



Environmental Assessment
National Petroleum Reserve-Alaska
Umiat Test Well No.6 & 7 Plug & Abandonment
2012

DOI-BLM-LLAK01000-2012-0008-EA

U.S. Army Corps of Engineers

Preparing Office: Arctic Field Office

Project Title/Type of Action: **National Petroleum Reserve-Alaska (NPR-A)
Defense Environmental Restoration Program –
Removal Action Umiat Test Well No. 6 & 7
Right of Way Grant**

Case File Number: **FF095495**

Land Use Plans: **Northeast National Petroleum Reserve-Alaska Supplemental Integrated
Activity Plan/Environmental Impact Statement (IAP/EIS) 2008
Colville River Special Area Management Plan (CRSAMP) 2008**

Applicant: **U.S. Army Corps of Engineers – Alaska**

Address: **CEPOA-EN-CW-ER
P.O. Box 6898
Elmendorf AFB, Alaska 99506-6898**

Date: **March 14, 2012**

Lands Involved: **Umiat 6 - Section 3, Township 1 South, Range 1 West, Umiat Meridian
69.38731°N 152.13252°W
Umiat 7 – Section 10, Township 1 South, Range 1 West, Umiat Meridian
69.37434N -152.10561W (WGS84)**

This Environmental Assessment (EA) has been prepared to meet requirements of the National Environmental Policy Act (NEPA), and to support U.S. Department of Interior (USDOI) Bureau of Land Management (BLM) decision-making on permits required to construct and implement

the proposed project. The scope of this EA includes analysis of the effects of the proposed activity and alternatives.

Impacts of this type of activity have been evaluated in the Northeast and Northwest Integrated Activity Plan (IAP)/Environmental Impact Statements (EIS) and the Colville River Special Area Management Plan (CRSAMP) 2008 for the NPR-A.

**Environmental Assessment
for Plugging and Abandonment of Umiat Test Wells No. 6 and 7
DOI-BLM-LLAK01000-2012-0008-EA**

1 INTRODUCTION

The United States Army Corps of Engineers (USACE) has requested authorization to conduct the plugging and abandonment of the Umiat Test Well No. 6 and Umiat Test Well No. 7, located in the Northeast (NE) Petroleum Reserve-Alaska (NPR-A) under a Right of Way authorization. USACE has contracted the work to Marsh Creek, LLC.

1.1 BACKGROUND

This Environmental Assessment (EA) has been prepared to meet requirements of the National Environmental Policy Act (NEPA), evaluate conformance with the relevant Integrated Activity Plan (IAP) and associated Environmental Impact Statement (EIS), and to support U.S. Department of Interior (USDOI) BLM decision-making on issuing permits required to construct and implement the proposed project. This EA is tiered to the 2008 NE NPR-A Supplemental IAP/EIS (USDOIBLM, 2008 – hereinafter known as 2008 NE IAP/EIS), 2008 NE Record of Decision (ROD- USDOI BLM, 2008), the Colville River Special Area Management Plan (CRSAMP) and Decision Record (DR) and EA AK-023-2004-025. It is also tiered to the Environmental Assessment completed by the USACE in January 2009 for the project. The scope of this EA includes analysis of the effects of the proposed activity and alternatives.

1.2 BRIEF DESCRIPTION OF THE PROPOSED ACTION

The proposed action would authorize a National Petroleum Reserve-Alaska Right of Way Grant to allow access to Umiat Test Well No. 6 and Umiat Test Well No. 7 in order to plug and abandon both wells following BLM and AOGCC requirements.

1.3 PURPOSE OF AND NEED FOR THE PROJECT

The purpose of the proposed action is to allow the applicant to permanently plug and abandon two Legacy Wells, Umiat Test Wells No. 6 and No. 7, that are in need of final closure. The plugging and abandonment of Legacy Wells within the NPR-A is an active and ongoing management goal, with funding directly allocated by Congress for this purpose.

