



**UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration**

National Marine Fisheries Service

P.O. Box 21668

Juneau, Alaska 99802-1668

July 7, 2008

Randall P. Vigil
Project Manager
U.S. Army Corps of Engineers
8800 Glacier Highway, Suite 106
Juneau, Alaska 99801-8079

Re: POA-1999-1426
Auk Nu Cove

Dear Mr. Vigil;

The National Marine Fisheries Service (NMFS) reviewed the June 6, 2008, agency reviewer letter for the application by R & M Engineering, Inc. on behalf of Mr. Mike Erickson and the Alaska Glacier Seafood Company. The applicant proposes to construct an approximately 60-foot wide by 145-foot long concrete panel dock supported by approximately 23 steel piles below the plane of mean high water (approximate elevation +14.8 feet above the 0.0 contour) in Auke Nu Cove. They propose to construct the dock over a five year two-phase plan. A permit was previously issued to discharge 15,600 cubic yards of fill and construct one 80-foot wide by 145-foot long pile-supported structure. A portion of the dock was constructed in 2004. The permit expired on March 31, 2007. We offer the following comments specific to the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), the Endangered Species Act (ESA), and the Marine Mammal Protection Act (MMPA).

Essential Fish Habitat

Section 305(b) of the MSFCMA requires federal agencies to consult with NMFS on all actions that may adversely affect Essential Fish Habitat (EFH). NMFS is required to make conservation recommendations, which may include measures to avoid, minimize, mitigate or otherwise offset adverse effects. NMFS has been actively involved in the planning and review of development at this site since the original seafood processing plant construction proposal in 1999. The ecological importance of the Auke Nu eelgrass bed has been substantially documented in previous correspondence. The extent of eelgrass in Auke Nu Cove is documented in a recent NOAA Technical Memorandum NMFS-AFSC-182 (Harris et. al., 2008).

NMFS is concerned with the cumulative effects of development in the cove. Marine species within the project area may be adversely affected by increased sedimentation and turbidity caused by boats utilizing the dock and underwater sound pressure waves generated by pile driving. In addition, eelgrass growth may be reduced due to shading of the vegetation. The following EFH Conservation Recommendations are made pursuant to Section 305(b)(4)(A) of the Magnuson-Stevens Act:



1. In light of the additional development that has taken place in Auk Nu Cove since this project was originally authorized, NMFS requests a meeting with the applicant and the Corps of Engineers to discuss options for additional mitigation. Additional mitigation is necessary to offset the cumulative effects of habitat loss associated with this project and other recent developments.
2. Piles should be driven with a vibratory hammer to the extent practicable. Pile driving can generate intense underwater sound pressure waves that can disrupt migration and injure or kill fish. Vibratory hammers produce less intense sounds than impact hammers (NMFS 2005). Fish have been observed to avoid sounds similar to those produced by vibratory hammers and to remain within the field of harmful sound associated with an impact hammer (Dolat 1997). If an impact hammer is required because of substrate type or the need for seismic stability, piles should be driven as deep as possible with a vibratory hammer before the impact hammer is used.
3. In-water blasting should be avoided unless it is the only practicable method for setting piles in bedrock. In-water blasting produces intense underwater sound pressure waves that can kill or injure fish. NMFS strongly encourages the use of drilling techniques or other mechanical means for setting piles in bedrock. If underwater blasting must be used, mitigative measures (e.g. stemming) should be employed to contain the explosive energy within the bedrock to the greatest extent possible. Because potentially harmful sound pressure waves are attenuated more rapidly in shallow water than in deep water (Rogers and Cox 1988), blasts should be conducted during the lowest tide level practical.
4. No in-water work should be permitted from April 15 through June 15 of any year to protect out migrating salmon and spawning herring.
5. NMFS recommends that reasonable precautions be taken to prevent incidental and accidental discharge of petroleum products and other contaminants. An emergency oil spill response kit or other appropriate equipment such as absorbent pads should be available on site to allow fast response to small oil spills and accidental discharge of hydrocarbon contaminated bilge waters.

Under section 305(b)(4) of the Magnuson-Stevens Act, the Corps is required to respond to NMFS EFH recommendations in writing within 30 days. If the Corps will not make a decision within 30 days of receiving NMFS EFH Conservation Recommendations, the Corps should provide NMFS with a letter within 30 days to that effect, and indicate when a full response will be provided.

Threatened and Endangered Species/ Marine Mammals

Section 7(a)(2) of the ESA directs federal interagency cooperation “to insure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered species or threatened species” or result in the destruction or adverse modification of critical habitat. NMFS is responsible for the administration of the ESA as it

applies to listed cetaceans, pinnipeds, fish, and reptiles (sea turtles) In southeast Alaska, endangered marine mammal species include the Steller sea lion (western stock, west of 144 degrees West longitude), fin whales and humpback whales. The endangered leatherback turtle has also been documented in southeast Alaska. The threatened eastern population of Steller sea lion (eastern stock, east of 144 degrees West longitude) is also present in southeast Alaska. Salmon from several ESA-listed Evolutionarily Significant Units along the west coast may occur in Alaska waters. Marine mammal species that are not listed under the ESA are afforded protection by the MMPA. In southeast Alaska, these species include harbor seals, harbor porpoise, Dall's porpoise, minke and killer whales.

