# Federal Consistency Determination - Washington

## I. Introduction

The Coastal Zone Management Act (CZMA) as amended, 16 U.S.C. Sections 1451 to 1465, requires each federal agency activity, within or outside the coastal zone that affects any land or water use or natural resource of the coastal state, to be carried out in a manner which is consistent to the maximum extent- practicable with the enforceable policies of an approved State management program. Each federal agency carrying out such an activity must provide a consistency determination to the relevant State agency at the earliest practicable time, but no later than 90 days before final approval of the action. This consistency determination is for the EPA's issuance of a National Pollutant Discharge Elimination System (NPDES) General Permit for discharges from offshore seafood processing vessels.

#### The Proposed Action

The proposed General Permit would authorize discharges of seafood processing waste from offshore seafood processing facilities discharging in Federal Waters off the coasts of Washington and Oregon. The draft General Permit will cover Federal Waters within the U.S. Exclusive Economic Zone (EEZ), between 3 and 200 miles off the Washington and Oregon coast. In the case of emergent offshore rocks and islands, the EPA's jurisdiction begins 3 nm seaward from the offshore rocks and islands.

The facilities are offshore seafood processing vessels who engage in the processing of fresh, frozen, canned, smoked, salted or pickled seafood, the processing of washed or unwashed mince or paste, or the processing of meal and other secondary by-products. Currently, there are fewer than 20 known seafood processing facilities (comprised primarily of the Pacific whiting fleet) that discharge effluent into waters of the U.S. that operate in these Federal Waters. This Permit does not authorize the discharge of pollutants from any shore-based facilities, nor any pollutants from vessels transporting material for the purposes of dumping materials into ocean waters.

Proposed permit conditions include, but are not limited to, the following:

- Permittees must send all solid seafood processing wastes through a properly maintained and operating grinder system designed and operated to grind solids to 0.5 inch or smaller prior to discharge. See Section V.A.1. of the re-proposed General Permit.
- The draft General Permit includes monitoring/reporting, best management/waste minimization requirements, and provisions to reduce impacts to seabirds. See Sections V. and VI. of the General Permit.
- Permittees must be moving while discharging, unless doing so would impact the safety of the vessel. See Section VI.A.5.10. of the General Permit.
- Discharge prohibition of seafood processing waste in waters shallower than 100 meters in depth during April 15 October 15. See Figure 1 of this document and Section III.B. of the General Permit.



Figure 1. Seasonal and year-round discharge prohibitions.

*This NPDES permitting activity applies exclusively to Federal Waters*; no discharge is permitted within Washington State waters. In general, the vessels of the Pacific whiting trawl fleet operate in waters off Washington and Oregon coast during late spring and late fall. The Pacific whiting fleet generally conducts its processing activity in waters deeper than 100 meters. This is corroborated by materials submitted to the EPA by seafood processing vessels that intend to seek coverage under this General Permit. More detailed information about the Pacific whiting fleet is provided in the Section I. of the revised Fact Sheet.

## II. Consistency Determination

As explained above, this General Permit only applies to Federal Waters. However, seafood wastewater discharges covered by this General Permit could potentially affect Washington waters, depending on wind/current conditions. Therefore, the EPA has reviewed its proposed NPDES General Permit against the enforceable policies of the State of Washington to ensure that its action is consistent with those policies to the maximum extent practicable.

## The Washington Coastal Zone Management Program<sup>1</sup>

Congress passed the federal Coastal Zone Management Act in 1972 to encourage the appropriate development and protection of the nation's coastal and shoreline resources. The Coastal Zone Management Act gives states the primary role in managing these areas. To assume this role, the State prepares a Coastal Zone Management Program (CZMP) document that describes the State's coastal resources and how these resources are managed. Washington was the first state to receive federal approval of a Coastal Zone Management Program in 1976. The Department of Ecology's Shorelands and Environmental Assistance Program is responsible for implementing Washington's Program.

Washington's Program defines the State's coastal zone to include the 15 counties with marine shorelines: Clallam, Grays Harbor, Island, Jefferson, King, Kitsap, Mason, Pacific, Pierce, San Juan, Skagit, Snohomish, Thurston, Wahkiakum, and Whatcom counties. The CZMP applies to activities within the 15 counties as well as activities outside these counties, which may impact Washington's coastal resources. Most, but not all, activities and development outside the coastal zone are presumed to NOT impact coastal resources.

Under Washington State's Program, federal activities that affect any land use, water use or natural resource of the coastal zone must comply with the enforceable policies within the six State laws identified in the Program document. The six state laws are:

- the Shoreline Management Act (including local government shoreline master programs)
- the State Environmental Policy Act (SEPA)
- the Clean Water Act
- the Clean Air Act
- the Energy Facility Site Evaluation Council (EFSEC); and,

<sup>&</sup>lt;sup>1</sup> <u>http://www.ecy.wa.gov/programs/sea/czm/fed-consist.html</u>

• the Ocean Resource Management Act (ORMA)

Activities and development affecting coastal resources which involve the federal government are evaluated through a process called "federal consistency." This process allows the public, local governments, Tribes, and state agencies an opportunity to review Federal actions likely to affect Washington's coastal resources or uses. Activities undertaken by a Federal agency (such as an NPDES permit), can trigger a federal consistency review. The federal agency then determines if coastal effects are reasonably foreseeable.<sup>2</sup> If the federal agency makes this determination, it prepares a consistency determination. Here, since the EPA agrees with Ecology that coastal effects are reasonably foreseeable, the EPA has prepared a consistency determination.

#### Federal and State Agency Coordination

On October 8, 2015, the Washington State Department of Ecology (Ecology) notified the EPA via letter that the State believes that the federally permitted activity affects Washington's coastal resources and requires a CZMA consistency review. As a result, the EPA began working on a consistency determination for the permitting action. As required by the CZMA Federal Consistency Regulations, the EPA has coordinated with Ecology prior to providing this consistency determination. Since spring/summer 2016, Ecology and the EPA have engaged in numerous coordination calls to clarify the State's position and the requirements of the consistency determination. On November 21, 2016, the EPA provided a draft consistency determination for Ecology's review to ensure that all enforceable policies had been adequately addressed. On February 28, 2017, Ecology provided written comments to EPA on the draft consistency determination. On March 16, 2017, staff from the EPA and Ecology conducted an in-person meeting to discuss the applicability of enforceable policies and outstanding technical issues. Coordination is (and has been) ongoing. This consistency determination takes into account Ecology's October 8, 2015, November 28, 2016, and February 10, 2017 letters to the EPA, as well as its comments on the draft consistency determination. The EPA appreciates Ecology's willingness to discuss this General Permit and consistency determination.

# Methodology for Determining Consistency with the Enforceable Policies of the State of Washington

In addition to this consistency determination, the record/basis for the proposed General Permit also includes:

- 1. Re-proposed draft General Permit
- 2. Fact Sheet from the first public comment period
- 3. Fact Sheet for the re-proposed draft General Permit
- 4. Biological Evaluation (revised May 2017)
- 5. Ocean Discharge Criteria Evaluation.

For a detailed discussion of the EPA's federal statutory and regulatory requirements for issuing this NPDES General Permit, please see the Fact Sheet from the first public comment period, and the Fact Sheet for the re-proposed draft General Permit. For an analysis of how the proposed

<sup>&</sup>lt;sup>2</sup> <u>http://www.ecy.wa.gov/programs/sea/czm/fed-consist.html</u>

permit could affect threatened or endangered species, or Essential Fish Habitat, please refer to the revised Biological Evaluation. For more detail on effects to ocean resources, please refer to the Ocean Discharge Criteria Evaluation.

