

FINDING OF NO SIGNIFICANT IMPACT

Hilcorp, Alaska, LLC Geohazard Survey EA
Cook Inlet, Alaska

Introduction

In accordance with the National Environmental Policy Act (NEPA), 42 USC 4261, *et seq.*; the Council on Environmental Quality regulations at 40 CFR § 1501, *et seq.*; Department of the Interior (DOI) regulations implementing NEPA at 43 CFR Part 46; and Bureau of Ocean Energy Management (BOEM) policy, BOEM prepared an Environmental Assessment (EA) of the potential effects of a geohazard survey proposed by Hilcorp Alaska, LLC (HAK). The project would occur in the Cook Inlet Planning Area of the Alaska Outer Continental Shelf (OCS) for approximately 30 days during summer/fall of 2021.

Pursuant to BOEM regulations at 30 CFR Part 551, HAK's permit application to conduct geophysical and geological (G&G) exploration (Proposed Action) was submitted to BOEM on January 28, 2021. Because the proposed survey area includes OCS tracts currently leased by HAK, the permit application also constitutes a notice of ancillary activities per 30 CFR § 550.208.

A notice of preparation of an EA to evaluate the environmental impacts of the Proposed Action was published on March 10, 2021 on <https://www.regulations.gov> (docket BOEM-2021-0023), and posted on the Alaska Regional Office website. The notice stated that BOEM was seeking public involvement for preparing an EA of a geohazard survey in the Cook Inlet. Comments were accepted through March 22, 2021. Three comments were received from the general public.

BOEM prepared the EA to determine whether the Proposed Action may result in significant effects such that an environmental impact statement is required (40 CFR §1501.3(a)). The EA included here 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 EA was also prepared to assist with BOEM planning and decision-making (40 CFR §1501.5(b)).

Proposed Action

HAK is proposing to conduct geohazard and geotechnical surveys over 4 lease blocks in the Lower Cook Inlet (6405, 6406, 6455, and 6456) between June and October 31, 2021. The surveys would take about 30 days total to complete. The Proposed Action takes place entirely within the area offered for lease in the June 21, 2017 Lease Sale 244.

Hilcorp also proposes to survey the on and off-lease areas with a suite of geophysical tools including a multibeam echosounder, magnetometer, sidescan sonar, sub-bottom profiler, and UHD Sparker multi-channel sub-bottom profiler. HAK proposes to collect core samples of 3–4 inches up to 25 feet below the seafloor using a Vibracore sampler. Cone penetration measurements will be collected to determine soil stability and jack-up leg penetration. The equipment proposed will be configured for 8-meter penetrations.

Shallow hazard survey equipment will be vessel-mounted or towed behind the Research Vessel (R/V) Woldstad or similar. The Woldstad is a 121-foot heavy weather vessel with a 12-foot draft designed for cruising speeds up to 10 knots. A sound source verification (SSV) is required to establish distances for specific project environmental parameters for this survey; a separate vessel such as the 70-foot R/V Thunder or similar will be used to conduct the SSV.

The proposed survey is essentially the same program proposed for 2020 and authorized under AKOCSR Permit 20-10; this program was delayed due to COVID-19. These surveys are required as part of HAK's forthcoming Exploration Plan and will obtain information necessary to evaluate shallow hazards and conduct an archaeological evaluation in support of future oil and gas exploration and development. HAK proposes to conduct the surveys in compliance with BOEM's Notice to Lessees (NTL) 2005-A01 (Shallow Hazards Survey and Evaluation for OCS Exploration and Development Drilling) and NTL 2005-A03 (Archaeological Survey and Evaluation for Exploration and Development Activities). The HAK OCS Geohazard Survey is focused on HAK leases but is expected to extend beyond these leases to ensure that sufficient data is collected to support HAK's future exploration drilling program.

Environmental Assessment

The purpose of the proposed survey is to obtain shallow hazard data required for future exploration drilling activities. The need is to further the orderly development of OCS resources in accordance with the Outer Continental Shelf Lands Act (OCSLA) (43 United States Code (USC) § 1331 et seq.). BOEM evaluated the Proposed Action and a No Action alternative. No additional alternatives that met the purpose and need for the project were identified by BOEM or suggested during the public involvement period.

No Action Alternative

Under this alternative, BOEM would not issue HAK a permit to conduct the proposed 2021 geohazard survey, meaning the Proposed Action would not occur. HAK would not gather data required to inform a future exploration drilling program. This alternative would also delay or avoid potential impacts to the environment identified in the EA.

Proposed Action

Under this alternative, BOEM would issue HAK a permit for the Proposed Action, and the Proposed Action would occur. Shallow hazard data would be obtained to inform a future exploration drilling program.

Adverse effects to the environment would occur; the level of these impacts would range from negligible to minor, depending on the specific environmental resource and the mitigation measures employed.

Anticipated impacts of the Proposed Action are summarized below:

- ***Physical Resources***

Projected emissions from the Proposed Action would have a negligible level of effect on coastal air quality. This is due to the mobile nature of the vessels combined with the duration of the survey (approximately 30 days), which would prevent/minimize transport of emissions. The quality of onshore air would remain better than required by Federal standards.

For water quality, the effects of the Proposed Action would be associated with vessel discharges. Vessel discharges would be localized, brief (e.g., vessel discharges and deck runoff), and result in a negligible level of effect to water quality.

- *Biological Resources*

The Proposed Action is expected to have environmental effects ranging from negligible to minor on biological resources.

