

**United States Department of the Interior  
Bureau of Land Management**

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**Environmental Assessment**

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**DOI-BLM-AKF01000-2015-036-EA**

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**Mahto Construction, Inc.  
2602 E Kates Drive  
Wasilla, Alaska 99654-8782**

**Right-of-Way  
FF097017**

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**Arctic Field Office, Fairbanks, Alaska**



**July 2015**

# Table of Contents

- Chapter 1 ..... 4
  - 1. Introduction..... 4
    - 1.1 Need for the Proposed Action .....5
    - 1.2 Purpose of the Proposed Action .....5
    - 1.3 Related Statutes, Regulations, Policies, and Programs .....6
      - 1.3.1 Federal Laws and Regulations .....6
      - 1.3.2 Required Permits, Licenses, Authorizations, and Approvals .....7
      - 1.3.3 Related Environmental Analyses .....7
    - 1.4 Decision to be Made .....7
    - 1.5 Scoping and Issues.....8
    - 1.6 Public Involvement ..... 11
- Chapter 2 ..... 11
  - 2 Proposed Action and Alternatives ..... 11
    - 2.1 Alternative A Description of the Proposed Action ..... 12
      - 2.1.1 Duration of Activities ..... 12
      - 2.1.2 Access..... 12
      - 2.1.3 Debris Inventory ..... 14
      - 2.1.4 Drum and Debris Removal ..... 14
      - 2.1.5 Contaminants ..... 15
      - 2.1.6 Equipment ..... 16
      - 2.1.7 Transportation and Disposal..... 16
      - 2.1.8 Fuel Supply and Storage ..... 16
      - 2.1.9 Waste..... 16
      - 2.1.10 Project End..... 17
    - 2.2 Alternative B No Action..... 17
    - 2.3 Conformance ..... 17
- Chapter 3 ..... 18
  - 3 Affected Environment..... 18
    - 3.1 Introduction..... 18
- Chapter 4 ..... 18
  - 4 Environmental Impacts ..... 18
    - 4.1 Direct and Indirect Effects..... 19
    - 4.2 Cumulative Effects ..... 19
    - 4.3 Mitigation and Monitoring..... 19
    - 4.4 Additional Mitigation and Monitoring ..... 20
    - 4.5 Summary of Environmental Consequences ..... 21
- Chapter 5 ..... 22
  - 5 Consultation and Coordination ..... 22
    - 5.1 Agency Coordination ..... 22
    - 5.2 Public Coordination ..... 22
    - 5.3 List of Preparers ..... 22
- Chapter 6 References ..... 23

## LIST OF TABLES

Table 1.1 Legal Description.....	5
Table 1.2 Permits and Authorizations for Proposed Project.....	7
Table 1.3 Issues Considered in Evaluating Impacts .....	8
Table 5.1 List of Preparers.....	22

## LIST OF FIGURES

Figure 1. Applicant Map Overview of Proposed Project.....	6
Figure 2: Applicant Submitted figure showing Sample and Debris Locations – Site 26...13	
Figure 3: Applicant submitted figure showing Sample and Debris Locations – Sites 30 & 30A.....	13

## Appendix A

NPR-A 2013 ROD Stipulations and Best Management Practices.....	24
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## LIST OF ACRONYMS

AAC.....	Alaska Administrative Code
ACEC.....	Area of Critical Environmental Concern
ADEC .....	Alaska Department of Environmental Conservation
ANILCA.....	Alaska National Interest Land Conservation Act
AO.....	(BLM) Authorized Officer
Arctic FO.....	Arctic Field Office
BLM.....	Bureau of Land Management
BMP.....	Best Management Practice
CEQ.....	Council of Environmental Quality
CERCLA.....	Comprehensive Environmental Response, Compensation, and Liability Act
CFR.....	Code of Federal Regulations
DEW.....	Distance Early Warning
EA.....	Environmental Assessment
EFH.....	Essential Fish Habitat
EIS.....	Environmental Impact Statement
EO.....	Executive Order
ESA.....	Endangered Species Act
FLPMA.....	Federal Land Policy and Management Act of 1976
FONSI.....	Finding of No Significant Impacts
FSP.....	Field Sampling Plan
GPS.....	Global Positioning System
IAP.....	Integrated Activity Plan
IDW.....	investigation derived waste
Mahto.....	Mahto Construction, Inc.
MOA.....	Memorandum of Agreement
NEPA .....	National Environmental Policy Act

NHPA.....	National Historic Preservation Act of 1966
NPR-A.....	National Petroleum Reserve – Alaska
NPRPA.....	Naval Petroleum Reserve Production Act
NSB.....	North Slope Borough
PPE.....	personal protective equipment
PID.....	photoionization detector
QAR.....	Quality Assurance Representative
RCRA.....	Resource Conservation and Recovery Act
ROD.....	Record of Decision
ROW.....	Right of Way
SAP.....	Subsistence Advisory Panel
SARA.....	Superfund Amendments and Reauthorization Act
USACE.....	United States Army Corps of Engineers
USDOI.....	United States Department of Interior
USFWS.....	United States Fish & Wildlife Service
XRF.....	x-ray fluorescence

## Chapter 1

### 1. Introduction

This Environmental Assessment (EA) has been prepared in compliance with the National Environmental Policy Act (NEPA) to disclose and analyze the environmental consequences of granting a Right-of-Way (ROW) for activity proposed by Mahto Construction, Inc. (Mahto). Mahto has been contracted by the U.S. Army Corps of Engineers (USACE) Alaska District, to conduct debris inventory and removals at the Cape Simpson Legacy<sup>1</sup> Well Sites 26, 30 and 30a. USACE is contracting the work on behalf of the Bureau of Land Management (BLM).

BLM follows the procedures contained in the agency’s NEPA Handbook H-1790-1 (USDOI BLM 2010), which was issued June, 2010. An application was submitted by Mahto on June 25, 2015 to the BLM Arctic Field Office (Arctic FO) for activity on federal lands within the National Petroleum Reserve in Alaska (NPR-A) which are administered by the BLM’s Arctic FO. The description of the Proposed Action (Section 2.1) provides details of the activity that would be conducted if the ROW were to be granted.

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<sup>1</sup> Legacy Well – well drilled in NPR-A prior to 1980 by the federal government.

## 1.1 Need for the Proposed Action

The Applicant has filed a ROW application. The BLM's underlying need is to respond to the ROW application by considering the proposed activity in a manner that minimizes impacts to resources.

## 1.2 Purpose of the Proposed Action

The purpose of the proposed action is to allow the applicant to conduct the requested activity. The applicant's purpose with the proposed project is to fulfill a contract with the United States government to remove remaining debris from the sites.

The proposed project is composed of several elements and is designed to meet the applicant's needs and objectives, including:

- Access to well sites that allows for maximum operations while minimizing environmental impact.
- Conduct removal and cleanup efforts of abandoned material.
- Perform confirmation soil sampling.
- Compliance with all related requirements of the NPR-A Integrated Activity Plan/Environmental Impact Statement (IAP/EIS) Record of Decision (ROD) and all associated laws, regulations, permits, and approvals.
- Alternatives to the proposed project are evaluated on the basis of their effectiveness in meeting these objectives.

The BLM is authorized to approve ROWs on BLM-administered public lands pursuant to the 43 Code of Federal Regulations (CFR) 2800 which establishes procedures for issuing grants and 2360, operations within the petroleum reserve when authorization for such operations is required from the BLM.

**Table 1.1 Legal Description:**

<b>Cape Simpson Legacy Well Site</b>	<b>Latitude &amp; Longitude</b>	<b>Meridian, Township, Range, Section</b>
Test Core 26	N 70 55.919 W 154 42.684	U-17N, 11W, Section 2 NWNW
Test Core 30	N 70 55.571 W 154 42.320	U-18N, 11W, Section 11 NESW
Test Core 30a	N 70 55.588 W 154 42.291	U-18N, 11W, Section 11 NESW

Key to Table 1.1

E - East

N - North

S - South

U - Umiat

W - West

### 1.3 Related Statutes, Regulations, Policies, and Programs

The 2012 IAP/EIS was completed to fulfill the BLM's responsibility to manage lands in the NPR-A under the authority of the: Naval Petroleum Reserve Production Act, as amended (NPRPA), Federal Land Policy and Management Act of 1976 (FLPMA), National Environmental Policy Act, and the Alaska National Interest Lands Conservation Act (ANILCA). Findings in the IAP/EIS and decisions reflected in the 2013 ROD were based upon an open and collaborative public process, as well as experience with multiple exploration programs completed in the NPR-A.