Pursuant to the CZMA, as amended, 16 U.S.C. Sections 1451 to 1465, federal activities which affect (directly or are reasonably foreseeable to affect) the coastal zone are to be carried out in a manner that is "consistent to the maximum extent practicable with the enforceable policies of approved State management programs." To do this, the EPA analyzed the proposed General Permit against the six Washington laws listed above. The EPA's consistency determination also includes information contained in numerous documents that have been prepared to meet the requirements of Clean Water Act (CWA), Endangered Species Act (ESA), Ocean Discharge Criteria Evaluation (ODCE), Magnuson-Stevens Fishery Conservation and Management Act, and Section 304(d) of the National Marine Sanctuaries Act (NMSA), as well as other statutes described below.

#### Washington State Enforceable Policies

#### The Shoreline Management Act (including local government shoreline master programs)

The proposed General Permit is consistent with the Shoreline Management Act, Washington Administrative Code, and the Shoreline Master Programs of Clallam, Jefferson, Grays Harbor, and Pacific Counties. See Appendix A for a detailed analysis.

*The State Environmental Policy Act (SEPA)* Not applicable.

#### The Clean Water Act / The Washington Water Pollution Control Act

The EPA implements the NPDES permits program in Federal Waters. The proposed General Permit applies only to Federal Waters, and does not allow for discharges within the waters of the State of Washington. The EPA has written this NPDES General Permit to comply with the federal Clean Water Act. As described in more detail below, through this consistency determination, EPA concludes that the General Permit will meet Washington State water quality standards and criteria at the boundary of Washington waters. Information on the legal and technical basis for this General Permit is provided in the original and re-proposal Fact Sheets. See Appendix B of this consistency determination for a detailed analysis.

In Ecology's October 8, 2015 comment letter and in subsequent letters regarding this General Permit, Ecology expressed the following concerns relating to water quality:

- 1) harmful algal bloom outbreaks and impacts to the razor clam and Dungeness crab harvest;
- 2) potential for BOD loading to exacerbate seasonal hypoxia;
- 3) increasingly low pH levels/ocean acidification and potential impacts to coastal resources, especially shellfish;
- 4) effluent limits should be the same as those required for on-shore processing facilities, at least within 24 miles of the Washington coast; and

5) Inadequate monitoring requirements.

The EPA addresses these concerns below.

#### Harmful algal bloom outbreaks

Algal blooms are common in aquatic environments. A subcategory of these blooms poses environmental or public health risk, and are therefore referred to as "harmful algal blooms," or HABs. Some HABs are deleterious because of their sheer biomass, whereas others are associated with algal blooms capable of producing toxins (e.g. the neurotoxin domoic acid). During a HAB event, algal toxins can bioaccumulate up the food web. Animals, including humans, can be exposed to HAB-related toxins when they eat contaminated fish or shellfish, have contact with contaminated water, or inhale contaminated aerosols (Backer and McGillicuddy, 2006).

Harmful algal blooms can cause a number of human health effects, including paralytic shellfish poisoning, neurotoxic shellfish poisoning, and respiratory irritation, diarrhetic shellfish poisoning, amnesic shellfish poisoning, and cyanobacterial toxin illnesses (Backer and McGillicuddy, 2006). The neurotoxin domoic acid has impacted numerous species along the West Coast since 1991, including razor clams, Dungeness crabs, seabirds, and marine mammals (Trainer et al., 2002). Domoic acid can bioaccumulate via food web transfer from filter-feeding fish and shellfish to birds and mammals (Trainer, et al., 2002).

The Juan de Fuca Eddy (which is located off the Northwest corner of Washington State, in Federal Waters to be covered by this General Permit) is thought to be an initiation site for toxic Pseudo-nitzschia blooms, which can impact the Washington coast (MacFadyen et al., 2008; Trainer, et al., 2002). The Juan de Fuca Eddy region is characterized by high phytoplankton biomass (Trainer, et al., 2002). The eddy is seasonal and topographically defined, with typical near-surface eddy radii ranging from ~15 km in the early summer to ~30 km in September (MacFadyen et al., 2008). According to MacFadyen et al. (2008), "The presence of the eddy facilitates large inputs of dissolved inorganic nutrients to the area and thus has a major impact on regional nutrient distributions. Nutrients are supplied to the region through two primary mechanisms: direct upwelling of California Undercurrent water onto the shelf, and enhanced cross-shelf advection of Juan de Fuca Strait outflow. The penetration of Undercurrent source water to increasingly shallow depths throughout the season results in elevated nutrient concentrations over a large portion of the northern Washington shelf."

Algal blooms can be difficult to identify. HABS have been called "red tides" because many were comprised of red pigmented dinoflagellates, but blooms can also be yellow, green, or brown, depending on the type of algae present (Glibert, et al., 2005). But algal blooms are not always visible. According to Zingone and Enevoldsen (2000), the microalgal species that are potentially involved in HABs comprises approximately 80 toxic species and 200 noxious species out of about 4,000 total marine planktonic microalgae that had been described to date. Less than one percent of algal blooms actually produces toxins (NOAA, 2016) and only a handful of Pseudonitzschia produce domoic acid. At present, monitoring for the specific domoic acid-producing diatoms provides the only proactive method that permits some early warning that shellfish might

become toxic. Unfortunately, *P. multiseries*, which produces the toxin and *P. pungens* (which does not produce significant amounts of the toxin) are virtually identical under the standard light microscope. Therefore, a current means to identify the toxic species from non-toxic is by the scanning electron microscope (SEM), a method that magnifies cells about 20,000 times (Northwest Fisheries Science Center, 2008). To further complicate matters, there are many places where HAB monitoring and surveillance programs do not exist.

Given the challenges associated with addressing harmful algal blooms, the EPA sought the expertise of Dr. Vera Trainer, a NOAA scientist whose research is focused on West Coast harmful algal blooms. Since the EPA was working to address not only Ecology's concerns regarding algal blooms, but also those of the NMFS EFH program and the NOAA Olympic Coast National Marine Sanctuary (with whom the EPA is engaged in a concurrent but separate consultations regarding this permit), the EPA requested that NOAA provide the EPA with concrete recommendations for implementation in the NPDES permit. On May 31, 2016, NOAA provided the EPA with a potential bounding box for the Juan De Fuca Eddy (Trainer, 2016, personal communication). See Figure 2. The EPA considered prohibiting discharge within the Juan de Fuca Eddy region, but decided against it, in part because of impacts to tribal treaty protected fisheries within a tribe's usual and accustomed area, and in part because of a subsequent personal communication with Dr. Trainer (see below).



Figure 2. Satellite-derived sea surface temperature (SST), particulate domoic acid ( $\mu$ g/L) and total Pseudo-nitzschia cell numbers in surface seawater July 1997 (modified from Trainer et al., 2002). This image (including a potential bounding box for the Juan De Fuca Eddy) was provided to the EPA as part of the EFH consultation on May 31, 2016 (Trainer, 2016, personal communication).

On July 14, 2016, Dr. Trainer communicated the following to the EPA via email:

"...[T] he following are scientific facts regarding harmful algal blooms (HABs) in the area:

1. The seasonally retentive Juan de Fuca eddy is a hotspot for harmful algal bloom initiation off the Washington State coast.

2. The manifestation of the eddy varies considerably and basically disappears during the winter

3. Pseudo-nitzschia (one of the harmful algal species) abundance and toxin production are influenced by nutrient (pulses of nitrate, ammonium) inputs in the coastal environment. These cells bloom when pulses of nutrients are supplied, especially after periods of nutrient limitation.

These 3 facts are our basic truths that need to be connected with more scientific research. There currently is no evidence to suggest that nutrient inputs from fish processing will be sufficient to cause toxic algal blooms. (emphasis added)

I suggest the following.

