



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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February 10, 2017

Ms. Catherine Gockel
Office of Water & Watersheds
United States Environmental Protection Agency Region 10
1200 Sixth Avenue, Suite 900, OWW-191
Seattle, Washington 98101

Dear Ms. Gockel:

Thank you for providing the Department of Ecology (Ecology) with the preliminary draft NPDES General Permit and Fact Sheet for Offshore Seafood Processors in Federal Waters off the Coast of Washington and Oregon. The Department of Ecology (Ecology) is concerned that the permit could authorize discharges that may result in undesirable impacts to the marine environment in Washington's coastal waters. Ecology offers the following comments:

Fact Sheet:

Ecology concurs with the statements below from the Fact Sheet that seafood processing waste is high in nutrients and BOD and is an NPDES point source of organic carbon and nutrients in offshore waters. Ecology also agrees that organic carbon is broken down by bacteria, which consume dissolved oxygen during the decomposition process, triggering hypoxic conditions, increasing CO₂ levels and lowering pH. The fact sheet states that "Seafood processing waste not consumed at the surface has high biochemical oxygen demand..." and that "respiration can further exacerbate hypoxic conditions as bottom water moves shoreward over the shelf, especially if surface organic carbon sources are sizable..." Even with the 90 meter seasonal depth restriction Ecology remains concerned that the discharges could impact State Waters.

"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)."

"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 (West Coast Panel, 2016). Since upwelled waters are low in dissolved oxygen, the progression of ocean acidification will be coupled with increasing risk of hypoxic events (West Coast Panel, 2016). But, since ocean acidification and hypoxia often co-occur and share a common set of drivers (e.g., increased atmospheric CO₂ and local nutrient and organic carbon inputs), they can be managed synergistically (West Coast Panel, 2016)."



“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” (West Coast Panel, 2016). Although the Panel’s recommendations are focused on nutrient inputs from land-based sources to semi-enclosed waterbodies, the EPA believes 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, and 3) seafood waste could become entrained by eddies or retentive waters.”

Fact Sheet at 5-6.

Ecology is concerned by the statements below from the Fact Sheet which indicate that the water quality impacts from this discharge are not known. There has been ample opportunity for EPA or the industry to assess the impacts as the industry has been operating and discharging for 20 years off the Washington coast, and this is a routine activity in Alaska.

“This will be the first time an NPDES permit has been issued for offshore seafood processing waste off the coast of Washington and Oregon. As such, the EPA has not received complete Notices of Intent for permit coverage, and the EPA has not received sufficiently detailed information from offshore processing vessels about the nature and location of the discharge. What is known is that seasonal hypoxia is already occurring at the seafloor in areas of broad continental shelf off the coast of Washington and Oregon, and that seafood processing detritus is high in nutrients. The extent to which seafood processing waste will further contribute to hypoxic conditions at depth is not known.

In accordance with § 125.123(c), the EPA has insufficient information to determine prior to permit issuance that there will be no unreasonable degradation of the marine environment pursuant to § 125.122.”

Fact Sheet at 9.

Under 40 C.F.R § 125.123(c)(3), if EPA has insufficient information to determine that there will be no unreasonable degradation of the marine environment, no discharge to the marine environment is allowed unless there is no reasonable alternative to on-site disposal. Ecology believes there are reasonable alternatives to the discharges proposed in the draft permit. In our October 8, 2015 letter Ecology expressed its concerns with the level of treatment provided by an offshore processing ship compared to a shore based processing plant. Ecology recommended requiring factory processors discharging within the contiguous zone (24 miles offshore) be required to provide the same level of treatment. If this is not possible the discharges should be restricted to 24 miles off the coast to prevent impacts to State Waters. The statements below from the Fact Sheet indicate that the offshore processing ships routinely operate at distances greater than 24 miles off the coast and restricting them to this distance should not cause any undue hardship to the industry.

“The Pacific whiting fleet generally conducts its processing activity in waters deeper than 90 meters, often 20-30 miles offshore.”

Ms. Catherine Gockel

February 10, 2017

Page 3

“American Seafoods Company provided information to the EPA about the following six vessels for which the company intends to seek coverage under this General Permit: American Dynasty, American Triumph, Ocean Rover, Northern Eagle, Northern Jaeger, and Katie Ann. Information submitted by American Seafoods Company for all six vessels indicates that fishing/processing is conducted between 91 meters and 1,828 meters in depth.”

“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.”

Fact Sheet at 10 and 13.

The statement below from the Fact Sheet supports Ecology’s ongoing concerns regarding the potential for harmful algal blooms resulting from the additional nutrient inputs from factory processor ships. A recent harmful algal bloom shut down recreational and commercial razor clam and Dungeness crab harvest for most of the 2015/2016 season in Washington, causing an economic hardship for the State’s coastal communities.

“According to a 2008 study on the values of commercial fish landings in Washington, the Dungeness crab landing had an ex-vessel value of \$29,567,235, comprising 79% of the ex-vessel value of shellfish commercial fish landings by Washington non-treaty fisheries that year, and 45% of the total ex-vessel value of 2006 non-treaty commercial fish landings from Washington fisheries (TCW Economics, 2008).”

Fact Sheet at 10.

Ecology feels the study mentioned below in the Fact Sheet should not be optional and that the discharges must be evaluated to determine whether they increase the likelihood of hypoxic conditions.

