

authority for Sites 1, 2, 3 and 6 if not activated by June 30, 2015, and to a seven-year ASF sunset provision that would terminate authority for magnet Site 5 if not activated by June 30, 2017.

Signed at Washington, DC, July 8, 2010.

**Ronald K. Lorentzen,**

*Deputy Assistant Secretary for Import Administration, Alternate Chairman, Foreign-Trade Zones Board.*

**Andrew McGilvray,**

*Executive Secretary.*

[FR Doc. 2010-17971 Filed 7-21-10; 8:45 am]

BILLING CODE 3510-DS-P

## DEPARTMENT OF COMMERCE

### Foreign-Trade Zones Board

[Order No. 1697]

#### Reorganization of Foreign-Trade Zone 54 Under Alternative Site Framework; Clinton County, NY

Pursuant to its authority under the Foreign-Trade Zones Act of June 18, 1934, as amended (19 U.S.C. 81a-81u), the Foreign-Trade Zones Board (the Board) adopts the following Order:

*Whereas*, the Board adopted the alternative site framework (ASF) in December 2008 (74 FR 1170, 01/12/09; correction 74 FR 3987, 01/22/09) as an option for the establishment or reorganization of general-purpose zones;

*Whereas*, Clinton County, grantee of Foreign-Trade Zone 54, submitted an application to the Board (FTZ Docket 31-2009, filed 7/31/2009) for authority to reorganize under the ASF with a service area of Clinton County, in and adjacent to the Champlain, New York Customs and Border Protection port of entry, and FTZ 54's existing Sites 1, 2, 3, 4 and 5 would be categorized as magnet sites;

*Whereas*, notice inviting public comment was given in the **Federal Register** (74 FR 39298, 8/6/2009) and the application has been processed pursuant to the FTZ Act and the Board's regulations; and,

*Whereas*, the Board adopts the findings and recommendation of the examiner's report, and finds that the requirements of the FTZ Act and Board's regulations are satisfied, and that the proposal is in the public interest;

*Now, therefore*, the Board hereby orders:

The application to reorganize FTZ 54 under the alternative site framework is approved, subject to the FTZ Act and the Board's regulations, including Section 400.28, to the Board's standard 2,000-acre activation limit for the

overall general-purpose zone project, and to a five-year ASF sunset provision for magnet sites that would terminate authority for Sites 1, 2, 3 and 5 if not activated by July 31, 2015.

Signed at Washington, DC, this 8th day of July, 2010.

**Ronald K. Lorentzen,**

*Deputy Assistant Secretary for Import Administration, Alternate Chairman, Foreign-Trade Zones Board. Attest:*

**Andrew McGilvray,**

*Executive Secretary.*

[FR Doc. 2010-17998 Filed 7-21-10; 8:45 am]

BILLING CODE P

## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

RIN 0648-XX25

#### Small Takes of Marine Mammals Incidental to Specified Activities; Exploratorium Relocation Project in San Francisco, CA

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

**ACTION:** Notice; proposed incidental harassment authorization; request for comments.

**SUMMARY:** NMFS has received a complete and adequate application from the Exploratorium for an Incidental Harassment Authorization (IHA) to take marine mammals, by harassment, incidental to pile driving during the Exploratorium's relocation project. Pursuant to the Marine Mammal Protection Act (MMPA), NMFS is proposing to issue an IHA to the Exploratorium to incidentally harass, by Level B harassment only, four species of marine mammals during the specified activity within a specific geographic area and is requesting comments on its proposal.

**DATES:** Comments and information must be received no later than August 23, 2010.

**ADDRESSES:** Comments on the application and this proposal should be addressed to Michael Payne, Chief, Permits, Conservation and Education Division, Office of Protected Resources, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, MD 20910-3225. The mailbox address for providing email comments is 0648-XX25@noaa.gov. NMFS is not responsible for e-mail comments sent to addresses other than the one provided here. Comments sent via e-mail,

including all attachments, must not exceed a 10-megabyte file size.

Instructions: All comments received are a part of the public record and will generally be posted to <http://www.nmfs.noaa.gov/pr/permits/incidental.htm> without change. All Personal Identifying Information (for example, name, address, etc.) voluntarily submitted by the commenter may be publicly accessible. Do not submit Confidential Business Information or otherwise sensitive or protected information.

A copy of the application containing a list of the references used in this document may be obtained by writing to the address specified above, telephoning the contact listed below (see **FOR FURTHER INFORMATION CONTACT**), or visiting the internet at: <http://www.nmfs.noaa.gov/pr/permits/incidental.htm>. Documents cited in this notice may also be viewed, by appointment, during regular business hours, at the aforementioned address.

**FOR FURTHER INFORMATION CONTACT:** Michelle Magliocca or Jaclyn Daly, Office of Protected Resources, NMFS, (301) 713-2289.

#### 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 specific geographical region if certain findings are made and either regulations are issued or, if the taking is limited to harassment, a notice of a proposed authorization is provided to the public for review.

Authorization for incidental takings shall be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s), will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses (where relevant), and if the permissible methods of taking and requirements pertaining to the mitigation, monitoring and reporting of such takings are set forth. NMFS has defined "negligible impact" in 50 CFR 216.103 as "...an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival."

Section 101(a)(5)(D) of the MMPA established an expedited process by which citizens of the United States can

apply for an authorization to incidentally take small numbers of marine mammals by harassment. Section 101(a)(5)(D) establishes a 45-day time limit for NMFS review of an application followed by a 30-day public notice and comment period on any proposed authorizations for the incidental harassment of marine mammals. Within 45 days of the close of the comment period, NMFS must either issue or deny the authorization.

