



BUREAU OF OCEAN ENERGY MANAGEMENT
Alaska Regional Office
Office of Environment

DETERMINATION OF NEPA ADEQUACY

September 24, 2021

Hilcorp Alaska, LLC
Request for Extension of Survey Area
Geological & Geophysical Permit 21-01
Cook Inlet, Alaska

Related Environmental Documents:

BOEM. 2016. Cook Inlet Planning Area Oil and Gas Lease Sale 244, Final Environmental Impact Statement. 2 Volumes. OCS EIS/EA BOEM 2016-069. Anchorage, AK: USDO, BOEM, Alaska OCS Region.

BOEM. 2021. Hilcorp Alaska LLC, Geological and Geophysical Exploration, Cook Inlet, Alaska. Environmental Assessment. Alaska Region OCS EIS/EA BOEM 2021-029. 52 pp.
<https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/2021-0805-HAK-EA.pdf>.

Introduction

This is the Bureau of Ocean Energy Management (BOEM), Alaska Regional Office's Determination of NEPA Adequacy (DNA) that analyzes whether it must supplement an existing environmental assessment (EA) in light of a revision to the Proposed Action (EA Section 2.1, page 3). The *Hilcorp Alaska, LLC Geological and Geophysical Exploration Environmental Assessment* (Hilcorp EA) (BOEM 2021-029) analyzed geological and geophysical (G&G) exploration activities and resulted in the issuance of G&G Permit 21-01, and letter of non-objection for ancillary activities.

On September 9, 2021, Hilcorp requested authorization to conduct additional off-lease work (30 C.F.R. § 551.8(b)). The specific request is to extend the southern boundary of the survey area by approximately 522 meters (m) (1,712.6 feet). This proposed extension of the survey area would allow Hilcorp to utilize the existing "COST" well, located within Lease Block 6555, as an additional point of reference for the survey.

Background

BOEM prepared the Lease Sale 244 (LS 244) Environmental Impact Statement (EIS) to disclose the environmental impacts of conducting a lease sale in Lower Cook Inlet and to assist with planning and decision-making. The EIS analyzes the impacts of activities typically associated with the development of oil and gas leases following a lease sale including air and vessel traffic, seismic surveys, and other activities associated with offshore drilling. BOEM issued a Record of Decision in March 2017 to offer for lease 224 Outer Continental Shelf (OCS) blocks in lower Cook Inlet with mitigation measures adopted to reduce potential impacts to beluga whales and their critical habitat and feeding areas; sea otters and their critical habitat; and the gillnet fishery. Hilcorp acquired 14 lease blocks in OCS LS 244 (2017) and has since conducted an airborne gravity and magnetic survey (14 lease blocks) and a three-dimensional seismic survey (8 lease blocks).

On January 28, 2021, Hilcorp submitted a permit application to conduct G&G exploration off-lease activities (G&G permit 21-01), and a notice of Ancillary Activities (AA015) covering on-lease activities on January 29, 2021. Together, the activities described in these documents (Proposed Action in the Hilcorp EA, page 3) comprise a proposed survey of seafloor conditions on and near Hilcorp leases where exploration drilling could occur in the future. The purpose of the proposed survey is to gather data required to locate a jackup rig in a safe and environmentally sensitive manner, including the identification of unstable soil, steep slopes, or surface faults; assessment of possible scour risk around jackup legs or soil failure if near a submarine channel with steep banks; and identification of shallow gas pockets.

Pursuant to the National Environmental Policy Act (NEPA) and related Council on Environmental Quality (CEQ) regulations, BOEM prepared the Hilcorp EA to determine whether the Proposed Action may result in significant effects such that an EIS is required (40 CFR §1501.3(a), 40 CFR § 1502.9(d)(1)). The Hilcorp EA analyzes the potential for significant effects from the Proposed Action on the human environment, which is interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment. The Hilcorp EA was also prepared to assist with BOEM planning and decision-making (40 CFR §1501.5(b)). Based on the analysis provided in the Hilcorp EA, BOEM determined that the Proposed Action would not cause any significant impacts and implementing the Proposed Action did not constitute a major federal action significantly affecting the quality of the

human environment. Following preparation of the Hilcorp EA and a subsequent Finding of No Significant Impact (FONSI¹) (August 6, 2021), G&G Permit 21-01 was approved and issued (30 CFR Part 551).

