



MARINE MAMMAL COMMISSION

16 September 2019

Ms. Jolie Harrison, Chief
Permits and Conservation Division
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910-3225

Dear Ms. Harrison:

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the National Marine Fisheries Service's (NMFS) 16 August 2019 notice (84 Fed. Reg. 41957) proposing to modify the letter of authorization (LOA) issued to Hilcorp Alaska, LLC (Hilcorp) authorizing it to conduct oil and gas activities in Cook Inlet, Alaska, under section 101(a)(5)(A) of the Marine Mammal Protection Act (MMPA).

NMFS has proposed to modify Hilcorp's LOA to clarify that clearance of the entire 500-m exclusion zone during its 2D/3D survey is not necessary prior to initiating ramp up of airguns at night. Instead, protected species observers would be required to monitor the exclusion zone to the 'greatest extent possible' to verify that marine mammals are not present¹ prior to ramp up at night. NMFS previously required that operators in Cook Inlet clear the entire exclusion zone, and in some cases the entire Level B harassment zone, prior to initiating ramp-up procedures. Exceptions have been made to the clearance requirement during nighttime or low-visibility conditions if passive acoustic monitoring (PAM) was used to confirm no acoustic detections of marine mammals in the 30 minutes prior to ramp up². However, NMFS did not include PAM as a required mitigation or monitoring measure in the final rule based on past unsuccessful deployments of PAM devices during seismic surveys in Cook Inlet³. Nor did NMFS require any other type of night-vision device⁴ to aid in the detection of marine mammals at night, which are standard for other industry⁵ and research⁶ seismic surveys.

As part of its rationale to modify the LOA, NMFS indicated in the *Federal Register* notice that allowing ramp up at night would reduce the overall number of days that the acoustic source would be operating. Although that may be the case, the Commission is not convinced that NMFS adequately considered the use of both towed PAM and night-vision devices to aid in the detection of marine mammals at night, particularly since NMFS requires other operators to use both

¹ Based on a clearance time of 15 minutes for pinnipeds and porpoises and 30 minutes for other cetaceans.

² See, for example, 84 Fed. Reg. 35093, 83 Fed. Reg. 63312, and 83 Fed. Reg. 29306.

³ See section 13 of Hilcorp's application and the preamble to the final rule (84 Fed. Reg. 37456).

⁴ Such as night-vision binoculars, forward-looking infrared devices, or thermal imaging cameras.

⁵ See, for example, 83 Fed. Reg. 63359 and 83 Fed. Reg. 29286.

⁶ <https://www.fisheries.noaa.gov/webdam/download/93867938>.

monitoring methods during seismic surveys conducted in U.S. and international waters worldwide. As such, the Commission recommends that NMFS reconsider requiring Hilcorp to use towed PAM and night-vision devices to better assess whether the exclusion zone is clear prior to implementing ramp-up procedures at night and consult with other seismic operators regarding the standard use of these devices in other regions. NMFS also should consult with acousticians at the Alaska Fisheries Science Center and the University of St. Andrews regarding acoustically monitoring for the various species in Cook Inlet. In addition, the Commission recommends that NMFS require Hilcorp to limit ramp up at night and during low-visibility conditions to situations in which operational planning cannot reasonably avoid such circumstances, consistent with requirements in other recent authorizations⁷.

In its review of the Hilcorp LOA for year 1 activities, the Commission notes that the radial distances of the exclusion and safety zones⁸ were not specified in the LOA. NMFS's intent to include those distances in the LOA is indicated in section 217.164(f) of the final rule (84 Fed. Reg. 37503)—

- (1) For all relevant in-water activity, Hilcorp must implement shutdown zones/exclusion zones (EZ) with radial distances as identified in any LOA issued under §§ 216.106 of this chapter and 217.166. If a marine mammal is sighted within or entering the EZ, such operations must cease.
- (2) For all relevant in-water activity, Hilcorp must designate safety zones (SZ) for monitoring with radial distances as identified in any LOA issued under §§ 216.106 of this chapter and 217.166 and record and report occurrence of marine mammals within these zones.

Although the radial distances of the exclusion and safety zones were included in Table 20 of the preamble to the final rule (84 Fed. Reg. 37494), they also should have been included in the LOA⁹, consistent with other LOAs¹⁰. Additionally, the LOA referred to 'mitigation and monitoring zones' and 'Level B isopleths'. It is unclear whether the mitigation and monitoring zones are the same as the exclusion and safety zones or whether they are synonymous with the Level A and B harassment zones. In any case, all of the relevant zones should be specified in the LOA, including those associated with implementation of mitigation measures and those for which takes must be enumerated and reported. The Commission recommends that NMFS specify the radial distances of the exclusion and safety zones, as well as the Level A and B harassment zones, for all sound sources and remove all references to mitigation and monitoring zones in Hilcorp's modified and subsequent LOAs.

⁷ See, for example, 83 Fed. Reg. 63347 and 83 Fed. Reg. 29270.

⁸ In some instances, the exclusion and safety zones are much less than the Level A and B harassment zones.

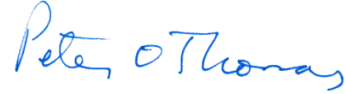
⁹ Rather than specify the zones, NMFS inserted the same text in the LOA that was included in section 217.164(f)(1) and (2) of the final rule, resulting in circular statements that lack the necessary details.

¹⁰ NMFS may have decided not to include the relevant zones because Hilcorp is required to conduct sound source verification (SSV) during the 3D seismic survey and shallow-hazard survey (i.e., when sub-bottom profilers are used) and the zones may change. However, Hilcorp is authorized to conduct many more activities than those two activities, and NMFS included condition 5(a) in the LOA that allows for the zones to change based on the SSVs. Thus, all relevant zones should have been included in the LOA.

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I trust these comments will be helpful. Please let me know if you or your staff have questions with regard to the Commission's recommendations.

Sincerely,

A handwritten signature in blue ink that reads "Peter O. Thomas". The signature is written in a cursive style with a large initial "P" and a distinct "O" before the last name.

Peter O. Thomas, Ph.D.,
Executive Director