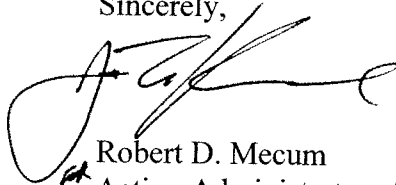
All of the aforementioned marine mammal species may swim and forage in marine waters near the proposed project at any time of year on an opportunistic basis. We do not have detailed information on the frequency or magnitude of occurrence of ESA or MMPA-protected species in Auke Nu Cove near the proposed project area. General information on ESA species and MMPA species under NMFS jurisdiction can be found at: <http://www.fakr.noaa.gov/protectedresources>.

The MMPA and the ESA prohibit the injury, harm or harassment of marine mammals. Pile driving introduces high levels of impulsive noise into the water column, with the potential to harass or injure marine mammals. Sound pressure levels (SPLs) in the range of 130-135 dB re: 1 μ Pa have been measured up to one kilometer from an active pile driver (Johnson et. al., 1986). Humpback whales have been observed to react to SPLs greater than 115-129 dB re: 1 μ Pa within 200 meters of a sound source. Reyff (2003) measured SPLs of 159 dB re: 1 μ Pa about 200 meters from a pile driver driving 14-inch diameter hollow steel piles. NMFS normally considers harassment takes to begin at received levels of 160 dB.

NMFS recommends that pile driving not occur if any marine mammals are observed within 200 meters of the platform to reduce the possibility for harassment or injury to marine mammals. The operator should scan the area for the presence of marine mammals. If marine mammals are sighted within 200 meters of the sound source or are observed to be disturbed by the activity at any distance, pile driving should cease until the animals leave the immediate area.

If you have any questions regarding our habitat recommendations for this project, please contact Cindy Hartmann at 907-586-7585. Please direct any questions regarding marine mammals and endangered species to Aleria Jensen at (907) 586-7248.

Sincerely,



Robert D. Mecum
Acting Administrator, Alaska Region

cc: Alaska Glacier Seafood, Mr. Mike Erickson, 13555 Flacier Hwy., Juneau, AK 99801
R&M Engineering, Chris Crenshaw, 6205 Glacier Hwy., Juneau, AK 99801
ADNR, Juneau, Jackie Timothy*

USFWS, Juneau, Richard Enriquez and Neil Stickert*
USEPA, Juneau, Chirs Meade*
City and Borough of Juneau, Teri Camey*
ADF&G, Juneau, Tom Schumacher*
NMFS, HCD, Juneau, Cindy Hartmann, Susan Walker, Chiska Derr*
NMFS, PRD, Juneau, Aleria Jensen*
NMFS, AKR, Records
* electronic copy

References:

Dolat, S.W. 1997. Acoustic measurements during the Baldwin Bridge Demolition (final, dated March 14, 1997). Prepared for White Oak Construction by Sonalysts, Inc., Waterford, CT/34 pp + appendices.

Harris, P. M., A. D. Neff, S. W. Johnson, and J. F. Thedinga. 2008. Eelgrass habitat and faunal assemblages in the City and Borough of Juneau, Alaska. U. S. Dep. Commer., NOAA Tech. Memo. NMFS-AFSC-182 , 46 p.

Johnson, S.R., C.R. Greene, R.A. Davis, and W.J. Richardson. 1986. Bowhead whales and underwater noise near the Sandpiper Island drillsite, Alaskan Beaufort Sea, autumn 1985, Reprinted by LGL Limited Environmental Research Associates, King City, Ontario, and Greeneridge Sciences, Inc., Santa Barbara, CA, for Shell Western Exploration & Production Inc., Anchorage, AK. 130p.

National Marine Fisheries Service. 2005. Final Environmental Impact Statement, Essential Fish Habitat Identification and Conservation in Alaska, Vol. 2, Appendix G; National Marine Fisheries Service, Department of Commerce. April, 2005.

Reyff, J.A. 2003. Underwater sound levels associated with seismic retrofit construction of the Richmond-San Rafael Bridge. Document in support of Biological Assessment for the Richmond-San Rafael Bridge Seismic Safety Project. January 31, 2003. 18pp.

Rogers, P.H. and M. Cox. 1988. Underwater sound as a biological stimulus. pp. 131-149. *In* Sensory biology of aquatic animals. Atema, J, R.R. Fay, A.N. Popper, and W.N. Tavolga, eds. Springer-Verlag. New York.