



DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648-XE554]

Taking and Importing Marine Mammals; Taking Marine Mammals Incidental to Geophysical Surveys Related to Oil and Gas Activities in the Gulf of Mexico

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

ACTION: Notice of issuance of letter of authorization.

SUMMARY: In accordance with the Marine Mammal Protection Act (MMPA), as amended, its implementing regulations, and NMFS' MMPA Regulations for Taking Marine Mammals Incidental to Geophysical Surveys Related to Oil and Gas Activities in the Gulf of Mexico, notification is hereby given that NMFS has issued a Letter of Authorization (LOA) to bp Exploration and Production, Inc., (bp) for the take of marine mammals incidental to geophysical survey activity in the Gulf of Mexico (GOM).

DATES: The LOA is effective from January 14, 2025, through December 31, 2025.

ADDRESSES: The LOA, LOA request, and supporting documentation are available online at: <https://www.fisheries.noaa.gov/action/incidental-take-authorization-oil-and-gas-industry-geophysical-survey-activity-gulf-mexico>. In case of problems accessing these documents, please call the contact listed below (see **FOR FURTHER INFORMATION CONTACT** section).

FOR FURTHER INFORMATION CONTACT: Ben Laws, Office of Protected Resources, NMFS, (301) 427-8401.

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, a notice of a proposed authorization is provided to the public for review.

An 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.

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).

On January 19, 2021, we issued a final rule with regulations to govern the unintentional taking of marine mammals incidental to geophysical survey activities conducted by oil and gas industry operators, and those persons authorized to conduct activities on their behalf (collectively “industry operators”), in U.S. waters of the GOM over the course of 5 years (86 FR 5322, January 19, 2021). The rule was based on our

findings that the total taking from the specified activities over the 5-year period will have a negligible impact on the affected species or stock(s) of marine mammals and will not have an unmitigable adverse impact on the availability of those species or stocks for subsistence uses, and became effective on April 19, 2021.

The regulations at 50 CFR 217.180 *et seq.* allow for the issuance of LOAs to industry operators for the incidental take of marine mammals during geophysical survey activities and prescribe the permissible methods of taking and other means of effecting the least practicable adverse impact on marine mammal species or stocks and their habitat (often referred to as mitigation), as well as requirements pertaining to the monitoring and reporting of such taking. Under 50 CFR 217.186(e), issuance of an LOA shall be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under these regulations and a determination that the amount of take authorized under the LOA is of no more than small numbers.

NMFS subsequently discovered that the 2021 rule was based on erroneous take estimates. We conducted another rulemaking using correct take estimates and other newly available and pertinent information relevant to the analyses supporting some of the findings in the 2021 final rule and the taking allowable under the regulations. We issued a final rule in April 2024, effective May 24, 2024 (89 FR 31488, April 24, 2024).

The 2024 final rule made no changes to the specified activities or the specified geographical region in which those activities would be conducted, nor to the original 5-year period of effectiveness. In consideration of the new information, the 2024 rule presented new analyses supporting affirmance of the negligible impact determinations for all species, and affirmed that the existing regulations, which contain mitigation, monitoring, and reporting requirements, are consistent with the “least practicable adverse impact” standard of the MMPA.

Summary of Request and Analysis

Bp plans to conduct a field trial of a marine vibrator source (C-BASS) array in the Atlantis prospect area centered around Green Canyon block 743 for a duration of up to 14 days, with water depths ranging from approximately 1,300 to 2,200 m. See figure 1 of the LOA application for a map of the area.

The marine vibrator source was not included in the acoustic exposure modeling developed in support of the rule. However, our rule anticipated the possibility of new and unusual technologies (NUT) and determined they would be evaluated on a case-by case basis (see 86 FR 5322, 5442, January 19, 2021).