Project Description: Extension of Survey Area

Under G&G Permit 21-01, Hilcorp is authorized to conduct geohazard and geotechnical surveys over four lease blocks in lower Cook Inlet (6405, 6406, 6455, and 6456). Hilcorp received its permit on August 11, 2021 and subsequently began work on the authorized surveys. It is anticipated that the work could take up to 30 days. As per BOEM lease stipulations reflected in G&G Permit 21-01, work must be completed by October 31, 2021.

The additional activity requested by Hilcorp through the request for extension of the survey area would require two additional 500-meter tracklines centered over the COST well, located south of the survey area and within Lease Block 6555. The following systems are proposed for this positioning effort: Multibeam, Side Scan Sonar, Sub-Bottom Profiler, and Magnetometer. This survey equipment is a subset of, and identical to, equipment identified in the Hilcorp EA Proposed Action (Section 2.1, page 3).

The distance between the closest survey trackline end and the COST well location is approximately 2 kilometers. Hilcorp estimates a transit time of approximately 20 minutes at a speed of 4 knots. All geophysical survey gear will be shut down during transit between the southern extent of the current survey program and the COST well location. Hilcorp anticipates it will take less than 30 minutes to conduct the additional activity.

The original Proposed Action in the Hilcorp EA and the requested southern extension of the survey area (by approximately 522 m), are entirely within the area offered for lease in LS 244 and analyzed in the corresponding LS 244 EIS.

Review and Analysis

BOEM's Alaska Region Office of Environment has reviewed the Hilcorp EA and the request for extension of the survey area for G&G Permit 21-01 to determine whether the EA is adequate to support BOEM's consideration of the permit modification, or whether BOEM must conduct additional NEPA analyses prior to rendering its decision. This review addressed whether the Hilcorp EA sufficiently covered the Proposed Action to such an extent that a supplemental EA is not necessary, per Department of the Interior regulations 43 CFR Sections 46.300(a)(2) and 46.120(c), the latter of which specifies:

An existing environmental analysis prepared pursuant to NEPA and the Council on Environmental Quality regulations may be used in its entirety if the Responsible Official determines, with appropriate supporting documentation, that it adequately assesses the environmental effects of the proposed action and reasonable alternatives. The supporting record must include an evaluation of whether new circumstances, new information or changes in the action, or its impacts not previously analyzed may result in significantly different environmental effects.

¹ <https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/2021-0806-HAK-EA-FONSI.pdf>

The extension of the survey area described in the permit modification request by Hilcorp would use the same survey equipment described in the Proposed Action of the EA and would not disturb the seafloor. The additional survey time would be brief and survey equipment would be turned off during transit to the location of the COST well. All additional activities would be conducted in accordance with mitigation requirements described in the Hilcorp EA.

There are no unique site-specific factors associated with the location of the additional activity that require additional analysis of effects beyond those considered in the Hilcorp EA and summarized by resource below.

Air Quality

The impacts of air emissions from the vessels and equipment analyzed in the Hilcorp EA are also applicable to the air emissions expected during the proposed, brief 30-minute survey. Any additional air emissions created by Hilcorp's additional activities would be quickly diluted in the ambient air and considered negligible. The analysis and conclusion in *Section 3.2, Air Quality* of the Hilcorp EA, are appropriate and applicable to the additional survey work described.

