

FINDING OF NO SIGNIFICANT IMPACT
Outer Continental Shelf Lease Exploration Plan EA
EP008-Eni 2017
Beaufort Sea, 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 Eni U.S. Operating Co. Inc. (Eni) drilling four exploration wells from an existing facility located on State of Alaska waters to Federal leases in the Harrison Bay Block 6423 Unit on the Outer Continental Shelf (OCS) of the Beaufort Sea. This action is to begin in December, 2017 and continue through 2019.

The proposed exploration activities (Proposed Action) are detailed in an Exploration Plan (EP) submitted in May, 2017, and deemed submitted by BOEM on June 12, 2017. The three leases identified for exploration (OCS-Y-1753, OCS-Y-1754, and OCS-Y-1757) were acquired by Armstrong Oil & Gas in 2005 through Beaufort Sea Lease Sale 195, and are currently operated by Eni.

The notice of preparation of an EA on the Proposed Action was published on June 12, 2017, on Regulations.gov (docket BOEM-2017-0025), sent to potentially affected stakeholders, and posted on the Alaska OCS Region website. The notice stated that "BOEM Seeks Public Involvement in Preparing an Environmental Assessment for the Eni 2017 Outer Continental Shelf Lease Exploration Plan, Beaufort Sea, Alaska." All comments received were reviewed and considered during the development of the EA and analysis of the Proposed Action.

BOEM prepared the EA to determine whether the Proposed Action may result in significant effects (40 CFR 1508.27) such that an environmental impact statement is required. The EA analyzes the potential for significant adverse 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 (40 CFR 1508.13 and 1508.14). The EA was also prepared to assist with BOEM planning and decision-making (40 CFR 1501.3(b)), namely, to help inform a determination as to whether the Proposed Action would cause undue or serious harm or damage to the human, marine, or coastal environment under 30 CFR 550.202.

Purpose of the Proposed Action

The purpose of the Proposed Action is to evaluate the oil and gas resource potential of federal leases within the Nikaitchuq North Harrison Bay Block 6423 Unit.

Description of the Proposed Action

Eni's proposal is to drill up to four exploration wells, consisting of two extended reach mainbores and two sidetracks, from the Spy Island Drill site (SID) to subsurface locations within three federal leases (OCS-Y-1753, OCS-Y-1754, and OCS-Y-1757) of Harrison Bay Block 6423. The SID is an existing, man-made gravel island constructed in the shallow (6-8 feet) waters of Simpson Lagoon, approximately three miles north of Oliktok Point and just south of the Spy Island barrier island. The SID is owned and operated by Eni and supports the drilling and production from State of Alaska leases in Eni's Nikaitchuq

unit. Eni also owns and operates the Oliktok Production Pad (OPP), an onshore drilling and processing facility located on Oliktok Point near the shoreline of Simpson Lagoon. All drilling would occur during winter (December through mid-April) during solid ice conditions.

The Proposed Action would be conducted using existing facilities and equipment associated with Eni's ongoing drilling and production activities on State of Alaska leases. No new construction would occur. Freight and personnel would be transported from the OPP to the SID via ice roads in winter and via marine vessels and barges during the open water season.

Environmental Assessment

BOEM evaluated the Proposed Action and a No Action alternative. A list of other alternatives considered but not analyzed, is provided in Section 2.4 of the EA. None of the potential alternatives identified during internal scoping were determined to be reasonable or carried forward for full analysis in the EA. No additional alternatives were suggested through external scoping (public comment period).

No Action Alternative

Under the No Action Alternative, BOEM would not approve Eni's proposed EP. This would preclude Eni from evaluating the oil and gas resource potential of its federal leases within the Nikaitchuq North Harrison Bay Block 6423 Unit.

Eni has indicated that if the proposed EP is not approved, it would continue to produce oil from its existing wells on State leases, and would also likely pursue additional development drilling on State leases. Ongoing and potential activities on State leases are not authorized by BOEM and are not part of the Proposed Action analyzed in the EA. These activities are, however, evaluated as past, present, and reasonably foreseeable future actions within the Cumulative Effects Scenario (Appendix B), and their potential contributions to cumulative impacts are accounted for within each resource-specific subsection of Chapter 4 of the EA.

Proposed Action

Under this alternative, BOEM would approve Eni's EP, and the Proposed Action would occur. Up to four exploration wells, consisting of two extended reach mainbores and two sidetracks, would be drilled from SID to evaluate the oil and gas resource potential of three of the company's OCS leases in the U.S. Beaufort Sea. Adverse effects to the environment would occur; the level of these impacts would range from negligible to minor, depending on the specific environmental resource. Anticipated impacts of the Proposed Action on these resources are summarized below:

- **Physical Resources**

The level of effects of the Proposed Action on air and water quality would be negligible because little to no adverse effects would occur.

