

ADDRESSES: Comments should be addressed to the Chief, Marine Mammal Conservation Division, Office of Protected Resources, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, MD 20910–3226. A copy of the application and a list of references used in this document may be obtained by writing to this address, or by telephoning the contact listed here (see **FOR FURTHER INFORMATION CONTACT**). A copy of the MMS draft Programmatic Environmental Assessment (Draft PEA) is available by writing to: Minerals Management Service, Public Information Office, 1201 Elmwood Park Boulevard, New Orleans, LA 70123–2394. Comments will not be accepted if submitted via e-mail or the Internet.

FOR FURTHER INFORMATION CONTACT: Kenneth R. Hollingshead, NMFS, 301–713–2055, ext 128.

SUPPLEMENTARY INFORMATION:

Background

Section 101(a)(5)(A) of the Marine Mammal Protection Act (16 U.S.C. 1361 *et seq.*)(MMPA) directs the Secretary of Commerce (Secretary) to allow, upon request, the incidental, but not intentional taking 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 regulations are issued.

Permission may be granted for periods of 5 years or less if the Secretary 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, and regulations are prescribed setting forth the permissible methods of taking and the requirements pertaining to the monitoring and reporting of such taking.

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.” 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 December 20, 2002, MMS petitioned NMFS, as a precautionary measure, for rulemaking under section 101(a)(5)(A) of the MMPA to authorize any potential take of sperm whales (*Physeter macrocephalus*) incidental to conducting seismic surveys during oil and gas exploration activities in the GOM (MMS, 2002a). MMS has preliminarily determined that the taking will involve only small numbers of sperm whales; have no more than a negligible impact on the species and stocks of affected marine mammals; and not have an unmitigable adverse impact on the availability of marine mammals for subsistence uses. It should be noted that MMS expects to update its petition for regulations to include the incidental take of other species of marine mammals, such as dolphins, beaked whales, and Bryde’s whales (*Balaenoptera edeni*), based upon information currently being assessed under the National Environmental Policy Act (NEPA). The NEPA document will be submitted to NMFS prior to its determination on whether or not to proceed with this rulemaking. If NMFS decides to proceed with rulemaking, that document will expand the description of seismic airgun operations and on the analysis of impacts on marine mammals by seismic airgun arrays.

Description of the Specified Activity

Marine geophysical seismic surveys are conducted to obtain information on surface and near-surface geology and on subsurface geological formations. Typical seismic surveying operations tow an array of airguns (the seismic sound source) and a streamer (signal receiver cable) behind the vessel, 5–10 m (16.4–32.8 ft) below the sea surface. The airgun array produces a burst of underwater sound by releasing compressed air into the water column that creates an acoustic energy pulse. The release of compressed air every several seconds creates a regular series of strong acoustic impulses separated by silent periods lasting 7–16 seconds, depending on survey type and depth to the target formations. Airgun arrays are designed to focus the sound energy downward. Acoustic (sound) signals are reflected off the subsurface sedimentary layers and recorded near the water surface by hydrophones spaced within the streamer cables. These streamer cables are often 3 mi (4.8 km) or greater in length. Vessel speed is typically 4.5–6 knots (about 4–8 mph) with gear deployed.

The 3–D (3–Dimensional) seismic surveying enables a more accurate assessment of potential hydrocarbon reservoirs to optimally locate exploration and development wells, and minimize the number of wells required to develop a field. State-of-the-art interactive computer mapping systems can handle much denser data coverage than the older 2–D seismic surveys. Multiple-source and multiple-streamer technologies are used for 3–D seismic surveys. A typical 3–D survey might employ a dual array of 18 guns per array. Each array might emit a 3,000 cubic-inch burst of compressed air at 2,000 kilojoule (kJ) of acoustic energy for each burst. The streamer array might consist of 6–8 parallel cables, each 6–8 km (3.7–5 mi) long, spaced 75 m (246 ft) apart. A series of 3–D surveys collected over time (4–D seismic survey) is used for reservoir monitoring and management (the movement of oil, gas, and water in the reservoirs can be observed over time).

For management purposes, MMS has divided the Northern GOM into three planning areas: Eastern, Central and Western. In general, Federal waters offshore Florida and Alabama are in the Eastern Planning Area, Federal waters offshore Mississippi and Louisiana are in the Central Planning Area, and Federal waters offshore Texas are in the Western Planning Area. For seismic exploration, about 1300 blocks in the Western and Central Planning Areas have not yet been surveyed with 3–D seismic techniques (R. Brinkman, MMS GOM Region, pers comm, 2002). It is assumed that a lower level of new seismic survey activity will occur in the Eastern Planning Area relative to the other two areas (i.e. the vast majority of survey activities are expected in the Central and Western Planning Areas). Industry interest in the Eastern GOM has historically been limited to the westernmost portions of the planning area and is usually defined by MMS’ 5–Year Leasing Plan (MMS, 2002a).

The different types of seismic survey activity in the northern GOM can occur on any day of a given year during the scope of the petition (5 years). Seismic surveys may span one day, weeks, or months. MMS (2002b) provides detailed characteristics of the different types of operations and equipment applicable to seismic surveys employed in the region. That information will be used by NMFS during this rulemaking.

Seismic surveys may be conducted in any Federal waters of the GOM. Tables provided in the MMS application (MMS, 2002a) project the anticipated surveys for vertical seismic profiling, deep seismic, and high resolution