Water Quality

The impacts from operational discharges from these vessels and equipment were previously analyzed in the Hilcorp EA and are applicable to the operational vessel discharges expected during the proposed, brief 30-minute survey. Operational vessel discharges associated with the additional survey will not alter the analysis and the negligible conclusion for water quality in the Hilcorp EA. The analysis and conclusion in *Section 3.3, Water Quality* of the Hilcorp EA, are appropriate and applicable to the additional survey work described.

Fish and Invertebrates

The additional activity would occur in an area very close to the original boundary, and there is no expectation that the habitat in the extended area will be different than what was originally analyzed in the Hilcorp EA. Further, the same types of disturbance are expected because the proposed survey methods and equipment are the same as the original analysis. The analysis and conclusion in *Section 3.4, Fish and Invertebrates* of the Hilcorp EA, are appropriate and applicable to the additional survey work described.

Birds

Hilcorp's additional activity does not include any additional vessels, extend into any different season when birds may be engaged in different life history phases, measurably extend the relatively short project duration, or extend into any measurably different bird habitats (e.g., nearshore waters). The proposed activity does not, therefore, entail any additional risks of potential effects not already considered in the Hilcorp EA. The analysis and conclusion in *Section 3.5, Birds* of the Hilcorp EA, are appropriate and applicable to the additional survey work described.

Marine Mammals

Hilcorp's additional activity would bring no additional survey equipment, nor would it add extra workdays or vessels to what has been analyzed. The proposed extension would not cause a substantial increase in the effects to marine mammals from sound released into the water, as the project equipment will produce either high-frequency sound or a narrow beam width (15–24 degrees). High frequencies outside of the hearing range of marine mammals cannot be heard by the animals, and narrow beams are unlikely to be directly intercepted by any marine mammals. The animal would need to be within a few meters of the source and within the narrow beam of sound (i.e., directly under the vessel), which is extremely unlikely (This text is generally, but not explicitly, described in the EA in Section 3.6.2, pages 26–30. The text is explicitly discussed in NOAA's BO and ITR: (84 FR 37470, July 31, 2019; NOAA 2019, p. 171).

The habitat conditions are expected to be similar between the COST well site and the rest of the survey area, and no differences are likely in species occurrences and densities. The location identified is within the area of impacts evaluated in the EA, and it is also in the area evaluated by both the U.S. Fish and Wildlife Service and the National Marine Fisheries Service in Biological Opinions and Incidental Take Regulations for Hilcorp's Cook Inlet work (NMFS, 2019; USFWS, 2017, 2019; 84 FR 37442; 84 FR 37716). The additional survey activities will take only about 30 minutes, and all activities will be conducted in accordance with existing authorizations, including mitigation requirements related to marine mammals.

The analysis and conclusion in *Section 3.6, Marine Mammals* of the Hilcorp EA, are appropriate and applicable to the additional survey work described.

Subsistence Activities

The additional activity is near the previously defined survey area and would not alter the area of potential impacts on subsistence fishing. Survey of the two additional 500-meter tracklines within an approximately 30-minute period would not increase the level of potential impacts. Potential impacts, if any, would remain temporary and localized. The measures identified in the Hilcorp EA to minimize conflicts with other user groups in lower Cook Inlet, including subsistence users, would apply to the additional survey activity described in the permit modification request and would help minimize impacts on subsistence fishing. The analysis and conclusion in *Section 3.7, Subsistence Activities* of the Hilcorp EA, are appropriate and applicable to the additional survey work described.

Sport Fishing

The additional activity would occur in an area very close to the original boundary, and there is no expectation that the target species habitat in the extended area will be different than what was originally analyzed in the Hilcorp EA. Further, the same types of disturbance are expected, since the proposed survey methods and equipment are the same as the original analysis. The analysis and conclusion in *Section 3.8, Sport Fishing* of the Hilcorp EA, are appropriate and applicable to the additional survey work described.