That this wish for proper permitting be based on strong science and scientific collaboration. For example, the current project on Monitoring and Event Response to HABs (MERHAB) project that proposes to collaborate with the Makah and makes available boat sampling in the Makah U&A, provides an opportunity to sample inside and outside the eddy region, both near and far to the fish processing vessels. I would recommend that phytoplankton net tows, whole water and nutrient samples be collected near the vessels before and after discharge. In fact, the fish processing vessels could be involved in the sample collection, as the work is very simple and straightforward.

I would imagine that similar samples could be collected to answer questions about hypoxia and perhaps also pH.

I would strongly advocate for a delay in issuance of the permit until the proper science is available to substantiate any decisions."

Since the NOAA scientist to whom the NMFS and the NOAA Olympic Coast National Marine Sanctuary deferred for their respective consultations believes that there is currently no evidence to suggest that nutrient inputs from fish processing will be sufficient to cause toxic algal blooms, it would not be reasonable for the EPA to prohibit seafood processing waste discharge within the bounding box in Figure 2. With regard to monitoring for HABs, the EPA is supportive of additional scientific research on West Coast HABs, but believes that a requirement for permittees to participate in the Monitoring and Event Response to HABs (MERHAB) project is beyond the scope of this NPDES permit. Conducting phytoplankton net tows and sampling for whole water and nutrients before and after discharge are also beyond the scope of this permit, and/or infeasible because vessels are moving and fishing while discharging. If permittees are interested in collaborating with NOAA to further the scientific knowledge on HABs, the EPA encourages those permittees to contact NOAA directly.

NPDES permits are written for a five-year time period; the EPA will consider any relevant new information prior to the next permit reissuance. *Because there is currently no evidence to suggest that discharge authorized by this General Permit will cause toxic algal blooms, the EPA does not propose to amend the draft Permit with regard to HAB outbreaks.* 

#### Seasonal Hypoxia and Increasing Ocean Acidification

Seasonal hypoxia and increasing ocean acidification are addressed in the Fact Sheet for the reproposed General Permit. For ease of reference, the relevant text is provided below:

The process of seasonal hypoxia off the Washington and Oregon coast is well described by Peterson, et al. (2013): "In the northern section of the California Current (NCC), running along the west coast of the U.S.A., seasonal hypoxia events are driven by a combination of relatively low oxygen waters upwelling onto the shelf with further oxygen drawdown stemming from the decomposition of organic matter settling to the seafloor (Chan et al., 2008; Connolly et al., 2010). During the upwelling season (typically mid-April to mid-October), water from 100–150 m depth is transported up onto the shelf and replaces surface waters that move offshore via wind-driven Ekman transport. The upwelled waters are relatively old and tend to be low in oxygen due to extended exposure to water column respiration and isolation from the atmosphere."

According to 15 years of data presented in Peterson, et al. (2013), hypoxia in the Northern California Current is highly seasonal, patchily distributed in both time and space, and can potentially affect over 60% of the continental shelf. Several regions, particularly the wider shelf areas, such as Heceta Bank off Oregon and much of the Washington shelf, are the most prone to early development and persistence of hypoxic bottom waters. Sediment oxygen demand causes the Washington coast to be susceptible to hypoxia and is associated with the broad area of shallow shelf (<60 meters) (Siedlecki, et al., 2015). Low-oxygen conditions result in negative habitat impacts for many organisms (Siedlecki, et al., 2015).

There have been numerous severe hypoxia/anoxia events off the coasts of Oregon and Washington in the last 15 years. For example, in 2002, the Heceta and Stonewall Bank complex experienced unprecedented inner shelf (<70 meter) hypoxia, which resulted in mass die-offs of fish and invertebrates, including Dungeness crab (*Cancer magister*) mortality of >75% in commercial crab pots, compared with the normal 0% (Grantham, et al., 2004). In 2006, the central Oregon coast experienced areas of anoxia, accompanied by the expansion of severe hypoxia across broad sections of the continental shelf. At its peak, hypoxia extended from the

shelf break to the inner shelf (<50 meter) and covered at least 3,000 square km off the coast. Hypoxia occupied up to 80% of the water column in shallow (60 meter) shelf waters and continued over the mid to inner-shelf waters from June to October (Chan, et al., 2008).

Although severe hypoxia is a permanent feature of the oxygen minimum zone that intersects the continental slope (>600 meter in this system), there are no previous records of anoxia over the continental shelf or within the oxygen minimum zone (Chan, et al., 2008). Demersal fish and benthic invertebrate communities in these shallow shelf waters have been acutely affected by seasonally persistent anoxia and severe hypoxia. For instance, in August 2006, submersible based surveys revealed the complete absence of all fish from rocky reefs that normally serve as habitats for diverse rockfish (*Sebastes species*) communities. Chan, et al. (2008) also reported near-complete mortality of macroscopic benthic invertebrates (e.g. Dungeness crabs).

The West Coast is one of the first regions in the world to be impacted by ocean acidification, and multiple factors create a confluence of conditions (including ocean currents, coastal upwelling, and winds) that will make ocean acidification's impacts increasingly severe in the future (Chan, et al., 2016). Since upwelled waters are low in dissolved oxygen, the progression of ocean acidification will be coupled with increasing risk of hypoxic events (Chan, et al., 2016). But, since ocean acidification and hypoxia often co-occur and share a common set of drivers (i.e., increased atmospheric CO2 and local nutrient and organic carbon inputs), they can be managed synergistically (Chan, et al., 2016).

The West Coast Ocean Acidification and Hypoxia Science Panel recommends better controls on nutrients and organic matter pollution, since they provide nourishment for algae and bacteria that can trigger hypoxia and exacerbate ocean acidification (Chan, et al., 2016). They recommend that managers reduce local pollutant inputs that exacerbate ocean acidification and hypoxia. "While elevated atmospheric CO2 levels are a major driver of ocean acidification, local discharge of organic carbon and nutrients can exacerbate ocean acidification. Upon discharge, organic carbon is broken down by bacteria, which consume dissolved oxygen during the decomposition process, triggering hypoxic conditions, increasing CO2 levels and lowering pH" (Chan, etal., 2016). Although the Panel's recommendations are focused on nutrient inputs from land-based sources to semi-enclosed waterbodies, they are still relevant to this permit because: 1) seafood processing waste is high in nutrients and BOD and is a (NPDES "point") source of organic carbon and nutrients in offshore waters; 2) circulation is sluggish over Heceta and Stonewall Banks and other areas where the continental shelf is wide (e.g. Grays Harbor), and 3) seafood waste could become entrained by eddies or retentive waters.

Although high primary production [from nutrient inputs] produces oxygen at the surface, the system is driven toward hypoxia when the particulate organic carbon sinks and respires into water already low in oxygen (Siedlecki, et al., 2015). Seafood processing waste has high biochemical oxygen demand, and could contribute to near-bottom hypoxia off the coast, particularly in wide shelf areas that already experience high sediment oxygen demand. Even if dissolved oxygen has already reached hypoxic levels at the continental shelf break, respiration can further exacerbate hypoxic conditions as bottom water moves shoreward over the shelf,

especially if surface organic carbon sources are sizable (Grantham, et al., 2004). Once nutrients sink to the bottom off the Washington and Oregon coast, they stay on the shelf until circulation patterns are strong enough to flush them away (Siedlecki, et al, 2015).

Oceanographers whom the EPA interviewed while developing this draft permit recommended depth-based discharge exclusion zones in waters shallower than 100 or 200 meters to prevent seafood waste discharges from triggering or exacerbating hypoxic conditions in retentive and/or wide continental shelf areas (Newton and Peterson, 2016, via separate personal communications). Additionally, the NOAA Olympic Coast National Marine Sanctuary recommended that the EPA consider a discharge exclusion zone, possibly by depth contour, as part of its 304(d) consultation with NOAA (see Section III.F. of the re-proposal Fact Sheet for more detail).

