

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

[I.D. 090601B]

Small Takes of Marine Mammals Incidental to Specified Activities; Building Demolition Activities at Mugu Lagoon, CA

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of issuance of an incidental harassment authorization.

SUMMARY: In accordance with provisions of the Marine Mammal Protection Act (MMPA) as amended, notification is hereby given that an Incidental Harassment Authorization (IHA) to take small numbers of pinnipeds by harassment incidental to the demolition and removal of buildings located at the entrance of Mugu Lagoon in Point Mugu, CA has been issued to the Department of Navy, Naval Base Ventura County (NBVC).

DATES: Effective from September 26, 2001, until September 26, 2002.

ADDRESSES: The application and authorization are available by writing to Donna Wieting, Chief, Marine Mammal Conservation Division, Office of Protected Resources, NMFS, 1315 East-West Highway, Silver Spring, MD 20910-3225, or by telephoning one of the contacts listed here.

FOR FURTHER INFORMATION CONTACT: Simona P. Roberts, (301) 713-2322, ext 106 or Christina Fahy, (562) 980-4023.

SUPPLEMENTARY INFORMATION:**Background**

Sections 101 (a)(5)(A) and (D) of the MMPA (16 U.S.C. 1361 *et seq.*) direct the Secretary of Commerce to allow, upon request, the incidental, but not intentional taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if certain findings are made and either regulations are issued or, if the taking is limited to harassment, notice of a proposed authorization is provided to the public for review.

Permission may be granted if NMFS finds that the taking will have no more than a negligible impact on the species or stock(s) and will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses and that the permissible methods of taking and

requirements pertaining to the monitoring and reporting of such taking are set forth.

On April 10, 1996 (61 FR 15884), NMFS published an interim rule establishing, among other things, procedures for issuing incidental harassment authorizations (IHAs) under section 101 (a)(5)(D) of the MMPA for activities in Arctic waters. For additional information on the procedures to be followed for this authorization, please refer to that document.

Summary of Request

On May 23, 2001, NMFS received an application from NBVC requesting an authorization for the harassment of small numbers of marine mammals incidental to the demolition and removal of approximately 12 buildings and associated infrastructures. The demolition site encompasses a total area of approximately 8 acres (3.2 hectares (ha)) at the entrance of Mugu Lagoon in Point Mugu, CA.

There will be two phases to the demolition activities. No explosives will be used during any phase of the project and demolition crews will work only during daylight periods. During the first phase, one building requiring specialized procedures will be demolished and the resulting material removed from the site. In addition, the first phase will involve the excavation and removal of sand and soil around another building. This first phase will take approximately 5 weeks to complete. Construction equipment to be used during the first phase will include: a 2000-gallon water truck; a John Deere 710 4-wheel-drive backhoe with a 2000-pound hydraulic concrete breaker attachment; a front end loader with a 3-cubic-yard bucket; and, standard half-ton work pickup and dump trucks. The second phase of the project will be the demolition and removal of the remaining structures using standard construction procedures and equipment. This second phase may last 3 weeks, but is more likely to be completed in 2 weeks. Specific construction equipment to be used during phase two will include: a 973 loader; a 450 Hitachi excavator; a 320 loader; a Case 621 loader; a 710 4-wheel-drive backhoe; a 545D skip loader; a 1000-gallon water truck; a dump truck; and, a Bobcat loader. A more detailed description of the work proposed for 2001 is contained in the application (The Environmental Company and LGL Ltd., 2001) which is available upon request (see **ADDRESSES**).

Comments and Responses

On June 29, 2001 (66 FR 34618), NMFS published a notice of receipt and a 30-day public comment period was provided on the application and proposed authorization. A recommendation to issue the requested authorization was received from the Marine Mammal Commission (MMC). No other comments were received.

