



United States Department of the Interior

BUREAU OF OCEAN ENERGY MANAGEMENT
Alaska Outer Continental Shelf Region
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Memorandum

To: Regional Supervisor, Leasing and Plans

From: Regional Supervisor, Office of Environment

Subject: Determination of NEPA Adequacy - Eni US Operating Co. Inc. Revised Exploration Plan - Harrison Bay Block 6423 Unit - Proposed Drilling of Leases OCS-Y-1753, OCS-Y-1754, and OCS-Y-1757

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Eni US submitted a Revised Exploration Plan (EP) on April 6, 2018. The Revised EP modifies Eni's initial EP, which BOEM approved on July 12, 2017. The Revised EP requests authorization to modify their 2018 drilling operations schedule.

The Office of Environment has completed its review of Eni's Revised EP and has determined that supplementation of the existing 2017 EA is not warranted. Documentation of this determination is attached for your files.

If you have questions regarding the Determination of NEPA Adequacy, please contact Sharon Randall, Chief, Analysis Section I at (907) 334-5235, or by email at sharon.randall@boem.gov.

Determination of NEPA Adequacy

Environmental Review of Eni's Revised Exploration Plan for the Nikaitchuq North Project April 13, 2018

This document reflects the Bureau of Ocean Energy Management (BOEM), Alaska OCS Region's analysis concerning whether it must supplement an existing Environmental Assessment (EA) in light of a revision to the proposed action.

Background

On June 12, 2017, BOEM deemed "submitted" a proposed Exploration Plan (EP) from Eni entitled "Nikaitchuq North Exploration Plan" for exploration drilling activities in the Harrison Bay Block 6423 Unit (leases OCS-Y-1753, OCS-Y-1754, and OCS-Y-1757). The EP proposed drilling up to four exploration wells, consisting of two extended reach mainbores and two sidetracks, to evaluate the oil and gas resource potential of three of the company's Outer Continental Shelf (OCS) leases in the U.S. Beaufort Sea. Eni proposed to start the Nikaitchuq North Exploration Project from its existing 11-acre Spy Island Drillsite (SID). The SID is a man-made, land-based gravel island, constructed in shallow (6-8 feet) State of Alaska coastal waters, approximately 3 miles north of Oliktok Point and just south of the Spy Island barrier island. The SID has supported and continues to support a host of ongoing activities associated with production from State of Alaska leases in Eni's Nikaitchuq Unit; these activities have occurred on a year-round basis and would continue to proceed regardless of whether BOEM authorized any drilling into OCS leases. The exploration wells proposed in the EP would begin at the SID and extend subsurface of the ocean floor, ending in federal leases. The EP proposed activities commencing in December 2017 and concluding in May 2019. The EP specified that all drilling of proposed OCS wells would occur during winter months under solid ice conditions. A schedule contained in the EP further specified that drilling of the NN01 well and sidetrack during the 2017-2018 winter season would conclude by April 14, 2018, and that drilling of the NN02 well and sidetrack during the 2018-2019 winter season would conclude by April 21, 2019.

Per National Environmental Policy Act (NEPA) and Council on Environmental Quality regulations at 40 CFR § 1501.3 and 40 CFR § 1508.9, the BOEM prepared an Environmental Assessment (EA) to determine whether Eni's proposed exploration activities would result in significant effects and to assist with planning and decision making. Based on analysis provided in the EA and review of significance criteria under 40 CFR § 1508.27, BOEM determined that Eni's proposed exploration activities would not significantly affect the quality of the marine, coastal, or human environment.

On July 12, 2017, BOEM conditionally approved Eni's EP, thereby authorizing Eni to pursue the drilling activities specified in its EP. Eni commenced drilling its first OCS well from the SID in December 2017.

Revised EP

Due to delays in executing its OCS drilling program, Eni submitted a Revised EP on March 16, 2018, in which Eni proposed to augment its existing winter drilling program with certain drilling activities during the summer of 2018. On April 6, 2018, Eni submitted another Revised EP which supersedes the March 16 submittal and which proposes additional augmentations to its summer 2018 drilling program.

The present analysis considers all of the changes proposed by Eni in its latest Revised EP. Relevant proposed changes are summarized below:

- Eni may proceed with certain drilling activities year-round (i.e., drilling during 2018 would not be limited to winter and solid ice conditions);
- During the summer of 2018, Eni may continue to drill the NN01 mainbore well (but would not drill any sidetracks); and
- The NN01 well may only enter the hydrocarbon bearing formation from July 15 to September 15, 2018.