#### 1.3.1 Federal Laws and Regulations

The proposed action must comply with numerous Federal laws and Executive Orders (EOs) that apply to activities on public lands – including those listed above. Key Federal and State controls associated with the proposed action were described in the 2013 IAP/EIS.

The proposed action is in conformance with the NPR-A IAP/EIS (2012), NPRPA, FLPMA, ANILCA, Endangered Species Act, Marine Mammal Protection Act, Sustainable Fisheries Act, EO 11988, and EO 11990.

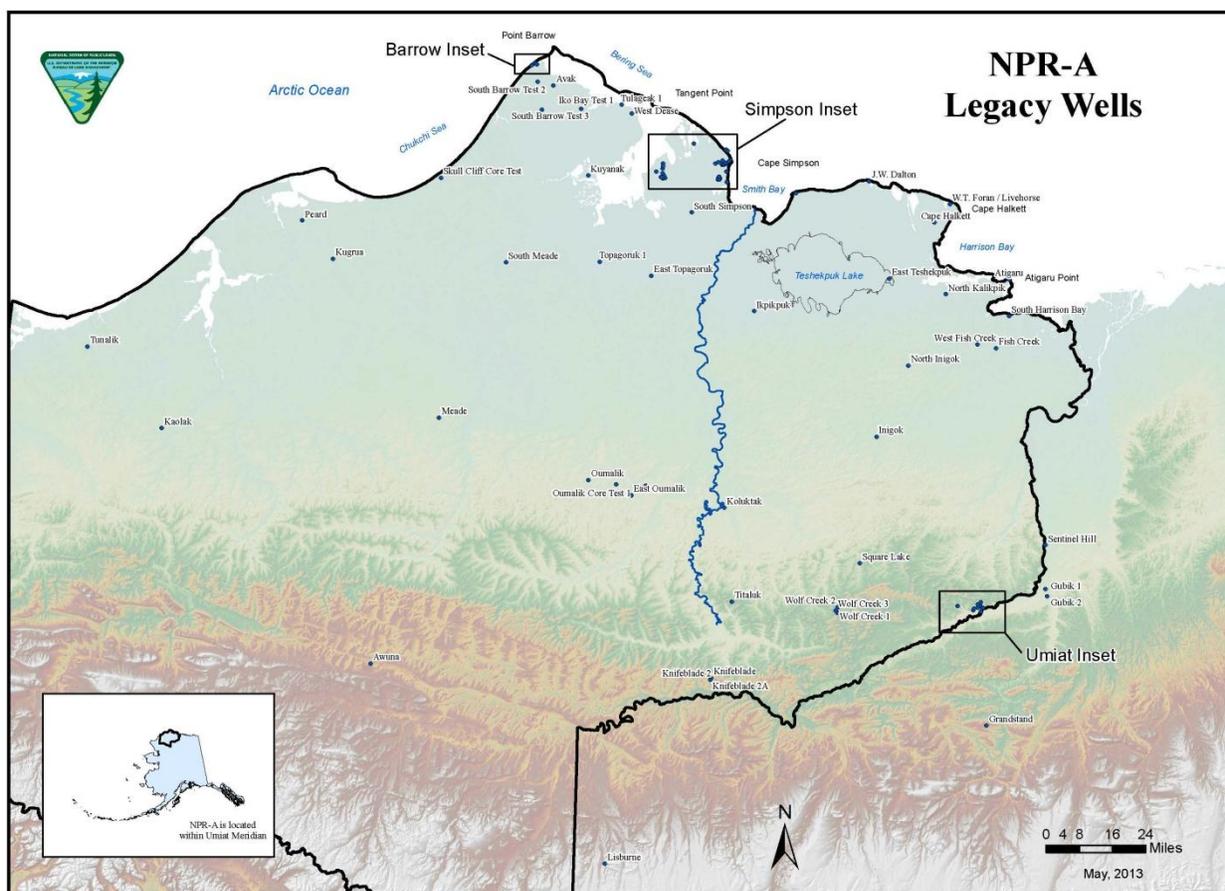


Figure 1. Applicant Map Overview of Proposed Project

### 1.3.2 Required Permits, Licenses, Authorizations, and Approvals

A number of Federal, State, and local permits and approvals must be obtained before the applicant can conduct proposed project. Primary regulatory authorization requirements for the proposed project are listed in Table 1.2.

**Table 1.2 Permits and Authorizations for Proposed Project**

<i>Federal Authorizations and Approvals</i>	
Bureau of Land Management (BLM)	Right-of-Way (ROW) Threatened and Endangered Species Determination Essential Fish Habitat Assessment (EFH) ANILCA 810 Evaluation and Findings Archaeological and Cultural Resources Clearance
U.S. Fish and Wildlife Service (USFWS)	Reply to BLMs Threatened and Endangered Species Determination
<i>State Authorizations and Approvals</i>	
Alaska Department of Environmental Conservations	Contaminated Sites Program approval of the Field Sampling Plan (FSP)
<i>Local North Slope Borough (NSB) Authorizations and Approvals</i>	
North Slope Borough (NSB)	Administrative Approval

### 1.3.3 Related Environmental Analyses

The Council of Environmental Quality (CEQ) Regulation 40 CFR 1502.20 encourages agencies to “tier off their environmental impact statements to eliminate repetitive discussions of the same issues and to focus on the actual issues ripe for decision at each level of environmental review.” The analysis for this EA is tiered off the National Petroleum Reserve-Alaska Integrated Activity Plan Environmental Impact Statement (USDOJ BLM 2012) and ROD, which are incorporated in their entirety by reference in accordance with CEQ Regulation 40 CFR 1502.21.

### 1.4 Decision to be Made

The EA assists the BLM in project planning by evaluating the potential significance of environmental impacts. As defined by the CEQ, the significance of a federal action is determined by the context of the action in relation to the overall project setting, as well as the intensity of direct, indirect, and cumulative effects resulting from the project. If the BLM determines that the preferred alternative would not result in significant impacts beyond those already addressed in the USDOJ BLM 2012 and ROD, the BLM would prepare a Finding of No Significant Impact (FONSI) and Decision Record approving the selected alternative. If the project is found to result in significant impacts, an Environmental Impact Statement may be prepared.

The decision-maker, BLM Authorized Officer (AO), will take into account technical, economic, environmental, and social issues (Table 1.3) and the purpose and need of the proposed project. This EA will be based on findings, management controls and protective measures of the NPR-A ROD (USDOI BLM 2013) as well as other laws and regulations. The scope of this EA includes analysis which enables BLM to select among alternatives that meet the purpose and need, and are within the BLM's jurisdiction [40 CFR 1506.1(a) (2)].

## 1.5 Scoping and Issues

Public notification of the Environmental Analysis was announced on June 25, 2015 in the NEPA Register on file at the Arctic Field Office Environmental Assessment web site. No public comments have been received through July 24, 2015. Development of the 2012 IAP/EIS involved extensive input from other Federal agencies, the State, the North Slope Borough (NSB), thousands of individuals, and many institutions. BLM guidelines include a list of issues that are addressed, where applicable, in NEPA assessments, (USDOI BLM 2012). Some elements are not present in the project area and are, therefore, not discussed further. A summary listing of related issues considered by Arctic FO Staff is provided in Table 1.3.

**Table 1.3 Issues Considered in Evaluating Impacts**

<b>Issue Considered</b>	<b>Determination</b>	<b>Basis of Determination (See Note 1)<sup>1</sup></b>
ACEC's	Not Present	
Air Quality	Not Present	
Cultural and Paleontological Resources	Not Present	Archaeological and Cultural Resources Clearance by BLM required under the NHPA. No paleontological resources present. Impacts to cultural resources, namely, the Legacy Well sites at Cape Simpson proposed for surface debris removal have been reviewed through a programmatic 106 evaluation, and mitigated pursuant to MOA AK-2014-003.
Environmental Justice	Minimal Impact to Not Present	No disproportionately high and adverse human health or environmental effects to North Slope Inupiaq residents have been identified for the proposed project. Impacts to subsistence use from this project in and of itself are not expected to be more than minor and short term. Protection provided by NPR-A BMPs A-1, A-2, A-4, F-1, H-3, and Project Specific Stipulation #6. EO 12897 [See Subsistence]
Fisheries	Minimally Impacted	Protections provided by 2013 ROD BMPs A-4, and A-5; EFH assessment finding is <i>not likely to adversely affect</i> .
Floodplains/Wetlands and Riparian	Minimally Impacted	Protection provided by BMPs, A-4, A-5 and EO 11988 and EO 11990.