Description of Habitat and Marine Mammals Affected by the Activity

Mugu Lagoon is one of the largest salt marshes in southern California, encompassing approximately 350 acres (142 ha) of water and tidal flats. The beaches around the Mugu Lagoon entrance are used year-round by harbor seals (*Phoca vitulina*) for resting, molting, and breeding. The Navy reported a peak count of 361 adults in the Mugu Lagoon on June 6, 2000 (The Environmental Company and LGL Ltd., 2001). Two other pinniped species are known to occur infrequently in the area of the proposed activity during certain times of the year: northern elephant seals (*Mirounga angustirostris*) and California sea lions (*Zalophus californianus*). When present, these latter species haul out at the mouth of the lagoon and on Family Beach, located south of the demolition project area on the ocean side. Descriptions of the biology and local distribution of these species can be found in the application as well as other sources such as, Hanan (1996), Stewart and Yochem (1994, 1984), Forney *et al.* (2000), Koski *et al.* (1998), Barlow *et al.* (1993), Stewart and DeLong (1995), and Lowry *et al.* (1992). Please refer to those documents for information on these species.

Isolated observations of cetaceans have occurred in the Mugu Lagoon area. Two gray whale (*Eschrichtius robustus*) strandings have been recorded (one 20 years ago and one in the early 1980s). There is also one recorded observation of a gray whale moving in and out of the entrance to Mugu Lagoon (T. Keeney, NBVC Point Mugu Environmental Division, pers. comm., 2001). Sightings of Dall's porpoise (*Phocoenoides dalli*), bottlenose dolphin (*Tursiops truncatus*), common dolphin (*Delphinus delphis*), and pilot whale (*Globicephala macrorhynchus*) have been made within 3 nautical miles (nm) (5.6 kilometers (km)) of shore in the vicinity of Point Mugu (Koski *et al.*, 1998); however, none of these species would be expected to occur within the lagoon.

Potential Effects of Demolition Activities on Marine Mammals

Acoustic and visual stimuli generated by the use of heavy equipment during the demolition and removal activities, as well as the increased presence of personnel, may cause short-term disturbance to pinnipeds hauled out closest to the work area. This disturbance from acoustic and visual stimuli is the principal means of marine mammal taking associated with these activities. Based on the measured sounds of construction equipment, such as might be used during the Point Mugu demolition project, sound levels from all equipment (except the concrete breaker to be used during the first phase) drops to below 100 decibels, A-weighted (dBA) within 50 feet (ft) (15.2 meters (m)) of the source (CALTRANS, 2001).

Pinnipeds sometimes show startle reactions when exposed to sudden brief sounds. An acoustic stimulus with sudden onset (such as a sonic boom) may be analogous to a "looming" visual stimulus (Hayes and Saif, 1967), which may elicit flight away from the source (Berrens et al., 1988). The onset of operations by a loud sound source, such as the concrete breaker during phase one, may elicit such a reaction. In addition, the movements of the large hydraulic arms of the backhoes or the Hitachi excavator may represent a "looming" visual stimulus to seals hauled out in close proximity. Seals exposed to such acoustic and visual stimuli may either exhibit a startle response or leave the haul-out site.

Harbor seals that haul out in Mugu Lagoon have clearly habituated to very loud airborne sounds at this location, as well as to the presence of humans and vehicle movement along the road that passes through the demolition area. For instance, biologists observed harbor seal haul-out sites in Mugu Lagoon during repeated overflights of a F-14a Tomcat jet aircraft in full afterburner as it performed touch-and-go maneuvers at nearby Mugu airfield. No more overt reactions than a momentary elevation of the hind flippers of a single juvenile seal were observed (The Environmental Company and LGL Ltd., 2001). Based on Air Force data, the received sound levels at the Mugu Lagoon haul-out sites under the jet's flight path could have reached a sound exposure level (SEL) of 117-121 dB re 20 micro-Pascal (Pa) during these maneuvers (from C. Malme, data in the USAF aircraft noise database). In areas where harbor seals are not exposed to regular aircraft noise or other acoustic stimuli, it should be noted that this type of reaction is not

typical. For instance, Bowles and Stewart (1980) reported that harbor seals on San Miguel Island, CA reacted to low-altitude jet overflights with alert postures and often with rapid movement across the haul-out sites, especially when aircraft were visible.

