Whitney Grande, Vice President Safety, Environment and Quality
Eni US Operating Co. Inc.
3800 Centerpoint Dr. Suite 300
Anchorage, AK 99503

Dear Mr. Grande:

The Bureau of Ocean Energy Management (BOEM) has reviewed the Eni US Operating Co. Inc. (Eni) Revised Exploration Plan (Revised EP) - Harrison Bay Block 6423 Unit—Proposed Drilling of Leases OCS-Y-1753, OCS-Y-1754, and OCS-Y-1757. The Revised EP augments Eni’s existing, winter-only OCS drilling schedule with additional drilling and related activities to occur during the summer of 2018. The Revised EP proposes to enter the hydrocarbon bearing formation only from July 15 to September 15, 2018. BOEM hereby approves the Revised EP subject to the same conditions imposed by BOEM in its July 12, 2017 letter approving Eni’s Initial EP.

If you have questions, please contact William Ingersoll, Chief of Plans Section, at (907) 334-5224 or by email at william.ingersoll@boem.gov.

Sincerely,

[Signature]

David Johnston, Regional Supervisor
Office of Leasing and Plans
Bureau of Ocean Energy Management, Alaska OCS Region

Enclosure: Eni’s July 12, 2017 approval letter

cc. Bureau of Safety and Environmental Enforcement, Alaska Region, Att: Kevin Pendergast
Bureau of Safety and Environmental Enforcement, OSPD, Att: Eric Miller
Whitney Grande, SEQ Director and Alaska Representative  
Eni US Operating Co. Inc.  
3800 Centerpoint Dr. Suite 300  
Anchorage, AK 99503

Dear Mr. Grande:


In accordance with 30 CFR 550.233, the BOEM hereby conditionally approves the EP subject to the conditions below:

1. Eni US must inform the Regional Supervisor, Office of Leasing and Plans (RSLP), before any deviation from activities specified and procedures described under the EP.

2. Prior to commencing exploratory drilling operations, Eni US must obtain Bureau of Safety and Environmental Enforcement (BSEE) approval of its Oil Spill Response Plan under 30 CFR Part 254 Subpart D, and must notify the RSLP of BSEE's approval.

3. Prior to commencing exploratory drilling operations, Eni US must obtain State of Alaska, Department of Environmental Conservation (ADEC), approval of the March 2017 revision to the Oil Discharge Prevention and Contingency Plan, and must submit a copy of ADEC's approval to the RSLP.

4. Prior to commencing exploratory drilling operations, Eni US must obtain BSEE approval(s) of an Application for Permit to Drill (APD) for that well.

5. Prior to commencing proposed activities each year, Eni US must submit to the RSLP for review a copy of its proposed orientation program in compliance with Lease Stipulation No. 2 requirements.

6. In the event that a relief well is needed, Eni US must notify the RSLP of the BSEE approval of the relief well drilling rig and any corresponding APD for drilling the relief well.

7. Prior to commencing exploratory drilling operations, Eni US must demonstrate compliance with the BSEE regulations concerning H₂S. Eni US must either notify the RSLP that BSEE has classified the area as "H₂S absent"; or, in the event that the BSEE classifies the area as "H₂S present" or "H₂S unknown", Eni US must provide the RSLP with an H₂S contingency plan prepared under 30 CFR 250.490(f), or a reference to an approved H₂S contingency plan that covers the proposed exploration activities.
8. Eni US must collect operations activity information and report to OCSEmissionsInventoty@boem.gov within 30 days after the end of each drilling season. The report must include facility and equipment fuel usage or hours of operation for each emission unit and the sulfur content of fuel deliveries. Alternatively, copies of the Facility Operating Report for the SID prepared for ADEC in compliance with State of Alaska air quality regulations may be submitted to the RSLP to satisfy this condition.

