UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

December 17, 2008

Melinda O'Donnell
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Alaska Coastal Management Program, DCOM
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RE: Alaska Coastal Management Program Public Notice for the Environmental Protection Agency's Vessel Discharge General Permit, AK0808-13AA

Dear Ms. O'Donnell:

The National Marine Fisheries Service (NMFS) Habitat Conservation Division (HCD) has reviewed the above referenced Public Notice (PN) soliciting comment on the consistency of the Environmental Protection Agency's (EPA) Proposed Vessel Discharge General Permit (VGP) under the National Pollutant Discharge Elimination System (NPDES) with the Alaska Coastal Management Program (ACMP). The VGP would apply to owners and operators of commercial vessels and recreational vessels over 79 feet for twenty-one types of discharges incidental to the normal operation of these vessels into waters of the United States as defined by 40 CFR 122.2,.

As outlined in the PN; with the exception of water quality issues addressed through the Alaska Department of Environmental Coordination (DEC) 401 Certification process, the activities subject to ACMP review are:

- Ballast water from discharges from fishing vessels of any size
- Ballast water discharges from commercial vessels less than 79 feet in length
- Discharges incidental to the normal operation of commercial vessels greater than or equal to 79 feet in length

This letter constitutes our review under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). NMFS request that you forward our letter to DEC for any of these issues you deem appropriate to their jurisdiction.

Background

Since May 1973, EPA's regulations have excluded certain discharges "incidental to the normal operation of vessels", including ballast water, from the NPDES program under the Clean Water Act (CWA).

On July 23, 2008, the U.S. Court of Appeals for the Ninth Circuit upheld a District Court decision which ruled that EPA exceeded its authority under the CWA in exempting certain marine discharges from the NPDES program, and that EPA is now required to regulate discharges incidental to the normal operation of vessels under the CWA NPDES program requirements. A draft general permit has been issued and the final regulation is expected to enter into force on 19 December 2008.

In order to meet its obligations under the CWA, the EPA will issue a Vessel General Permit (VGP) covering all commercial vessels and recreational vessels over 79 feet in length. It will not be necessary to obtain a separate permit for each vessel. Instead, vessels will be covered by the VGP automatically if the vessel is less than 300 gross registered tons and the vessel does not have the capacity to hold or discharge more than 8 cubic meters (2113 gallons) of ballast water. For vessels that exceed these thresholds, permit coverage occurs when vessel operators file Notices of Intent (NOIs) to receive coverage under the VGP by various deadlines according to vessel category. Vessels will then be required to comply with the requirements of the VGP. EPA currently estimates that there will be approximately 91,000 U.S. flagged vessels that may be eligible for coverage under this permit. Additionally, EPA estimates that there are up to 7,000 additional foreign flagged vessels that may need coverage under this permit.

General Comments

Coordination between West Coast States

The VGP applies nationwide and vessels covered will travel between the United States and Canada on a routine basis. To avoid confusion and encourage consistent adherence to VGP compliance, coordination should be facilitated between the west coast state's coastal zone management programs and any similar programs in Canada to bring awareness and understanding among jurisdictions and to streamline the regulations as much as possible.

Specific Comments

Trans Alaska Pipeline System Vessels and Ballast Water

Trans Alaska Pipeline System (TAPS) crude oil tankers are currently exempt from ballast water management requirements under Section 1101 (c) (2) (L) of the National Invasive Species Act of 1996 (16 U.S. C. 4711) when engaged in the coastwide trade. EPA's Fact Sheet on the VGP states:

> "There is no counterpart exemption for such vessels in the CWA, nor does it appear that such vessels are inherently unable to perform the ballast water exchange and other aquatic nuisance species management practices that their non-exempt vessel counterparts can and do routinely carry out. Hence, the VGP would not exempt crude oil tankers in the coastwise trade from its ballast water management requirements, and such tankers must either seek coverage under the proposed permit and comply with its applicable terms or seek alternative NPDES permit coverage as discussed under the alternative permits section in Part 1.8 of the proposed permit."

Because Federal laws and regulations for TAPS tankers will be made inconsistent by the finalization of the VGP, NMFS recommends that the State formally supersede the TAPS exemptions as contained in the existing U.S. Coast Guard regulations with State of Alaska specific ballast water regulations, similar to what has been done for the states of Washington and Oregon.

Draft VGP

Mandatory Ballast Water Management Practices, Section 2.2.3.3

This section contains the following as a mandatory requirement of the VGP.

