Introduction
The Bureau of Ocean Energy Management (BOEM) has prepared an environmental assessment (EA) of the potential effects of ancillary activities that BPXA would conduct in 2014. The work would occur in the Beaufort Sea Planning Area of the Alaska outer continental shelf (OCS).

The ancillary activities are detailed in a notice (Notice) submitted by BPXA to BOEM on February 14, 2014, and titled Notice to Conduct Ancillary Activities Liberty 2014 Shallow Geohazard Survey, Liberty Development, Beaufort Sea, Alaska. The Notice describes “ancillary activities,” which are defined in 30 CFR 550.105 and 550.207, authorized under the OCS Lands Act, 43 USC 1331, et seq., and regulated under 30 CFR 550.207-550.210. The Notice also describes survey activities to occur off-lease; together with the ancillary activities, these are referred to as the Noticed Activities.

On March 7, 2014, a notice of preparation of an EA for BPXA’s Noticed Activities was published on Regulations.gov as docket BOEM-2014-0025, sent to potentially affected stakeholders, and posted on the BOEM Alaska OCS Region website. The notice of preparation stated that BOEM is inviting the public to comment on issues that should be considered by BOEM in preparing the EA. Comments were accepted through March 19, 2014. No comments were received.

BOEM prepared an EA to assist with BOEM planning and decision making, specifically, whether the ancillary activities comply with the standards set forth in 30 CFR 550.202(a), (b), (d) and (e), as required by 30 CFR 550.209. Particularly relevant for purposes of environmental analysis is 30 CFR 550.202(e), which requires that ancillary activities “not cause undue or serious harm or damage to the human, marine, or coastal environment.”

Purpose of the Noticed Activities
The purpose of the Noticed Activities is to support the Liberty Development by evaluating the existence and location of archaeological resources and potential geologic hazards on the seafloor and in the shallow subsurface in the vicinity of the planned gravel island (Site) and subsea pipeline. The ancillary activities would support the purpose of the OCS Lands Act to make the OCS available “for expeditious and orderly development, subject to environmental safeguards” (43 USC 1332(4)).

Description of the Noticed Activities
A detailed description of the Noticed Activities is set forth in the Notice. BPXA plans to conduct a Site survey with an emphasis on obtaining two-dimensional high-resolution (2DHR) shallow geohazard data using an airgun array and towed streamer. In addition, BPXA plans to conduct a sonar survey using a multi-beam echosounder, sidescan sonar, subbottom profiler, and magnetometer over the Site and subsea pipeline locations. The sonar survey area is 29 mi² and the Site survey area is 12 mi², which includes State and federal waters. The sonar and Site survey areas within federal waters are 8.5 mi² and 6.7 mi², respectively. The timeframe for the Noticed Activities is mid-July to mid-October, depending on ice and weather conditions.

Environmental Assessment
BOEM evaluated and compared the Noticed Activities and a No Action alternative in its EA.
Alternative 1. No Action.

Under Alternative 1, BPXA’s Noticed Activities would not occur. If selected, this alternative would delay or preclude BPXA from obtaining data to inform future decisions about potential development of the Liberty field and could result in delayed or lost opportunities to develop the OCS resources. This alternative would also delay or avoid potential impacts to the environment identified in the EA.

Alternative 2. Noticed Activities.

BPXA would conduct the Noticed Activities in the Beaufort Sea during 2014. Data about the location of archaeological resources and potential geologic hazards on the seafloor and in the shallow subsurface in the vicinity of the planned gravel island (Site) and subsea pipeline would be obtained. This information would help inform future decisions about potential development in the Liberty field in the Beaufort Sea. Adverse effects to the environment would occur; the level of these impacts would range from negligible to minor, depending on environmental resource. Anticipated impacts of the Noticed Activities on the environment are summarized below.

- Physical Resources
  The level of effects on air quality would be negligible because no pollutants would exceed recognized thresholds defining a de minimis, or negligible effect. Effects from potential vessel discharges on water quality would be temporary and could result in a minor level of effect.