For the purposes of their application, NBVC assumed that when behavioral patterns of pinnipeds are disrupted by the demolition activities, they will be taken by harassment. In general, if the received level of the noise stimulus exceeds both the background (ambient) noise level and the auditory threshold of the animals, and especially if the stimulus is novel to them, then there may be a behavioral response. The probability and degree of response will also depend on the season, the group composition of the pinnipeds, and the type of activity in which they are engaged. The Navy considers minor and brief responses, such as momentary startle or alert reactions not to be "takes" by harassment (The Environmental Group and LGL Ltd., 2001; see 64 FR 9925). However, when startle and alert reactions are accompanied by large-scale movements, such as stampedes into the water, this may have adverse effects on individuals and considered a "take" because of the potential for injury or death. As described here, harbor seals in the Mugu Lagoon are exposed to noise levels far greater than those expected during the demolition activities described in NBVC's application, and there is no evidence that noise-induced injury or deaths have occurred. The effects of the demolition activities are expected to be limited to short-term and localized behavioral changes (The Environmental Group and LGL Ltd., 2001).

For a further discussion on the anticipated effects of the planned demolition activities on marine mammals in the area and their food sources, please refer to the application (The Environmental Company and LGL Ltd., 2001). Information in the application and referenced sources is preliminarily adopted by NMFS as the best information available on this subject.

Numbers of Marine Mammals Expected to Be Taken

NBVC estimates that the following numbers of marine mammals may be subject to Level B harassment, as defined in 50 CFR 216.3:

<i>Species</i>	<i>Potential Harassment Takes 2001</i>
Harbor Seals*	288
Northern Elephant Seal*	8

<i>Species</i>	<i>Potential Harassment Takes 2001</i>
California Sea Lion*	12

* Some individual seals may be harassed more than once

Effects of Demolition Activities on Marine Mammal Habitat

NBVC anticipates no loss or modification to the habitat used by marine mammal populations that haul out within the Mugu Lagoon. Demolition activities will occur on shore above the highest tide mark, and the demolition contractor will ensure that building refuse will not enter the waters of the lagoon (New World Technology, 2001). The tidal patterns in the lagoon and structure of the nearby sandy haul-out areas will not be altered by these shore-based demolition activities.

The pinnipeds that may be present in Mugu Lagoon leave the lagoon area to feed in the open sea (T. Keeney, NBVC Point Mugu Environmental Division, pers. comm., 1998); therefore, it is not expected that the demolition activities will have any impact on the food or feeding success of these marine mammals.

Effects of Demolition Activities on Subsistence Needs

There are no subsistence uses for these pinniped species in California waters, and thus there are no anticipated effects on subsistence needs.

Mitigation

No pinniped mortality and no significant long-term effect on the stocks of pinnipeds hauled out in the Mugu Lagoon are expected based on the relatively low levels of sound generated by the demolition equipment (i.e., 100 dBA within 50 ft (15.2 m) from the source) and the relatively short time period over which the project will take place (approximately 8 weeks). However, NBVC does expect that the demolition activities may cause disturbance reactions by some of the pinnipeds on the beaches. To reduce the potential for disturbance from visual and acoustic stimuli associated with the demolition project, NBVC will undertake a variety of mitigation measures. In addition to these measures to be taken by NBVC, the construction contractor has developed detailed work plans for the project, which emphasize that special consideration is required to minimize disturbances to the resident harbor seal population (New World Technology, 2001). In addition to not using explosives and only operating

during daylight hours, NBVC will adopt the following mitigation measures:

(1) Prior to each day of demolition or removal activities, NBVC Point Mugu Environmental Division personnel will inspect the work site to ensure compliance with the construction contractor's work plan, and to assess the number and types of marine mammals that are occupying the lagoon. Depending on results of initial observations and subsequent planned activities, the NBVC personnel will decide each day whether marine mammal monitoring for the entire day is needed (see Monitoring section). Work will be suspended or conducted in another area in the event that a monitoring biologist or a member of the demolition crew sights a marine mammal hauled out in an area where there is a risk that the animal may come into physical contact with construction machinery or personnel.

(2) The demolition contractor will ensure that work areas are caution taped as a barricade against inadvertent entry of unauthorized personnel where physical barriers are not already present. Before start of the activities, demolition personnel will be advised of all marine mammal mitigation measures.

(3) Work outside of the fenced boundary on the lagoon side of the site will be minimized to the extent possible. Work within 100 feet (30.48 meters) of the lagoon will be done manually where possible (New World Technology, 2001).

(4) During excavations, tarps will be carefully placed over areas in such a way as to reduce "flapping" during installation by unfolding the tarps in sections as they are installed. The edges of the tarps will be held down and secured with sandbags and/or tent stakes to prevent movement of the tarp during windy conditions.