Issue Considered	Determination	Basis of Determination (See Note 1) <sup>1</sup>
Zones		
Invasive, Non-native species	Minimal Impact to Not Present	BMP M-2 (Appendix A) will ensure that invasive plants do not become an issue.
Native American Religious Concerns	Not Present	
Recreation	Minimally Impacted	Protection provided by 2013 NPR-A BMPs A-1, F-1, H-3, and M-2
Sociocultural Systems	Minimally Impacted to Not Present	No negative impacts to sociocultural systems from clean up activities are expected. Protection provided by NPR-A BMPs A-1, A-2, A-4, A-12, F-1, H-3, and Project Specific Stipulation #6. EO 12897 [See Subsistence]
Subsistence	Minimally Impacted	Large game could be deflected from areas of activity, but effects are expected to be short-term and minor. Hunters may avoid area, or may take advantage of services provided at the camp while out hunting. ANILCA 810 Evaluation and Findings by BLM required. Additional protection provided by: NPR-A BMPs A-1, A-2, A-4, A-12, F-1, H-3, and Project Specific Stipulation #6.
Threatened & Endangered Species Steller's eider	Minimally Impacted	Steller's eiders are listed as Threatened under the Endangered Species Act. No impacts expected other than those already covered in 2013 NPR-A ROD. USFWS concurred with the BLM ESA finding of not likely to adversely affect. Protections are provided by Section 7 of the Endangered Species Act, and BMP's A-2, A-4 and E-9 from the 2013 ROD and from Project Specific Stipulation 4.
Threatened & Endangered Species Spectacled eider	Minimally Impacted	Spectacled eiders are listed as Threatened under the Endangered Species Act. No impacts expected other than those already covered in 2013 NPR-A ROD. USFWS concurred with the BLM ESA finding of <i>not likely to adversely affect</i> . Protections are provided by Section 7 of the Endangered Species Act, and BMP's A-2, A-4, and E-9 from the 2013 ROD and from Project Specific Stipulation 4.
Threatened & Endangered Species Polar Bear	Minimally Impacted	Protection provided by section 7 of the Endangered Species Act and BMPs A-5, J and M-1 from the 2013 ROD and from Project Specific Stipulations 4 & 8 – 14.
Non threatened and endangered	Minimally Impacted	No impacts expected other than those already covered in 2012 NPR-A Final IAP/EIS. Protections are provided

Issue Considered	Determination	Basis of Determination (See Note 1) <sup>1</sup>
birds		in the 2013 ROD by BMPs A-2, A-4, E-9, and E-15.
Non threatened and endangered mammals	Minimally Impacted	Caribou, grizzly bear, polar bear, wolf, wolverine and small mammals (weasel, rodents, and shrews) may inhabit the area. No impacts expected other than those already covered in 2012 NPRA Final IAP/EIS. Protection provided in Appendix A: BMPs A-8, F-1.e, g, h, I, K-3.b, K-6.b, c, and M-1.
Vegetation	Minimally Impacted	Protection provided by BMP L-1 (Appendix A).
Visual Resource Management	Minimally Impacted	Protection provided by 2013 NPR-A BMPs A-1, A-4, F-1, and M-2.
Water Resources	Minimally Impacted	Protections provided by: BMPs A-2, A-4, A-5
Waste (Hazardous/Solid)	Minimally Impacted	Protection provided by BMPs A-1, A-2 and A-4.
Wild & Scenic Rivers	Not Present	
Wilderness Characteristics	Minimally Impacted	Protection provided by 2013 NPR-A BMPs A-1, A-4, F-1 and M-2.

**Key to Table 1.3:**

AAC- Alaska Administrative Code  
 ACEC- Area of Critical Environmental Concern  
 ANILCA- Alaska National Interest Lands Conservation Act  
 BLM – Bureau of Land Management  
 BMP- Best Management Practice  
 CFR - Code of Federal Regulations  
 EA- Environmental Assessment  
 EFH – Essential Fish Habitat  
 EO- Executive Order

ESA- Endangered Species Act  
 IAP/EIS- Integrated Activity Plan/Environmental Impact Statement  
 MOA – Memorandum of Agreement  
 NHPA –National Historic Preservation Act of 1966  
 NPRA-National Petroleum Reserve in Alaska  
 ROD – Record of Decision  
 USFWS-United States Fish & Wildlife Service

**Potentially Affected:** The proposed action or alternative could result in potential impacts to resource or issues to the level that additional mitigation may be required, or there is a need to evaluate potentially significant issues.

**Minimally Impacted:** Resources or issues would not be affected to a degree requiring further analysis because either the expected impacts from the proposed action and alternative would be minimal, or standard protections (e.g., ROPs, BMPs and Stipulations from overriding BLM plans

or other legal protections) would reduce impacts. Minimally impacted resources or issues will not be analyzed further in this EA.

**Not Present:** Resources or issues are not expected to be affected by the proposed action or alternatives because activities would occur at a different time or place. Resource or issues not present will not be analyzed further in the EA.

**Notes, Table 1.3:**

<sup>1</sup> Determination tiered from: 2012 IAP/EIS Vol. 2, Chap. 4; 2013 ROD; and laws and regulations as noted.

In summary, BLM resource specialists have not identified issues for further evaluation in this EA. Environmental characteristics of the general project area have been extensively described in the 2012 NPR-A IAP/EIS (Vol. 1, Chapter 3), to which this analysis is tiered.

## **1.6 Public Involvement**

Development of the NPR-A IAP/EIS (USDOI BLM 2012) involved extensive input from Federal agencies, the State, the NSB, thousands of individuals, and many institutions. Project-specific permit applications (see Table 1.2) are available for public review prior to agency decision making

## **Chapter 2**

### **2 Proposed Action and Alternatives**

The proposed project is part of the BLM legacy well restoration program<sup>2</sup>. Simpson Core Test 26, 30 and 30a wells were rated by BLM as having a high surface risk. The wells were previously plugged and abandoned by BLM, however surface debris remains. The sites are approximately 10 air miles south of the former Cape Simpson Distant Early Warning (DEW) Line Site, 50 air miles west of the former Pt. Lonely DEW Line Site and 72 air miles from the city of Barrow, Alaska.

All project activities would be conducted in compliance with Resource Conservation and Recovery Act (RCRA), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Superfund Amendments and Reauthorization Act (SARA), and 18 Alaska Administrative Code (AAC) 75, "Oil and Other Hazardous Substances Pollution Control." The work is to be conducted in accordance with USACE, Alaska Department of Environmental Conservation (ADEC), under the statutory authority of the Naval Petroleum Reserves Production Act (42 U.S.C. Chapter 78), and consistent with other applicable state and federal statutes.

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<sup>2</sup> USDOI Open File Report 127 National Petroleum Reserve in Alaska: 2013 Legacy Wells Summary Report, pages 369 and 393

## **2.1 Alternative A Description of the Proposed Action**

On behalf of the BLM, the USACE has contracted with Mahto to perform debris removal activity at the Simpson Test Core 26, 30 and 30a sites. Some of the remaining debris is still on the land surface or sitting in surface water. The BLM conducted initial global positioning system (GPS) mapping of Simpson Test Cores 26, 30, and 30a, which are the subject of this scope of work. Simpson Test Cores 26, 30, and 30a were drilled in or very near natural seeps of oil.

BLM has documented the following debris to be removed under the proposed action:

- Scrap metal, including wire rope and pipe;
- Several pallets of unused concrete, now hardened into bag-shaped mounds;
- Wood from transport, construction, and on-site operations;
- Several pallets of unused drilling supplies (i.e., mica, bentonite, etc.), now weathered;
- Approximately 50 to 70 decomposing drums, believed to have been empty when abandoned;
- Equipment components, including at least one length of tractor track; and
- Trash, including small containers, small fittings, etc.

There would be a total of 7 people on-site for the duration of the project; 5 Mahto Employees, 1 pilot, and 1 USACE oversight person.

### **2.1.1 Duration of Activities**

The proposed activity on-site would take place during the beginning of August 2015, approximately the 1<sup>st</sup> through the 10<sup>th</sup>. Work activities onsite would generally take place between 7:00 a.m. and 7:00 p.m. Twelve-hour shifts, 7 days per week, are planned for onsite work. A schedule presenting the project activities will be provided prior to mobilization.

### **2.1.2 Access**

Mahto would provide all project field facilities. Mobilization and demobilization of personnel, including USACE Quality Assurance Representative (QAR), equipment, and supplies, would be conducted using commercial aircraft from Anchorage to Barrow. The project field office and accommodations would be provided by Mahto in Barrow. The field team would travel from Barrow to the sites via helicopter daily, return to Barrow each night. They expect to make 1-2 trips to and from Barrow daily, for a maximum of 7 days, or at total of 14 trips for daily mobilization. There would be a staging area near the Barrow helicopter landing location for the field team's equipment and supplies.