The width of the shallow shelf is the critical factor that controls sediment oxygen demand, probably because proximity of the bottom to the surface allows organic matter to reach the bottom, and sediment oxygen demand is directly proportional to the flux of detritus that sinks to the seafloor (Siedlecki, et al., 2015). Observations of sediment oxygen demand in waters shallower than 70 meters are not available, but biomass is more concentrated near the coast, resulting in more large detrital particles. Seafloor oxygen modeling for waters off the Washington and Oregon coasts shows substantial depth dependence, with more sediment oxygen demand in the shallower depths. The larger detritus tends to sink faster, so it reaches the seafloor and respires faster. In addition, more detritus reaches the bed faster, in general, in shallower water columns, since there is less area for respiration to occur in the water column (Siedlecki, et al., 2015).

In order to avoid triggering or encouraging hypoxic conditions because of additional nutrient inputs from seafood processing waste, the EPA proposes to prohibit the discharge of seafood processing waste in waters shallower than 100 meters in depth during April 15 - October 15 (i.e., the summer upwelling season) to avoid exacerbating seasonal hypoxia at the seafloor. See Figure 1. Heceta Bank and the broad Washington shelf region (e.g. offshore of Grays Harbor at 46 N–47 N) are known "hot spots" of organic matter respiration (Siedlecki, et al., 2015). A depthbased discharge exclusion zone will help to protect the wider shelf areas, where both detrital concentrations and sediment oxygen demand are high (Siedlecki, et al., 2015). The wide shelf areas off the Washington and Oregon coasts are already stressed by ocean acidification and hypoxia, both of which are projected to increase as the global climate continues to change.

Excluding discharge in waters shallower than 100 meters will also help to protect other important benthic and near-bottom fisheries that operate off the coasts of Washington and Oregon, such as Dungeness crab, lingcod, and Chinook salmon (Peterson, 2016, personal communication). According to NOAA Fisheries, Dungeness crab are primarily fished at depths between approximately 10 and 100 meters off the Washington and Oregon coasts.<sup>3</sup> Dungeness crabs are not abundant beyond 91 meters in depth.<sup>4</sup> Most lingcod occupy rocky areas at depths between 10 and 100 meters.<sup>5</sup>

Since the EPA is proposing to prohibit discharge in waters shallower than 100 meters during the April 15 – October 15 critical period, the discharge will be at least 10 miles from the Washington coast during the season when hypoxia is likely to occur. Discharge will be prohibited April 15 – October 15 within approximately 10 nm from Lake Ozette, within 19 nm of shore near Grays Harbor, and within 12 nm of shore at the Columbia River. See Figure 1. Thus, discharge will take place miles from the state/Federal Waters boundary. Within that *miles-wide* buffer between the discharge and state waters, an enormous amount of mixing and flushing will occur, given the massive dilution provided by the open ocean, tides, currents, wave action, and the vessels moving while discharging. Thus, the discharges covered by this General Permit will have no effect on dissolved oxygen or hypoxia within Washington waters.

### Monitoring

The EPA is proposing to require additional reporting on the quantity and nature of the discharge in order to better understand loading and potential water quality impacts (see Appendix A of the re-proposed General Permit for the revised NOI and Appendix B for the revised Annual Report). Reporting requirements include: a table on which to report daily location of the vessel while discharging, minimum and average daily distances traveled, vessel speed, total stickwater discharged per month, maximum daily discharge amounts, and monthly average by-product recovery rates.

However, the EPA is not proposing to require additional monitoring to assess the discharge's contributions to hypoxic conditions, primarily because of logistical and cost considerations. For the following reasons, it would be unreasonable for the EPA to require near-bottom dissolved oxygen monitoring as part of this General Permit (Peterson, 2016, personal communication):

- Deep-sea monitoring is difficult and expensive, and would likely require the employment of a specialized research vessel;
- Vessels are moving while discharging;
- Seafood processing waste will likely take weeks to mineralize, depending on temperature and other ocean conditions. Therefore, there will be an unknown time lag in the BOD of the discharge; and
- Ocean conditions are dynamic, and seasonal hypoxia is already occurring of the coast due to natural upwellings.

<sup>3</sup> 

http://www.westcoast.fisheries.noaa.gov/publications/protected\_species/marine\_mammals/large\_wha le\_entanglement\_appendix\_a-e.pdf

<sup>&</sup>lt;sup>4</sup> <u>http://www.psmfc.org/crab/2014-2015%20files/DUNGENESS%20CRAB%20REPORT2014.pdf</u>

<sup>&</sup>lt;sup>5</sup> <u>http://wdfw.wa.gov/fishing/bottomfish/identification/greenling/o\_elongatus.html</u>

Thus, there are multiple factors that would confound the interpretation of the discharge's contribution to hypoxic conditions.

Over the course of CZMA discussions regarding this General Permit, Ecology has suggested that EPA require additional effluent monitoring, similar to the requirements of shore-based seafood processing permits. The EPA considered including a requirement for BOD and TSS monitoring of the effluent, but concluded that such monitoring would be infeasible for offshore seafood processors because of short holding times (e.g. 48 hours for BOD). In other words, it would be difficult for Permittees operating in the open ocean to deliver samples to a laboratory for analysis within the 48-hour window, especially since no discharge is allowed in State waters. See 40 CFR 136—guidelines establishing test procedures for the analysis of pollutants; §136.3 Identification of test procedures; Table II—Required Containers, Preservation Techniques, and Holding Times.

#### Requiring Shore-based Effluent Limits in Offshore Waters

In its 2015 comment letter, Ecology stated that to meet the "all known, available, and reasonable methods of treatment" (AKART) requirement of the State's regulations (WAC 173-220-130), offshore seafood processing ships must apply the same level of treatment, and meet the same federally promulgated technology-based effluent limits, as Washington shore-based processors. However, AKART does not apply to this permitting action because the discharge will occur entirely in Federal Waters.

There are currently are no federally promulgated effluent limit guidelines (ELGs) that apply to offshore seafood processors. As explained in the original Fact Sheet for this General Permit,

EPA has promulgated final ELGs specifying BCT, BPT, and NSPS for specific categories of seafood processing. These ELGs are codified at 40 CFR Part 408. When the ELGs were promulgated, the offshore seafood processing industry either did not exist or was in its infancy. Therefore, offshore processors were not analyzed during the development of the ELGs and, as such, these ELGs do not apply to the offshore seafood processing industry.

In addition, as previously explained, this permit covers discharges into Federal Waters; therefore, State water quality standards, including AKART, do not apply to this discharge. Even if AKART *did* apply to offshore processors discharging to Federal Waters, AKART would not warrant the same effluent limits as shore-based processors because of fundamental differences in how shore-based and offshore facilities operate, including the space and safety constraints inherent to offshore operations. Most offshore processing vessels expected to seek coverage under this General Permit also conduct active trawl operations during discharge- a significant difference from their shore-based counterparts. Offshore processing vessels have limited space available for treatment or storage of waste product, which limits treatment options. In addition, offshore processing vessels are operating in the open ocean at least 3 nm from shore, and face vastly different safety and operational issues than their shore-based counterparts. Since these floating factories are surrounded by ocean, they do not have access to sewer, electricity, road access and other basic utilities and amenities that shore-based factories have. They also have dramatically more dilution available in the open ocean, as opposed to enclosed/shallow bays.