Marine vibrator sources represent an alternative to traditional airgun sources, and operate by displacing a volume of water with a vibrating plate or shell to create a pressure wave. In contrast to airgun sources, marine vibrators produce a long duration, low amplitude signal and operate at a lower peak intensity. The C-BASS source consists of two types of sweep units: six M72-15 and two M72-30, comprising eight total source units mounted on a tow body. Both sets of units (M72-15 and M72-30) will sweep for 8 seconds (s), with the two signals overlapping. The M72-30 signal will lag the M72-15 by 0.5 s. The total sweep cycle will be repeated every 16 s with a 7.5 s quiet period in between sweeps. The dominant frequencies of the C-BASS sweep are between 10–50 Hz, with minimal signal energy occurring above 100 Hz. Marine vibrator sources, including the C-BASS, produce signals with a relatively gentle rise and decay over time and are therefore considered to be non-impulsive. The usage characteristics described above, which equate to a duty cycle of 53 percent and allow for periods of silence between each signal, result in evaluation of the C-BASS as an intermittent source for purposes of the planned trial. Please see bp's application for additional detail.

Use of a relatively low-intensity, non-impulsive source such as the C-BASS is likely to result in significantly less take by Level B harassment than would occur for a similar survey using an airgun array as a sound source, and use of the C-BASS source is

unlikely to result in any potential for Level A harassment. In order to demonstrate this, bp provided an exposure modeling report in association with its LOA application. The exposure modeling effort was performed using the same modeling approach as was used in support of the 2021 and 2024 rules. Modeling of the C-BASS source compared with the same 5,110 cubic inch (in³) airgun array used for additional exposure modeling for the 2024 rule illustrates a reduction in estimated Level B harassment distance of over 98 percent, with acoustic exposures above harassment criteria associated with use of the C-BASS source generally less than 1 percent those associated with use of the airgun array. Please bp's exposure modeling report for more detail.

Based on this information we have determined there will be no effects of a magnitude or intensity different from those evaluated in support of the rules. NMFS therefore expects that use of modeling results supporting the final rule are conservative as a proxy for use in evaluating potential impacts of use of the marine vibrator source.

We also note that for the marine vibrator source, the Bureau of Ocean Energy Management (BOEM) determined that Endangered Species Act (ESA) section 7 step-down review was required under NMFS' 2020 Biological Opinion on Federally Regulated Oil and Gas Program Activities in the Gulf of Mexico. NMFS' ESA Interagency Consultation Division requested and received an analysis from BOEM that considered the effects associated with the source. As a result of this review, NMFS determined that use of the source is unlikely to result in additional effects beyond those previously considered in the 2020 Biological Opinion.

The survey effort proposed by bp in its LOA request was used to develop LOA-specific take estimates based on the acoustic exposure modeling results described in our rule preamble (89 FR 31488, April 24, 2024). In order to generate the appropriate take number for authorization, the following information was considered: (1) survey type; (2)

location (by modeling zone¹); (3) number of days; (4) source; and (5) month.² In this case, the 4,130 in³ airgun array was selected, as its use for purposes of generating take numbers for authorization represents the least impactful airgun array (but remains conservative for use in estimating takes that are expected to result from use of the C-BASS source, as discussed above). The acoustic exposure modeling performed in support of the rule provides 24-hour exposure estimates for each species, specific to each modeled source and survey type in each zone and month.

Summary descriptions of modeled survey geometries are available in the preamble to the 2018 proposed rule (83 FR 29212, 29220, June 22, 2018). Coil was selected as the best available proxy survey type in this case because this selection minimizes over-estimation of take. Although bp is not proposing to perform a survey using the coil geometry, the coil proxy is most representative of the effort planned by bp in terms of predicted Level B harassment exposures.

The survey will include up to 14 days of sound source operation in zones 5 and 7. We assume equal distribution of survey effort over the two zones. Although the survey is currently planned to occur in March 2025, the actual timing is not known in advance, so take estimates for each species are based on the time period that produces the greatest value.