Mahto has contracted with Maritime Helicopters to provide a Bell 206 helicopter for the project. Mahto anticipates accessing the well sites for the first 3 days of the project to consolidate the debris and to prepare it for slinging. Once the debris is consolidated, a tug and barge would anchor adjacent to the well sites. The debris would be slung in approximately 120 loads to the deck of the barge over a period of approximately 6 days. The total number of helicopter take offs and landings for the project is anticipated to be 268. During the slinging operation, the helicopter would fuel and remain overnight on the deck of the barge where the helicopter crew

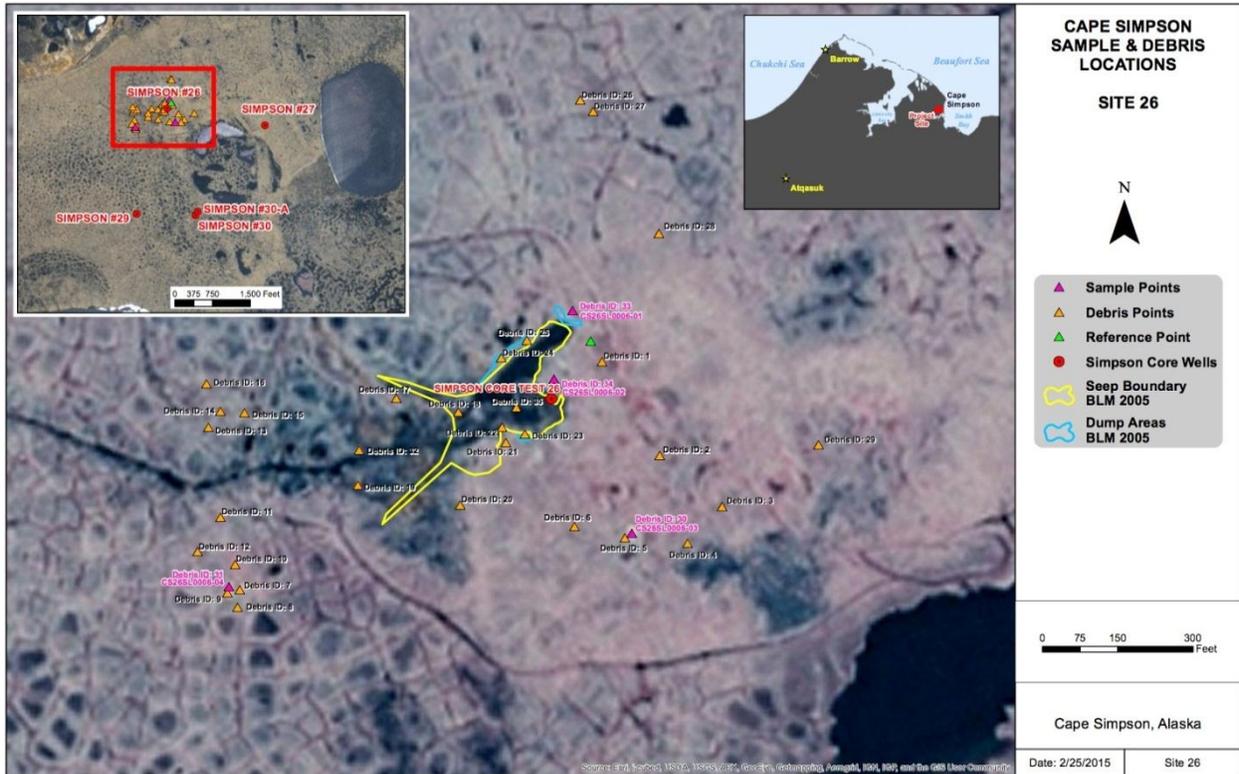


Figure 2: Applicant Submitted figure showing Sample and Debris Locations – Site 26

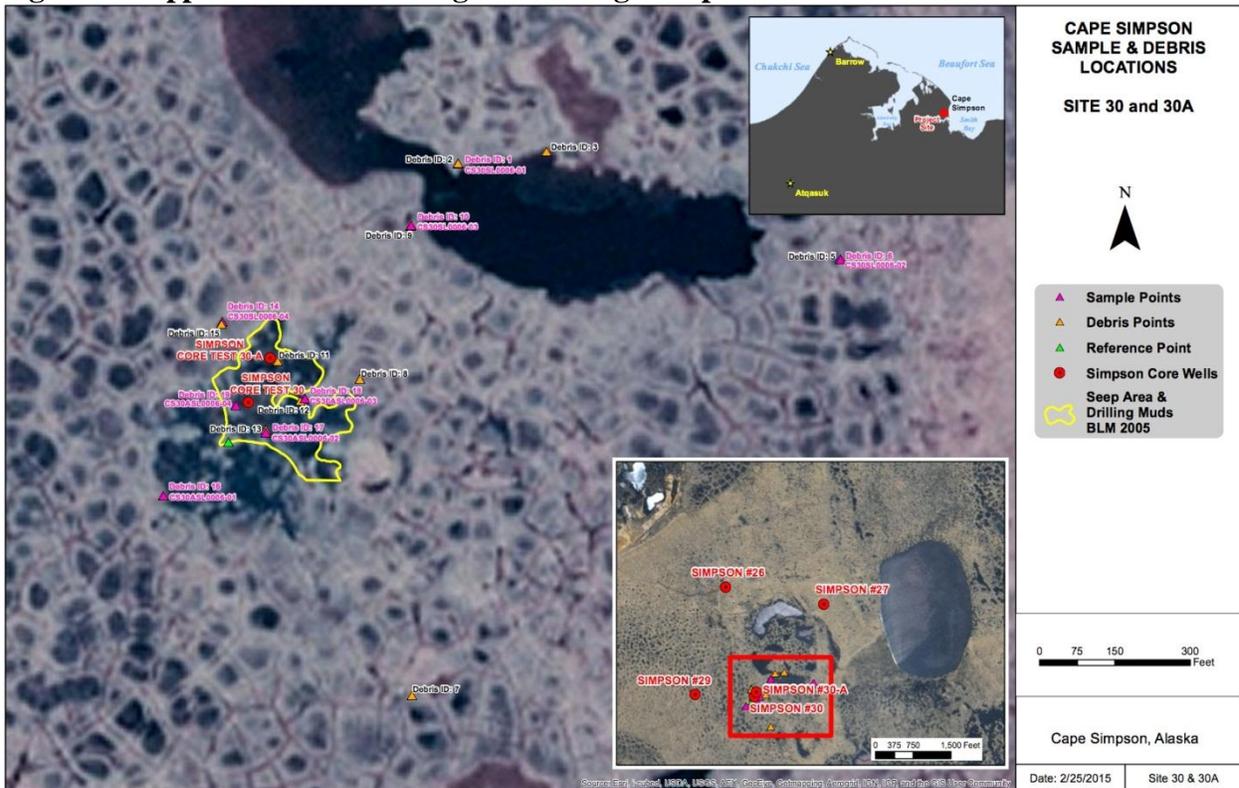


Figure 3: Applicant submitted figure showing Sample and Debris Locations – Sites 30 & 30A

would be housed. No camping would take place on land during the proposed action. When the debris removal is complete, the tug would demobilize to Anchorage for debris disposal and recycling.

### **2.1.3 Debris Inventory**

An initial debris inventory was conducted in October 2014 to document the physical hazards and potential environmental and cultural concerns at each of the Simpson Legacy Sites. The objective of the initial inventory effort was to identify and catalog site features, and to verify whether contaminants associated with these features (i.e., leaking drums) have been or have the potential to be released to the environment. Any anthropogenic physical features were photographed and described in sufficient detail to convey what the object is and whether it possesses the potential for release of contaminants to the environment. The coordinates of each feature and piece of suspect debris were recorded using a field GPS unit. Field documentation emphasized the following for each feature:

1. Location – as established using the field GPS.
2. Description – summarized key elements of each feature using notes and photographs in sufficient detail to identify what the feature is, or was, initially (for example, noting the color, text, and any visible labeling would be key to confirming the gray material is actually hardened cement)
3. Context – is the feature spread over a large area or localized, and does it comingle with other areas of concern? Potential comingled items include: drums in a berm, or fine-grained material spread over a large area, perhaps with associated cuttings, suggesting drill muds that have been placed on the ground surface.
4. Impacts – is there visible evidence that the feature is affecting the local setting (i.e., stressed vegetation or staining).

Applicant Figures 2 and 3 were generated after the 2014 site inspections and show the sample and debris locations as well as the oil seep boundaries at well sites 26, 30 and 30A.