9. Eni US must provide the Regional Supervisor, Office of Resource Evaluation (RSRE), with copies of any requested well logs and reports associated with its NN01 and NN02 wells. These materials may include but are not limited to the following:

   a. Well log data (open and cased-hole logs) including MWD, LWD, and wireline
   b. Directional surveys
   c. Velocity surveys (time/depth pairs) and detailed vertical seismic profile reports
   d. Wireline formation tester data and logs
   e. Drill stem tests and associated flow data
   f. Mudlog data and related reports such as drilling reports
   g. Paleontological reports and related information
   h. Rotary sidewall, percussion cores and/or conventional core analyses and reports
   i. Geochemical and/or PVT analysis of formation fluids
   j. Any other well logs, reports, or related information requested by the RSRE or RSLP

   For data format types and submission instructions, please contact the RSRE directly. The RSRE will approve the proposed submittal date of each log, report, analysis and other related information.

10. Based on the size, timing, duration, and scope of the proposed operations, the lack of anticipated impacts from the proposed activities identified in BOEM's Environmental Assessment, and input received during consultation with the Alaska Eskimo Whaling Commission (AEWC) and the North Slope Borough (NSB), BOEM has determined that a site-specific monitoring program is not necessary for the first year of operations, and waives the requirements of Lease Stipulation No. 4 for that time period. At the end of the first year of proposed activities, BOEM will consult with the AEWC and the NSB to evaluate the possibility of extending the waiver. In the event that BOEM does not extend this waiver, Eni US must conduct Bowhead Whale Monitoring during the second year of operations.

11. Eni US must inform the RSLP if it signs a Conflict Avoidance Agreement (CAA) with the Alaska Eskimo Whaling Commission (AEWC) and submit to the RSLP a signed copy of the document prior to commencing proposed activities each year. Eni US must also submit to the RSLP documentation of any program it intends to conduct, or actions it intends to take, in order to implement the associated provisions, terms, and conditions of the CAA.

12. Pursuant to Lease Stipulation No. 5, Eni US must communicate to the RSLP any concerns expressed by the potentially affected communities during proposed operations and of any steps taken to address such concerns. Lease-related use will be restricted if the RSLP determines it is necessary to prevent unreasonable conflicts with local subsistence hunting activities.

13. Eni US must adhere to all mitigation measures included in the document entitled “Mitigation Measures and Conditions” (copy enclosed).
The BOEM encourages active, thoughtful engagements with the tribal governments and nearby North Slope communities for purposes of establishing and maintaining positive relationships. This may include, but is not limited to, providing orientation of operations, sharing informational updates of activities, and/or taking part in cultural events and exchanges. The BOEM encourages its lessees to monitor subsistence activities occurring near their operations, and to consider local community members with traditional knowledge of the local environment and wildlife when filling any Protected Species Observer positions.

As provided by 30 CFR 550.284, BOEM will annually conduct a review of the activities conducted under the conditionally approved EP and may require Eni US to submit updated information or revise the EP.

If you have questions, please contact William Ingersoll, Chief of Plans Section, at (907) 334-5224 or by email at william.ingersoll@boem.gov.

Sincerely,

David Johnston, Regional Supervisor
Office of Leasing and Plans
Bureau of Ocean Energy Management, Alaska OCS Region

Enclosure

cc: State of Alaska – Governor Walker
    Senator Murkowski
    Senator Sullivan
    Congressman Don Young
    Bureau of Safety and Environmental Enforcement, Alaska Region, Att: Kevin Pendergast
    Bureau of Safety and Environmental Enforcement, OSPD, Att: David M. Moore
    U.S. Fish and Wildlife Service, Alaska Region, Att: Greg Siekaniec
    U.S. Environmental Protection Agency, Region 10, Alaska Operations Office, Att: Diane Soderlund
    Mayor of North Slope Borough, Att: Mayor Harry Brower, Jr.
    Mayor of Utqiagvik, Att: Mayor Robert Harcharek
    Mayor of Kaktovik, Att: Mayor Nora Jane Burns
    Mayor of Nuiqsut, Att: Mayor Thomas Napageak, Jr.
    Native Village of Barrow, Att: President Thomas Olemaun
    Native Village of Kaktovik, Att: Mr. Matthew Rexford
    Native Village of Nuiqsut, Att: President Margaret Pardue
    Inupiat Community of the Arctic Slope, Att: President George Edwardson
    Alaska Eskimo Whaling Commission, Att: Mr. Harry Brower, Jr., Chair
    Arctic Slope Regional Corporation, Att: President Rex Rock, Sr.
    Kuukpik Corporation, Att: Mr. Lanston Chinn, CEO
Mitigation Measures and Conditions