Further, requiring offshore seafood processors to transport Pacific whiting (i.e., the target species) to shore-based processors, as Ecology has suggested, would not be "reasonable." In fact, it would be particularly problematic for the Pacific whiting trawl fleet, and would cause unnecessary expense and logistical difficulties. During discussion with the EPA, representatives of the Pacific whiting offshore processing fleet have emphasized the importance of offshore (i.e., on-vessel) processing for Pacific whiting because of a naturally occurring parasite that causes fish turn become soft soon after it is caught. If whiting is not processed immediately after harvest, the quality of the marketable product suffers. According to NOAA, "The abnormal muscle texture in Pacific whiting is caused by a myxosporidian- induced proteolysis. The latent potential for proteolytic textural softening in whiting, due to the presence of myxosporidian cysts at variable intensity, appears to be an intrinsic characteristic of the Pacific species.... The muscle parasite that affects whiting similarly is of little public health concern, but since it degrades flesh texture significantly and limits the utilization of the resource, it is a matter of technological concern."<sup>6</sup>

In addition, there would be significant costs in terms of time, fuel, and greenhouse gas emissions associated with transporting the catch to shore-based processing facilities.

As explained in the Fact Sheet, the appropriate technology-based standard which the EPA has applied in this permit using BPJ is the 0.5 inch grind requirement coupled with utilization of byproduct recovery where available. In particular, in determining what constitutes BPJ for the offshore seafood processing industry, as explained in the Fact Sheet, "grinding seafood waste to 0.5 inch has been the technology-based effluent limitation applicable to offshore seafood processing facilities in offshore waters around Alaska for over 30 years. The majority, if not all, of the vessels that would likely apply for coverage under the Draft Permit also operate in Alaskan waters and, thus, have the equipment on board to grind their waste to 0.5 inch. The 0.5 inch limitation was originally used for remote Alaska locations in consideration of the expense and logistical difficulties associated with much of Alaska. The 0.5 inch grind effluent limitation was also the BPJ effluent limit that was established in an individual NPDES permit for a seafood processing vessel that discharges to the Atlantic Ocean. Ground wastes should disperse rapidly in the waters covered by the Permit.

In addition to grinders, most of the vessels known to discharge in the coverage area of the Draft Permit also have the capacity onboard to produce fishmeal and/or fish oil. When these byproduct recovery systems are fully utilized, wastes discharged to the receiving waters are reduced. Because grinding is economically and technologically feasible, the BPJ requirements for the draft permit are as follows:

a. Permittees must send all solid seafood processing wastes through a properly maintained and operating grinder system designed and operated to grind solids to 0.5 inch or smaller prior to discharge. This 0.5 inch effluent requirement does not apply to (1) the calcareous shells of scallops, clams, oysters and abalones, (2) the

<sup>&</sup>lt;sup>6</sup> <u>http://spo.nmfs.noaa.gov/mfr445/mfr4451.pdf</u>

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calcareous shells (i.e., tests) of sea urchins, or (3) incidental catches of prohibited and by-catch species which are neither retained nor processed."

Permittees must fully utilize to the extent practicable all treatment processes available on board their vessel to reduce wastes discharges, including but not limited to fishmeal and fish oil production.

#### Washington's Marine Water Quality Designated Uses and Criteria (173-201A-210)

The EPA has analyzed the proposed General Permit against Washington's Marine Water Quality Designated Uses and Criteria (173-201A-210) in order to ensure that the discharges authorized by the General Permit do not negatively affect State waters at the point where Federal and State waters meet. For this analysis, the EPA referred to Table 612—Use designations for marine waters, Washington's coastal waters are designated "Extraordinary" for Aquatic Life Uses, for Primary Contact Recreation, and for Wildlife Habitat, Harvesting, Com/Navigation, Boating, and Aesthetics. The major constituents of seafood processing wastes are blood, tissue, liquids, meat, viscera, oil and grease, shells, and bones. Except for the bones and shells, which are highly biodegradable, the wastes are primarily organic matter. Major pollutants consist of BOD, solids (sediments and residues), oil and grease, and nutrients. These major pollutants are all considered conventional and of a non-toxic nature (the end-product is meant for human consumption). Thus, the proposed General Permit will have no effect on human health criteria within Washington waters.

#### Aquatic Life Temperature Criteria

As described in Section 2.2.1.1. of the revised Biological Evaluation, sea water is used to move fish and waste via flumes to grinders and discharge chutes and secondarily for clean-up and sanitation. By volume, sea water is a primary component of the discharge. Discharge authorized by this General Permit will not impact ocean temperatures, and will cause no change in Washington State water temperatures.

#### Dissolved Oxygen

The EPA does not expect this General Permit to impact dissolved oxygen levels in Washington State waters. Notably, the discharge will only be authorized in Federal Waters at least 3 nm from shore. In addition, the EPA has proposed a seasonal discharge prohibition in waters shallower than 100 meters in depth to avoid any contribution to hypoxic conditions at the seafloor as a result of the discharge authorized by this General Permit. Consequently, discharge will be prohibited within approximately 10-20 miles of the Washington Coast during the critical season, during which low dissolved oxygen occurs at-depth. Discharge will be prohibited April 15 -October 15 within approximately 10 nm from Lake Ozette, within 19 nm of shore near Grays Harbor, and within 12 nm of shore at the Columbia River. See Figure 1. Thus, discharge will take place miles from the State/Federal Waters boundary during the critical period. Within that miles-wide buffer between the discharge and State waters, an enormous amount of mixing and flushing will occur, given the massive dilution provided by the open ocean, tides, currents, wave action, and the vessels moving while discharging. Thus, the discharges covered by this General Permit will have no effect on dissolved oxygen within Washington waters. See Section I.B.1. of the re-proposed Fact Sheet and Section 4.5.2 of the revised Biological Evaluation. Also see Figure 1, above, for a visual depiction.

#### Turbidity

Due to the nature of the discharge, there could be localized areas of turbidity which would occur in Federal Waters. However, given the enormous dilution provided by the open ocean, the EPA expects any turbidity to dissipate prior to reaching Washington waters. Offshore waters within the action area have strong currents, assimilation is high, waste materials disperse rapidly, and there is likely to be little impact on water quality. As explained above, during the April 15 – October 15 critical period, discharge will occur approximately 10-20 nm from the Washington coast, and will dissipate prior to reaching Washington waters.

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This General Permit authorizes the discharge of seafood processing waste, and pH is not a pollutant of concern in this General Permit. The discharge authorized by this General permit will have no effect on the pH of Washington State waters.

#### Shellfish Harvesting/Fecal Coliform

This General Permit authorizes the discharge of seafood processing waste, not sanitary waste, and will not impact fecal coliform counts. All vessels must employ properly functioning Type I or Type II Marine Sanitation Devices (MSDs), in accordance with U.S. Coast Guard regulations.

#### Summary

In summary, for the reasons cited above, this General Permit is consistent with Washington's Water Pollution Control Act. See Appendix B for analysis of other components of Washington's Water Pollution Control Act.

#### Washington's Sediment Management Standards (173-204 WAC)

As described in Section 5.1.3. of the revised Biological Evaluation, decay of organic matter can affect chemical changes within the sediments. However, since ambient waters containing abundant dissolved oxygen rapidly mix with the affected waters, reductions of dissolved oxygen concentrations throughout the overlaying water column are not expected; nor are significant impacts to mobile marine organisms. Flushing in the action area is high, which will disperse seafood processing wastes. Any areas of reduced dissolved oxygen above a waste accumulation would be expected to be small and would be avoided or quickly passed through by mobile organisms. In addition, as explained above, due to the 100-meter discharge prohibition, any discharge will take place *miles* from the State/Federal water boundary during the critical period for hypoxic conditions (i.e., April 15<sup>th</sup> to October 15th). As stated above, the discharge parameters are all considered conventional and of a non-toxic nature (since the end-product is meant for human consumption). Thus, the proposed General Permit will have no impact on sediment quality in Washington State and is thus consistent with Washington's Sediment Management Standards and would not impact Washington State sediment quality.

*The Clean Air Act* Not applicable.

The Energy Facility Site Evaluation Council (EFSEC)

Not applicable.