- Minimize or avoid uptake of ballast water in the following areas and situations:
  - Areas known to have infestations or populations of harmful organisms and pathogens (e.g., algal blooms).
  - Areas near sewage outfalls.
  - Areas near dredging operations.
  - Areas where tidal flushing is poor or when a tidal stream is known to be more turbid.
  - In darkness when bottom dwelling organisms may rise up in the water column.
  - In shallow water or where propellers may stir up the sediment.
  - Areas with pods of whales, convergence zones and boundaries of major currents

Some of these conditions are self-evident (shallow and turbid water), whereas others, such as the locations of areas known to have infestation of populations of harmful organisms and pathogens (e.g. algal blooms), may not be readily apparent and may change within time and space on a frequent basis. Given this condition of the permit is mandatory, a mechanism needs to be developed that will provide timely information to vessel owners and operators on the locations and nature of these areas and situations so they are able to comply with the VGP.

NMFS recommends that the condition to avoid uptake in darkness be removed. While some organisms rise in the water column during the night, others undertake the opposite migration pattern, rising into the water column during the day and descending to the bottom at night. A study in western Florida of the dinoflagellate *Karenia brevis* by Schofied et al. (2006) showed that this neurotoxin producing species, associated with harmful algal blooms, peaked in the late afternoon, around 1600 local daylight time, over a 24 hour period. In this case, ballast water uptake during the day instead of at night could increase the chances of spreading this species to other locations. Notices to vessel owners to avoid these organisms at certain times through ballast water uptake would be advisable but must be location and time specific to be meaningful.

Underwater Ship Husbandry Discharges, Section 2.2.25

The VGP encourages hull-cleaning activities when vessels are in drydock, or other land-based facilities but still allows the removal of fouling organisms from hulls while the vessel is waterborne. Such activity has the potential to spread invasive species attached to vessel hulls to the water column where they may disperse, or to the bottom where they may re-attach. Such dispersal would be inconsistent with the ACMP Habitat Standard (11 AAC 112.300) to "avoid the introduction of competing or destructive species and predators." NMFS recommends that in-

water removal of fouling organisms from vessel hulls be prohibited with the exception of an emergency situation that is documented and justified. Alternatively, if best management practices are developed that allow in-water removal of fouling organisms without the potential to disperse invasive species, the prohibition could be modified accordingly.

Waters Federally Protected wholly or in part for Conservation Purposes, Section 12

The proposed VGP restricts, in various manners, the discharges of bilgewater, ballast water, aqueous film forming foam, boiler/economizer blowdown, graywater, firemain systems discharges and motor gasoline and compensating discharges to "waters federally protected wholly or in part for conservation purposes." These waters include marine sanctuaries, national park system units, national wildlife refuge system units, national wilderness areas, and national wild and scenic rivers.

NMFS proposes that, in addition to the areas defined above, the following areas also be restricted from these discharges (as described below and depicted in the figure and coordinates table – Enclosure 1). These areas have portions that occur within the jurisdictional three miles covered for discharges by the VGP.

NOAA Fisheries and the North Pacific Fishery Management Council have identified six Aleutian Islands Coral Habitat Protection Areas. These sites are referred to as: Great Sitkin Island, Cape Moffet Island, Adak Canyon, Bobrof Island, Ulak Island, and Semisopochnoi Island. These areas contain high densities of sensitive coral and sponge species as compared to adjacent areas. Living habitat structure within these areas support juvenile and adult commercial groundfish and prey resources. Federal Regulations [71 FR 36694, June 28, 2006; 50 CFR Part 679] protect these six areas from all bottom contact fishing gear, including pots, long lines, and bottom trawling. In conjunction with these Federal Regulations, the Alaska State Board of Fisheries adopted parallel protections measures.

In addition, the VGP directs that ballast water exchanges required for discharges within three miles of the coast be conducted more than 50 nautical miles from any Pacific Shore for vessels engaged in Pacific nearshore voyages (Sections 2.2.3.5 and 2.2.36). This requirement further specifies that "Exchange should occur as far from the shore, major estuary and oceanic river plumes, subsurface physical features (e.g. seamounts) and know fishery habitats as practicable." NMFS recommends that the avoidance of such areas be mandatory, specifically identified and provided to vessel owner/operators. NMFS has identified a number of areas protected for the conservation of fisheries habitat that occur between 50 and 200 nautical miles. NMFS recommends that EPA initiate an EFH consultation with NMFS to identify them for inclusion in the VGP. Descriptions of these areas may be found on our website at the following link: http://www.fakr.noaa.gov/habitat/efh.htm.

