DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648-XB309]

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.


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 a Letter of Authorization (LOA) has been issued to Taylor Energy Company LLC (Taylor) for the take of marine mammals incidental to geophysical survey activity in the Gulf of Mexico.

DATES: The LOA is effective from August 15, 2021, through August 15, 2022.

ADDRESSES: The LOA, LOA request, and supporting documentation are available online at: 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).

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 Federal waters of the U.S. Gulf of Mexico (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. The rule became effective on April 19, 2021.

Our 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.

**Summary of Request and Analysis**

Taylor plans to conduct a 2D high resolution seismic survey in Mississippi Canyon Block 20. Taylor plans to use a single, 10-cubic inch airgun, and would also use a suite of high-resolution geophysical acoustic sources aboard an autonomous underwater vehicle. Please see Taylor’s application for additional detail.

Consistent with the preamble to the final rule, the survey effort proposed by Taylor in its LOA request was used to develop LOA-specific take estimates based on the acoustic exposure modeling results described in the preamble (86 FR 5322, 5398; January 19, 2021). In order to generate the appropriate take number for authorization, the following information was considered: (1) survey type; (2) location (by modeling zone\(^1\));

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\(^1\) 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.
The acoustic exposure modeling performed in support of the rule provides 24-hour exposure estimates for each species, specific to each modeled survey type in each zone and season.

Exposure modeling results were generated using the single airgun proxy. Because those results assume use of a 90-in$^3$ airgun, the take numbers authorized through this LOA are considered conservative (i.e., they likely overestimate take) due to differences in the sound source planned for use by Taylor, as compared to those modeled for the rule. The survey is planned to occur for 3 days in Zone 5. The season is not known in advance. Therefore, the take estimates for each species are based on the season that has the greater value for the species (i.e., winter or summer).

In this case, use of the exposure modeling produces results that are substantially smaller than average GOM group sizes for multiple species (i.e., estimated exposure values are less than 10 percent of assumed average group size for the majority of species) (Maze-Foley and Mullin, 2006). NMFS’ typical practice in such a situation is to increase exposure estimates to the assumed average group size for a species in order to ensure that, if the species is encountered, exposures will not exceed the authorized take number. However, other relevant considerations here lead to a determination that increasing the estimated exposures to average group sizes would likely lead to an overestimate of actual potential take. In this circumstance, the very short survey duration and relatively small Level B harassment isopleths produced through use of a single airgun (compared with an airgun array) mean that it is unlikely that certain species would be encountered at all, much less that the encounter would result in exposure of a greater number of individuals than is estimated through use of the exposure modeling results. As a result, in this case

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2 For purposes of acoustic exposure modeling, seasons include Winter (December-March) and Summer (April-November).
NMFS has not increased the estimated exposure values to assumed average group sizes in authorizing take.

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 9 of the rule (86 FR 5322; January 19, 2021).

**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. For more information please see NMFS’ discussion of the MMPA’s small numbers requirement provided in the final rule (86 FR 5322, 5438; January 19, 2021).

The take numbers for authorization, which are determined as described above, 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 abundance reports (SAR; 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/). For the latter, for taxa where a density surface model could be produced, we use the maximum mean seasonal (i.e., 3-month) abundance prediction for purposes of comparison as a precautionary smoothing of month-to-month fluctuations and in consideration of a corresponding lack of data in
the literature regarding seasonal distribution of marine mammals in the GOM.

Information supporting the small numbers determinations is provided in Table 1.

### Table 1. Take Analysis

<table>
<thead>
<tr>
<th>Species</th>
<th>Authorized take</th>
<th>Abundance</th>
<th>Percent abundance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice’s whale</td>
<td>0</td>
<td>51</td>
<td>n/a</td>
</tr>
<tr>
<td>Sperm whale</td>
<td>2</td>
<td>2,207</td>
<td>0.1</td>
</tr>
<tr>
<td>Kogia spp.</td>
<td>1</td>
<td>4,373</td>
<td>0.0</td>
</tr>
<tr>
<td>Beaked whales</td>
<td>47</td>
<td>3,768</td>
<td>1.2</td>
</tr>
<tr>
<td>Rough-toothed dolphin</td>
<td>1</td>
<td>4,853</td>
<td>0.0</td>
</tr>
<tr>
<td>Bottlenose dolphin</td>
<td>5</td>
<td>176,108</td>
<td>0.0</td>
</tr>
<tr>
<td>Clymene dolphin</td>
<td>2</td>
<td>11,895</td>
<td>0.0</td>
</tr>
<tr>
<td>Atlantic spotted dolphin</td>
<td>2</td>
<td>74,785</td>
<td>0.0</td>
</tr>
<tr>
<td>Pantropical spotted dolphin</td>
<td>10</td>
<td>102,361</td>
<td>0.0</td>
</tr>
<tr>
<td>Spinner dolphin</td>
<td>3</td>
<td>25,114</td>
<td>0.0</td>
</tr>
<tr>
<td>Striped dolphin</td>
<td>1</td>
<td>5,229</td>
<td>0.0</td>
</tr>
<tr>
<td>Fraser’s dolphin</td>
<td>0</td>
<td>1,665</td>
<td>n/a</td>
</tr>
<tr>
<td>Risso’s dolphin</td>
<td>1</td>
<td>3,764</td>
<td>0.0</td>
</tr>
<tr>
<td>Melon-headed whale</td>
<td>2</td>
<td>7,003</td>
<td>0.0</td>
</tr>
<tr>
<td>Pygmy killer whale</td>
<td>0</td>
<td>2,126</td>
<td>n/a</td>
</tr>
<tr>
<td>False killer whale</td>
<td>1</td>
<td>3,204</td>
<td>0.0</td>
</tr>
<tr>
<td>Killer whale</td>
<td>0</td>
<td>267</td>
<td>n/a</td>
</tr>
<tr>
<td>Short-finned pilot whale</td>
<td>0</td>
<td>1,981</td>
<td>n/a</td>
</tr>
</tbody>
</table>

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 (Roberts et al., 2016). For those taxa where a density surface model predicting abundance by month was produced, the maximum mean seasonal abundance was used. For those taxa where abundance is not predicted by month, only mean annual abundance is available. For the killer whale, the larger estimated SAR abundance estimate is used.

3The final rule refers to the GOM Bryde’s whale (Balaenoptera edeni). These whales were subsequently described as a new species, Rice’s whale (Balaenoptera ricei) (Rosel et al., 2021).

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


Catherine Marzin,
Acting Director, Office of Protected Resources,
National Marine Fisheries Service.

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