1.4 THE DECISION TO BE MADE

The BLM must conduct a project-specific NEPA analysis and determine whether the proposed project should be approved, rejected, or approved with modifications, and if additional mitigation is needed. This EA will be based on the findings, management controls, and protective measures of the 2008 NE ROD and the CRSAMP DR as well as other laws and regulations. The scope of this EA includes analysis that enables the BLM to select among alternatives that meet the purpose and need, and are within the BLM's jurisdiction (40 Code of Federal Regulations 1506.1(a)(2)).

1.5 PUBLIC INVOLVEMENT AND ISSUES

Development of the 2008 NE Supplemental IAP/EIS and the CRSAMP involved extensive input from other Federal agencies, the State, the NSB, thousands of individuals, and many institutions. The BLM publicly noticed the proposed action on February 29, 2012. To date we have not received any comments concerning the proposed action.

BLM guidelines include a list of authorities that are addressed, where applicable, in NEPA assessments of an EA (BLM, 2008, Appendix 1). Some elements are not present in the project area and are, therefore, not discussed further. A summary listing of related issues considered is provided in Table 1.2

Table 1.2 issues Considered in Evaluating Impacts

Issue Considered	Determination	Basis of Determination (See Note 1)
ACEC's	Not Present	
Air Quality	Minimally Impacted	Air quality impacts likely to remain below applicable ambient air quality standards and increments. Protection provided by: ADEC air permit; 40 CFR 2020(c)(2), and NE ROP A-9
Cultural and Paleontological Resources	No Impact	Archaeological and Cultural Resources Clearance by BLM required under the NHPA. Cultural resources review was completed. Cultural resources expected to remain unaffected based on location; no impacts to paleontological resources expected, based on identified locations and <i>de minimus</i> surface disturbance. Protection provided by NE ROP C-2, E-13, and I-1.
Fish	Minimally Impacted	Protection provided by NE ROD ROPs A-4, A-5, B-1, B-2, C-3, C-4; ADF&G Fish Habitat Permits. Essential Fish Habitat finding: "Not likely to adversely affect".

Flood Plains/Wetlands and Riparian Zones	Minimally Impacted	New heavy traffic patterns on cross-country snow roads possible. Impact evaluation required under EO 11990 and EO11988. Additional protection provided by NE Stipulation D-2, and ROPs A-3 – A-7, B-1, B-2, C-2 –C-4, I-1.
Invasive, Non-native species	No Impact	
Recreation	Minimally Impacted	Protection provided by NE ROD ROPs A-1, A-5, C-3, C-4, E-6, F-1,I-1,
Subsistence	Minimally Impacted	Large game and furbearers could be deflected from areas of activity, but effects are expected to be short term and minor. ANILCA 810 Evaluation and Findings by BLM required. Additional Protection provided by: NW/NE Stipulation D-1 and D-2; NW/NW ROPs A-1- A-7, NE ROP A-11, NW/NE ROPs B-1, B-2, C-4, F-1, H-1, H-2, and I-1
Threatened & Endangered Species	No Impact	Specific protections provided by NE ROD Stipulation J-1 and ROPS C-1 (polar bear) and E-11 (spectacled and Steller’s eiders. Threatened and Endangered Species “No Effect” Determination” made by BLM as the direct and indirect effects of the action are not expected to result in any take of listed species and are wholly beneficial. [See Note 2]
Non threatened and endangered birds	Minimally impacted	Raptors, including the peregrine falcon inhabit the project area, particularly along the Colville River. Protection provided by the CRSAMP in Protections 1-9. Other protection provided by NE Stipulation D-1, ROPs A-2 – A-6, A-8, C-1, E-9, F-1, I-1.
Non threatened and endangered mammals	Minimally impacted	Moose and caribou may inhabit the area. Protection provided by the CRSAMP in Protections 1-9. Other protection provided by NW/NE Stipulation D-1, ROPs A-2 – A-6, A-8, C-1, E-9, F-1, I-1.
Vegetation	Minimally impacted	Protections provided by NE SIAP ROP C-2
Visual Resource Management	Minimally Impacted	Protection provided by NE ROD ROPs A-1, A-3,A-4, A-5, A-6, C-2, C-3, C-4,E-6, F-1, I-1