The Revised EP does not propose any revisions to the existing schedule for drilling the approved NN02 well and sidetrack during the 2018-2019 winter season.

Issue

Do changes proposed in Eni's Revised EP require BOEM to supplement its existing EA prior to approving, requiring modification of, or disapproving the Revised EP?

Review and Analysis

To determine whether the Eni EA remains adequate to support BOEM's pending decision concerning Eni's Revised EP, or whether BOEM must supplement the Eni EA prior to rendering its decision, the Office of Environment reviewed its existing EA along with Eni's Revised EP, and addressed whether either of the circumstances referenced in the Council of Environmental Quality regulations at 40 CFR § 1502.9(c)(1)(i)-(ii) apply.

This exercise is consistent with Department of the Interior regulations at 43 CFR § 46.120(c), which specify that:

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.

Are there "substantial changes in the proposed action that are relevant to environmental concerns?"

The proposed action analyzed in BOEM's EA encompassed all of the OCS exploration activities identified in Eni's EP. This included drilling four exploration wells (two mainbores and two sidetracks) during winter conditions from existing facilities at the SID, along with a variety of associated support activities.

The EP contained information concerning not only Eni's proposed OCS drilling program, but also the existing infrastructure and ongoing activities which support Eni's development and production of State of Alaska leases. BOEM applied conservative analysis assumptions to ensure that the scope of its EA was broad enough to capture all activities potentially associated with Eni's OCS exploration drilling program. Unless it was clear that a particular activity had nothing to do with the proposed OCS exploration program, BOEM included that activity as part of the proposed action and analyzed its potential effects in the EA. For instance, BOEM assumed that the year-round presence of the drill rig and a host of summer vessel traffic activities were part of the proposed action, even though Eni's EP did not propose drilling OCS wells in the summer. Ongoing, State-authorized development and production activities that lacked

any nexus with Eni's exploration of its Federal leases were considered in the Cumulative Effects section of the EA.

Given the broad scope of the proposed action analyzed in the EA, the only new activities proposed in Eni's Revised EP that are not already analyzed as part of the proposed action in BOEM's EA and Finding of No Significant Impact are operating the drill rig and disposing of cuttings and waste during summer months. All other aspects of Eni's summer drilling proposal (i.e. drill rig presence, vessel traffic associated with transport personnel and supplies, etc.) are already analyzed as part of the proposed action in the EA.

The subsections below address on a resource-specific basis the potential environmental concerns of these new proposed activities.

Air Quality. The Revised EP would effectively shift a portion of the drill rig emissions that would have occurred during the winter of 2017-2018 to the summer of 2018. Drill rig emissions would remain within the limits imposed by Eni's existing State of Alaska-issued emissions permits no matter when the drilling occurred. All other emissions associated with the Revised EP (i.e., support vessel emissions) were analyzed as part of the proposed action in the EA. Environmental impacts from Eni's new proposal are expected to be similar to those analyzed in the EA and remain at a "negligible" level of effect.

Water Quality. The Revised EP would result in no additional discharges or other water quality impacts not already analyzed in the EA. The EA analyzed a host of summer activities with the potential to affect water quality, such as vessel traffic, as part of the proposed action. The Revised EP would effectively delay the drilling-related discharges from winter to summer months, but these discharges would remain subject to existing water quality permitting requirements, and the shift in timing would not create the potential for impacts to exceed the "negligible" level of effects anticipated in the EA.

Vegetation and Wetlands. The Revised EP would not result in any additional or modified activities that would impact vegetation and wetlands. Impacts would remain "negligible."

Lower Trophic Organisms. The EA identified the potential for the proposed action to affect lower trophic organisms through point-source discharges, cooling water intake structures, alteration of the ice environment or the seafloor, and vessel traffic (winter and summer). The Revised EP does not propose any new or modified activities that could affect lower trophic organisms; noise from drilling is not believed to have the potential for impacts to this resource, whether in winter or in summer. As such, environmental impacts from the Revised EP are expected to be similar to those analyzed in the EA, and would remain at a "negligible" level of effects.

Fish. The only new or modified activity in the Revised EP with the potential to affect fish is drilling noise during summer months. The EA explains that noise from winter drilling was not expected to have a population-level effect because fish are mobile and are expected to avoid the louder, infrequent sounds; and to habituate to the constant noises. The same concepts apply to noise from summer drilling. Environmental impacts from the Revised EP are thus expected to be similar to those analyzed in the EA, and would remain at a "negligible" level of effect.