A. Except with respect to certain activities not pertinent here, the MMPA defines “harassment” as:

any act of pursuit, torment, or annoyance which (i) has the potential to injure a marine mammal or marine mammal stock in the wild [Level A harassment]; or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering [Level B harassment].

**Summary of Request**

On April 28, 2010, NMFS received an application from the Exploratorium, a nature, science, art and technology museum, requesting an IHA for the take, by Level B harassment, of small numbers of Pacific harbor seals (*Phoca vitulina richardii*), California sea lions (*Zalophus californianus*), harbor porpoises (*Phocoena phocoena*), and gray whales (*Eschrichtius robustus*) incidental to relocation of the Exploratorium museum. Upon receipt of additional information, NMFS determined the application complete and adequate on June 1, 2010.

The Exploratorium proposes to relocate from the Palace of Fine Arts to Piers 15 and 17, along San Francisco’s waterfront. The relocation project would include the installation, repair, and removal of piles at Pier 15, removal of wharf decking between Piers 15 and 17, and expansion of the southern portion of Pier 15. The Exploratorium proposes to install up to 69 new steel piles and repair and remove existing piles by hydraulic or hand-held cutting tools. Because pile driving has the potential to result in marine mammal harassment, NMFS is proposing to issue an IHA for take incidental to this specified activity.

**Description of the Specified Activity**

The Exploratorium proposes to relocate from 3601 Lyon Street to Piers 15 and 17, along the Embarcadero of San Francisco’s waterfront. The relocation project is scheduled to commence as early as September 2010 and construction would continue throughout a 26-month period. However, of the activities associated with the relocation, only pile driving

has the potential to result in marine mammal take and this activity is expected to be complete by the spring of 2011.

To make room for the new Exploratorium, a maximum of 69 various sized steel piles (thirty 72–inch, twenty six 24–inch, and thirteen 20–inch diameter piles) would be installed around Piers 15 and 17 using a vibratory hammer (Table 1). Between two and five steel piles (average of three piles) would be installed daily, depending on their size and the amount of time necessary to install them. Each pile would take approximately 30 minutes to install followed by at least one hour break, the minimum amount of time needed to reset the hammer and next pile. In total, the Exploratorium anticipates conducting 28 hours of pile driving, with 15 hours spent on 72–inch piles, five hours spent on 20–inch piles, and eight hours spent on 24–inch piles. All piles would be installed with an ICE 14122 (or similar) vibratory hammer; however, it may be necessary to seat a pile using an impact hammer. Based on the ground sediments and the depth of pile driving needed, the use of an impact hammer is not anticipated for the smaller 20–inch and 24–inch piles but may be needed for the large diameter 72–inch piles. Should an impact hammer be necessary, the Exploratorium would use a steam or diesel-powered hammer delivering between 80,000 and 110,000 ft-lbs per blow. For 20, 24, and 72–inch piles, the amount of strikes per pile would be limited to 120, 25, and 5, respectively. Sound attenuation devices (e.g., wood block, bubble curtain) would be used during any impact hammering. In addition, impact hammering would not occur between June 1 and November 30 to prevent injury to listed salmonids.

In addition to pile driving, the Exploratorium would repair or remove existing piles (Table 1) and remove existing wharf decking. Existing concrete piles would be removed by cutting them with a hydraulic shear. The shear operates like a knife gate, with hydraulic rams pushing a shear plate through the piling. The cutting shear would be suspended from a crane on deck. In-water noise from this work would be negligible. Pile repair would include installing a fiberglass shell around damaged pile and filling the shell with concrete. The work would be completed by divers using hand tools and does not involve loud noise. Furthermore, there are no marine mammal haul out sites at Piers 15 and 17 and deck height in the area is at elevations generally too high to facilitate marine mammal haul out. Deck removal

and expansion would occur outside of habitat for marine mammals. Therefore, removal and expansion of the existing pier decking would not likely result in harassment of marine mammals. Finally, there would be two to ten barges or floats at any given time in the water to support construction activities; however, these would be concentrated in the direct vicinity of Piers 15/17. Because pile repair, pile removal, and use of barges do not release loud sounds into the environment, marine mammal harassment from these activities not anticipated.

**TABLE 1. SUMMARY OF PILE ACTIVITIES DURING THE EXPLORATORIUM RELOCATION ACTIVITY**

Activity	Maximum Number of Piles	Location
Installation of new piles	69 steel piles (30 72–inch diameter steel piles, 26 24–inch steel piles, and 13 20–inch steel piles)	Marginal Wharf; South Apron
Repair of existing piles	1026	Pier 15; Valley Infill Area; Marginal Wharf; North Apron
Extension of existing piles	120	Valley Infill Area
Removal of existing piles— cut at mudline	837	Marginal Wharf; Valley Removal Area; South Apron; Pier 15
Removal of existing piles—cut above mean lower low water (MLLW)	306	Valley Removal Area; Marginal Wharf

During the San Francisco Oakland Bay Bridge Project (SFOBB), the California Department of Transportation (Caltrans), measured vibratory driving sound levels from various pile types, sizes, and locations around San Francisco Bay (Caltrans, 2007). Because no pile driving noise data specific to the Exploratorium project exists, NMFS has determined that hydroacoustic data from the Caltrans SFOBB project are appropriate to use to estimate sound levels from the specified activity. For

background, sound is a physical phenomenon consisting of minute vibrations that travel through a medium, such as air or water, and is generally characterized by several variables.

Frequency describes the sound's pitch and is measured in hertz (Hz) or kilohertz (kHz), while sound level describes the sound's loudness and is measured in decibels (dB). Sound level increases or decreases exponentially with each dB of change. For example, 10 dB yields a sound level 10 times more intense than 1 dB, while a 20 dB level equates to 100 times more intense, and a 30 dB level is 1,000 times more intense. Sound levels are compared to a reference sound pressure (micro-Pascal) to identify the medium. For air and water, these reference pressures are "re: 20  $\mu$ Pa" and "re: 1  $\mu$ Pa," respectively.