### **2.1.4 Drum and Debris Removal**

The previous site inspections determined that only empty drums remain at the sites. If liquids are found in any of the drums, the liquids would be observed for visual and olfactory evidence of fuel residual (e.g., sheen and fuel odors). If no indications of fuel or other contaminants are present, the liquids (likely water) would be discarded onsite at the drum location. Drums with obvious fuel or liquids other than fuel would be over packed for removal via helicopter from the sites directly onto a barge for transportation to an approved disposal facility. The identification of waste containing drums is considered a change in conditions. If observations indicate that liquids other than fuel are present in the drums, a HazCat<sup>3</sup> kit (or equivalent) would be used to screen the material. If this condition arises, waste characterization and disposal would be managed with input from the Mahto Project Manager and the USACE Project Manager.

Empty drums would be gathered by hand and grouped into clusters of approximately 8 to 10. Each cluster would then be loaded into a cargo net and removed from the site via helicopter

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<sup>3</sup> Hazard Categorization or Characterization

directly onto the barge for transportation to an approved disposal facility. All drums and drum locations would be marked with an identification number, and photographs would be taken of any unique features observed.

All exposed surface debris would be removed from the site, with the possible exception of cement. If the cement is broken into pieces capable of passing through a 6-inch screen, it can be scattered on the tundra near where it exists now. For the purposes of this work, debris includes all manmade or processed materials on the site that are not completely buried. The work does not include the removal of debris fully buried at the site. Existing photography for some drill sites indicates the presence of berms. Each berm would be screened for metal using a hand-held magnetometer. Those berms with a positive response on the magnetometer would be hand excavated sufficiently to identify the nature of the metal object(s) within the berm. The field team would use professional judgment, based on observation, to decide whether additional data or samples would be collected to verify a potential release of contaminants from objects discovered within the berm. Removal of debris completely buried in the berms at Simpson 26 is not required, although debris that is largely exposed in these berms will be removed. Where inert debris is present and largely buried and difficult to remove, it is permissible to cut off the exposed portion or drive it into the tundra.

Debris that is present in the surface waterbodies onsite would be removed. The known materials to be removed include metal barrels, powdered material or cement, metal pipe, concrete, wood, cable, tractor track sections, etc. The wellheads at the site will be left intact.

### **2.1.5 Contaminants**

If field screening or observations indicate the presence of contamination, up to an additional 15 surface and subsurface samples would be collected from each site to more fully characterize the drill sites.

If necessary, subsurface samples would be collected from manually excavated/augured sampling holes down to the top of the permafrost layer. A photoionization detector (PID) and x-ray fluorescence (XRF) would be used in conjunction with visual and olfactory clues to determine additional sample locations. Samples would be taken from eight locations of potential anthropogenic material, at the surface, at specific depths through the soil column, and at the permafrost level, based on the field observations and screenings.

Discretion would be used in the collection of soil samples due to the presence of naturally occurring crude oil seeps at the site. Care would be taken to focus the sampling on the assessment of the impact from previous drilling operations at the site. Samples would not be collected from areas obviously affected by surface seeps.

Soil borings would be backfilled using cuttings removed from the boring. Analytical samples would be collected from the soil around any debris observed to contain unidentified chemical or petroleum agents (i.e. drums, drilling muds etc.) as well as from locations where field screening results, or observations (i.e. odors, staining, or stressed vegetation) indicate the potential presence of contamination

### **2.1.6 Equipment**

The work would be completed without the use of heavy machinery. Hand and power tools such as shovels, picks, chop saws and winches would be used to complete the work on-site. Various types of contaminant sampling equipment would be used on site. Sling loading equipment would be used with the helicopter to transport material. All dirt and weeds would be cleaned from each piece of equipment and hand tool prior to transporting to site.

### **2.1.7 Transportation and Disposal**

The cleanup activities within the project areas require the disposal of drums, debris, and potentially contaminated environmental media. All media being removed would be placed into over-pack drums or supersacks and transported via helicopter from the sites directly onto a barge for transportation to an approved disposal facilities. The helicopter would be equipped with a direct read scale, which is linked to the slinging cable assembly to ensure that the load is within the safe lifting capacity of the helicopter.

Other potential wastes include both general refuse and investigation derived waste (IDW). IDW accumulated during sampling activities would include the following:

- General refuse (e.g., paper towels, plastic bags, and plastic water containers);
- Expended personal protective equipment (PPE); and
- Used sorbents from wiping the inside of emptied drum.

General refuse and IDW waste would be placed in over-pack drums or supersacks for transportation to approved disposal facilities. Small amounts of garbage would be generated at the work sites. Minor garbage would be disposed of daily at the Barrow landfill where work crews would be housed.

### **2.1.8 Fuel Supply and Storage**

The helicopter, chop saw and winch would be fueled at Barrow each day prior to returning to the site. Mahto does not anticipate needing to refuel equipment in the field. If it were to become necessary they would transport 2.5 gallon type II safety cans in secondary containment to the sites and refuel the chop saw and winch within the secondary containment. There will be a 55 gallon spill kit on-site. The 55 gallon spill kit would remain on site with the staged debris. It will be in a sealed 85 gallon drum to keep the contents from being exposed to the weather. Mahto has an Environmental Protection Plan which contains additional information about refueling the helicopter, secondary containments and spill response of which they have provided BLM a copy.

### **2.1.9 Waste**

Drums and debris will be disposed of in accordance with Mahto's Waste Management Plan which was submitted to BLM. When Mahto conducted the initial inspection of the site last year they did not find any hazardous waste or contamination outside of the natural seeps. The debris that would be removed from the seeps would be treated as oily waste and would be segregated

from the other debris, placed in sealed supersacks or drums and transported to an approved disposal facility. Super sacks of debris, extra super sacks and the spill kit will all be staged on top of an approximately 50'x50' black liner and will remain on site until removal to the barge. Mahto has an Emergency Response and Spill Control Plan which is located in their Environmental Protection Plan, section 6.

Human waste would be captured in a transportable honey bucket with a lid and transported to and from the site each day. The waste would be disposed of at the NSB treatment facility in Barrow daily.

### **2.1.10 Project End**

Following sample collection, all locations would be surveyed using GPS technology to ensure the sample locations can be relocated, if necessary. The GPS would have a horizontal accuracy of at least 1 foot. Larger debris items and removal locations, as well as locations of stressed vegetation, would also be surveyed. All survey data would be integrated in project reports. Rehabilitation at this site is not proposed.

### **2.2 Alternative B No Action**

Under the No Action Alternative, the Proposed Action would not take place on BLM managed land. None of the impacts that may result from approval of the ROW grant would occur. Simpson Core Test wells 26, 30 and 30a would not have debris removed.

### **2.3 Conformance**

The ROW grant would be subject to the Best Management Practices (BMPs) from the NPR-A IAP/EIS (USDOI BLM 2012) and associated ROD (USDOI BLM 2013).

The proposed action is in conformance with the NPR-A IAP/EIS (USDOI BLM 2012) and associated ROD (USDOI BLM 2013), the NPRPA, FLPMA, ANILCA, Endangered Species Act, EO 11988, and EO 11990.

In the NPR-A IAP/EIS (USDOI BLM 2012), the BLM evaluated the direct, indirect, and cumulative effects of access in the NPR-A. This analysis concluded that the stipulations and BMPs provided adequate protection for surface resources and subsistence activities in the planning area.

As part of the most recent analysis, the BLM considered site-specific evaluations of activities not associated with oil and gas exploration and development in the Planning area over the years, all of which received a Finding of No Significant Impact by the BLM. Findings for these types of programs included analysis of Threatened and Endangered Species, Essential Fish Habitat (EFH) and Subsistence Use under ANILCA 810, as well as coordination with the State Historic Preservation Office. In addition to BLM permits, other required authorizations were issued by other Federal and State agencies and the NSB.

## **Chapter 3**

### **3 Affected Environment**

Chapter 3 describes the aspects of the human environment that may be affected by implementing Alternatives A or B. Resources and resource values analyzed in this EA are aspects of the human environment. The CEQ regulations discuss “human environment” (40 CFR 1508.14) as broadly relating to the biological, physical, social, and economic elements of the environment. The project area refers to the lands enclosed within the exterior boundaries of the proposed action (See Figure 1).