- Biological Resources
  BPXA’s Noticed Activities are expected to have negligible to minor, short-term effects on biological resources. Effects on marine mammals due to disturbance would be negligible with the implementation of typical monitoring and operation procedures as identified in the Incidental Harassment Authorization and Letter of Authorization. The effects on fish would be negligible because the disturbance would be short-term and affect a small number of individuals. The effects on marine and coastal birds would be minor and primarily due to the potential for collisions with vessels. There may be disruption of life cycles for some lower trophic organisms, but these effects are expected to be negligible due to the temporary nature of the activities.

- Subsistence Activities, Economy, Environmental Justice, Public Health, and Archeological Resources
  Subsistence Activities - The Noticed Activities could cause negligible to minor impacts to marine subsistence hunts. Negligible to minor effects on harvesting of bowhead whales, spotted, ringed and bearded seals, fish species and land based animals are anticipated. Effects should not be long-term but limited to the season in which the activities are conducted: July – October, 2013.
  Economy/Employment - The activities that would be conducted under the Noticed Activities would have a negligible effect on employment, income, and revenue levels of the North Slope Borough (NSB). These activities are short term and temporary, involve low levels of new employment and associated income, and would generate no property tax revenues accruing to the NSB or State of Alaska.
  Public Health and Environmental Justice - The Noticed Activities would have minor effects on public health. The Noticed Activities would have no long-term consequences to public health and well-being in NSB communities and a negligible level of effect on Environmental Justice.
  Archaeological Resources - There would be no bottom-disturbing activities or any other activities with the potential to affect historic resources as defined under the National Historic Preservation Act.

Significance Review (40 CFR 1508.27)

Consistent with 40 CFR 1508.27, significance is evaluated by considering both context and intensity. The potential significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with
setting. For site-specific activities, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short-term and long-term effects are relevant. For the Noticed Activities, the context is one of a short-term action in an offshore environment. Particularly relevant for purposes of environmental analysis is 30 CFR 550.202(e), which requires that ancillary activities "not cause undue or serious harm or damage to the human, marine, or coastal environment."

It is within this context that the intensity of potential effects of the Noticed Activities is considered. Intensity refers to the severity of effect. Consistent with 40 CFR 1508.27(b), the following ten factors have been considered based on the detailed analysis in the EA of the impacts of the Noticed Activities on specific environmental and other resources:

1. **Impacts that may be both beneficial and adverse.** Potential adverse effects of the Noticed Activities to the physical environment, biological resources, and subsistence activities, with consideration of certain mitigation measures already incorporated into the Noticed Activities (i.e., design features), are expected to be below thresholds that define significant effects in Appendix B of the EA. Overall, adverse impacts are expected to be negligible to minor. The potential beneficial impacts for local residents employed in support of these activities are expected to be temporary and negligible, although beneficial. Therefore, the level of adverse and beneficial effects of the Noticed Activities does not render the potential impacts significant.

2. **The degree to which the Noticed Activities affect public health or safety.** Within its environmental impact analysis, BOEM considered the distance of the Noticed Activities from local communities; potential effects of expected allowable discharges and emissions; and the potential for the Noticed Activities to interfere with subsistence activities. The Noticed Activities are not expected to adversely affect public health or safety. Therefore, the degree to which the Noticed Activities 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 Noticed Activities would not take place in, or otherwise adversely affect, any historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas. Consideration of potential site specific effects of the Noticed Activities 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.** Whaling is a culturally self-defining practice of the Ifuguo people. Past stakeholder concerns related to anthropogenic noise in the Arctic marine environment have focused on the potential effects to marine species, particularly the bowhead whale, from impulse sounds associated with high-energy seismic surveys, such as the Noticed Activities. Concerns have included the potential effects of noise on other marine mammals, fish, and birds; the biological significance of bowhead whale responses to anthropogenic marine noise; and potential interference with subsistence activities. However, no significant effects to these resources are anticipated. Therefore, the degree to which the potential effects of the Noticed Activities may be highly controversial 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.** There has been considerable public discourse regarding the effects of seismic activities on biological resources and subsistence hunting activities. There is scientific evidence suggesting that specific levels of sound may injure, disturb, or displace marine mammals. Further, traditional knowledge has also suggested that seismic surveys can disturb and displace marine mammals and reduce their availability for subsistence harvest.
However, seismic surveys have been conducted in the Federal waters of the Beaufort Sea since the 1960's. BOEM environmental analyses (to include Environmental Assessments, Environmental Impact Statements, and Biological Evaluations) have consistently found that, if appropriate avoidance and mitigation measures are required, even large-scale seismic survey activities have not caused any significant impacts to the environment or to subsistence activities, and these analyses have not been contradicted by monitoring results or existing scientific literature. Moreover, the seismic arrays to be used here are much smaller and less intensive than the majority of those previously analyzed activities. Independent analyses by NMFS and USFWS have verified these conclusions.