In 2007, Caltrans released a report summarizing typical and maximum sound pressure levels (SPLs) measured during vibratory pile driving in San Francisco Bay (Table 2). In summary, Caltrans measured sound pressure levels (SPLs) 5 m from the hammer were below 180 dB root mean square (rms) values. Most of the energy during vibratory pile driving was below 600 Hz. NMFS notes that the vibratory hammers Caltrans used to install the 72-inch pile were the King Kong and Super Kong Driver (Model 600). The hammer the Exploratorium proposes to use is 40% of the energy of the King Kong hammer; therefore, source levels would be lower for the relocation project as hammer noise levels are proportional to blow energy. Vibratory pile driving measurements taken by Caltrans approximately 11–13 kilometers (km) northeast of the Exploratorium in similar depth water indicate that peak sound pressures drop off at a rate of about 7 dB per doubling of distance. For comparison, spherical spreading (20 log R) is characterized by a drop-off rate of 6 dB per doubling of distance. Therefore, it is anticipated that noise from pile driving will dissipate very quickly around the Exploratorium.

TABLE 2. MEASURED SOUND PRESSURE LEVELS DURING VIBRATORY PILE DRIVING IN SAN FRANCISCO BAY (CALTRANS, 2007).

Pile Type/ Size	Relative Water Depth	SPL at 10 m (RMS)
72-inch steel pile	5 meters	Average = 170 dB Loudest = 180 dB

TABLE 2. MEASURED SOUND PRESSURE LEVELS DURING VIBRATORY PILE DRIVING IN SAN FRANCISCO BAY (CALTRANS, 2007).—Continued

Pile Type/ Size	Relative Water Depth	SPL at 10 m (RMS)
34-inch steel pile	5 meters	Average = 170 dB Loudest = 175 dB
24-inch steel pile	5 meters	Average = 160 dB Loudest = 165 dB
12-inch steel pile	5 meters	Average = 155 dB

Caltrans also conducted hydroacoustic surveys within San Francisco Bay during impact pile driving of similar size piles proposed for use by the Exploratorium (Table 3). Bubble curtains can provide between 5–20 dB reduction in source level; however, this is highly directional and a function of current and device effectiveness (Caltrans, 2009). Therefore, distances to the Level A and Level B harassment isopleths are based on estimated unattenuated source levels. These distances are likely an overestimate of sound levels produced by pile driving using a bubble curtain or wood cap.

TABLE 3. MEASURED UNATTENUATED SOUND PRESSURE LEVELS IN THE NEAR FIELD (10 M) DURING IMPACT PILE DRIVING IN SAN FRANCISCO BAY (CALTRANS, 2009).

Pile Type/ Size	Relative Water Depth	SPL at 10 m (RMS)
96-inch steel pile	10 meters	205 dB
60-inch steel pile	<5 meters	195 dB
36-inch steel pile	<5 meters	190 dB
24-inch steel pile	5 meters	190 dB
14-inch steel pile	15 meters	184 dB

#### Description of Marine Mammals in the Area of the Specified Activity

Marine mammals with confirmed occurrences in San Francisco Bay are the Pacific harbor seal, California sea lion, harbor porpoise, gray whale, humpback whale (*Megaptera novaeangliae*), and sea otter (*Enhydra*

*lutris*). However, humpback whales are considered extremely rare in San Francisco Bay and are highly unlikely to be present in the project vicinity during pile driving. Sea otters are managed by the U.S. Fish and Wildlife Service. Therefore, these two species are not considered further in this proposed IHA notice.

#### Pacific Harbor Seals

Pacific harbor seals are found in the coastal and estuarine waters off Baja, California, north to British Columbia, west through the Gulf of Alaska, and in the Bering Sea. The most recent harbor seal counts estimate the California stock of Pacific harbor seals at 34,233 individuals. The population appears to be stabilizing at what may be their carrying capacity and human-caused mortality is declining (NMFS, 2005). The California stock of Pacific harbor seals is not listed under the Endangered Species Act (ESA) nor considered strategic under the MMPA.

In California, approximately 400–500 harbor seal haul out sites are widely distributed along the mainland and offshore islands, including intertidal sandbars, rocky shores, and beaches. The north side of Yerba Buena Island is the closest haul out area to the relocation project, approximately 3 km from Piers 15 and 17. Although harbor seals use this haul out year-round, Yerba Buena Island is not considered a pupping site. In California breeding occurs from March to May, and pupping between April and May depending on local populations. Harbor seals around the new Exploratorium site would likely be transiting to and from their closest haul out (Yerba Buena Island) or opportunistically foraging. Herring spawning events could result in harbor seals congregating and approaching the action area sporadically in an unpredictable manner (pers. comm., M. DeAngelis to M. Magliocca).

Pinnipeds produce a wide range of social signals, most occurring at relatively low frequencies (Southall *et al.*, 2007), suggesting that hearing is keenest at these frequencies. Pinnipeds communicate acoustically both on land and in the water, but have different hearing capabilities dependent upon the medium (air or water). Based on numerous studies, as summarized in Southall *et al.* (2007), pinnipeds are more sensitive to a broader range of sound frequencies underwater than in air. Underwater, pinnipeds can hear frequencies from 75 Hz to 75 kHz. In air, the lower limit remains at 75 Hz but the highest audible frequencies are only around 30 kHz (Southall *et al.*, 2007).