#### The Ocean Resource Management Act (ORMA)

In the 1980s, concerns over proposed oil and gas drilling off the coast and impacts on existing coastal uses and resources (such as fishing) resulted in adoption of ORMA. The legislative policy and intent of ORMA was a moratorium on leases for oil and gas exploration, development, or production. Since this General Permit does not cover oil and gas activities, ORMA does not apply. Since WAC 173-26-360 Part IV (Ocean Management Guidelines) implements the Ocean Resources Management Act, (RCW 43.143.005 through 43.143.030), WAC 173-26-360 does not apply to this General Permit.

That said, RCW 43.143.005(4) recognizes that outside 3 miles, the Federal Government has primary jurisdiction, although the State has an interest in how the resources are managed. The EPA analyzed impacts to State resources at the State/Federal Boundary in order to ensure that impacts to State renewable resources were avoided. The EPA notes that the fishery itself (a renewable resource) is regulated by NMFS.

#### Conclusion

This will be the first issuance of this General Permit, and the first time the offshore seafood processing sector has received NPDES permit coverage in Federal Waters off the coast of Washington and Oregon.

The EPA has evaluated all reasonably foreseeable adverse effects of the proposed NPDES General Permit. After considering these effects, *the EPA has determined that the General Permit is consistent to the maximum extent practicable with the enforceable policies of the State of Washington.* The EPA's consistency determination includes all required components for the content of a consistency determination as set out by 15 C.F.R. Section 930.39.

## References

Backer, L.C. and Jr., D.J. McGillicuddy. 2006. Harmful Algal Blooms: at the interface between coastal oceanography and human health. *Oceanography*, Vol. 19, 2, 94-106.

Chan, F., J. A. Barth, J. Lubchenco, A. Kirincich, H. Weeks, W. T. Peterson, and B. A. Menge. 2008. Emergence of anoxia in the California Current large marine ecosystem. *Science*, 319: 920.

Chan, F., Boehm, A.B., Barth, J.A., Chornesky, E.A., Dickson, A.G., Feely, R.A., Hales, B., Hill, T.M., Hofmann, G., Ianson, D., Klinger, T., Largier, J., Newton, J., Pedersen, T.F., Somero, G.N., Sutula, M., Wakefield, W.W., Waldbusser, G.G., Weisberg, S.B., and Whiteman, E.A. The West Coast Ocean Acidification and Hypoxia Science Panel: Major Findings, Recommendations, and Actions. California Ocean Science Trust, Oakland, California, USA. April 2016.

Connolly, T. P., B. M. Hickey, S. L. Geier, AND W. P. Cochlan. 2010. Processes influencing seasonal hypoxia in the northern California Current System. *Journal of Geophysical Research*, Vol 115: C03021.

Glibert, P.M., D.M. Anderson, P.G. Entien, E. Graneli, and K.G. Sellner. 2005. The Global, Complex Phenomena of Harmful Algal Blooms. *Oceanography*, Vol. 18, 2.

Grantham, B. A., F. Chan, K. J. Nielsen, D. S. Fox, J. A. Barth, A. Huyer, J. Lubchenco and B. A. Menge. 2004. Upwelling-driven nearshore hypoxia signals ecosystem and oceanographic changes in the northeast Pacific. *Nature*, 429, 749–754.

MacFadyen, A., B. M. Hickey, and W. P. Cochlan. 2008. Influences of the Juan de Fuca Eddy on circulation, nutrients, and phytoplankton production in the northern California Current System. *Journal of Geophysical Research*, 113, C08008, doi:10.1029/2007JC004412.

National Oceanic and Atmospheric Administration (NOAA). 2016. Are all algal blooms harmful? Accessed August 8, 2016 online at <u>http://oceanservice.noaa.gov/facts/habharm.html</u>

Newton, J. Personal Communication. University of Washington Applied Physics Lab. 2016.

Northwest Fisheries Science Center (NFSC). 2008. *Pseudo-nitzscia*. Accessed from NOAA Fisheries August 8, 2016 online

https://www.nwfsc.noaa.gov/research/divisions/efs/microbes/hab/habs\_toxins/hab\_species/pn/index.cfm

Peterson, W. Personal Communication. National Oceanic and Atmospheric Administration, Northwest Fisheries Science Center, Hatfield Marine Science Center, Newport, Oregon. 2016.

Peterson, J. O., C. A. Morgan, W. T. Peterson, and E. Di Lorenzo. 2013. Seasonal and interannual variation in the extent of hypoxia in the northern California Current from 1998–2012, *Limnol. Oceanogr. Methods*, 58(6), 2279–2292.

Siedlecki, S. A., N. S. Banas, K. A. Davis, S. Giddings, B. M. Hickey, P. MacCready, T. Connolly, and S. Geier (2015), Seasonal and interannual oxygen variability on the Washington and Oregon continental shelves, *Journal of Geophysical Research: Oceans*, 120, 608–633.

Trainer, V.L., B.M. Hickey and R.A. Horner. 2002. Biological and physical dynamics of domoic acid production off the Washington coast. *Limnology and Oceanography*. 47(5), 1438-1446)

Trainer, Vera. Personal Communication. NOAA, Marine Biotoxin Program at the Northwest Fisheries Science Center. 2016.

Zingone, A. and H.O. Enevoldsen. 2000. The diversity of harmful algal blooms: a challenge for science and management. *Ocean & Coastal Management*, 43, 725-748.

# Appendix A – Shoreline Management Act Consistency Review

Discussion			
Washington State Shoreline Master Program Guidelines			
See analysis below.			
The General Permit authorizes discharges into Federal Waters of the United States by processors operating and discharging seafood processing waste in Federal Waters greater than 3 nautical miles from shore. Fishing and processing often occur 20-30 miles offshore. The General Permit explicitly does not authorize discharge into waters inland from the west coasts of Washington and Oregon, or any state waters.			
The economically productive uses of the shoreline will not be affected by the issuance of this General Permit. If anything, conditions will <i>improve</i> because of this General Permit since the discharge is already occurring, without any of the protections or conditions of an NPDES permit.			
The processing occurs greater than 3 nautical miles offshore and would not limit public access or recreation.			
The EPA has proposed a seasonal discharge prohibition in waters shallower than 100 meters in order to avoid triggering seasonal hypoxia at the seafloor.			
The discharge of offshore seafood processing waste would not adversely affect or change the ecological functions of shoreline natural resources.			
The EPA has proposed a seasonal discharge prohibition in waters shallower than 100 meters in order to avoid triggering seasonal hypoxia at the seafloor.			
For analyses of the proposed Permit's effects to water quality and/or aquatic life, please see the Fact Sheets, the Biological Evaluation, and the Ocean Discharge Criteria Evaluation.			

of chorolines of the state shall	
of shorelines of the state shall	
be designed and conducted in	
a manner to minimize, insofar	
as practical, any resultant	
damage to the ecology and	
environment of shoreline area	
(3)(d): Protection of the public	Processing/discharging takes place at least 3 miles (but more often
right of navigation and	20-30 miles) offshore and would not limit public navigation and
corollary uses of waters of the	corollary uses.
state.	
RCW 90.58.20: protecting	
generally public rights of	
navigation and corollary rights	
incidental thereto	
minimize interference with	
public's use of the water.	
(3)(e): The protection and	Permit does not include any shoreline modification or development
restoration of buildings and	and would not alter the natural condition of any shorelines of the
sites having historic, cultural	state. Would not impact any historic buildings or other land-based
and educational value.	sites of historic, cultural, or educational value. No adverse effects
	on submerged historic resources within US territorial waters,
	including within Washington state coastal zone waters.
(3)(f): Planning for public	Processing/discharging occur offshore and would not impact public
facilities and utilities	facilities and utilities.
correlated with other	
shoreline uses.	
(3)(j): Coordination of	Not applicable.
shoreline management with	
other relevant local, state, and	
federal programs.	
WAC 173-26-181: Special	See below.
policy goals of the act and	
guidelines for shorelines of	
statewide significance.	
(1) Recognize and protect the	The offshore seafood sector is an important statewide interest, and
statewide interest over local	employs thousands of residents (approximately 100 crew on-board
interest	each vessel). Vessels to be covered by this General Permit are
	primarily moored at Pier 91 or Fisherman's Terminal in Seattle, WA.
(2) Preserve the natural	Processing/discharging occur at least 3 miles offshore and would not
character of the shoreline	alter the natural condition of shorelines of the state
(3) Result in long term over	Seafood is a renewable resource, and fishing is regulated by the
short term benefit	NMFS to ensure sustainability. Sustainable harvest of the Pacific
	whiting fishery provides long-term benefit to Washington