(5) To reduce sound levels in proximity to harbor seal haul-out sites, concrete slabs that form the bases of some buildings and the pools will be sectioned using concrete cutting saws, rather than the hydraulic concrete breaker, where possible.

Monitoring

As part of its application, NBVC provided a proposed monitoring plan for assessing impacts to marine mammals from demolition activities in Mugu Lagoon. This monitoring would be entirely land-based and is designed to determine if there are disturbance reactions, to determine the area over which reactions occur, and to characterize harbor seal reactions to demolition sounds.

The monitoring program will be conducted by NMFS-approved and biologically-trained marine mammal monitors via land-based visual observations. NBVC must conduct a minimum of twice-daily monitoring efforts for each day of the two phases of demolition, and conduct all-day monitoring when marine mammals are present or when new procedures or equipment are employed relative to previous project activities. Marine mammal monitors are required to record a variety of information including: (1) date and time, (2) weather, (3) tide state, (4) composition and locations of the haul-out groups of pinnipeds within the lagoon, (5) marine mammal behavior patterns observed before, during, and after the activities, (6) horizontal visibility (estimated by determining what the furthest visible object is relative to the interacting seals using known positions of local objects and accounting for obstructing terrain), and (7) occurrence, or planned occurrence, of any other military aircraft activity or other anthropogenic activities in or around the lagoon.

Through direct visual observation, the number of seals hauled out and haul-out locations will be documented during the demolition. This monitoring plan also provides data required to characterize the extent and nature of marine mammal takings.

Reporting

NBVC will provide an initial report to NMFS within 90 days after the demolition and removal activities cease. This report will provide dates and locations of demolition activities, details of seal behavioral observations, and estimates of the amount and nature of all takes of seals by harassment or in other ways. In the unanticipated event that any cases of pinniped mortality are judged to result from demolition activities, this will be reported to NMFS immediately.

Endangered Species Act Consultation

NBVC's activities will not affect any listed species. Therefore, NMFS has determined that a section 7 consultation under the Endangered Species Act is not required at this time.

National Environmental Policy Act (NEPA)

The Department of the Navy, following Council on Environmental Quality regulations (40 CFR 1500), has found that demolition and disposal involving buildings or structures neither on, nor eligible for, listing on the National Register of Historic Places and requiring removal of hazardous

materials, are categorically excluded from further documentation under NEPA (32 CFR 775, Department of Navy Procedures for Implementing the National Environmental Policy Act). NBVC is preparing a Record of Categorical Exclusion for all phases of this demolition project.

In accordance with section 6.01 of NOAA Administrative Order 216-6 (Environmental Review Procedures for Implementing the National Environmental Policy Act, May 20, 1999), NMFS has analyzed both the context and intensity of this action and determined based on previous programmatic environmental reviews contained in NBVC's request for an IHA and the Draft Environmental Impact Statement/Overseas Environmental Impact Statement for the Point Mugu Sea Range (Department of Navy Naval Air Warfare Center Weapons Division, July 2000) that the issuance of this IHA to NBVC by NMFS will not individually or cumulatively result in a significant impact on the quality of the human environment as defined in 40 CFR 1508.27 and is therefore categorically excluded from further NEPA analysis. In addition to the required NEPA analysis for categorical exclusion, NMFS' rulemaking for the issuance of IHAs (61 FR 15884; April 10, 1996) stated that for issuance of an IHA, NMFS must first determine that the taking (by harassment) would not result in any serious injury or death to a marine mammal, would have no more than a negligible impact on marine mammals and their habitat, and would not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses. Therefore, NMFS' decision-making process for IHA issuance or denial independently and separately analyzes factors similar to those suggested under section 6.01 of NOAA Administrative Order 216-6 for determining the significance of agency actions for the purposes of NEPA.

Determinations

Based on the evidence provided in the application and this document, and taking into consideration comments received on the application and proposed authorization notice, NMFS has determined that the effects of the planned demolition activities will have no more than a negligible impact on pinniped species and stocks. NMFS is assured that the short-term impact of conducting demolition and removal activities at the entrance of Mugu Lagoon in Point Mugu, California will result, at worst, in a temporary modification in behavior by certain species of pinnipeds. While behavioral