The effects of the Noticed Activities are not expected to be highly uncertain, nor do the Noticed Activities involve unique or unknown risks. Therefore, the degree to which the potential effects of the Noticed Activities 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. BPXA submitted the Ancillary Activities Notice in compliance with 30 CFR 550.208. These ancillary activities in the support of the Liberty field are consistent with the overall objectives of the OCS Lands Act. In compliance with the OCS Lands Act and DOI policy in 516 DM 15, BOEM has conducted a technical and environmental review on the Noticed Activities. Although the data and information obtained as a result of the Noticed Activities would inform any decision by BPXA to proceed with submission of a Development and Production Plan (DPP) for the Liberty field, BOEM's response to this ancillary activity notice does not constrain agency decisions on any future DPPs or responses to ancillary activity notices. This action will not establish a precedent for future actions nor represent a decision in principle about a future consideration. Therefore, the degree to which the Noticed Activities may establish a precedent for future actions or represents 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 potential cumulative effects of the Noticed Activities and other expected activities in 2014. The EA concludes that the Noticed Activities are not reasonably anticipated to produce significant impacts or to incrementally add to the effects of other activities to the extent of producing significant effects. The Noticed Activities are not directly or causally related to other actions with cumulatively significant impacts. Therefore, the degree to which the potential effects of the Noticed Activities 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 action may adversely 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. The Noticed Activities do not include seafloor-disturbing activities (e.g., anchoring). Allowable discharges and emissions are not expected to affect the coastal area. The Noticed Activities are not expected to adversely affect, or cause the loss of, any scientific, cultural, or historic resources. Therefore, the degree to which the Noticed Activities 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. The Noticed Activities are within the scope of the activities covered in the current ESA
consultations. These documents conclude that activities of the type contemplated in the Notice are not likely to jeopardize the continued existence of any listed species. Prior to conducting these ancillary activities, BPXA must also receive incidental take authorization from NMFS and USFWS under the Marine Mammal Protection Act. For marine mammals, such authorizations are only available when these agencies determine that the number of marine mammals taken would be small, the activities would have no more than a negligible impact on the stock, and there would be no unmitigable adverse effects to subsistence activities.

Consistent with those determinations, the EA concludes that adverse effects from the Noticed Activities are expected to be short term and localized. No adverse modification of critical habitat is anticipated. Therefore, the degree to which the Noticed Activities may adversely affect endangered or threatened species or designated critical 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 Noticed Activities may violate Federal, State, or local law or requirements imposed for the protection of the environment, BOEM considered documentation in BPXA’s Notice and considered their commitment to obtain incidental take authorizations from both NMFS and USFWS. BOEM requires compliance with all applicable Federal, State, and local laws and requirements. There is no indication that the Noticed Activities threaten a violation of Federal, State, or local law or requirement imposed for the protection of the environment.

Finding of No Significant Impact and Compliance with 30 CFR 550.209

I have considered the evaluation of the potential effects of the Noticed Activities and the review of the 40 CFR 1508.27 significance factors. It is my determination that the Noticed Activities would not cause any significant impacts and comply with the standards set forth in 30 CFR 550.202(a), (b), (d) and (e), as required by 30 CFR 550.209, and do 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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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 www.boem.gov.