### California Sea Lions

California sea lions are found throughout the Eastern North Pacific Ocean in shallow coastal and estuarine waters, ranging from Central Mexico to British Columbia, Canada. Their primary breeding range extends from Central Mexico to the Channel Islands in Southern California. The abundance of the U.S. stock is estimated to be 238,000 sea lions (NMFS, 2007). This stock is approaching carrying capacity and is reaching "optimum sustainable population" limits, as defined by the MMPA. California sea lions are not listed under the ESA nor considered strategic under the MMPA.

Sandy beaches are preferred habitat for haul out sites, but marina docks, jetties, and buoys are often used in California for resting, breeding, and molting. In San Francisco Bay, sea lions haul out on floating docks (e.g., Pier 39 around Fishermen's Wharf) and on buoys throughout the Bay. Breeding season begins in May and lasts until August, with most pups born by July. While onshore, California sea lions often form groups of several hundred animals. No sea lion haulouts are located around the Exploratorium. However, sea lions observed within this area may be transiting to and from nearby piers or opportunistically foraging.

### Harbor Porpoises

Harbor porpoises have a wide and discontinuous range that includes the North Atlantic and North Pacific. In the Eastern North Pacific, harbor porpoises are found in coastal and inland waters from Point Conception, California to Alaska. Harbor porpoises in U.S. waters are divided into 10 stocks, based on genetics, movement patterns, and management. Any harbor porpoises encountered during the Exploratorium relocation would likely be part of the San Francisco-Russian River stock which has an estimated abundance of 9,189 animals. Abundance of the San Francisco-Russian River stock appeared to be stable or declining between 1988 and 1991 and has steadily increased since 1993, although this increase is not statistically significant. Harbor porpoises are not commonly sighted in San Francisco Bay, but have been observed traveling in small pods of two to three animals on occasion (pers. comm., M. DeAngelis to M. Magliocca). They may occur in the action area during a time when they could be affected by pile driving activities; however, their presence in the vicinity is rare. Harbor porpoises in California

are not listed under the ESA nor considered strategic under the MMPA.

Cetaceans are divided into three functional hearing groups: low-frequency, mid-frequency, and high frequency. Harbor porpoises are considered high-frequency cetaceans and their estimated auditory bandwidth (lower to upper frequency hearing cut-off) ranges from 200 Hz to 180 kHz.

### Gray Whales

Gray whales are large mysticetes, or baleen whales, found mainly in shallow coastal waters of the North Pacific Ocean. Two isolated geographic distributions of gray whales exist: the Eastern North Pacific stock and the Western North Pacific stock. The Eastern North Pacific stock migrates as far south as Baja, California for breeding and calving in the winter and as far north as the Bering and Chukchi Seas for summer feeding. During migration, gray whales will occasionally enter rivers and bays, including San Francisco Bay, along the coast, but in very low numbers. They could potentially be in the action area during pile driving activities. The most recent 2008 stock assessment report estimated the Eastern North Pacific stock to be approximately 18,813 individuals with an increasing population trend over the past several decades. Gray whales were delisted from the ESA in 1994 and are not considered strategic under the MMPA.

Gray whales, like other baleen whales, are in the low-frequency hearing group. There are no empirical data on gray whale hearing; however, Wartzok and Ketten (1999) suggest that mysticete hearing is most sensitive at the same frequencies at which they vocalize. Underwater sounds produced by gray whales range from 20 Hz to 20 kHz (Richardson et al., 1995).

### Potential Effects on Marine Mammals

Pile driving at the Exploratorium's new location may temporarily impact marine mammal behavior within the action area due to elevated in-water noise levels. No pinnipeds on haulouts would be affected as the closest haulout is approximately 3 kms away; therefore, in-air noise is not a concern. Marine mammals are continually exposed to many sources of sound. Naturally occurring sounds such as lightning, rain, sub-sea earthquakes, and biological sounds (e.g., snapping shrimp, whale songs) are ubiquitous throughout the world's oceans. Marine mammals produce sounds in various contexts and use sound for various biological functions including, but not limited to, (1) social interactions; (2) foraging; (3) orientation; and (4) predator detection.

Interference with producing or receiving these sounds may result in adverse impacts. Audible distance, or received levels (RLs) will depend on the nature of the sound source, ambient noise conditions, and the sensitivity of the receptor to the sound (Richardson et al., 1995). Type and significance of marine mammal reactions to noise are likely to dependent on a variety of factors including, but not limited to, the behavioral state (e.g., feeding, traveling, etc.) of the animal at the time it receives the stimulus, frequency of the sound, distance from the source, and the level of the sound relative to ambient conditions (Southall et al., 2007).

### Hearing Impairment

Temporary or permanent hearing impairment is possible when marine mammals are exposed to very loud sounds. Hearing impairment is measured in two forms: temporary threshold shift (TTS) and permanent threshold shift (PTS). There are no empirical data for onset of PTS in any marine mammal; therefore, PTS-onset must be estimated from TTS-onset measurements and from the rate of TTS growth with increasing exposure levels above the level eliciting TTS-onset. PTS is presumed to be likely if the hearing threshold is reduced by  $\geq 40$  dB (i.e., 40 dB of TTS). Due to proposed mitigation measures and source levels, NMFS does not expect that marine mammals would be exposed to levels that could elicit PTS; therefore, it will not be discussed further.

