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

January 22, 2008

Colonel Kevin J. Wilson
District Engineer
U.S. Army Corps of Engineers
P.O. Box 6898
Anchorage, Alaska 99506-0898

Re: POA-2007-1707-1
Lisianski Inlet

Attn: Tiffany Smodey

Dear Colonel Wilson:

The National Marine Fisheries Service (NMFS) has reviewed the above referenced application from Mr. Mike Chapman to construct a new pile supported 30-foot by 40-foot home, located in Pelican, Alaska. The home would be supported by twenty 12-inch galvanized steel pilings located 5 feet from the existing Pelican boardwalk.

Section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) requires federal agencies to consult with NMFS on all actions that may adversely affect Essential Fish Habitat (EFH). NMFS is required to make EFH Conservation Recommendations, which may include measures to avoid, minimize, mitigate or otherwise offset adverse effects. The Alaska Department of Fish and Game's Anadromous Waters Catalog identifies an anadromous fish stream, Pelican Creek (USGS quad map Sitka D-7, #113-95-10030) within a mile of this project. Pelican Creek support runs of pink and chum salmon. Juvenile salmon use nearshore habitat during spring and early summer for feeding and predator avoidance prior to migration out to sea. In addition to Pacific salmon, the NMFS's Nearshore Fish Atlas indicates that the following MSA species utilize nearshore habitat in the vicinity of the project: flatfish, rockfish, mackerel, ocean perch, cod, pollock, sculpin, skates, sharks, scallops, squid, octopus, and forage fish species.

In accordance with Section 305(b)(4)(A) of the MSA, NMFS makes the following EFH Conservation Recommendations:

1. No in-water work should be permitted from April 1 through June 15 of any year to protect out-migrating salmon.

2. No docks, ramps, or other structures that block sunlight should be placed in or over eelgrass beds.

3. The use of any wood that has been surface or pressure-treated with creosote or treated with pentachlorophenol should be prohibited. If treated wood must be used, any wood

that comes in contact with water should be treated with waterborne preservatives approved for use in aquatic and/or marine environments. These include, but are not limited to: Chromated Copper Arsenic (CCA) Type C, Ammoniacal Copper Zinc Arsenate (ACZA), Alkaline Copper Quat (ACQ), Copper Boron Azole (CBA) or Copper Azole (CA). Use wood treated with waterborne preservatives in accordance with Best Management Practices developed by the Western Wood Preservers Institute. Treated wood should be inspected before installation to ensure that no superficial deposits of preservative material remain on the wood.

4. Drive piles with a vibratory hammer. Pile driving can generate intense underwater sound pressure waves that can injure or kill fish (Longmuir and Lively 2001, Stotz and Colby 2001). 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.

5. 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 (Keevin 1998). 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.

Under section 305(b)(4) of the Magnuson-Stevens Act, the Corps is required to respond to NMFS EFH Conservation 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.

NMFS is also responsible for administering the Endangered Species Act (ESA) and Marine Mammal Protection Act (MMPA). The project is within the range of endangered humpback whales and threatened Steller sea lions, as well as harbor porpoises, harbor seals and killer whales, which are protected under the Marine Mammal Protection Act (MMPA). The MMPA and the ESA prohibit the injury, harm or harassment of marine mammals.

We offer the following recommendation to protect marine mammals from disturbance due to in-water blasting:

1. To reduce the possibility for harassment or injury to marine mammals, any blasting should not occur if any marine mammals are observed within 200 meters of the platform.

Prior to each blast, the blaster should scan the area for the presence of marine mammals. If marine mammals are sighted within 200 meters of the blast source or are observed to be disturbed by blasts at any distance, blasting should cease until the animals leave the immediate area.

If you have any questions regarding our recommendations for this project, please contact Linda Shaw at 907-586-7510 or linda.shaw@noaa.gov.

Sincerely,

for James W. Balsiger
Administrator, Alaska Region

cc: Applicant
EPA Juneau, Chris Meade*
ADNR, Joe Schumacher and Jackie Timothy*
USFWS Juneau, Richard Enriquez*
ADEC Juneau, Brenda Krauss*

* e-mail PDF

Literature cited

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.

Keevin, T.M. 1998. A Review of Natural Resource Agency Recommendations for Mitigating the Impacts of Underwater Blasting. Reviews of Fisheries Science, 6(4): 281-313.

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.