Oil Effluent Limits

An oil and oily mixture concentration limit for discharges covered by the VGP is given as 15 parts per million (ppm) in Sections 2.1.4 "Discharges of Oil Including Oily Mixtures", 2.2.11 "Elevator Pit Effluent", 2.2.16 "Motor Gasoline and Compensating Discharge", and in Section 7, Appendix A, for the definition of "Treated Bilgewater." In addition, Section 2.2.14, "Gas Turbine Wash Water", states that "Under no circumstances may oils, including oily mixtures,

from Gas Turbine Wash Water be discharged into waters subject to this permit in quantities that may be harmful as determined in accordance with 40 CFR Part 110." 40 CFR Part 110 defines discharges of oil in quantities that may be both harmful and not harmful. Discharges of oil determined as not harmful is based on the International Convention for the Prevention of Pollution from Ships (MARPOL 73/78), Annex I, as provided in 33 CFR part 151, subpart A and is the origin of the 15 ppm concentration limit used in the VGP.

A biological basis for use of the 15 ppm concentration is not given in the VGP. Studies to understand the impacts of the *Exxon Valdez* oil spill have shown that herring adults and eggs, and juvenile salmon exposed to oil in the parts per billion ranges show ill effects to reproductive and immune systems and/or development abnormalities (Carls, et al., 1997, 1999; Marty, et al., 1997). Consequently, the 15 ppm discharge concentration limit is not protective of these fisheries resources and is inconsistent with the ACMP Habitat Standard (11 AAC 112.300) to "avoid, minimize, or mitigate significant adverse impacts to competing uses such as commercial, recreational, or subsistence fishing, to the extent that those uses are determined to be in competition with the proposed use." A concentration level based on the aforementioned research, and the use of existing technologies for reducing oil discharges to acceptable levels for herring and salmon productivity should both be researched and incorporated into the VGP for discharges of oil and oily mixtures.

We appreciate the opportunity to comment on your ACMP review of the VGP. If you have any questions please contact Linda Shaw at 907-586-7510.

Sincerely,

Robert D. Mecum
Acting Administrator, Alaska Region

cc: USFWS, Juneau, Richard Enriquez
USFWS, Anchorage, Ann Rappaport
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EPA, Seattle, Mike Gearheard
ADF&G, Juneau, Tom Schumacher
ADOT&PF, Ben White and Jim Heumann

LITERATURE CITED

Carls, M.G., S.W. Johnson, R.E. Thomas, and S.D. Rice. 1997. Health and reproductive implications of exposure of Pacific herring (Clupea pallasi) adults and eggs to weathered crude oil, and reproductive condition of herring stock in Prince William Sound six years after the Exxon Valdez oil spill. Exxon Valdez Oil Spill Restoration Final Project Report (Restoration Project 95074), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska.

Carls, M.G., S.D. Rice, and J.E. Hose. 1999. Senistivity of fish embryos to weathered crude oil: Part I. Low-level exposure during incubation causes malformations, genetic damage, and mortality in larval Pacific herring (Clupea pallasi). Environmental Toxicology and Chemistry. Vol. 18, No. 3. pp. 481-493.

Marty, G.D., J.W. Short, D.M. Dambach, N.H. Willits, R.A. Heintz, S.D. Rice, J.J. Steeman and D.E. Hinton. 1997. Ascites, premature emergence, increased gonadal cell apoptosis, and cytochrome P4501A induction in pink salmon larvae continuously exposed to oil-contaminated gravel during development. Can. J. Zool. 75:989-1007.

Shofield, O., J. Kerfoot, K. Mahoney, M. Moline, M. Oliver, S. Lohrenz and G. Kirkpatrick. 2006. Vertical migration of the toxic dinoflagellate *Karenia brevis* and the impact on ocean optical properties. J. Geophys. Res. III, C06009, doi:10.1029/2005JC003115

Enclosure 1

Figure.1 Aleutian Island Habitat Protection Areas.