- **Biological Resources**

The Proposed Action is expected to have negligible to minor effects on biological resources. Impacts to vegetation and wetlands, lower trophic resources, and fish would be negligible because little to no adverse impacts would occur. Impacts to birds are expected to be primarily insignificant or immeasurable at the population level, and therefore negligible but in rare circumstances impacts could be temporary and localized and therefore minor.

For marine mammals, the Proposed Action could have negligible to minor effects due to the location of the SID, the limited number of animals exposed to industrial activities, and human interactions. Eni has obtained a Letter of Authorization (LOA) from the United States Fish and Wildlife Service (USFWS) for the non-lethal incidental take of polar bears and Pacific walrus, and will also obtain an LOA for the intentional take (for deterrence) of polar bears. Both of these authorizations are approved under the Marine Mammal Protection Act (MMPA).

- **Sociocultural Systems, Subsistence Harvest Patterns, Population and Economy, Community Health, Environmental Justice, and Archaeological Resources**

Impacts to the Sociocultural Systems would be negligible because there would be little to no effects to social organization, cultural values and formal institutions of Nuiqsut or any other community.

Subsistence activities and harvest patterns could experience minor impacts if the presence of support vessels between Oliktok Point and the SID disturbs seal hunting or eider hunting, or interferes with travel to and from Cross Island during the fall bowhead whale hunts.

The Proposed Action would have negligible effects on population, employment, income, and revenue in the North Slope Borough and local communities (i.e. Nuiqsut).

Overall, there would be negligible impacts to Community Health from the Proposed Action. There would be no disproportionately high and adverse impacts to Environmental Justice communities from the Proposed Action.

No historic or prehistoric properties are likely to be affected by the activities proposed in the 2017 Eni EP. Therefore, the Proposed Action will have a negligible effect on archaeological resources.

Significance Review (40 CFR 1508.27)

Consistent with 40 CFR 1508.27, significance is evaluated by considering context and intensity. Significance varies with the setting of the Proposed Action. For short-term, site-specific actions such as this one, significance would usually depend upon the effects in the specific location rather than in the world as a whole. Both short-term and long-term effects are relevant. For this Proposed Action, the context is centered on Simpson Lagoon and the community of Nuiqsut. It is within this context that the intensity of potential effects of the Proposed Action is considered. Intensity refers to the severity of effect. Pursuant to 40 CFR 1508.27(b), the following ten factors have been considered in evaluating the significance of the Proposed Action:

1. **Impacts that may be both beneficial and adverse.** Potential adverse effects of the Proposed Action to the physical environment, biological resources, and subsistence activities, in consideration of mitigation measures already incorporated into the Proposed Action, are expected to be either negligible or minor, depending on the resource. Significant adverse effects are not anticipated for any resource. There would be beneficial economic impacts if local residents were employed in support of these activities, although such impacts are expected to be temporary. Therefore, the level of adverse and beneficial effects of the Proposed Action does not render the potential impacts significant.
2. **The degree to which the Proposed Action affects public health or safety.** Within its environmental analysis, BOEM considered the distance of the Proposed Action from the local communities, potential effects of anticipated discharges and emissions, and the potential for the Proposed Action to interfere with subsistence activities. Due to the location and limited duration of the Proposed Action,

it is expected to have no effects 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.

3. **Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.** The Proposed Action would not take place near any known historic or cultural resources, or near any park lands, prime farmlands, wetlands, or wild and scenic rivers or ecologically critical areas. While the Proposed Action would occur within designated critical habitat for polar bears, it is not expected to adversely modify or to otherwise negatively affect that habitat. No other ecologically critical areas exist within the area. BOEM also analyzed the potential to adversely affect subsistence hunting areas, including those used for whaling. Negligible to minor impacts to subsistence hunting patterns are anticipated as a result of the proposed exploration drilling or support activities. Consideration of potential site specific effects of the Proposed Action on unique geographical areas does not render the potential impacts significant.