Based on the results of our analysis, NMFS has determined that the level of taking expected for this survey and authorized through the LOA is consistent with the findings made for the total taking allowable under the regulations. See table 1 in this notice and table 6 of the 2024 final rule (89 FR 31488, April 24, 2024).

Small Numbers Determination

¹ For purposes of acoustic exposure modeling, the GOM was divided into seven zones. Zone 1 is not included in the geographic scope of the rule.

² Acoustic propagation modeling was performed for two seasons: winter (December-March) and summer (April-November). Marine mammal density data is generally available on a monthly basis, and therefore further refines take estimates temporally.

Under the GOM rule, NMFS may not authorize incidental take of marine mammals in an LOA if it will exceed “small numbers.” In short, when an acceptable estimate of the individual marine mammals taken is available, if the estimated number of individual animals taken is up to, but not greater than, one-third of the best available abundance estimate, NMFS will determine that the numbers of marine mammals taken of a species or stock are small (89 FR 31535, April 24, 2024). For more information please see NMFS’ discussion of small numbers in the 2021 final rule (86 FR 5438, January 19, 2021).

The take numbers for authorization, determined as described above in the **Summary of Request and Analysis** section, are used by NMFS in making the necessary small numbers determinations, through comparison with the best available abundance estimates (see discussion at 86 FR 5322, 5391, January 19, 2021). For this comparison, NMFS' approach is to use the maximum theoretical population, determined through review of current stock assessment reports (SAR; <https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments>) and model-predicted abundance information (<https://seamap.env.duke.edu/models/Duke/GOM/>). Information supporting the small numbers determinations is provided in table 1.

Table 1 -- Take Analysis¹

Species	Authorized take	Abundance ²	Percent abundance
Rice’s whale	0	51	n/a
Sperm whale	102	3,007	3.4
<i>Kogia</i> spp.	50 ³	980	5.1
Beaked whales	248	803	30.9
Rough-toothed dolphin	254	4,853	5.2
Bottlenose dolphin	210	165,125	0.1
Clymene dolphin	308	4,619	6.7
Atlantic spotted dolphin	62	21,506	0.3
Pantropical spotted dolphin	2,989	67,225	4.4
Spinner dolphin	152 ⁴	5,548	2.7
Striped dolphin	892	5,634	15.8

Fraser's dolphin	102	1,665	6.1
Risso's dolphin	73	1,974	3.7
Blackfish ⁵	704	6,113	11.5
Short-finned pilot whale	82	2,741	3.0

¹Scalar ratios were not applied in this case due to brief survey duration.

²Best abundance estimate. For most taxa, the best abundance estimate for purposes of comparison with take estimates is considered here to be the model-predicted abundance (Garrison *et al.*, 2023). For Rice's whale, Atlantic spotted dolphin, and Risso's dolphin, the larger estimated SAR abundance estimate is used.

³Estimated takes include 3 takes by Level A harassment and 47 takes by Level B harassment. However, as the actual source planned for use is a non-impulsive source, no take by Level A harassment is likely to occur and all authorized takes are by Level B harassment.

⁴Modeled take of 53 increased to account for potential encounter with a group of average size (Maze-Foley and Mullin, 2006).

⁵The "blackfish" guild includes melon-headed whales, false killer whales, pygmy killer whales, and killer whales.

Based on the analysis contained herein of bp's proposed survey activity described in its LOA application and the anticipated take of marine mammals, NMFS finds that small numbers of marine mammals will be taken relative to the affected species or stock sizes (*i.e.*, less than one-third of the best available abundance estimate) and therefore the taking is of no more than small numbers.

Authorization

NMFS has determined that the level of taking for this LOA request is consistent with the findings made for the total taking allowable under the incidental take regulations and that the amount of take authorized under the LOA is of no more than small numbers. Accordingly, we have issued an LOA to bp authorizing the take of marine mammals incidental to its geophysical survey activity, as described above.

Dated: January 15, 2025.

Kimberly Damon-Randall,

Director, Office of Protected Resources,

National Marine Fisheries Service.