#### **3.1 Introduction**

Environmental characteristics of the general project area have been extensively described in the NPR-A IAP/EIS (USDOI BLM 2012, Vol. 1, Chapter 3), to which this analysis is tiered, with some site-specific features described below. Proposed activities would take place on the Arctic Coastal Plain, where temperatures average below freezing for 8 months of the year. A dramatic change to higher temperatures and longer day length occurs during the other 4 months. Annual precipitation is low, averaging 8 inches per year, with more than half falling as snow. Snow cover is typically established in late September/October and disappears late May/mid-June. North Slope air quality meets the National Ambient Air Quality Standards and State of Alaska

The topography of the project area is generally flat to gently rolling, dominated by permafrost-related geomorphic features including polygonal patterned ground, shallow lakes, and extensive areas of wetland interlaced with small, meandering streams. Permafrost ranges from 650 to 1,330 feet deep, with an active thaw layer typically 1 to 2 feet deep.

Review of the proposed project for potential issues (Section 1.5) indicated no or minimal impacts to air quality, cultural and paleontological resources, fish Flood Plains/Wetlands and Riparian Zones Native American Religious Concerns, Recreation, subsistence, non threatened/endangered birds and mammals, vegetation, visual resource management, water resources, or waste management (See Table 1.3 for complete list of issues considered).

## **Chapter 4**

### **4 Environmental Impacts**

Activities proposed by Mahto are similar to previously authorized activities in the NPR-A in regard to legacy well restoration work. All of these programs have been approved and monitored on the basis of full implementation of relevant restrictions, protective measures, and the mitigation set forth in the applicable RODs, as well as state and local permits, and compliance. To date, authorizations to conduct restoration activities in the NPR-A have resulted in no long-term significant impacts to the environment, or access to and the use of subsistence resources. Because the proposed activities are not substantially different from those previously evaluated, and because no significant new scientific information or analyses have been developed since the

most recent related evaluation (i.e., USDO I BLM 2012), this NEPA analysis will focus on impacts due to the project-specific/site-specific differences of the proposed action.

#### **4.1 Direct and Indirect Effects**

BLM resource specialists have not identified issues for further evaluation in this EA. Review of the proposed project for potential issues (Section 1.5) indicated no or minimal impacts to air quality, cultural and paleontological resources, fish, flood plains/wetlands/riparian zones, Native American religious concerns, recreation, subsistence, non-threatened-endangered birds, threatened and endangered species, and mammals, vegetation, visual resource management, water resources, or waste management (See Table 1.3 for complete list of issues considered).

#### **4.2 Cumulative Effects**

Chapter 4 addresses direct, indirect, and cumulative impacts of the Proposed Action and No Action alternative. The BLM has evaluated the cumulative effects of past, present, and reasonably foreseeable restoration activities in and around the NPR-A in a series of recent NEPA analyses. This EA tiers to the most recent cumulative impact analysis in the USDO I BLM 2012 (Volume 4, Chapter 4 Section 4.8). That analysis was based on a timeframe of approximately 1900 through 2100, and a geographic range incorporating the entire North Slope of Alaska and adjacent marine waters. Based on the requirements of 40 CFR 1508.7, and guidance in the Council on Environmental Quality handbook on cumulative effects (CEQ, 1997), this analysis of restoration activity considers a narrower temporal and spatial framework (i.e. approximately 10 years past and future and influences limited to a distance of approximately 60 miles from Cape Simpson).

To date, no recent restoration activities authorized by the BLM in the NPR-A, individually or in combination, have caused significant direct, indirect, or cumulative adverse impacts to the environment. BLM resource specialists have not identified issues for further evaluation in this EA. Activity such as restoration of legacy wells have been analyzed in the plans from which this EA is tiered.

#### **4.3 Mitigation and Monitoring**

In consultation with agencies and local residents, North Slope operators have actively worked to develop winter activity technologies that create minimal impacts to the environment and to local residents. Many of these enhancements, such as ways to reduce damage to tundra, have been incorporated into operational plans, including the proposed project.

The objective of the monitoring of the project is to ensure that all terms and conditions of the Federal ROW, the NPR-A ROD (USDO I BLM 2013) the NPRPA, and FLPMA (where applicable) are met.

#### 4.4 Additional Mitigation and Monitoring

The BLM will incorporate the following additional mitigation measures into approvals for the Mahto ROW. Mahto shall:

1. Provide the BLM Arctic Field Office with a weekly activities summary report. The report shall be delivered in digital format every Monday to [dwixon@blm.gov](mailto:dwixon@blm.gov) and [s05mcint@blm.gov](mailto:s05mcint@blm.gov), through the applicable season(s) for the life of this project.
2. Provide the BLM with copies of any reports required by other agencies.
3. Maintain an aircraft log of the following information for each take-off and landing (which shall be turned in to BLM in electronic format in an excel spreadsheet with each item below listed in a separate column No Later Than 1 November 2015):
  - Type of Aircraft
  - Aircraft N number
  - Date
  - Time
  - Decimal Degree Format – latitude of takeoff location
  - Decimal Degree Format – longitude of takeoff location
  - Date
  - Time
  - Decimal Degree Format – latitude of landing location
  - Decimal Degree Format – longitude of landing location
4. Permittee must use products that are approved and certified by the Interagency Grizzly Bear Committee (IGBC) as ‘bear-resistant’ for the storage of all human food and for the in-field storage of animals taken during a commercial hunt. Use of IGBC-certified bear-resistant containers is one of the methods available to comply with food storage regulations. Other methods for compliance may also be considered for approval in some circumstances, for instance electric fencing may be authorized under certain conditions. Information about certified products can be found at: <http://www.igbconline.org/index.php/safety-in-grizzly-country/bear-resistant-products/igbc-certified-bear-resistant-products>.
5. The permittee will take no action that interferes with subsistence activities of rural users or restricts the reasonable access of subsistence users to public lands. This may include but is not limited to disturbance of wildlife and their movements near subsistence hunters, and damage to cabins, trails, traditional campsites or caches used by subsistence users. The permittee must familiarize themselves, their team, and their pilots with any subsistence camps and cabins located near their project site (map available upon request) and, when using aircraft, make all reasonable efforts to avoid disturbing hunters.
6. The Arctic Field Office will determine on an application-by-application basis what level of consultation will be required in order to provide adequate notification to communities, including whether the project merits application of the complete H-1 (Subsistence) Best Management Practice from the 2013 NPR-A EIS/IAP Record of Decision. Determination will be based on Arctic Field Office experience and on communication with representatives of the BLM NPR-A Subsistence Advisory Panel. Permittee will respond to questions and any reasonable requests for consultation that tribes and/or communities may have. Information on permits will be included on the NPR-A Permitted Projects

spreadsheet that is distributed to tribal governments and North Slope communities. Permittee is encouraged to correspond with Arctic Field Office anthropologist/subsistence specialist if they have any questions or concerns: Stacey Fritz: (907) 474-2309, [sfritz@blm.gov](mailto:sfritz@blm.gov)

7. It is the responsibility of the authorized user to ensure that all individuals brought to the project area under its auspices adhere to these stipulations. Authorized users of the planning area shall provide all employees, contractors, subcontractors, and clients with a briefing regarding stipulations applicable to the lease and/or permit.
8. The permittee must comply with all stipulations associated with the Endangered Species Act section 7 consultation between BLM and the USFWS.
9. The permittee and their contractors must cooperate with the U.S. Fish and Wildlife Service and other designated Federal, State, or local agencies to monitor the impacts of their activities on polar bears.
10. If requested the permittee or their contractors shall allow a U.S. Fish and Wildlife Service observer access to the activity site to monitor the impacts of the activity on polar bears.
11. Hazing of polar bears is prohibited.
12. The permittee or their contractors must designate a qualified individual or individuals to observe, record and report effects of the activity on polar bears to the U.S. Fish and Wildlife Service within 24 hours of visual observations. Evidence of polar bears, such as tracks, carcass, or dens will also be reported.
13. The permittee or their contractors shall submit a polar bear observation report to the BLM within 60 days of completion of field operation. This report shall contain information on all evidence of polar bears and the actions taken by the permittee on the adherence of these stipulations.
14. The Permittee or their contractors must follow the polar bear interaction guidelines provided in the document titled: "Polar Bear Interaction Guidelines.pdf"

#### **4.5 Summary of Environmental Consequences**

There were no potential issues identified in this EA further evaluation due to the proposed action (see Table 1.3). The valued environmental components included:

ACEC's  
Air Quality  
Cultural and Paleontological Resources  
Environmental Justice  
Fish  
Flood Plains/Wetlands and Riparian Zones  
Invasive, Non-native species  
Native American Religious Concerns  
Recreation  
Sociocultural Systems  
Subsistence  
Threatened & Endangered Species Spectacled and Steller's eider  
Threatened & Endangered Species Polar Bear  
Non threatened and endangered birds

Non threatened and endangered mammals  
 Vegetation  
 Visual Resource Management  
 Water Resources  
 Waste (Hazardous/Solid)  
 Wild & Scenic Rivers  
 Wilderness Characteristics and Wild Lands

The screening analysis by the interdisciplinary team found that impacts would be short term and localized and that project-specific and standard mitigation measures listed in Appendix A, would prevent potential significant environmental impacts. The proposed action would not contribute to significant adverse direct, indirect or cumulative effects to resources in the proposed project area.