### Temporary Threshold Shift (TTS)

TTS is the mildest form of hearing impairment that can occur during exposure to a loud sound (Kryter, 1985). While experiencing TTS, the hearing threshold rises and a sound must be louder in order to be heard. TTS can last from minutes or hours to, in cases of strong TTS, days. For sound exposures at or somewhat above the TTS-onset threshold, hearing sensitivity recovers rapidly after exposure to the noise ends. Few data on sound levels and durations necessary to elicit mild TTS have been obtained for marine mammals. Southall et al. (2007) considers a 6 dB TTS (i.e., baseline thresholds are elevated by 6 dB) sufficient to be recognized as an unequivocal deviation and thus a sufficient definition of TTS-onset. Because it is non-injurious, NMFS considers TTS as Level B harassment that is mediated by physiological effects on the auditory system; however, NMFS does not consider onset TTS to be the lowest level at which Level B harassment may occur. Southall et al. (2007) summarizes underwater

pinniped data from Kastak et al. (2005), indicating that a tested harbor seal showed a TTS of around 6 dB when exposed to a nonpulse noise at SPL 152 dB re: 1  $\mu$ Pa for 25 minutes. In contrast, a tested sea lion exhibited TTS-onset at 174 dB re: 1  $\mu$ Pa under the same conditions as the harbor seal. Data from a single study on underwater pulses found no signs of TTS-onset in sea lions at exposures up to 183 dB re: 1  $\mu$ Pa (peak-to-peak) (Finneran et al., 2003). There is no information on species-specific TTS for harbor porpoises or gray whales.

There are limited data available on the effects of non-pulse noise (e.g., vibratory pile driving) on pinnipeds in-water; however, field and captive studies to date collectively suggest that pinnipeds do not strongly react to exposures between 90–140 dB re: 1 microPa; no data exist from exposures at higher levels. Jacobs and Terhune (2002) observed wild harbor seal reactions to high frequency acoustic harassment devices (ADH) around nine sites. Seals came within 44 m of the active ADH and failed to demonstrate any behavioral response when received SPLs were estimated at 120–130 dB. In a captive study (Kastelein, 2006), a group of seals were collectively subjected to data collection and communication network (ACME) non-pulse sounds at 8–16 kHz. Exposures between 80–107 dB did not induce strong behavioral responses; however, a single observation at 100–110 dB indicated an avoidance response at this level. The group returned to baseline conditions shortly following exposure. Southall et al. (2007) notes contextual differences between these two studies noting that the captive animals were not reinforced with food for remaining in the noise fields, whereas free-ranging subjects may have been more tolerant of exposures because of motivation to return to a safe location or approach enclosures holding prey items. While most of the pile driving will be vibratory, a small portion of piles may be driven using an impact hammer (pulse noise) and sound attenuation devices, resulting in anticipated hydroacoustic levels between 164 and 179 dB RMS. Southall et al. (2007) reviewed relevant data from studies involving pinnipeds exposed to pulse noise and concluded that exposures to 150 to 180 dB (approximate source level range for vibratory pile driving) generally have limited potential to induce avoidance behavior.

Vibratory pile driving emits low frequency broadband noise, all of which may be detectable by marine mammals within the action area. However, lower

frequency hearing animals such as pinnipeds and gray whales are likely to be able to hear the sound better and farther away than the harbor porpoise, who has a hearing range of 200 Hz–180 kHz (Southall et al., 2007), as most of the energy during vibratory pile is expected to be below 600 Hz (Caltrans 2007). No known data exists for sound levels resulting from the type of vibratory hammer and pile sizes that would be used at the Exploratorium; however, measured sound levels for the “King Kong” vibratory hammer used in Richmond, California ranged between 163 and 180 dB RMS (Illingworth and Rodkin, 2007). Sound levels at the Exploratorium are expected to be substantially lower because the vibratory hammer being used is approximately 40 percent of the energetic capacity of the “King Kong” hammer and will not be used at full capacity. In addition, San Francisco Bay is highly industrialized and masking of the pile driver by other vessels and anthropogenic noise within the action area may, especially in the nearby shipping channel, may also make construction sounds difficult to hear at greater distances. Underwater ambient noise levels along the San Francisco waterfront may be around 133 dB RMS, based on measurements from the nearby Oakland Outer Harbor (Caltrans, 2009). Seals would likely also exhibit tolerance or habituation (as described in Richardson et al., 1999) due to the amount of anthropogenic use within the action area and San Francisco Bay as a whole.

Pacific harbor seal and California sea lion pupping season is outside of the temporal pile driving schedule; therefore, no impacts to reproduction are anticipated. It is expected that marine mammals exposed to pile driving noise would be using the adjacent waters around the Exploratorium’s project site for foraging or as a daily migration route between foraging grounds and haul out locations. Harbor porpoises also may use the adjacent waters for foraging and may pass through the area during pile driving. Gray whales are not expected to forage in the activity area, but may display behavioral changes in response to noise if they enter San Francisco Bay and transit or linger around the action area during their annual migration.

Any impacts to marine mammal behavior are expected to be temporary. First, animals may avoid the area around the hammer; thereby reducing exposure. Second, pile driving does not occur continuously throughout the day. As described above, the vibratory hammer only operates for about 30

minutes followed by at least a one hour break. Two to five pilings are anticipated to be driven per day, resulting in a total of 1–2.5 hours of pile driving within any given 24 hour period. Limiting pile driving to less than three hours per day would allow for minimal disruption of foraging or dispersal throughout the habitat. Any disturbance to marine mammals is likely to be in the form of temporary avoidance or alteration of opportunistic foraging behavior near the pile driving location. In addition, because pile driving is anticipated to be accomplished using only a vibratory hammer, marine mammal injury or mortality is not anticipated. If an impact hammer is used, a protected species observers (PSO) would be on watch to implement pile driver shut down, a mitigation measure designed to prevent animals from being exposed to injurious level sounds. For these reasons, any changes to marine mammal behavior are expected to be temporary and result in a negligible impact to affected species and stocks.