Water Resources	Minimal Impact	Water Quality protected by frozen, snow-covered water bodies as well as USCOE, EPA, ADEC, ADF&G and ADNR required permits. Other protections provided by: NW/NE Stipulation D-1, ROPs A-1 – A-7, B-1, B-2, C2 – C-4, E-9, I-1.
Waste (Hazardous/Solid)	Minimal Impact	Protection provided by ADEC waste storage permit and the Waste Management Plan Protection provided by required C-Plans and SPCC Plans, and BLM-required Orientation and Subsistence Protection Plans. Other protections provided by NE ROPS A-1 – A-7.
Wild & Scenic Rivers	Not Present	

ACEC – Area of Critical Environmental Concern

ADEC – Alaska Department of Environmental Conservation

ADF&G – Alaska Department of Fish and Game

ADNR – Alaska Department of Natural Resources

ANILCA – Alaska National Interest Lands Conservation Act

BLM – Bureau of Land Management

CRSAMP – Colville River Special Area Management Plan

EO – Executive Order

EPA – U.S. Environmental Protection Agency

NE – Northeast

NHPA – National Historic Preservation Act

NW – Northwest

ROD – Record of Decision

ROP – Required Operating Procedure

SPCC – Spill Prevention Control and Countermeasures

USCOE – United States Corp of Engineers

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 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:

1. Determination tiered from: 2008 NE IAP/EIS Vo1. 2, Chapter 4; and 2008 NE ROD; BLM General Stipulations and laws and regulations as noted.

2. The polar bear has recently been added to the Threatened and Endangered Species list. No federally designated Critical Habitat exists within or adjacent to the planning area. The Endangered Species Act Consultation is summarized in the 2008 NE ROD. The Biological Assessment prepared by the BLM and submitted to the USFWS found that the Preferred Alternative may affect, but was not likely to adversely affect, the polar bear. The USFWS concurred with BLM's findings on the polar bear and issued its Biological Opinion (BO) for the northern planning areas (2008 NE ROD, p. 2). The BO included Reasonable and Prudent Measures that are implemented through non-discretionary Terms and Conditions. In the ROD, the BLM adopted all of the Terms and Conditions. In both the NE and NW Planning Areas, ROP C-1b specifically provides protection for polar bear denning. There are no polar bear den sites or sightings reported in and near federal lands associated with the project (2008 NE IAP/EIS, Vol. 6, Map 3-29; 2003 NW IAP/EIS, Vol. 3, Map-51). The BLM has made a Threatened and Endangered Species "No Effect Determination" for this project.

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 2008 NE NPR-A IAP/EIS (Vol. 1, Chapter 3), to which this analysis is tiered. Umiat lies in the northern foothills of the Brooks Range along the Colville River. Umiat is a location where oil and gas wells were drilled as part of the U.S. Navy's Pet 4 exploration program conducted between 1945 and 1952. The State of Alaska received ownership of the airstrip and approximately 1450 acres of surrounding land via a Quit Claim Deed issued in 1966 under the authority of the Omnibus Act. Currently the Ukpiagvik Inupiat Corporation has a lease on site with a camp and facilities that they rent out. There are no permanent residences at Umiat, it is strictly a working camp area.

2. PROPOSED ACTION AND ALTERNATIVES

The BLM Arctic Field Office in Fairbanks is proposing to authorize a right of way grant to conduct the plugging and abandonment (P&A) of two legacy wells at Umiat on lands in the NPR-A. While the Umiat 6 well is on federal land, Umiat 7 is on state land. Permission from the state to conduct the work has been received. This work is necessary to ensure that the BLM is in compliance with state and federal regulations regarding the final abandonment of oil and gas wells on federal lands. The proposed action would authorize the USACE through their contractor Marsh Creek LLC to conduct the P&A of Umiat Test Wells No. 6 and No. 7. The proposed time frame for this program is mid-March through May 2012.