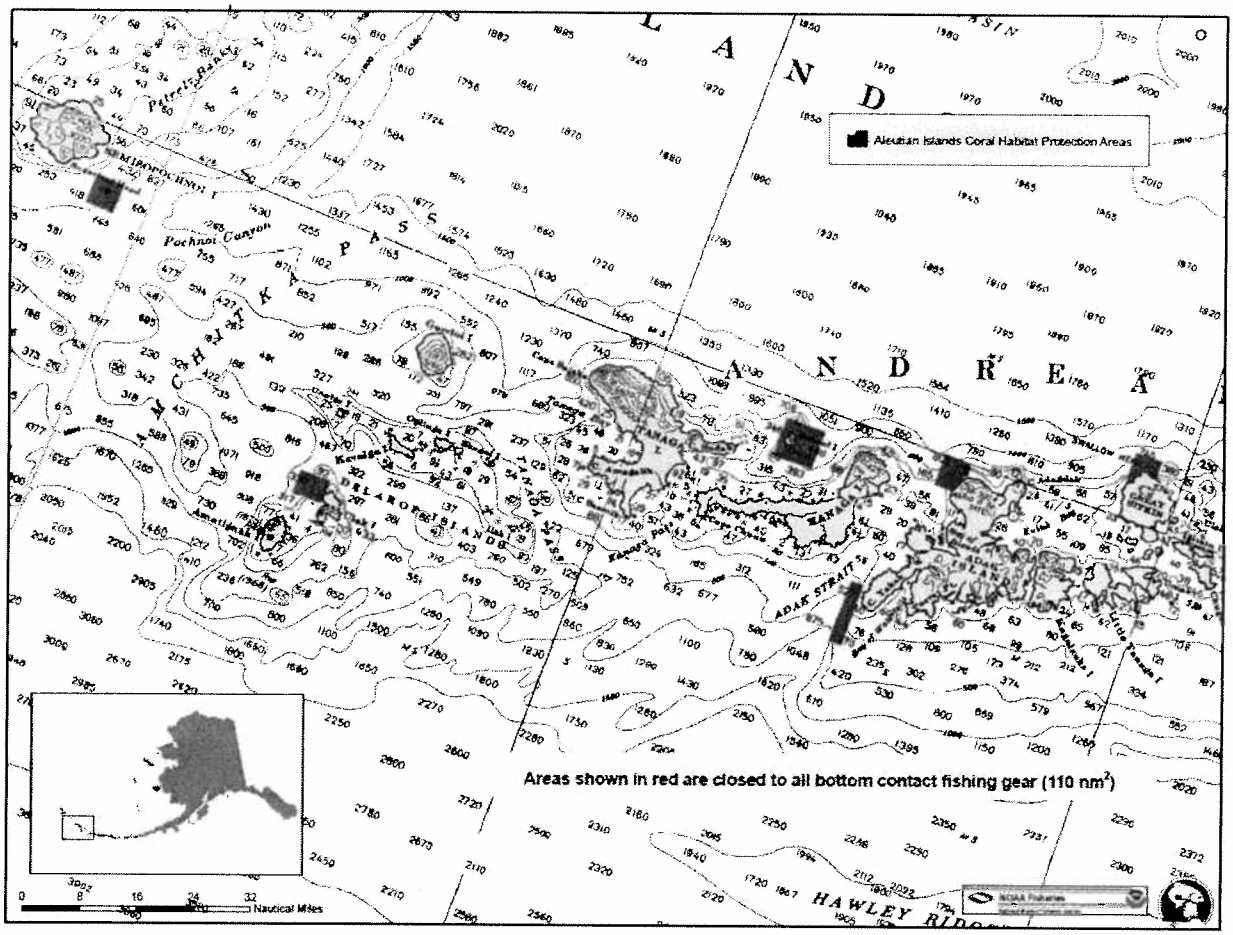

Table. 1 Aleutian Island Habitat Protection Area Names and Coordinates.

Area No.	Name	Latitude	Longitude
1	Great Sitkin I	52 9.56 N 52 9.56 N 52 4.69 N 52 6.59 N	176 6.14 W 176 12.44 W 176 12.44 W 176 6.12 W
2	Cape Moffett I	52 0.11 N 52 0.10 N 51 55.69 N 51 55.69 N 51 57.96 N	176 46.65 W 176 53.00 W 176 53.00 W 176 48.59 W 176 46.52 W
3	Adak Canyon	51 39.00 N 51 39.00 N 51 30.00 N	177 0.00 W 177 3.00 W 177 3.00 W

TABLE 23 TO PART 679.—ALEUTIAN ISLANDS CORAL HABITAT PROTECTION AREAS—Continued

Area No.	Name	Latitude	Longitude
		51 30.00 N	177 0.00 W
4	Bobrof I	51 57.35 N 51 57.36 N 51 51.65 N 51 51.71 N	177 19.94 W 177 29.11 W 177 29.11 W 177 19.93 W
5	Ulak I	51 25.85 N 51 25.69 N 51 22.28 N 51 22.28 N	178 59.00 W 179 6.00 W 179 6.00 W 178 58.95 W
6	Semisopochnoi I	51 53.10 N 51 53.10 N 51 48.84 N 51 48.89 N	179 53.11 E 179 46.55 E 179 46.55 E 179 53.11 E

Note: Each area is delineated by connecting the coordinates in the order listed by straight lines. The last set of coordinates for each area is connected to the first set of coordinates for the area by a straight line. Projected coordinate system is North American Datum 1983, Albers.

G: Ak Coastal Mgmt EPA vessel discharge review ls 12-17-08