4. **The degree to which the effects on the quality of the human environment are likely to be highly controversial.** BOEM evaluated the degree to which the potential effects of the proposed activities may be highly controversial. In developing the EA, BOEM reviewed relevant studies, scientific literature, past BOEM NEPA analyses, and ADEC, NMFS and USFWS analyses. BOEM invited the USFWS, NMFS, and the Bureau of Safety and Environmental Enforcement to be cooperating agencies during development of the EA. BOEM received and reviewed public comments, in part to determine if substantial questions exist on whether the Proposed Action would cause significant degradation of any environmental factor. Concerns raised by stakeholders were fully considered and addressed as appropriate in the EA. Furthermore, the effects analyses in the EA are based on the best available scientific information. Sufficient information was available to support sound scientific judgments regarding the potential for environmental effects. The following recent NEPA reviews and other environmental evaluation documents, as well as pertinent on-going studies, were reviewed and incorporated as appropriate:
 - Final Environmental Impact Statement – Outer Continental Shelf Oil & Gas Leasing Program: 2002-2007 (OCS EIS/EA MMS 2002-006) (USDOJ, MMS, 2002).
 - Final Environmental Impact Statement – Outer Continental Shelf Oil and Gas Leasing Program: 2007-2012 (OCS/EIS/EA MMS 2007-003) (USDOJ, MMS, 2007).
 - Final Programmatic Environmental Impact Statement – Outer Continental Shelf Oil and Gas Leasing Program: 2012-2017 (OCS/EIS/EA BOEM 2012-003) (USDOJ, BOEM, 2012).
 - Final Environmental Impact Statement – Beaufort Sea Planning Area Oil and Gas Lease Sales 186, 195, and 202 (OCS EIS/EA MMS 2003-001) (USDOJ, MMS, 2003).
 - Environmental Assessment — Proposed Oil & Gas Lease Sale 195, Beaufort Sea Planning Area and Finding of No Significant Impacts (OCS EIS/EA MMS 2004-028) (USDOJ, MMS, 2004).
 - Environmental Assessment — Shell Offshore, Inc., 2012 Revised Outer Continental Shelf Lease Exploration Plan, Camden Bay, Beaufort Sea, Alaska, Flaxman Island Blocks 6559, 6610 & 6658, Beaufort Sea Lease Sales 195 & 202.
 - NMFS 2013 Biological Opinion (USDOC, NOAA, NMFS, 2013).
 - FWS 2012 Biological Opinion (USDOJ, FWS, 2012).
 - Intra-Service Biological Opinion for the issuance of 2016-2021 Beaufort Sea Incidental Take Regulations (July 27, 2016).
 - ADEC Technical Analysis Report (TAR), for Minor Permit AQ0923MSS11, June 12, 2017 (ADEC, 2017)

The potential effects of oil and gas exploration activities such as those proposed have been thoroughly studied and are well understood. The effects of the Proposed Action are therefore not highly controversial, and consideration of this criterion does not render the potential impacts significant.

- 5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.** In determining the significance of effects of the proposed action, BOEM evaluated the degree to which the potential effects of the proposed action may be highly uncertain or involve unique or unknown risks. Since 1971, there has been one large ($\geq 1,000$ barrels) OCS spill during the drilling of approximately 15,000 OCS exploration wells. Exploration drilling in the Arctic OCS has more than two decades of history. No large spills occurred while drilling 36 exploration wells to depth in the Arctic OCS and no large spills have occurred during the Nikaitchuq Development.

The technologies and procedures used in exploration drilling conform to well-established industry standards, and the components of exploration drilling that may impact the environment are well understood. It is acknowledged that the wells proposed in Eni's EP are extended reach wells. These proposed wells would be deeper and have a longer horizontal reach than the existing wells drilled at Nikaitchuq, but their horizontal distance-to-depth ratio would be less (a more pertinent consideration). Extended reach drilling presents certain technical challenges, but these challenges are well-known and are addressed through use of appropriate equipment, drilling procedures and well design. It should be understood that well design (vertical vs. extended reach) is only one factor in the risk of an oil spill and other factors such as a reservoir pressure, oil composition, and geologic hazards also exert influence on the risk of an oil spill. All of these factors will be further considered by BSEE in its comprehensive technical review of each proposed well design as part of the APD review process. BSEE will not approve the APD, and Eni will not be authorized to drill, if BSEE determines that the well designs proposed here are not safe. If BOEM and BSEE approve Eni's EP and APD, respectively, and exploration drilling occurs, BSEE inspection personnel would monitor the operation and enforce and verify compliance with conditions of approval of the EP, lease stipulations, and BOEM and BSEE drilling, safety and environmental regulations.

The potential impacts of exploration activities in the Beaufort, including potential oil spills, have been addressed in several previous BOEM EISs and EAs. Updated, project-specific analyses of the potential impacts of small spills and a hypothetical large and very large spill from the Proposed Action are provided in Chapter 4 and Appendix A of this latest EA. Updated spill probabilities are also provided in Appendix A.

The effects of the Proposed Action are not highly uncertain, nor does the Proposed Action involve unique or unknown risks. Risks and effects have been identified and evaluated in the EA, the documents to which it tiers and other documents incorporated by reference. Therefore, the degree to which the potential effects of the Proposed Action may be highly uncertain or involve unique or unknown risks does not render the potential impacts significant.