2.1 DESCRIPTION OF THE PROPOSED ACTION

The proposed project is similar to well plugging and abandonment activities completed in the NPR-A in past winter seasons. Umiat is approximately 140 miles southwest of Deadhorse, Alaska, and approximately 70 miles southwest of Nuiqsut, Alaska. The Corp currently has an approved ROW grant to conduct remediation activities at the Umiat 9 well site. Therefore, their contractor Marsh Creek has already mobilized and is on site conducting work. The Umiat Test Well No. 6 and Test Well No. 7 are approximately 0.5 miles northeast of the east end of the

Umiat airstrip. Plugging and Abandonment work is scheduled to begin in mid-March 2012. The proposed P&A work will be conducted as a standalone operation; the crew would utilize some of the camp facilities presently mobilized for the on-going Well 9 work. No restoration of the ground surface surrounding the wellsites is planned at this time.

Marsh Creek will provide its own camp facilities in Umiat for the duration of the project. The spike camp for P&A activities will be placed at the Test Well 6 site and the Test Well 7 site during respective well activities, and will be equipped to handle up to 8 people (including camp crew), which is the anticipated number of employees needed for the P&A activities. The spike camp will be supported by the Test Well 9 main camp at Seabee Pad (approximately 2 miles away and easily accessible by snow machine or Tucker).

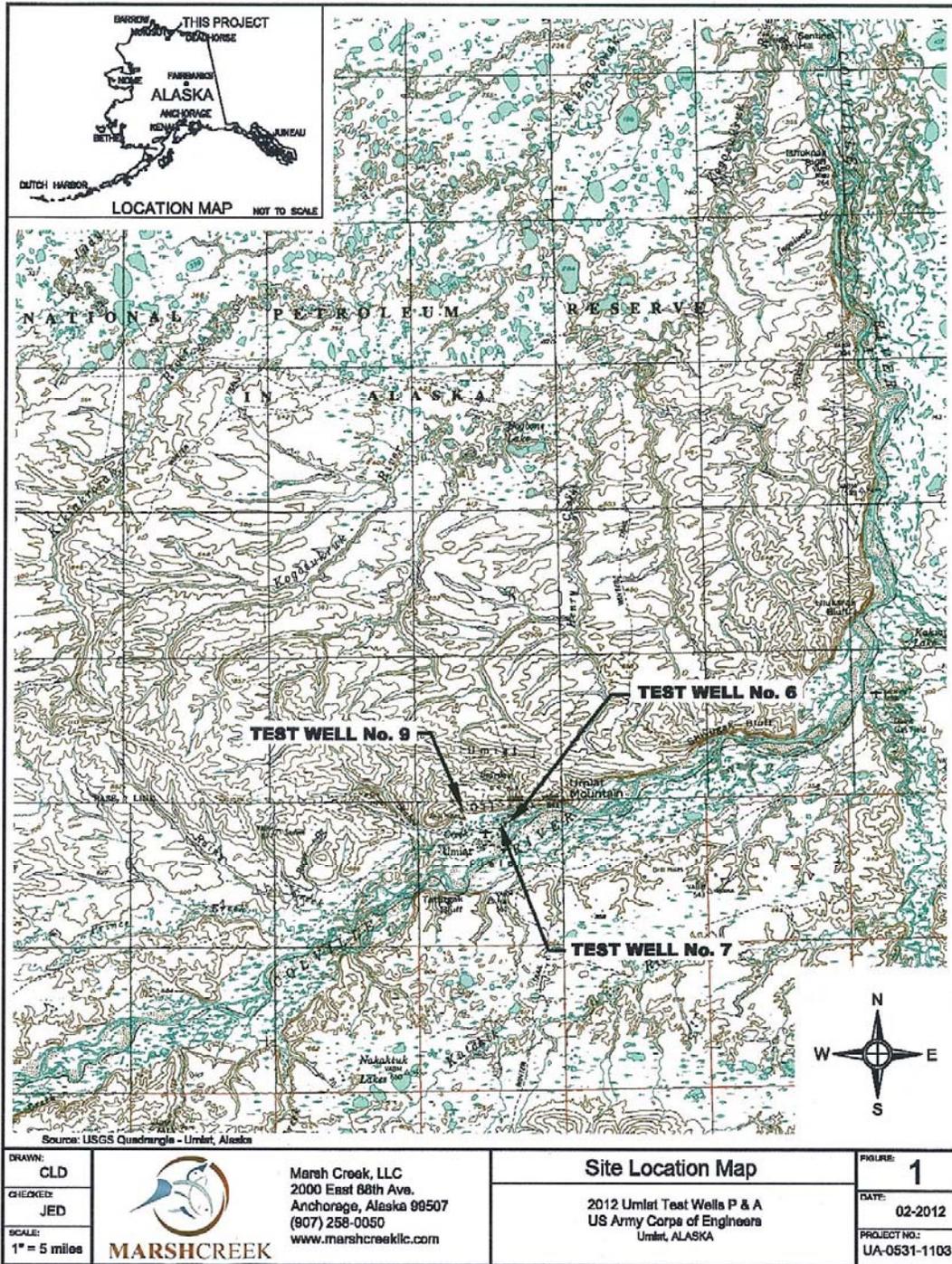
Equipment that will be utilized in the P&A include:

