



DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648-XE410]

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 (GOM), notification is hereby given that a Letter of Authorization (LOA) has been issued to Viridien for the take of marine mammals incidental to geophysical survey activity in the GOM.

DATES: The LOA is effective March 1, 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: Jenna Harlacher, 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 § 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” (LPAI) standard of the MMPA.

Summary of Request and Analysis

Viridien plans to conduct a three-dimensional (3D) ocean bottom node (OBN) survey over 1,840 lease blocks in the Garden Banks, Keathley Canyon, East Breaks, and Alaminos Canyon areas, with water depths ranging from approximately 1,000 to 2,700 meters (m). See section D of the LOA application for a map of the area.

Viridien anticipates using two dual-source vessels, and would preferentially use the low-frequency tuned pulse source (TPS). Alternatively, Viridien may use conventional airgun array sources consisting of 42 elements with a total volume of 5,220 cubic inches (in³). Please see Viridien's application for additional detail.

The TPS was not included in the acoustic exposure modeling developed in support of the rule. However, the TPS was previously described and evaluated in support of previous LOAs and we rely on those analyses here (86 FR 37309, 37310, July 15, 2021; 87 FR 55790, 55791, September 12, 2022). For additional detail regarding sources, see section C of the LOA application. 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 rule. NMFS therefore expects that use of modeling results supporting the final rule relating to use of airgun arrays are expected to be conservative as a proxy for use in evaluating potential impacts of use of the TPS.

The survey effort proposed by Viridien 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, because Viridien may also elect to use the specified 42-element, 5,220 in³ airgun

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.

array sources, the 5,110 in³ airgun array proxy was selected. 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.

No 3D OBN surveys were included in the modeled survey types, and use of existing proxies (*i.e.*, 2D, 3D NAZ, 3D WAZ, Coil) is generally conservative for use in evaluation of 3D OBN survey effort, largely due to the greater area covered by the modeled proxies. Summary descriptions of these modeled survey geometries are available in the preamble to the proposed rule (83 FR 29212, 29220, June 22, 2018). Coil was selected as the best available proxy survey type in this case because the spatial coverage of the planned survey is most similar to the coil survey pattern. The planned OBN survey will involve two source vessels sailing along closely spaced survey lines, with daily survey area coverage of approximately 144 kilometers squared (km²) per day, similar to that assumed for the coil survey proxy. Among the different parameters of the modeled survey patterns (*e.g.*, area covered, line spacing, number of sources, shot interval, total simulated pulses), NMFS considers area covered per day to be most influential on daily modeled exposures exceeding Level B harassment criteria. Although Viridien is not proposing to perform a survey using the coil geometry, the coil proxy is most representative of the effort planned by Viridien in terms of predicted Level B harassment exposures.

The survey will take place over approximately 115 days with 65 days of sound source operation, including 38 days planned in Zone 5, 23 days planned in Zone 6, and 4 days in Zone 7. The monthly distribution of survey days is not known in advance, though we assume that the planned 65 days of source operation would occur contiguously. Take estimates for each species are based on the time period that produces the greatest value.

For the Rice's whale, take estimates based on the modeling yielded results that are not realistically likely to occur when considered in light of other relevant information

concerning Rice's whale habitat preferences considered during the rulemaking process. NMFS' 2024 final rule provided detailed discussion regarding Rice's whale habitat (see, e.g., 89 FR 31508, 31519). In summary, recent survey data, sightings, and acoustic data support Rice's whale occurrence in waters throughout the GOM between approximately 100 m and 400 m depth along the continental shelf break, and associated habitat-based density modeling has identified similar habitat (*i.e.*, approximately 100 to 400 m water depths along the continental shelf break) as being Rice's whale habitat (Garrison *et al.*, 2023; Soldevilla *et al.*, 2022, 2024).

Although Rice's whales may occur outside of the general depth range expected to provide suitable habitat, we expect that any such occurrence would be rare. Viridien's planned activities will occur in water depths of approximately 1,000 to 2,700 m in the central GOM. Thus, NMFS does not expect there to be the reasonable potential for take of Rice's whale in association with this survey and, accordingly, does not authorize take of Rice's whale through the LOA.

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 rule (89 FR 31488, April 24, 2024).

Small Numbers Determination

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, May 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 are determined as described above in the **Summary of Request and Analysis** section. Subsequently, the total incidents of harassment for each species are multiplied by scalar ratios to produce a derived product that better reflects the number of individuals likely to be taken within a survey (as compared to the total number of instances of take), accounting for the likelihood that some individual marine mammals may be taken on more than 1 day (86 FR 5404, January 19, 2021). The output of this scaling, where appropriate, is incorporated into adjusted total take estimates that are the basis for NMFS’ small numbers determinations, as depicted in table 1.

This product is used by NMFS in making the necessary small numbers determinations through comparison with the best available abundance estimates (see discussion at 86 FR 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 Analysis

Species	Authorized take	Scaled take ¹	Abundance ²	Percent abundance
Rice’s whale	0	n/a	51	n/a
Sperm whale	560	237	3,007	7.9
<i>Kogia</i> spp.	202 ³	62	980	7.4
Beaked whales	1,299	128	803	15.9
Rough-toothed dolphin	1,436	412	4,853	8.5
Bottlenose dolphin	1,867	536	165,125	0.3
Clymene dolphin	1,570	451	4,619	9.8
Atlantic spotted dolphin	1,578	453	21,506	2.1
Pantropical spotted dolphin	12,359	3,545	67,225	5.3

Spinner dolphin	191	55	5,548	1.0
Striped dolphin	2,481	712	5,634	12.6
Fraser's dolphin	546	157	1,665	9.4
Risso's dolphin	453	134	1,974	6.8
Blackfish ⁴	3,501	1,033	6,113	16.9
Short-finned pilot whale	1,215	358	2,741	13.1

¹Scalar ratios were applied to "Authorized Take" values as described at 86 FR 5322, 5404 (January 19, 2021), to derive scaled take numbers shown here.

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.

³Includes 11 takes by Level A harassment and 191 takes by Level B harassment. Scalar ratio is applied to takes by Level B harassment only; small numbers determination made on basis of scaled Level B harassment take plus authorized Level A harassment take.

⁴The "blackfish" guild includes melon-headed whales, false killer whales, pygmy killer whales, and killer whales.

Based on the analysis contained herein of Viridien'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 Viridien authorizing the take of marine mammals incidental to its geophysical survey activity, as described above.

Dated: February 11, 2025.

Kimberly Damon-Randall,

Director, Office of Protected Resources,

National Marine Fisheries Service.