#### Anticipated Effects on Habitat

On May 28, 2010, the NMFS Southwest Regional Office concluded section 7 and Essential Fish Habitat (EFH) consultation, under the ESA and Magnuson Stevens Fishery Conservation and Management Act (MSFCMA), respectively, with the U.S. Army Corps of Engineers (Corps) on issuance of a Corps permit to the Exploratorium. In summary, NMFS Southwest Regional Office found that the proposed construction activities may affect ESA-listed fish by generating increased levels of turbidity and sound; however, these impacts are expected to be minor, localized, and short term. As such, NMFS Southwest Regional Office concurred with the Corps determination that impacts from the Exploratorium’s project would not result in adverse impacts to ESA-listed fish or their critical habitat. NMFS Southwest Regional Office also determined that the proposed project would adversely affect EFH for various federally-managed species within the Pacific Groundfish, Coastal Pelagic, and Pacific Salmonid Fishery Management Plans; however, they also determined that the proposed action contains adequate measures to avoid, minimize, mitigate, or otherwise offset the adverse effects to EFH.

Marine mammals and fish may occupy the same habitat. Pile driving noise would result in degradation of in-water habitat; however, this impact would be short term and localized. Installation of new piles would be permanent; however, overall site

conditions are anticipated to be substantively unchanged from existing conditions for marine mammals following project implementation. Therefore, following results of consultation under the ESA and MSFCMA, NMFS has preliminarily determined impacts to marine mammal habitat are negligible.

#### **Proposed Mitigation**

In order to issue an IHA under Section 101(a)(5)(D) of the MMPA, NMFS must set forth the permissible methods of taking pursuant to such activity, and other means of effecting the least practicable adverse impact on such species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of such species or stock for taking for certain subsistence uses.

The Exploratorium has proposed the following mitigation measures to help ensure the least practicable adverse impact on marine mammals:

##### *Limited Use of an Impact Hammer*

All piles would be installed using a vibratory pile driver unless sufficient depth cannot be reached, at which point an impact hammer may be used. In the event that an impact hammer is necessary, a bubble curtain, wood block, or both would be used as an attenuation device to reduce hydroacoustic sound levels to avoid the potential for injury. With the use of these devices, hydroacoustic source levels are anticipated to be between 164 and 179 dB RMS during impact hammering.

##### *Establishment of a Safety Zone*

During all in-water impact pile driving, the Exploratorium would establish a preliminary marine mammal safety zone of 500 m around each pile before pile driving commences. No safety zone for vibratory pile driving is necessary as source levels will not exceed the Level A harassment threshold.

##### *Pile Driving Shut Down and Delay Procedures*

If a PSO observes a marine mammal within or approaching the safety zone prior to start of impact pile driving, the PSO would notify the Resident Engineer (or other authorized individual) who would then be required to delay pile driving until the marine mammal has moved outside of the safety zone or if the animal has not been resighted within 15 minutes. If a marine mammal is sighted within or on a path toward the safety zone during pile driving, pile driving should cease until that animal

has cleared and is on a path away from the safety zone or 15 minutes has lapsed since the last sighting. In addition, if a marine mammal not authorized to be taken under the IHA (e.g., humpback whale) is observed within the Level B harassment zone (1900 m), pile driving would be delayed until that animal has cleared and is on a path away from the safety zone or 15 minutes has lapsed since the last sighting.

##### *Soft-start Procedures*

A "soft-start" technique would be used at the beginning of each pile installation to allow any marine mammal that may be in the immediate area to leave before the pile hammer reaches full energy. For vibratory pile driving, the soft-start procedure requires contractors to initiate noise from the vibratory hammer for 15 seconds at 40–60% reduced energy followed by a 1-minute waiting period. The procedure would be repeated two additional times before full energy may be achieved. For impact hammering, contractors would be required to provide an initial set of three strikes from the impact hammer at 40% energy, followed by a 1-minute waiting period, then two subsequent three-strike sets. The soft-start procedure would be conducted prior to driving each pile if vibratory hammering ceases for more than 30 minutes.

NMFS has carefully evaluated the applicant's proposed mitigation measures and considered a range of other measures in the context of ensuring that NMFS prescribes the means of effecting the least practicable adverse impact on the affected marine mammal species and stocks and their habitat. Our evaluation of potential measures included consideration of the following factors in relation to one another: (1) the manner in which, and the degree to which, the successful implementation of the measure is expected to minimize adverse impacts to marine mammals; (2) the proven or likely efficacy of the specific measure to minimize adverse impacts as planned; and (3) the practicability of the measure for applicant implementation, including consideration of personnel safety, and practicality of implementation.

Based on our evaluation of the applicant's proposed measures, NMFS has preliminarily determined that the proposed mitigation measures provide the means of effecting the least practicable adverse impacts on marine mammals species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance.

#### **Proposed Monitoring and Reporting**

In order to issue an IHA for an activity, Section 101(a)(5)(D) of the MMPA states that NMFS must set forth "requirements pertaining to the monitoring and reporting of such taking". The MMPA implementing regulations at 50 CFR 216.104 (a)(13) indicate that requests for IHAs must include the suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species and of the level of taking or impacts on populations of marine mammals that are expected to be present.

The Exploratorium must designate at least one biologically-trained, on-site individual, approved in advance by NMFS, to monitor the area for marine mammals 30 minutes before, during, and 30 minutes after all impact pile driving activities and call for shut down if any marine mammal is observed within or approaching the designated Level A harassment zone (preliminary set at 500 m). In addition, at least one NMFS-approved PSO would conduct behavioral monitoring in and around the Exploratorium at least two days per week between March 1 and November 30 to estimate take and evaluate the behavioral impacts pile driving has on marine mammals out to the Level B harassment isopleth (1,900 m). Should a non-authorized marine mammal (i.e. humpback whale) be observed at any time in this zone, the aforementioned shut down and delay procedures would be followed.