- Batch cementing unit, 50 bbl
- Bulk cement tank with 175-200 sacks of permafrost cement
- Backup centrifugal pump
- Vac Unit
- Open top tanks
- Waste transport tanks
- NaCL sacks for brine water mixture
- Forklift
- Excavator
- Spill kit
- Pipes, hoses, valves and fittings as needed
- 4" BOPE and required fitting and flange adaptors

The area around the well head will be excavated to a depth sufficient to access all casing valve outlets. A well enclosure will be installed over the well, and heat will be applied to warm the well. Any fluids within the well bore will be removed, and cement will be pumped into the well following BLM and AOGCC specifications for P&A. The well head will not be reattached due to the close proximity to the Colville River and the potential for the river to encroach the well site. The area excavated will be backfilled, and soil will be mounded over the top to account for summer subsidence.

Wellbore material and well returns from the cementing operations generated during the well P&A procedures will be containerized for transport and disposal offsite. Disposal at the appropriate facility will be based on sample results. These materials are not expected to contain PCBs and will be disposed of by Class I injection or other appropriate disposal means at local North Slope disposal facilities.

Demobilization back to Deadhorse will occur once the P&A work is approved as completed.



2.2 NO ACTION ALTERNATIVE

The no action alternative would be to deny the applicant's request to plug and abandon Umiat Test Wells No. 6 and No. 7. This would result in the two wells remaining in a suspended state, and delay final compliance with state and federal regulations regarding the plugging and abandonment of oil wells. The No Action Alternative is inconsistent with the existing management policy of the Fairbanks District Office.

2.3 CONFORMANCE

The proposed action is in conformance with the NE IAP/EIS, the CRSAMP and associated ROD and DR, National Petroleum Reserve Product Act (NPRPA), Federal Land Policy Management Act (FLPMA), Alaska National Interest Lands Conservation Act (ANILCA) Endangered Species Act, Executive Order (EO) 11988, EO 11990, and terms of the federal leases.

In the NE NPR-A IAP/EIS document, the BLM evaluated the direct, indirect, and cumulative effects of hazardous material or debris removal in the NPR-A. The analysis may be found under 'Activities Not Associated with Oil and Gas Exploration and Development'. This analysis concluded that the stipulations and ROPs provided adequate protection for surface resources and subsistence activities in the planning area. In the associated RODs, several changes were made to those protective measures to address new data, new regulations, and new public concerns.

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 NE Planning area over the years, all of which received a Finding of No Significant Impact by the BLM. Findings for these winter 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.

3. AFFECTED ENVIRONMENT

Environmental characteristics of the general project area have been extensively described in the 2008 NE NPR-A IAP/EIS (Vol. 1, Chapter 3), to which this analysis is tiered. Umiat lies in the northern foothills of the Brooks Range along the Colville River. Umiat is a location where oil and gas wells were drilled as part of the U.S. Navy's Pet 4 exploration program conducted between 1945 and 1952. The State of Alaska received ownership of the airstrip and approximately 1450 acres of surrounding land via a Quit Claim Deed issued in 1966 under the authority of the Omnibus Act. Currently the UICorporation has a lease on site with a camp and facilities that they rent out. There are no permanent residences at Umiat, it is strictly a working camp area.