The following mitigation measures and conditions are derived from relevant provisions contained within the NMFS-issued Biological Opinion (2013 BO; April 2, 2013) and the USFWS-issued Biological Opinion (2012 BO: May 8, 2012).

- All vessels shall reduce speed to less than 10 knots prior to coming within 274 m (300 yards) of whales. The reduction in speed will vary based on the situation but must be sufficient to avoid interfering with the whales. Those vessels capable of steering around such groups should do so. Vessels may not be operated in such a way as to separate members of a group of whales from other members of the group. For purposes of this opinion, a group is defined as being three or more whales observed within a 500 m (547 yard) area and displaying behaviors of directed or coordinated activity (e.g., group feeding);

- Avoid multiple changes in direction and speed when within 274 m (300 yards) of whales and also operate the vessel(s) to avoid causing a whale to make multiple changes in direction;

- Check the waters immediately adjacent to the vessel(s) to ensure that no whales will be injured when the vessel's propellers (or screws) are engaged;

- When visibility is reduced, such as during inclement weather (rain, fog) or darkness, adjust vessel speed accordingly to avoid the likelihood of injury to whales.

- A Protected Species Observer (PSO) must monitor the area around the SID for take of marine mammals by sound exposure, unless Eni can demonstrate that its operations would not subject this area to noise exceeding 120 dB. A PSO is also required on any vessel producing noise exceeding 120 dB.

- Eni US shall implement on its drilling rig lighting protocols aimed at minimizing the radiation of light outward from the exploratory drilling structure.

- Eni US shall minimize the use of high-intensity work lights on vessels. Exterior lights will only be used as necessary to illuminate active, on-deck work areas during periods of darkness or inclement weather; otherwise they will be turned off. Interior and navigation lights should remain on as needed for safety.

- Eni US shall report avian collisions with vessels or drilling structures within three days to BOEM and BSEE who will then provide these avian collision reports to the Endangered Species Branch Chief, USFWS, Fairbanks Fish & Wildlife Field Office (FFWFO) within 7 days. Minimum information for strike reporting will include species, date/time, location, weather, and identification of the vessel or drilling structure involved and its operational status when the strike occurred. Bird photographs are not required, but would be helpful in verifying species. The FFWO should be contacted regarding the recovery or transport of dead birds.

- Eni US shall obtain a USFWS Polar Bear Incidental Take LOA and a USFWS Polar Bear Intentional (Deterrence) Take LOA. Eni US must comply with the conditions of each LOA.

- Eni US shall notify BOEM, BSEE, and NMFS in the event of any loss of equipment that could pose a danger to marine mammals.
• Eni US shall immediately notify BOEM and NMFS Alaska Region, Protected Resources Division, at 907-586-7235 of the taking of any marine mammal.

• Eni US shall record the following information when a threatened or endangered marine mammal is sighted:
  o Species, group size, age/size/sex categories (if determinable), behavior when first sighted and after initial sighting, heading (if consistent), bearing and distance from vessel, sighting cue, apparent reaction to the vessel (e.g., none, avoidance, approach, paralleling, etc.), closest point of approach;
  o Time, location, heading, speed, activity of the vessel, Beaufort sea state and wind force, ice cover, visibility, and sun glare; and,
  o The data shall also be recorded at the start and end of each observation watch and during a watch whenever there is a change in one or more variables.

• Eni US is encouraged to maintain frequent and effective communication and coordination with the subsistence community.