As set forth in the Exploratorium's application to the Corps, monitoring for herring spawning events would be conducted on a daily basis between December 1 and February 28. This PSO would also monitor for marine mammals within and around the Level B harassment area. In addition to stationing a PSO to monitor for herring, the Exploratorium would cease pile driving for two weeks should a herring spawning event occur (a measure designed to reduce impacts to fish). Pinniped presence during such events can be sporadic and unpredictable; therefore, the requirements set forth under ESA and EFH consultation also minimize and allow for monitoring of impacts to marine mammals.

PSOs would be provided with the equipment necessary to effectively monitor for marine mammals (e.g., high-quality binoculars, compass, and range-finder) in order to determine if animals have entered into the harassment isopleths and to record species, behaviors, and responses to pile driving. PSOs would be required to submit a

report to NMFS within 120 days of expiration of the IHA or completion of pile driving, whichever comes first. The report would include data from marine mammal sightings (e.g., species, group size, behavior), any observed reactions to construction, distance to operating pile hammer, and construction activities occurring at time of sighting.

#### Estimated Take by Incidental Harassment

Except with respect to certain activities not pertinent here, the MMPA defines "harassment" as:

any act of pursuit, torment, or annoyance which (i) has the potential to injure a marine mammal or marine mammal stock in the wild [Level A harassment]; or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering [Level B harassment].

Based on the Exploratorium's application and subsequent analysis, the impact of the described pile driving operations may result in, at most, short-term modification of behavior by small numbers of marine mammals who are within the action area. Marine mammals may avoid the area or halt any behaviors (e.g., foraging) at time of exposure. Due to the short duration of pile driving per day (1- 2.5 hours), animals are not anticipated to be exposed multiple times per day.

Current NMFS practice regarding exposure of marine mammals to anthropogenic noise is that in order to avoid the potential for injury of marine mammals (e.g., PTS), cetaceans and pinnipeds should not be exposed to impulsive sounds of 180 and 190 dB rms or above, respectively. This level is considered precautionary as it is likely that more intense sounds would be required before injury would actually occur (Southall et al., 2007). Potential for behavioral harassment (Level B) is considered to have occurred when marine mammals are exposed to sounds at or above 160 dB rms for impulse sounds (e.g., impact pile driving) and 120dB rms for non-pulse noise (e.g., vibratory pile driving), but below the aforementioned thresholds. These levels are also considered precautionary.

Based on empirical measurements taken by Caltrans (which are presented in the Description of Specified Activities section above), estimated distances to NMFS current threshold sound levels from pile driving during the Exploratorium's relocation project are presented in Table 4. These estimates are based on the worst case scenario of driving the 72- inch steel

piles but would be carried over for all pile driving. Note that despite short distances to the Level A harassment isopleth, the Exploratorium has proposed to implement a preliminary 500-m marine mammal safety zone until empirical pile driving measurements can be made and distances to this threshold isopleth can be verified.

TABLE 4: MODELED UNDERWATER DISTANCES TO NMFS' MARINE MAMMAL HARASSMENT THRESHOLD LEVELS.

	Level A (190/180 dB)	Level B harassment (160 dB)	Level B harassment (120 dB)
Impact hammering	20 m (w/o sound attenuation device)	100 m	n/a
Vibratory hammering	n/a	n/a	1900 m

The estimated number of marine mammals potential taken was based on marine mammal monitoring reports prepared by Caltrans during similar activities in San Francisco Bay and on discussions with the NMFS Southwest Regional Office. Caltrans' SFOBB marine mammal monitoring reports were used to estimate the number of pinnipeds near the Exploratorium project area as the SFOBB site and Exploratorium are relatively close to each other and are similar in bathymetric features (e.g., water depth, substrate). However, monitoring conducted for the SFOBB project has been in close proximity to a haul out area, while the Exploratorium project is in an area of high commercial boat activity with no haul out sites. Therefore, the Caltrans data likely overestimates marine mammal abundance for the Exploratorium project area. Based on consultation with the NMFS Southwest Regional Office and review of Caltrans monitoring reports for pile driving activities in San Francisco Bay, the Exploratorium requested a total take of two Pacific harbor seals, one California sea lion, and one gray whale per day of pile driving. Upon further consultation with NMFS Southwest Regional Office, NMFS is proposing to include harbor porpoise as a species potentially taken by pile driving, due to the recorded, albeit infrequent, sightings of harbor porpoises within San Francisco Bay.

The Exploratorium estimates an average of three piles would be driven in a single day. Given 69 piles in total, pile driving would occur for 19 days over the life of the project. Therefore, NMFS is proposing to authorize annual take, by Level B harassment only, of 38 Pacific harbor seals, 19 California sea lions incidental to the Exploratorium's pile driving activities. Due to the infrequent, but potential presence of harbor porpoise and gray whales in the area, NMFS is also proposing to authorize the take of 28 harbor porpoise and five gray whales, annually, based on consultation with the NMFS Southwest Regional Office, NMFS. These numbers indicate the maximum number of animals expected to occur within the Level B harassment isopleth (1,900 m). Estimated and proposed level of take of each species is less than one percent of the affected stock population and therefore is considered small in relation to the population numbers previously set forth.

#### Negligible Impact and Small Numbers Analysis and Determination

NMFS has defined "negligible impact" in 50 CFR 216.103 as "...an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival." In making a negligible impact determination, NMFS considers a number of factors which include, but are not limited to, number of anticipated injuries or mortalities (none of which would be authorized here), number, nature, intensity, and duration of Level B harassment, and the context in which takes occur (e.g., will the takes occur in an area or time of significance for marine mammals, are takes occurring to a small, localized population?).