## Chapter 5

### 5 Consultation and Coordination

#### 5.1 Agency Coordination

The proposed project has recently undergone review by the NSB, as well as other State and Federal agencies, as described in Section 1.5.

Mahto provided the BLM with permit applications and support documentation that summarize the proposed project and their compliance with applicable stipulations. The BLM and Mahto discussed the proposed action as the proposed program was being developed. These discussions will continue as the project progresses.

#### 5.2 Public Coordination

Public notification of the Environmental Analysis was announced on June 25, 2015 in the NEPA Register on file at the Arctic Field Office Environmental Assessment web site.

#### 5.3 List of Preparers

**Table 5.1 List of Preparers**

Name	Title	Responsible for the Following Section(s) of this EA:
Richard Kemnitz	Hydrologist	Water Resources, Floodplains/wetlands and Riparian Zones
Stacie McIntosh	Arctic Field Office Manager	Authorized Officer Cultural and Paleontological Resources
Stacey Fritz	Anthropologist/Subsistence Specialist	Environmental Justice, Native American Concerns, Sociocultural Systems, Subsistence, ANILCA 810

Debbie Nigro	Wildlife Biologist	Table 1.1 sections T&E species spectacled and Steller's eider and polar bear, Section 4.5 Additional Mitigation and Monitoring stipulations 3, 4 and 8.
Matthew Whitman	Fish Biologist	Fisheries
Donna Wixon	Natural Resource Specialist, Project Lead	Lands and Realty Recreation, Wilderness Values, Visual Resource Management
Dave Yokel	Wildlife Biologist	Table 1.3 section invasive species, mammals and vegetation.

## ANILCA Requirements

### Section 810 Subsistence Evaluation

This proposed action will not significantly restrict subsistence uses. No reasonably foreseeable and significant decrease in the abundance of harvestable resources or in the distribution of harvestable resources, and no reasonably foreseeable limitations on harvester access will result from the proposed action.

## Chapter 6 References

- 18 AAC 75, "Oil and Hazardous Substances Pollution Control," Alaska Department of Environmental Conservation, Alaska Administrative Code, amended October 2011.
- Alaska Department of Environmental Conservation (ADEC), 2014. Contaminated Sites Database. <http://dec.state.ak.us/spar/csp/search/default.asp>. September.
- Bureau of Land Management (BLM), 2013. National Petroleum Reserve in Alaska: 2013 Legacy Wells Summary Report. September 2014.
- Council on Environmental Quality (CEQ). 1997. Considering Cumulative Effects Under the National Environmental Policy Act. December.
- Haynes, T. B., A. E. Rosenberger, M. S. Lindberg, M. Whitman, and J. a. Schmutz. 2014. Patterns of lake occupancy by fish indicate different adaptations to life in a harsh Arctic environment. *Freshwater Biology* 59:1884–1896.
- USDOI BLM 2010. NEPA Handbook (H-1790-1),
- USDOI BLM. 2012. National Petroleum Reserve-Alaska Integrated Activity Plan Environmental Impact Statement. November.
- USDOI BLM. 2013. National Petroleum Reserve-Alaska Integrated Activity Plan Environmental Impact Statement. Record of Decision. February.

## APPENDIX A

### NPR-A 2013 ROD Stipulations and Best Management Practices

#### Waste Prevention, Handling, Disposal, Spills, Air Quality, and Public Health and Safety

##### *A-1 Best Management Practice*

Objective: Protect the health and safety of oil and gas field workers and the general public by disposing of solid waste and garbage in accordance with applicable federal, State, and local law and regulations.

Requirement/Standard: Areas of operation shall be left clean of all debris.

##### *A-2 Best Management Practice (Modified)*

All feasible precautions shall be taken to avoid attracting wildlife to food and garbage.

##### *A-4 Best Management Practice*

Objective: Minimize the impact of contaminants on fish, wildlife, and the environment, including wetlands, marshes and marine waters, as a result of fuel, crude oil, and other liquid chemical spills. Protect subsistence resources and subsistence activities. Protect public health and safety. Requirement/Standard: Before initiating any oil and gas or related activity or operation, including field research/surveys and/or seismic operations, lessees/permittees shall develop a comprehensive spill prevention and response contingency plan per 40 CFR § 112 (Oil Pollution Act). The plan shall consider and take into account the following requirements:

- a. On-site Clean-up Materials. Sufficient oil-spill-cleanup materials (absorbents, containment devices, etc.) shall be stored at all fueling points and vehicle-maintenance areas and shall be carried by field crews on all overland moves, seismic work trains, and similar overland moves by heavy equipment.
- b. Storage Containers. Fuel and other petroleum products and other liquid chemicals shall be stored in proper containers at approved locations. Except during overland moves and seismic operations, fuel, other petroleum products, and other liquid chemicals designated by the authorized officer that in total exceed 1,320 gallons shall be stored within an impermeable lined and diked area or within approved alternate storage containers, such as over packs, capable of containing 110% of the stored volume. In areas within 500 feet of water bodies, fuel containers are to be stored within appropriate containment.
- c. Liner Materials. Liner material shall be compatible with the stored product and capable of remaining impermeable during typical weather extremes expected throughout the storage period.
- d. Permanent Fueling Stations. Permanent fueling stations shall be lined or have impermeable protection to prevent fuel migration to the environment from overfills and spills.
- e. Proper Identification of Containers. All fuel containers, including barrels and propane tanks, shall be marked with the responsible party's name, product type, and year filled or purchased.
- f. Notice of Reportable Spills. Notice of any reportable spill (as required by 40 CFR §

300.125 and 18 AAC § 75.300) shall be given to the authorized officer as soon as possible, but no later than 24 hours after occurrence.

- g. Identification of Oil Pans (“duck ponds”). All oil pans shall be marked with the responsible party’s name.

#### ***A-5 Best Management Practice***

Objective: Minimize the impact of contaminants from refueling operations on fish, wildlife and the environment.

Requirement/Standard: Refueling of equipment within 500 feet of the active floodplain of any water body is prohibited. Fuel storage stations shall be located at least 500 feet from any water body with the exception that small caches (up to 210 gallons) for motor boats, float planes, ski planes, and small equipment, e.g. portable generators and water pumps, are permitted. The authorized officer may allow storage and operations at areas closer than the stated distances if properly designed to account for local hydrologic conditions.

#### ***A-8 Best Management Practice***

Objective: Minimize conflicts resulting from interaction between humans and bears during oil and gas activities.

Requirement/Standard: Oil and gas lessees and their contractors and subcontractors will, as a part of preparation of lease operation planning, prepare and implement bear-interaction plans to minimize conflicts between bears and humans. These plans shall include measures to:

- a. Minimize attraction of bears to the drill sites.
- b. Organize layout of buildings and work sites to minimize human/bear interactions.
- c. Warn personnel of bears near or on work sites and identify proper procedures to be followed.
- d. Establish procedures, if authorized, to discourage bears from approaching the work site.
- e. Provide contingencies in the event bears do not leave the site or cannot be discouraged by authorized personnel.
- f. Discuss proper storage and disposal of materials that may be toxic to bears.
- g. Provide a systematic record of bears on the work site and in the immediate area.

#### ***A-12 Best Management Practice***

Objective: To minimize negative health impacts associated with oil spills.

Requirement/Standard: If an oil spill with potential impacts to public health occurs, the BLM, in undertaking its oil spill responsibilities, will consider:

- a. Immediate health impacts and responses for affected communities and individuals.
- b. Long-term monitoring for contamination of subsistence food sources.
- c. Long-term monitoring of potential human health impacts.
- d. Perceptions of contamination and subsequent changes in consumption patterns.
- e. Health promotion activities and communication strategies to maintain the consumption of traditional food.

### **Facility Design and Construction**

### ***E-9 Best Management Practice***

Objective: Avoidance of human-caused increases in populations of predators of ground nesting birds.

Requirement/Standard:

- b. Feeding of wildlife is prohibited and will be subject to non-compliance regulations.

### ***E-10 Best Management Practice***

Objective: Prevention of migrating waterfowl, including species listed under the Endangered Species Act, from striking oil and gas and related facilities during low light conditions.

Requirement/Standard: Illumination of all structures between August 1 and October 31 shall be designed to direct artificial exterior lighting inward and downward, rather than upward and outward, unless otherwise required by the Federal Aviation Administration.