- 6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.** In compliance with the OCSLA and the regulations at 30 CFR Part 550, BOEM has conducted a technical and environmental review of the Proposed Action. All EP's are subject to a review and evaluation by BOEM based on the specific facts of each Plan and the proposed activities at issue. Any future OCS oil and gas activities that are not described in the Proposed Action and analyzed in the EA would require separate review and approval before they could proceed. Thus, the Proposed Action here will not serve as a precedent for future actions nor represent a decision in principle about a future consideration. Accordingly, the degree to which the Proposed Action may establish a precedent for future actions or

represent a decision in principle about a future consideration does not render the potential impacts significant.

7. **Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.** The EA considered the Proposed Action's potential contribution to cumulative effects when combined with other past, present, and reasonably foreseeable activities, including past, present, and reasonably foreseeable activities at Nikaitchuq. The EA concluded that the Proposed Action is not reasonably anticipated to produce significant impacts or to add to the effects of other activities such that the incremental effects of the action result in significant effects. 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.
8. **The degree to which the Proposed Action may affect districts, sites, highways structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.** Activities associated with the Proposed Action are not anticipated to disturb historic or prehistoric properties. No such properties were identified during site-specific shallow hazard surveys and archeological assessments conducted in the area of proposed activities, and the Proposed Action does not entail any new ground disturbance. The Proposed Action is not expected to adversely affect, or cause the loss of, any scientific, cultural, or historic resources. Therefore, the degree to which the Proposed Action may adversely affect historic resources does not render the potential impacts significant.
9. **The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.** Section 7(a)(2) of the ESA requires each federal agency to ensure that any action that it authorizes, funds, or carries out is not likely to jeopardize the continued existence of a listed species or result in the adverse modification of designated critical habitat. BOEM determined that Eni's Proposed Action is within the scope of activities analyzed in the NMFS-issued Biological Opinion (2013 BO; April 2, 2013) and the USFWS-issued Biological Opinion (2012 BO: May 8, 2012), and that these consultations need not be re-initiated prior to making a decision on the proposed EP.

The EA concludes that any adverse effects to endangered or threatened species from the Proposed Action are expected to be short-term and localized, and would not exceed a minor level of effect. Specifically, bowheads would not likely be present during drilling or inside the barrier island where they could be affected by support vessels. Spectacled and Steller's eiders may strike existing facilities or be exposed to a small spill, but not in sufficient numbers to exceed a minor level of effect. Bearded seals are not numerous in Simpson Lagoon, are not anticipated to be exposed to high levels of noise, and would not alter behavior because they are already habituated to ongoing activities. Any incidental or intentional take of polar bears would occur pursuant to the conditions of USFWS Letters of Authorization that will serve to preclude significant impacts to polar bears from those activities. Additionally, no destruction or adverse modification of critical habitat is anticipated. Therefore, the degree to which the Proposed Action may adversely affect endangered or threatened species or its habitat does not render the potential impacts significant.

10. **Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.** In determining whether the Proposed Action may violate Federal, State, or local law or requirements imposed for the protection of the environment, BOEM considered the information in the EP, supporting documents submitted by Eni, regulatory and

permitting information submitted by Eni, including the current LOA authorization from the USFWS, as well as public comment. BOEM's analysis indicates that no unauthorized take of marine mammals is expected, and NMFS has advised Eni that an MMPA incidental take authorization for cetaceans or pinnipeds is not warranted for this Proposed Action. BOEM finds that no violations of the MMPA or any other laws or requirements imposed for the protection of the environment are reasonably anticipated to occur as a result of the Proposed Action. Approval of the exploration plan would be a conditional approval. Under the conditional approval, Eni may not commence exploration activities prior to the receipt of all necessary permits, authorizations and agreements. The OCS Lands Act authorizes BSEE to inspect all oil and gas operations on the OCS. Scheduled and unannounced inspections will examine all safety equipment and confirm compliance with applicable laws, requirements, and conditions of approval. Therefore, consideration of whether the Proposed Action threatens to violate Federal, State, or local law or requirements imposed for the protection of the environment does not render the potential impacts significant.

Finding of No Significant Impact

BOEM has considered the evaluation of the potential effects of the Proposed Action and reviewed the 40 CFR 1508.27 significance factors. BOEM 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.



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Date

Attachment: Environmental Assessment, 2017 Eni Beaufort Sea EP EA, Beaufort Sea, Alaska. OCS EIS/EA BOEM 2017-047.

Copies of the EA can be obtained by request to Bureau of Ocean Energy Management, Alaska OCS Region, 3801 Centerpoint Drive, Suite 500, Anchorage, AK 99503-5823 or (800) 764-2627, or by accessing <http://www.boem.gov/ak-eis-ea/>.