“Optional Study to Demonstrate that the Discharge will not Contribute to Hypoxic Conditions in the Receiving Water”

Fact Sheet at 11.

Any permit issued pursuant to 40 C.F.R. § 125.123(c) must include a monitoring program “sufficient to assess the impact of the discharge on water, sediment, and biological quality including, where appropriate, analysis of the bioaccumulative and/or persistent impact on aquatic life of the discharge.” 40 C.F.R. § 125.123(d)(2). The monitoring described in the Fact Sheet is inadequate to determine what impacts these discharges will have on the quality of the receiving waters. EPA acknowledges that the environmental impact of the discharge may continue for weeks. The effects could be significantly increased if the ship returns within a few days and discharges in the same location, or if other ships discharge in the same location. The process of applying for this permit must include studies to assess the effects of the discharges on the receiving water, if the discharge has been going on for 20 years there has been ample time to study it before permitting it with no information to assess its impacts on the marine environment. To consider the last 20 years as the “monitoring baseline” does not make sense. A control area and study area must be established and the differences between the two compared to fully understand how this pollutant input will affect the receiving waters.

“The EPA is proposing to require additional reporting on the quantity and nature of the discharge in order to better understand potential impacts to water quality and dissolved oxygen

Ms. Catherine Gockel

February 10, 2017

Page 4

(see Appendix A of the re-proposed General Permit for the revised NOI and Appendix B for the revised Annual Report). Additional 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." "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"

"Also, discharges from offshore seafood processing vessels are effectively part of the monitoring baseline, since discharge has been occurring for approximately 20 years."

Fact Sheet at 11 and 23.

The monitoring program in the draft permit fails to meet the requirements of 40 C.F.R. § 125.123(d)(2), and must be revised to adequately assess the impacts of the proposed discharges.

Permit:

A complete Notice of Intent (NOI) includes important information regarding projected production and a description of discharges. Preliminary Draft Permit at 11-13. In addition, an NOI establishes the maximum amount of seafood processing wastes that a permittee may discharge. Preliminary Draft Permit at 14. However, the Permit states that EPA can cover a discharger even if no NOI was submitted. Preliminary Draft Permit at 9. No vessel should receive permit coverage, or be allowed to discharge, unless a complete NOI has been received and permit coverage granted.

To prevent undesirable impacts to State waters Ecology requests that vessels be at least 24 miles off shore if they are discharging. As indicated by the Fact Sheet, this should not be a hardship since they routinely operate in depths far greater than 90 meters. Ecology may be willing to consider an all known, available, and reasonable methods of treatment and control (AKART) option for vessels desiring to discharge between 3 and 24 miles offshore. Possible restricting those to discharges from meal plant operations only with no grinding, screening, and pumping discharges in this zone.

The Permit requires that an "NOI must include information about whether a Permittee has the capability to refuel fishing vessels and, if so, the capacity of its refueling tank." Preliminary Draft Permit at 13. However, sea conditions off the Washington Coast are far too rough to refuel vessels at sea, and this must not be allowed.

The Permit requires that permittees "must fully utilize to the extent practicable all treatment processes available on board their vessel, including but not limited to fishmeal and fish oil production." Preliminary Draft Permit at 14. However, there is no way to determine compliance with this permit requirement. Ecology may be willing to consider an AKART option for vessels desiring to discharge between 3 and 24 miles offshore, and restricting those to discharges from meal plant operations only with no grinding, screening, and pumping discharges taking place in this zone.

Ms. Catherine Gockel
February 10, 2017
Page 5

The Permit prohibits discharges of seafood processing wastes that create an attractive nuisance that attracts fish or wildlife to the waste disposal. Preliminary Draft Permit at 15. However, a Department of Ecology employee who has lived and worked onboard offshore seafood processing ships in Alaska described the sea surface effluent plume from grinding, screening, and pumping discharges by saying, "it looked like a slaughterhouse". Please explain how permittees will comply with the prohibition on nuisance discharges.

Monitoring the pounds of bycatch, visual inspections of: waste conveyance system, grinder system, pre-season outfall check, 4 quarterly photos, daily and sea surface visual monitoring are inadequate to determine the impacts of the discharge on water quality. Annual Reporting is not frequent enough, and the reporting requirements completely lack any quantitative evaluation of the discharge or receiving water, or the effects of the discharge on the receiving water. There is no way for EPA to conduct its own monitoring to verify what is taking place, it is completely subjective and up to the permittee. The monitoring program in the draft permit fails to meet the requirements of 40 C.F.R. § 125.123(d)(2), and must be revised to adequately assess the impacts of the proposed discharges.


Discharges should not be allowed less than 24 miles offshore at any time during the year. Ecology may be willing to consider an AKART option for vessels desiring to discharge between 3 and 24 miles offshore. Possibly restricting those to discharges from meal plant operations only with no grinding, screening, and pumping discharges in this zone may be considered.

Presidential Proclamation No. 7219, August 2, 1999, extended the Contiguous Zone to 24 nautical miles offshore. The definition of "contiguous zone" at page 30 of the Preliminary Draft Permit should be modified to reflect this extension of the contiguous zone.

Ecology looks forward to continuing its work with you on this project, and on the federal consistency process as required by the Coastal Zone Management Act and federal regulations. If you have any questions please contact Marc Pacifico at 360-280-1303, or by e-mail at marc.pacifico@ecy.wa.gov.

Sincerely,



 Heather R. Bartlett
Water Quality Program Manager