## **Use of Aircraft for Permitted Activities**

### ***F-1 Best Management Practice***

Objective: Minimize the effects of low-flying aircraft on wildlife, subsistence activities, and local communities. Requirement/Standard: The lessee shall ensure that aircraft used for permitted activities maintain altitudes according to the following guidelines (Note: This best management practice is not intended to restrict flights necessary to survey wildlife to gain information necessary to meet the stated objectives of the stipulations and best management practices. However, flights necessary to gain this information will be restricted to the minimum necessary to collect such data.):

- a. Aircraft shall maintain an altitude of at least 1,500 feet above ground level when within ½ mile of cliffs identified as raptor nesting sites from April 15 through August 15 and an altitude of at least 1,500 feet above ground level when within ½ mile of known gyrfalcon nest sites from March 15 to August 15, unless doing so would endanger human life or violate safe flying practices. Permittees shall obtain information from the BLM necessary to plan flight routes when routes may go near falcon nests.
- b. Aircraft shall maintain an altitude of at least 1,000 feet above ground level (except for takeoffs and landings) over caribou winter ranges from December 1 through May 1, unless doing so would endanger human life or violate safe flying practices. Caribou wintering areas will be defined annually by the authorized officer. The BLM will consult directly with the Alaska Department of Fish and Game in annually defining caribou winter ranges.
- d. Use of aircraft, especially rotary wing aircraft, near known subsistence camps and cabins or during sensitive subsistence hunting periods (spring goose hunting and fall caribou and moose hunting) should be kept to a minimum.
- e. Aircraft used for permitted activities shall maintain an altitude of at least 2,000 feet above ground level (except for takeoffs and landings) over the Teshekpuk Lake Caribou Habitat Area (Map 2) from May 20 through August 20, unless doing so would endanger human life or violate safe flying practices. Aircraft use (including fixed wing and helicopter) by oil and gas lessees in the Goose Molting Area (Map 2) should be

minimized from May 20 through August 20, unless doing so would endanger human life or violate safe flying practices.

- f. Aircraft used for permitted activities shall maintain an altitude of at least 2,000 feet above ground level (except for takeoffs and landings) over the Utukok River Uplands Special Area (Map 1) from May 20 through August 20, unless doing so would endanger human life or violate safe flying practices.
- g. Hazing of wildlife by aircraft is prohibited. Pursuit of running wildlife is hazing. If wildlife begins to run as an aircraft approaches, the aircraft is too close and must break away.
- h. Fixed wing aircraft used as part of a BLM-authorized activity along the coast shall maintain minimum altitude of 2,000 feet when within a ½-mile of walrus haulouts, unless doing so would endanger human life or violate safe flying practices. Helicopters used as part of a BLM-authorized activity along the coast shall maintain minimum altitude of 3,000 feet and a 1-mile buffer from walrus haulouts, unless doing so would endanger human life or violate safe flying practices.
- i. Aircraft used as part of a BLM-authorized activity along the coast and shore fast ice zone shall maintain minimum altitude of 3,000 feet when within 1 mile from aggregations of seals, unless doing so would endanger human life or violate safe flying practices.

## **Subsistence Consultation for Permitted Activities**

### ***H-3 Best Management Practice***

Objective: Minimize impacts to sport hunting and trapping species and to subsistence harvest of those animals.

Requirement/Standard: Hunting and trapping by lessee's/permittee's employees, agents, and contractors are prohibited when persons are on "work status." Work status is defined as the period during which an individual is under the control and supervision of an employer. Work status is terminated when the individual's shift ends and he/she returns to a public airport or community (e.g., Fairbanks, Barrow, Nuiqsut, or Deadhorse). Use of lessee/permittee facilities, equipment, or transport for personal access or aid in hunting and trapping is prohibited.

## **Additional Protections that Apply in Select Biologically Sensitive Areas** be the highest high

### ***K-3 Best Management Practice – Kogru River, Dease Inlet, Admiralty Bay, Elson Lagoon, Peard Bay, Wainwright Inlet/Kuk River, and Kasegaluk Lagoon, and their associated Islands***

Objective: Protect fish and wildlife habitat (including, but not limited to, that for waterfowl and shorebirds, caribou insect-relief, and marine mammals), preserve air and water quality, and minimize impacts to subsistence activities and historic travel routes on the major coastal waterbodies.

- b. Daily operational activities, including use of support vehicles, watercraft, and aircraft traffic, alone or in combination with other past, present, and reasonably foreseeable activities,

shall be conducted to minimize impacts to subsistence uses, travel corridors, and seasonally concentrated fish and wildlife resources.

e. Reasonable efforts will be made to avoid or minimize impacts related to oil spill response activities, including vessel, aircraft, and pedestrian traffic that add to impacts or further compound “direct spill” related impacts on area resources and subsistence uses.

f. Before conducting open water activities, the permittee shall consult with the Alaska Eskimo Whaling Commission and the North Slope Borough to minimize impacts to the fall and spring subsistence whaling activities of the communities of the North Slope.

human

***K-6 Lease Stipulation/Best Management Practice – Coastal Area*** Note: This measure would be applied to relevant new leases. On lands unavailable for leasing in the respective alternatives, K-6 would be a best management practice.

Objective: Protect coastal waters and their value as fish and wildlife habitat (including, but not limited to, that for waterfowl, shorebirds, and marine mammals), minimize hindrance or alteration of caribou movement within caribou coastal insect-relief areas; protect the summer and winter shoreline habitat for polar bears, and the summer shoreline habitat for walrus and seals; prevent loss of important bird habitat and alteration or disturbance of shoreline marshes; and prevent impacts to subsistence resources and activities.

Requirement/Standard:

- b. Marine vessels used as part of a BLM-authorized activity shall maintain a 1-mile buffer from the shore when transiting past an aggregation of seals (primarily spotted seals) using a terrestrial haulout unless doing so would endanger human life or violate safe boating practices. Marine vessels shall not conduct ballast transfers or discharge any matter into the marine environment within 3 miles of the coast except when necessary for the safe operation of the vessel.
- c. Marine vessels used as part of a BLM-authorized activity shall maintain a ½-mile buffer from shore when transiting past an aggregation of walrus using a terrestrial haulout.

### **Summer Vehicle Tundra Access**

#### ***L-1 Best Management Practice***

Objective: Protect stream banks and water quality; minimize compaction and displacement of soils; minimize the breakage, abrasion, compaction, or displacement of vegetation; protect cultural and paleontological resources; maintain populations of, and adequate habitat for birds, fish, and caribou and other terrestrial mammals; and minimize impacts to subsistence activities.

Requirement/Standard: On a case-by-case basis, BLM may permit low-ground-pressure vehicles to travel off of gravel pads and roads during times other than those identified in Best Management Practice C-2a. Permission for such use would only be granted after an applicant has:

- a. Submitted studies satisfactory to the authorized officer of the impacts on soils and vegetation of the specific low-ground-pressure vehicles to be used. These studies should reflect use of such vehicles under conditions similar to those of the route proposed for use and should demonstrate that the proposed use would have no more than minimal impacts to soils and vegetation.

- b. Submitted surveys satisfactory to the authorized officer of subsistence uses of the area as well as of the soils, vegetation, hydrology, wildlife and fish (and their habitats), paleontological and archaeological resources, and other resources as required by the authorized officer.
- c. Designed and/or modified the use proposal to minimize impacts to the authorized officer's satisfaction. Design steps to achieve the objectives and based upon the studies and surveys may include, but not be limited to, timing restrictions (generally it is considered inadvisable to conduct tundra travel prior to August 1 to protect ground-nesting birds), shifting of work to winter, rerouting, and not proceeding when certain wildlife are present or subsistence activities are occurring. At the discretion of the authorized officer, the plan for summer tundra vehicle access may be included as part of the spill prevention and response contingency plan required by 40 CFR 112 (Oil Pollution Act) and Best Management Practice A-4.

## **General Wildlife and Habitat Protection**

### ***M-1 Best Management Practice***

Objective: Minimize disturbance and hindrance of wildlife, or alteration of wildlife movements through the NPR-A.

Requirement/Standard: Chasing wildlife with ground vehicles is prohibited. Particular attention will be given to avoid disturbing caribou.

### ***M-2 Best Management Practice***

Objective: Prevent the introduction, or spread, of non-native, invasive plant species in the NPR-A.

Requirement/Standard: Certify that all equipment and vehicles (intended for use either off or on roads) are weed-free prior to transporting them into the NPR-A. Monitor annually along roads for non-native invasive species, and initiate effective weed control measures upon evidence of their introduction. Prior to operations in the NPR-A, submit a plan for the BLM's approval, detailing the methods for cleaning equipment and vehicles, monitoring for weeds and weed control.