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

April 7, 2003

Mr. Van Sundberg
Project Environmental Coordinator
6860 Glacier Highway
Juneau, Alaska 99801-7999

RE: South Mitkof Island Ferry Terminal STP-0003(65)/67833

Dear Mr. Sundberg:

The National Marine Fisheries Service (NMFS) has reviewed the Revised Final Site Reconnaissance Study (March 2003) for the referenced project. NMFS also attended the interagency meeting held April 1, 2003, to discuss the basis for the change of location for the ferry terminal. We have already provided comments on resources of concern for the two potential sites in our letters of May 25, 2000, and May 10, 2001.

Initial scoping comments for the South Mitkof ferry terminal project recognized the higher value habitat located in Blind Slough, as opposed to the milepost 27 ½ site. The location has been changed due to wind and wave analyses, depth and turning radius required for vessels, and public comment from citizens of Petersburg. NMFS recognizes that these factors are important to the overall decision regarding location. However, the new site has higher value for fish habitat, by virtue of the presence of an eelgrass bed and silty substrate located in an area known to be productive for Dungeness crab fisheries. To protect this habitat and associated fishery values, we strongly suggests that appropriate measures be taken to minimize the greater environmental impact that will occur at the milepost 25 site.

The milepost 25 site will bisect an eelgrass/silt bottom complex. Eelgrass is considered a special aquatic site under the Clean Water Act 404(b)(1) guidelines. According to these guidelines, special aquatic sites are "generally recognized as significantly influencing or positively contributing to the overall health or vitality of the entire ecosystem or region." Eelgrass provides nesting, spawning, nursery, cover and forage habitats for numerous species of fish and invertebrates, contributes to primary and secondary productivity of marine food chains, and protects shorelines from erosion and wave action (Fonseca et al., 1998).

In Alaska, eelgrass provides Essential Fish Habitat (EFH), as defined by the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), for a number of commercially important species, including rockfish, Pacific cod and salmon (Murphy et al., 2000; Byerly, pers. comm., 2000). Three anadromous streams in Blind Slough collectively support runs of coho, pink, chum, and sockeye salmon, steelhead trout and Dolly Varden char (USGS Quad Petersburg, C-3, #10430, -10450, and.0 -10500.) Adult and juvenile salmonids will therefore be present in the eelgrass bed and near shoreline when spawning and outmigrating in the summer/fall and spring, respectively. Several other valuable species were observed in this eelgrass bed during your dive survey, including Dungeness crab and juvenile flatfish. Dungeness crab and herring use eelgrass for spawning, sheltering, feeding and rearing of young (Phillips, 1984; Stevens and Armstrong,1984).

Construction of the proposed dock would cause both direct and indirect adverse impacts within the eelgrass bed. Direct loss of eelgrass habitat would result from placement of piles. Indirect impacts would include shading from the dock structure, sedimentation from boat propeller wash, and introduction of hydrocarbons from boat engines. Hydrocarbons are extremely toxic to early life history stages of salmon and herring (Marty et al., 1997; Carls et al., 1997).

The referenced report includes a map showing the extent of the eelgrass bed in the vicinity of the dock and the location of the proposed dock. The use of pilings and relative narrowness of the bed in the location of the dock will help to minimize impacts. Alternative designs of the dock and its placement within the eelgrass bed should be further considered and analyzed to minimize adverse impacts. We have enclosed several documents that address placement of docks in eelgrass beds to minimize impacts. According to scientists from the Battelle Marine Science Laboratory, models are available to customize dock designs to minimize light impacts. These options should be fully investigated and optimal design features incorporated into the dock to minimize effects to eelgrass. The use of a vibratory hammer to drive the pilings should be investigated to minimize mortality and injury of organisms. A monitoring program should be used to assess long-term impacts of the dock to the eelgrass bed and any necessary corrective action. Consideration should be given to the possibility of sedimentation and oil spills. Use of the shallower areas of the dock should be limited to avoid sedimentation of the eelgrass band. Oil and toxic spill response materials should be stored on site, and a plan of action developed to protect the marine environment in the event of a spill.

To meet EFH requirements of the MSFCMA, the EA should include an EFH Assessment that specifically addresses the impacts of the dock to EFH. We have already outlined the requirements of an EFH assessment and the EFH species present in Blind Slough in previous letters.

Please contact Linda Shaw at (907-586-7510) if you have any questions regarding these comments.

Sincerely,

Jonathan M. Kurland
Assistant Regional Administrator
for Habitat Conservation

Enclosures:

"The Effects of Boat Docks on Eelgrass Beds in Coastal Waters of Massachusetts" by D.M. Burdick and F.T. Short.

"Evaluation of Methods to Increase Light Under Large Overeager Structures: Improving Salmon Habitat Functions" by S. Sargeant, Battelle, with attached reference list.

cc: Jim Cariello, ADF&G, Petersburg
Chris Meade, EPA, Juneau
ADEC, AADGC, ADNR, USFWS, Juneau

LITERATURE CITED

Byerly, M.M. 2001. Notes from Special Seminar "The Ecology of Juvenile Copper Rockfish (*Sebastes Caurinus*) in Vegetated Habitats of Sitka Sound, Alaska"

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.

Fonseca, M.S., W.J. Kenworthy, and G.W. Thayer. 1998. Guidelines for the Conservation and Restoration of Seagrasses in the United States and Adjacent Waters. NOAA Coastal Ocean Program Decision Analysis Series No. 12. NOAA Coastal Ocean Office, Silver Spring, MD. 222 pp.

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.

Murphy, M.L., S.W. Johnson, and D.J. Csepp. 2000. A Comparison of Fish Assemblages in Eelgrass and Adjacent Subtidal Habitats Near Craig, Alaska. 2000. Alaska Fishery Research Bulletin 7:11-21.

Phillips, R.C. 1984. The ecology of eelgrass meadows in the Pacific Northwest: a community profile. U.S. Fish and Wildlife Service FWS/OBS-84/24, Portland, Oregon.

Stevens, B.G. and D.A. Armstrong. 1984. Distribution, abundance and growth of juvenile Dungeness crabs, *Cancer magister*, in Grays Harbor Estuary, Washington. Fish Bulletin 82:469-483.