Commercial Fishing

The additional activity would occur in an area very close to the original boundary, and there is no expectation that the target species habitat in the extended area will be different than what was originally analyzed in the Hilcorp EA. Further, the same types of disturbance are expected since the proposed survey methods and equipment are the same as the original analysis. The analysis and conclusion in *Section 3.9, Commercial Fishing* of the Hilcorp EA, are appropriate and applicable to the additional survey work described.

Archaeological Resources

The Hilcorp EA describes negligible impacts to archaeological resources from seafloor disturbance associated with geotechnical sampling (core sample collection and cone penetration tests) on the four OCS blocks Hilcorp identified in the January 29, 2021 Ancillary Activities Notice for on-lease activities (AA015). The permit modification request does not include any additional geotechnical activities, and the applicant states in its response to Request for Additional Information (RFAI_Hilcorp response email) that no seafloor disturbance is included in the additional activity. Because no additional seafloor disturbances are included in the permit modification request, the analysis and conclusion in *Section 3.10, Archaeological Resources* of the Hilcorp EA, are appropriate and applicable to the additional survey work described.

Environmental Justice

BOEM identified the communities of Nikiski, Seldovia, Nanwalek, and Port Graham as environmental justice communities near the project area, based on these communities' high consumption patterns of fish and wildlife and other subsistence resources compared to the Kenai Peninsula as a whole. In the Hilcorp EA, BOEM estimates that impacts to the following resources would range from negligible to minor: air quality, water quality, fish and invertebrates, birds, marine mammals, and subsistence activities and harvest patterns. These effects do not constitute disproportionately high and adverse impacts to Nikiski, Seldovia, Nanwalek, or Port Graham and there would be no disproportionately high and adverse impacts to environmental justice communities. Because the additional activities described in the permit modification request do not change the impact conclusions for the resources listed above, the analysis and conclusion in *Section 3.11, Environmental Justice* of the Hilcorp EA, are appropriate and applicable to the additional survey work described.

BOEM also evaluated whether “new circumstances, new information, or changes in the action or its impacts not previously analyzed may result in significantly different environmental effects” (43 CFR § 46.120(c)) since BOEM issued the FONSI for the Hilcorp EA earlier this year. The circumstances surrounding Hilcorp’s proposed activities remain largely unchanged, and no new scientific studies, regulatory changes, or other information that would influence BOEM’s analysis of impacts from the Hilcorp EA have become available. As detailed above, nothing in the Request for Extension of Survey Area represents a substantial change or departure from those activities or impacts already considered in the Hilcorp EA and associated consultations.

Determination

After reviewing Hilcorp's Request for Extension of Survey Area identified in G&G Permit 21-01, and the analysis provided in the Hilcorp EA, BOEM has determined that:

- The activities described in the Request for Extension of Survey Area do not constitute a substantial change from the activities and associated environmental impacts analyzed in the Hilcorp EA;
- there are no significant new circumstances or information that would result in significantly different environmental effects from those considered in the Hilcorp EA;
- the location of the additional survey activity does not present unique circumstances that require additional analysis beyond those addressed in the Hilcorp EA; and thus
- conducting additional NEPA analysis is not necessary or warranted at this time before BOEM can proceed with a decision on the Request for Extension of Survey Area.

References:

84 FR 37442. National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce. Final Rule. July 30, 2019.

84 FR 37716. Department of Interior U.S. Fish and Wildlife Service. August 1, 2019.

NMFS (National Marine Fisheries Service). 2019. Endangered Species Act (ESA) Section 7(a)(2) Biological Opinion for Hilcorp Alaska and Harvest Alaska Oil and Gas Activities, Cook Inlet, Alaska. NMFS Consultation Number AKRO/2018/00381. 261pp.

USFWS (U.S. Fish and Wildlife Service). 2019. Biological Opinion on Lease Sale 244 First Reinitiation. Consultation 2016-F-0226-ROOI. 18pp.

USFWS. 2017. Biological Opinion for the Oil and Gas Activities associated with Lease Sale 244. Anchorage, AK: Anchorage Fish and Wildlife Conservation Office. 165pp.