Birds. Vessel and vehicle traffic, light attraction, and the year-round physical presence of structures (to include the drilling rig) were identified in the EA as the primary factors impacting birds as a result of the proposed action. Overall, the EA anticipated that impacts to birds would range from a "negligible" to, for some species, "minor" level of effect. The Revised EP does not entail any new structures or activities with the potential to affect birds in a manner or to an extent not already considered in the EA.

Marine Mammals. The primary impacts to marine mammals assessed in the EA as a result of the proposed action were underwater noise from vessels and winter drilling, and winter ice road construction. The only new or modified activity proposed in the Revised EP that was not specifically analyzed in the EA is the operation of the drill rig during summer months.

The EA explains how data from similar drilling operations suggests that noise from drilling would be perceptible to marine mammals only within close proximity to the SID. Although this statement was made in the context of winter drilling, it is equally true for summer drilling, which would feature the same well characteristics and be subject to the same rapid decay of noise that occurs in shallow water inside barrier islands. Noise from drilling during any season would be perceptible to only those marine mammals located within close proximity to the SID. As explained in the EA, this area is not preferred habitat for any marine mammal species during any time of the year, and no bowhead whales, gray whales, beluga whales, or Pacific walrus would be expected to occur close enough to the SID to experience impacts.

The EA also makes clear that there is no data to suggest exploratory drilling or related activities (which have occurred in summer and winter months) have had adverse population-level effects on any cetacean species in the Arctic. There is no reason to expect a different result from the summer drilling activities proposed in the Revised EP.

The EA acknowledges that a small number of ringed, spotted, and bearded seals could be present near the SID on a year-round basis, but also explains that exploration drilling from the SID has limited potential to affect ice seals. The same factors identified in the EA as limiting impacts to these species from winter drilling, including habituation to past and ongoing activities on and around the SID, would similarly limit impacts to these species from summer drilling.

The EA also acknowledges that small numbers of polar bears could be present near the SID during summer drilling. All winter activities, including drilling, would be conducted in accordance with mitigation measures developed by the U.S. Fish and Wildlife Service. Any impacts to polar bears from summer drilling would be limited to temporary disturbances likely to result in little to no potential impacts.

Because the same factors that limit the potential for impacts to marine mammals from winter drilling at the SID would also limit the potential for impacts from summer drilling, shifting some drilling activities from winter months to summer months would not change the expected level of effects to marine mammals. Impacts from drilling in the open water season would be similar to those from the winter drilling activities analyzed in the EA, or for that matter, to impacts from Eni's past and ongoing State-authorized activities. The level of effects on marine mammals from the Revised EP would therefore remain as described in the EA: "negligible."

Subsistence Harvest Patterns. The EA anticipated a "negligible" to "minor" level of effects to subsistence activities and harvest patterns from the proposed action. The potential for these impacts stemmed from the potential for support vessels to interfere with certain subsistence hunting activities during various times of the year, including summer. No impacts to subsistence harvest patterns were anticipated to result from winter drilling. Similarly, there is no reason to believe that operating the existing drill rig in summer months would impact subsistence harvest activities. Noise from drilling on the SID would be limited (see the explanation of EA's analysis concerning drilling noise propagation, summarized in the marine mammals subsection above) and would not reach any areas typically utilized for subsistence harvest activities. Impacts from the Revised EP would thus remain unchanged from the impacts anticipated in the EA.

Oil Spills. The EA analyzed potential impacts from hypothetical oil spills that it assumed could occur during any season. The proposed shift in the timing of certain activities as proposed in the Revised EP do not alter the analytical conclusions of the EA concerning oil spills.

Are there “significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts?”

BOEM issued its EA and FONSI and approved Eni’s EP less than a year ago. The circumstances surrounding Eni’s ongoing operations remain largely unchanged, and no new scientific studies, regulatory changes, or other information that would influence BOEM’s analysis of impacts from Eni’s Nikaitchuq North exploration program have become available.

Determination

After reviewing Eni’s Revised EP and the analysis provided in the EA, BOEM has determined that:

- The Revised EP does not constitute a substantial change in the proposed action that is relevant to environmental concerns;
- There are no significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts; and thus
- Supplementing the existing EA is not necessary or warranted at this time.