As described above, marine mammals would not be exposed to activities or sound levels which would result in injury (e.g., PTS), serious injury, or mortality. Pile driving would occur in shallow coastal waters of San Francisco Bay to stocks occurring throughout California, and, for gray whales, the eastern Pacific Ocean. The action area (waters around Piers 15-17) is not considered as providing significant habitat for harbor seals. The closest haulout is 3 kms away on Yerba Buena Island; however, noise levels about NMFS harassment thresholds would only extend to 1,900 m in-water. Marine mammals approaching the action area would likely be traveling or opportunistically foraging. However, marine mammals foraging on herring runs would not be affected by

construction because the Exploratorium would not conduct pile driving for two weeks if a herring run is observed by the on-site PSO, who would monitor the area daily between December 1-February 28. In addition, a PSO would monitor for marine mammals twice a day to estimate take and verify impacts to marine mammals are not above those described here. The amount of take the Exploratorium has requested, and NMFS proposes to authorize, is considered small (less than one percent) relative to the estimated populations of 34,233 Pacific harbor seals, 238,000 California sea lions, 9,189 harbor porpoises, and 18,813 gray whales. As previously noted, no affected marine mammals are listed under the ESA or considered strategic under the MMPA.

Marine mammals may be temporarily impacted by pile driving noise. However, marine mammals are expected to avoid the area, thereby reducing exposure and impacts. Further, although the relocation project is expected to take up to two years, installation of the 69 steel piles would only occur for approximately 19 days. Further, San Francisco Bay is a highly industrialized area and species such as harbor seals and California sea lions flourish throughout the Bay. Therefore, animals are likely tolerant or habituated to anthropogenic disturbance, including low level vibratory pile driving operations, and noise from other anthropogenic sources (e.g., vessels in the adjacent shipping lane) may mask construction related sounds. Finally, breeding and pupping season occur outside of the proposed pile driving timeframe; therefore, no disruption to reproductive behavior is anticipated. There is no anticipated effect on annual rates of recruitment or survival of affected marine mammals.

Based on the analysis contained herein of the likely effects of the specified activity on marine mammals and their habitat, and taking into consideration the implementation of the mitigation and monitoring measures, NMFS preliminarily determines that the Exploratorium's relocation project will result in the incidental take of small numbers of marine mammals, by Level B harassment only, and that the total taking from will have a negligible impact on the affected species or stocks.

#### **Impact on Availability of Affected Species for Taking for Subsistence Uses**

There are no relevant subsistence uses of marine mammals implicated by this action.

#### **Endangered Species Act (ESA)**

No marine mammal species listed under the ESA are anticipated to occur within the action area. Therefore, Section 7 consultation under the ESA is not required.

#### **National Environmental Policy Act (NEPA)**

In compliance with the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*), as implemented by the regulations published by the Council on Environmental Quality (40 CFR parts 1500–1508), and NOAA Administrative Order 216–6, NMFS is preparing an Environmental Assessment (EA) to consider the direct, indirect, and cumulative effects to marine mammals and other applicable environmental resources resulting from issuance of a one-year IHA and the potential issuance of additional authorization for incidental harassment for the ongoing project. Upon completion, this EA will be available on the NMFS website listed in the beginning of this document.

Dated: July 16, 2010.

**James H. Lecky,**

*Director, Office of Protected Resources,  
National Marine Fisheries Service.*

[FR Doc. 2010-18002 Filed 7-21-10; 8:45 am]

**BILLING CODE 3510-22-S**

#### **DEPARTMENT OF COMMERCE**

#### **National Oceanic and Atmospheric Administration**

**RIN 0648-XW81**

#### **Takes of Marine Mammals Incidental to Specified Activities; Installation of Meteorological Data Collection Facilities in the Mid-Atlantic Outer Continental Shelf**

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

**ACTION:** Notice; proposed incidental harassment authorization; request for comments.

**SUMMARY:** NMFS has received two applications from Bluewater Wind (Bluewater) for an Incidental Harassment Authorization (IHA) to take marine mammals, by harassment, incidental to pile driving associated with installation of two meteorological data collection facilities (MDCF's); one each off the coast of Delaware and New Jersey. Pursuant to the Marine Mammal Protection Act (MMPA), NMFS is requesting comments on its proposal to issue an IHA to Bluewater to

incidentally harass, by Level B Harassment only, eight species of marine mammals during the installation of both MDCF's. The IHA would be effective from October 1–November 15, 2010.

**DATES:** Comments and information must be received no later than August 23, 2010.

**ADDRESSES:** Comments on the applications should be addressed to Michael Payne, Chief, Permits, Conservation and Education Division, Office of Protected Resources, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, MD 20910–3225. The mailbox address for providing e-mail comments is [PR1.0648-XW81@noaa.gov](mailto:PR1.0648-XW81@noaa.gov). NMFS is not responsible for e-mail comments sent to addresses other than the one provided here. Comments sent via e-mail, including all attachments, must not exceed a 10-megabyte file size.

**Instructions:** All comments received are a part of the public record and will generally be posted to <http://www.nmfs.noaa.gov/pr/permits/incidental.htm> without change. All Personal Identifying Information (for example, name, address, etc.) voluntarily submitted by the commenter may be publicly accessible. Do not submit Confidential Business Information or otherwise sensitive or protected information.

A copy of the application containing a list of the references used in this document may be obtained by writing to the address specified above, telephoning the contact listed below (see **FOR FURTHER INFORMATION CONTACT**), or visiting the Internet at: <http://www.nmfs.noaa.gov/pr/permits/incidental.htm>. The following associated document is also available at the same internet address:

Environmental Assessment (EA) on the *Issuance of Leases for Wind Resource Data Collection on the Outer Continental Shelf Offshore Delaware and New Jersey* (MMS, 2009). Documents cited in this notice may also be viewed, by appointment, during regular business hours, at the aforementioned address.

**FOR FURTHER INFORMATION CONTACT:** Jaclyn Daly, Office of Protected Resources, NMFS, (301) 713–2289, ext 151.

#### **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