	companies and residents, in the form of jobs and marketable
	product, and a healthy food source.
(4) Protect the resources and	The permitted activity will occur at least 3 miles offshore. No
ecology of the shoreline	shoreline modification or development and no alteration to the
	natural condition of any shorelines of the state.
	For analyses of the proposed Permit's effects to ocean ecology,
	please see the Fact Sheets, the Biological Evaluation, and the Ocean
	Discharge Criteria Evaluation.
(5) Increase public access to	The permitted activity will occur at least 3 miles offshore, but more
publicly owned areas of the	often 20-30 miles offshore. The proposed Permit will have no impact
shorelines	on public access to publicly owned areas of shorelines. No
	anticipated impacts on transportation or shipping, commercial or
	recreational fishing, or tourism.
(6) Increase recreational	Processing/discharging occur at least 3 miles offshore and do not
opportunities for the public in	limit recreational opportunities.
the shoreline	
WAC 173-26-186 Governing	The EPA has reviewed coastal county master programs. See below.
principles of the guidelines	For analyses of the proposed Permit's potential impacts, please see
	the Fact Sheets, the Biological Evaluation, and the Ocean Discharge
	Criteria Evaluation.
WAC 173-26-201 Process to	Not applicable, as this General Permit is not related to preparing or
prepare or amend shoreline	amending shoreline master programs.
master programs	
WAC 173-26-211 Environment	See below.
designation system	Net evolve ble. The second the definition will take where in Federal
1) Archaeological and historic	Not applicable. The permitted discharge will take place in Federal
(2) Critical areas (includes	Waters, at least 3 miles offshore in the Pacific Ocean.
(2) Critical areas (includes	Not applicable. The permitted discharge will take place in Federal
wetlands, critical	waters, at least 3 miles offshore in the Pacific Ocean.
fresh/saltwater habitats,	
geologically hazardous areas,	
etc.)	
(3) Flood bazard reduction	Not applicable. The permitted discharge will take place in Federal
	Waters, at least 3 miles offshore in the Pacific Ocean.
(4) Public access	Not applicable. The permitted discharge will take place in Federal
	Waters, at least 3 miles offshore in the Pacific Ocean.
(5) Shoreline vegetation	Not applicable. The permitted discharge will take place in Federal
conservation	Waters, at least 3 miles offshore in the Pacific Ocean.
(6) Water quality, storm	See above, and the Ocean Discharge Criteria Evaluation, for a
water, and nonpoint pollution	discussion of water quality.
	Storm water and nonpoint source pollution do not apply to this
	permit.

WAC 173-26-231 Shoreline	Not applicable. The permitted discharge will take place in Federal
modifications	Waters, at least 3 miles offshore in the Pacific Ocean.
WAC 173-26-241 Shoreline	Not applicable. The permitted discharge will take place in Federal
uses	Waters, at least 3 miles offshore in the Pacific Ocean.
(a) Agriculture	
(b) Aquaculture	
(c) Boating facilities	
(d) Commercial development	
(e) Forest practices	
(f) Industry	
(g) In-stream structural uses	
(h) Mining	
(i) Recreational development	
(j) Residential development	
(k) Transportation and parking	
(I) Utilities	
WAC 173-26-251 Shorelines of	The proposed discharges will occur at least 3 miles offshore, in the
statewide significance	Pacific Ocean, and has no bearing on public access, navigability, or
	structures/residences/marinas, etc.
	The offshore seafood sector is an important statewide interest, and
	employs thousands of residents.
	Seafood is a renewable resource, and fishing is regulated by the
	NMFS to ensure sustainability.

<b>RCW</b> Section	Shoreline Management Act	Discussion
90.58.065	Application of guidelines and master programs to agricultural activities	Not applicable.
90.58.020	Shorelines of Statewide Significance Preferred Uses	See analysis for WAC 173-26-181, above, re: special policy goals of the act and guidelines for shorelines of statewide significance.
90.58.030	Definitions and concepts	Not applicable.
90.58.040	Program applicable to shorelines of the state.	Not applicable.
90.58.100	Programs as constituting use regulations	Not applicable.
90.58.140 (Entire section except sub- Sections (4), (5) (a) (5)(b)(iii)	Development permits	Not applicable to this offshore seafood processing waste discharge into Federal Waters.

90.58.150	Selective commercial timber cutting	Not applicable, since permit does <u>not</u> involve selective timber cutting.
90.58.270	Non-application to certain structures, docks, developments, etc., placed in navigable waters, etc.	Not applicable.
90.58.310	Designation of shorelines of statewide significance by legislature – Recommendation by Director, procedure.	Not applicable.
90.58.320	Height limitation respecting permits.	Not applicable.
90.58.350	Non-application to treaty rights.	The federal government has a trust responsibility to federally recognized tribes, and the EPA is engaged in tribal coordination and consultation with the four Washington coastal tribes with treaty-protected usual and accustomed areas that extend into the EEZ. See the re-proposed Fact Sheet for more detail.
90.58.355	Persons not required to obtain certain permits, variances, letters of exemption, or other local review	Not applicable.
90.58.550	Oil or natural gas exploration in marine waters – Definitions – Application for permit – Requirements – Review – Enforcement	Not applicable since the permit does <u>not</u> involve oil or natural gas exploration.
90.58.580	Shoreline Restoration Projects – Relief from shoreline master program development standards and use regulations	Not applicable since the project is not a shoreline project.
90.58.900	Liberal construction – 1971 ex.s. c 286.	Not applicable.

# Analysis of Coastal County Shoreline Master Programs

Policy or Regulation	Discussion	
Jefferson County Shoreline Master Program Guidelines		
Jefferson County Code Chapter 18.25		

Policy or Regulation	Discussion		
18.25.060: Ocean uses and activities conducted within Jefferson County and the State of Washington's jurisdiction shall comply with the RCW 43.143 (Ocean Resources Management Act) and Ocean Management (WAC 173-26-360)	This General Permit authorizes discharge to Federal Waters at least 3 miles off the coast. No activities are authorized within the State of Washington's jurisdiction.		
18.25.130(2)(a): Economic development goals – encourage viable, orderly economic growth through economic activities that benefit the local economy and are environmentally sensitive activities should not disrupt or degrade the shoreline or surrounding environment	The permitted activity will occur at least 3 miles offshore, and will have minimal (if any) effect on the shoreline or surrounding environment. See the Fact Sheet, Biological Evaluation, and Ocean Discharge Criteria Evaluation for more detail. The EPA has proposed a seasonal discharge prohibition in waters shallower than 100 meters in order to avoid triggering seasonal hypoxia at the seafloor (thus helping to protect the Dungeness crab and other benthic fisheries that are environmentally sensitive and important to the local economy)		
18.25.130(2)(b): Economic development goals – accommodate and promote water-oriented industrial and commercial uses and developments, giving highest preference to water-dependent uses	Offshore seafood processing is a water-oriented industry/commercial use, and is a water-dependent use, so should get highest preference.		
Clallam County Shoreline Master Program			
Clallam County Code Chapter 35.01	Not applicable. This General Permit authorizes discharge to Federal Waters at least 3 miles off the coast. No activities are authorized within Clallam County's jurisdiction.		
Grays Harbor County Shoreline Master Program			
Chapter 1, Economic Development: The primary pillars of the regional economy	Fishing is specifically listed as a pillar of the regional economy. This NPDES General Permit will benefit Washington's commercial fishing industry by providing Clean Water Act coverage, i.e., allowing the sector to conduct business that will support the regional economy and maintain the shoreline (since the discharge will take place at least 3 miles offshore).		
Chapter 1, Economic Development Goal: To maintain and enhance our shorelines- related industry which can coexist harmoniously with the	This NPDES General Permit will benefit WA's commercial fishing industry by providing NPDES permit coverage to seafood processing vessels that are owned by Washington-based seafood companies.		