Effects of the Proposed Action on fish and invertebrates would be limited to the areas surrounding the vessels and would likely not be detectable once the vessels have left the area. Fish may be temporarily displaced from the area where vessels are operating. The effects are limited to discrete locations and times, would not persist, and are not additive. The Proposed Action is also unlikely to affect the timing or success of fish runs, or to have population level impacts. The survey activity would occur away from spawning streams and would be in areas where fish could divert around the source of disturbance. Therefore, the level of effects for the Proposed Action, with respect to fish and invertebrate species, is negligible.

Primary sources of potential impacts of the Proposed Action on birds are vessel traffic and light attraction/collision hazards. Vessel presence and activity could disturb birds, but flocks of migrating or molting birds generally move away from vessel activity. Attraction to and/or collisions with the vessels associated with the Proposed Action could result in injury and death to individual birds or migrating flocks of birds. However, exposure of most birds to hazards associated with the Proposed Action would be brief and would not affect enough individuals to have measurable population level impacts. Overall, Cook Inlet bird populations are expected to experience no more than minor impacts.

The Proposed Action has the potential to affect all of the marine mammal species found in Cook Inlet. The most likely effects on marine mammals would primarily be behavioral responses that are short-term and non-injurious. Such behavioral responses would include avoidance of areas near vessels by some species. No critical habitat (as designated under the Endangered Species Act (ESA)) areas are within the survey area itself, nor will such areas be affected by the Proposed Action. Overall, effects from the Proposed Action on marine mammals would range from negligible to minor.

- *Sport and Commercial Fishing*

BOEM anticipates negligible impacts to nearshore sport fishing and clamming because there would be no space-use conflicts with the Proposed Action. Further offshore, there could be short-term and localized displacement of boats and fishers during survey operations, potentially resulting in minor adverse impacts from the Proposed Action.

Similarly, impacts to commercial fishing could occur through space-use conflicts with survey vessels. If the timing of the Proposed Action overlaps portions of the salmon fishing season and commercial halibut season, BOEM anticipates that the increase in vessel activity could result in localized and short-term, and thus minor, adverse impacts to commercial fishing.

- *Subsistence Activities, Environmental Justice, Economy, and Archaeological Resources*

For nearshore subsistence fishing and harvest of seals and marine invertebrates near communities, BOEM estimates little to no adverse impacts from the Proposed Action because there would be no space-use conflicts. There is a slight potential for space-use conflicts between offshore subsistence fishing vessels and vessels used in the Proposed Action. The impacts would be temporary, but such interference could delay subsistence users and they could miss some potential harvest. Subsistence harvesters would most likely have time to fish at other locations during any single trip, or at other times and places during the season. Overall, BOEM estimates negligible to minor impacts to subsistence activities from the Proposed Action. Based on the analyses for air and water quality, and

subsistence and sociocultural activities, Environmental Justice impacts from the Proposed Action are not anticipated.

The Proposed Action would involve contact with the seafloor to collect core samples and would produce an extremely slight potential to cause effects on historic properties. Overall, impacts to archaeological resources from the Proposed Action are expected to be negligible.

EFFECTS of the Action

I have considered the following in my evaluation of the degree of the effects 40 CFR § 1501.3(b)(2)) from the Hilcorp Geohazard surveys:

1. Short- and Long-term Effects

The EA considered the Proposed Action's potential contribution to impacts when combined with other past, present, and reasonably foreseeable activities for the Cook Inlet OCS in the general area of lower Cook Inlet. The EA effects analyses indicate that the Proposed Action is not reasonably anticipated to produce significant impacts, nor is it anticipated to combine with the effects of other activities such that the incremental effects of the action result in significant impacts. Therefore, the degree to which the potential effects of the Proposed Action may be related to other actions with individually insignificant but cumulatively significant impacts does not render the potential impacts significant.

2. Beneficial and Adverse Effects

Potential adverse effects of the Proposed Action to physical, biological, and sociocultural resources are expected to occur at negligible to minor levels, depending on the resource. Significant adverse effects are not anticipated for any resource. Therefore, the level of adverse and beneficial effects of the Proposed Action does not render the potential impacts significant.

3. Effects on Public Health and Safety

Within its environmental analysis, BOEM considered the distance of the Proposed Action from local communities, potential effects of anticipated discharges and emissions, and the potential for the Proposed Action to interfere with subsistence activities. Due to the nature, location, and limited duration of the Proposed Action, it is expected to have little to no effect on public health or safety. Therefore, the degree to which the Proposed Action may affect public health or safety does not render the potential impacts significant.

4. Effects that Would Violate Federal, State, Tribal, or Local Law Protecting the Environment

BOEM's permit will be issued once all appropriate federal, state, and other permits are received. There is no indication that the Proposed Action, if approved, would threaten a violation of federal, state, tribal, or local law or requirement imposed for the protection of the environment. The potential effects of geohazard surveys such as those proposed here have been thoroughly studied and are well understood. No substantial disputes about the environmental consequences of such surveys are evident from the scientific literature, past analyses of similar activities in Cook Inlet, or the present EA.

Finding of No Significant Impact

BOEM has considered the evaluation of the potential effects of the Proposed Action and has determined that the Proposed Action would not cause any significant impacts, and implementing the Proposed Action does not constitute a major federal action significantly affecting the quality of the human environment within the meaning of Section 102(2)(c) of the National Environmental Policy Act of 1969.

Sharon Randall
Regional Supervisor, Office of Environment
Alaska Regional Office

Date

Attachments:

Environmental Assessment, 2021 HAK Geohazard Survey EA, Cook Inlet, Alaska. OCS EIS/EA BOEM 2021-0023.