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Policy or Regulation	Discussion	
natural and human		
environments		
Pacific County Shoreline Master Program		
Section 27, Ocean Resources		
Section 27.D.7: Ocean Disposal	Not applicable. The Marine Protection, Research and Sanctuaries Act (MPRSA), also known as the Ocean Dumping Act, regulates the transportation and dumping of any material into ocean waters. NPDES permits are distinct from ocean dumping, and are authorized by the Clean Water Act Section 402. The EPA is authorized to issue NPDES permits for discharges to Federal Waters, as is the case for this General Permit.	

# Appendix B – Washington Pollution Control Act Consistency Review

Washington Water Pollution Control Act (RCW 90.48)		
RCW Section	Title	Analysis
<u>90.48.039</u>	Hazardous substance remedial actions Procedural requirements not applicable.	Not applicable.
<u>90.48.080</u>	Discharge of polluting matter in waters prohibited.	See analysis in the text above.
<u>90.48.110</u>	Plans and proposed methods of operation and maintenance of sewerage or disposal systems to be submitted to department Exceptions Time limitations.	Not applicable, as this General Permit does not authorize discharge from a sewage system, sewage treatment plant, or disposal system (WAC 173-240).
<u>90.48.160</u>	Waste disposal permit Required Exemptions.	This General Permit will provide NPDES permit coverage to commercial seafood processors disposing of waste into waters of the US at least 3 miles offshore ( <u>not</u> to Washington waters).
<u>90.48.162</u>	Waste disposal permits required of counties, municipalities and public corporations.	This General Permit will provide NPDES permit coverage to commercial seafood processors disposing of waste into waters of the US at least 3 miles offshore ( <u>not</u> to Washington waters).
<u>90.48.165</u>	Waste disposal permits required of counties, municipalities and public corporations Cities, towns or municipal corporations may be granted authority to issue permits Revocation Termination of permits.	Not applicable since this permit is issued by EPA to cover Federal Waters.
90.48.170	Waste disposal permits required of counties, municipalities and public corporations Application Notice as to new operation or increase in volume Investigation Notice to other state departments.	Not applicable since this permit is issued by EPA to cover Federal Waters.
90.48.180	Waste disposal permits required of counties, municipalities and public corporations Issuance Conditions Duration.	Not applicable since this permit is issued by EPA to cover Federal Waters.

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<u>90.48.190</u>	Waste disposal permits required of counties, municipalities and public corporations Termination Grounds.	Not applicable since this permit is issued by EPA to cover Federal Waters.
90.48.195	Waste disposal permits required of counties, municipalities and public corporations Modification or additional conditions may be ordered.	Not applicable since this permit is issued by EPA to cover Federal Waters.
<u>90.48.200</u>	Waste disposal permits required of counties, municipalities and public corporations – Non-action upon application Temporary permit Duration.	Not applicable since this permit is issued by EPA to cover Federal Waters.
90.48.310	Application of barley straw to waters of the state.	Not applicable.
<u>90.48.364</u>	Discharge of oil into waters of the state Definitions.	Not applicable- this General Permit authorizes the discharge of seafood processing waste to Federal Waters. This permit does <u>not</u> authorize the discharge of oil.
<u>90.48.366</u>	Discharge of oil into waters of the state Compensation schedule.	Not applicable- this General Permit authorizes the discharge of seafood processing waste to Federal Waters. This permit does <u>not</u> authorize the discharge of oil.
<u>90.48.367</u>	Discharge of oil into waters of the state Assessment of compensation.	Not applicable- this General Permit authorizes the discharge of seafood processing waste to Federal Waters. This permit does <u>not</u> authorize the discharge of oil.
<u>90.48.445</u>	Aquatic noxious weed control Water quality permits Definition.	Not applicable.
<u>90.48.448</u>	Eurasion water milfoil Pesticide 2,4-D application.	Not applicable.
<u>90.48.455</u>	Discharge of chlorinated organics Engineering reports by pulp and paper mills Permits limiting discharge.	Not applicable.
<u>90.48.530</u>	Construction projects involving fill material Leaching test.	Not applicable.

Washington State Water Pollution Control Act Regulations		
WAC Section	Title	Enforceable Policy Applicability
173-40	Pollution Disclosure	Chapter 90.52 RCW requires the Director of the Department of Ecology to adopt a critical materials registry and establish an annual reporting procedure for those operations which discharge wastes, other than sanitary sewage, into waters of the state and/or into the air of the state. Not applicable because this General Permit only authorizes discharge into Federal Waters.
173-100	Groundwater Management Areas and Programs	Not applicable.
173-200	Water Quality Standards for Ground Waters of the State of Washington	Not applicable. This General Permit authorizes the discharge of seafood processing waste into Federal Waters at least 3 nm from the Washington Coast, and will have no impact on Ground Waters of the State of Washington.
173-201A	Water Quality Standards for Surface Waters of the State of Washington	This EPA-issued NPDES General Permit authorizes discharge to Federal Waters between 3-200 nm from the Washington Coast. The General Permit expressly does <u>not</u> authorize discharge into State waters. For a discussion of how this General Permit is consistent with Washington's Water Quality Standards, see text above.
173-204	Sediment Management Standards	See analysis above.

173-216	State Waste Discharge Permit Program Individual Permits	The purpose of this chapter is to implement a state permit program, applicable to the discharge of waste materials from industrial, commercial, and municipal operations into ground and surface waters of the state and into municipal sewerage systems. Thus, this chapter is not applicable, as this is an NPDES General Permit issued by the EPA to cover discharges to Federal Waters.
173-218	Underground Injection Control Program	Not applicable.
173-220	National Pollutant Discharge Elimination System Permit Program Individual Permits	This chapter is not applicable since it pertains to Ecology's NPDES permitting program. This is a federal NPDES General Permit issued by the EPA to cover discharges to Federal Waters.
173-221	Discharge Standards and Effluent Limitations for Domestic Wastewater Facilities	Not applicable.
173-221A	Wastewater Discharge Standards and Effluent Limitations	This is a federal NPDES General Permit issued by the EPA to cover discharges by offshore seafood processing factories to Federal Waters. The EPA has applied wastewater discharge standards and effluent limitations using Best Professional Judgment (BPJ). See discussion above.
173-224	Wastewater Discharge Permit Fees	Not applicable.
173-226	Waste Discharge General Permit Program	This chapter is not applicable since it pertains to Ecology's NPDES permitting program. This is a federal NPDES General Permit issued by the EPA to cover discharges to Federal Waters.
173-230	Certification of Operators of Wastewater Treatment Plants	Not applicable.

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173-240	Submission of Plans and Reports for Construction of Wastewater Facilities	Not applicable.
173-245	Submission of Plans and Reports for Construction and Operation of Combined Sewer Overflow Reduction Facilities	Not applicable.
173-270	Puget Sound Highway Runoff Program	Not applicable.
372-52	Water Districts Requests for Approvals and Certifications of Necessity to Operate Sewer Districts	Not applicable.
372-68	Water Pollution Control and Abatement Plans for Sewage Drainage Basins	Not applicable.