4. ENVIRONMENTAL IMPACTS

The proposed activities are not substantially different from those previously evaluated, and no significant new scientific information or analyses have been developed since the most recent related evaluation (i.e., May 2008).

4.1 Direct and Indirect Effects

The proposed action is built on experience gained from decades of similar operations on the North Slope. This EA is tiered from the 2008 NE IAP/EIS and its ROD the (CRSAMP) and Decision Record (DR) and EA AK-023-2004-025. Related discussion of impacts is found in: 2008 NE IAP/EIS, Vol. 2, Chapter 4.6 (Environmental Consequences of Alternative D, the preferred alternative).

4.1.1 No Action Alternative

Under the No Action Alternative the ROW for the plugging and abandonment would not be granted. The Umiat 6 and 7 wells would not get plugged.

4.2 Cumulative Effects

Cumulative impacts result from the incremental addition of past, present, and reasonably foreseeable actions. Each action may be individually minor by itself, but when added to others could become significant over a period of time.

The time frame for the proposed action for the project area is 1977 (designation of NPR-A) to 10 years into the future, assuming that the relatively low level of activity and management would remain at about the same level as present. Due to the limited scope and intensity of the proposed action the geographic area would be limited within 1 mile of the proposed use area. Additional past, present, and future activities in the area include oil and gas exploration, recreation, subsistence, and research and monitoring. While the level of such activities may increase slightly within the next 10 years, there are no development proposals that would substantially add to the current levels. The incremental addition of the proposed action would be short-term and highly localized and would not add to increased cumulative effects.

The proposed action is not anticipated to result in cumulative impacts due to the remoteness of the portion of the area where the activity would occur, the low impact levels associated with the activity.

4.3 Mitigation and Monitoring

The stipulations (Appendix A) for the proposed action are a subset of the IAP/EIS ROD, the 2008 NE NPR-A SIAP/EIS ROD, and project specific stipulations developed in previous NEPA process.

4.4 SUMMARY OF ENVIRONMENTAL CONSEQUENCES

No potential issues were identified in the evaluation of the proposed action for this EA.

5. CONSULTATION AND COORDINATION

5.1 Agencies, Organization, Persons Consulted

Public notification of the Environmental analysis will be on file at the Arctic Field Office and available on the Arctic Field Office Environmental Assessment web site.

State of Alaska Northern Region Aviation Leasing
State of Alaska Oil and Gas Conservation Commission

5.2 List of Preparers

Dave Yokel, Wildlife Biologist
Michael Kunz, Archaeologist
Susan Flora, Environmental Scientist
Richard Kemnitz, Hydrologist
Donna Wixon, Natural Resource Specialist
Debbie Nigro, Wildlife Biologist
Matthew Whitman, Fish Biologist
Stacey Fritz, Anthropologist/Subsistence Specialist
Stacie McIntosh, Arctic Field Office

5.3 ANILCA Requirements

Section 810 Subsistence Evaluation

This action is not likely to cause any significant restriction to the subsistence resources of the area (see ANILCA section 810 Evaluation within the ROW case file).

Appendix A FF095495 Umiat #6 & 7 US Army Corps of Engineers 2012 ROW P&A Amendment Stipulations

Project Specific Stipulations

1. The applicant or their contractor will provide the BLM with a weekly activities summary report via e-mail to: dwixon@blm.gov
2. Provide the BLM with copies of any reports required by other agencies.
3. The portions of excavation that might end up below grade are to be contoured to assure no pooling of water. Backfilling shall occur if any discrete holes which would collect surface water are created during removal of contaminated soils.
4. For each lake utilized as a water source, the applicant shall maintain a daily record of water removed. Provide the BLM with this daily tracking record in conjunction with the weekly progress report.
5. Notify the BLM within 24 hours if water removal exceeds the volume approved by Alaska Dept. of Natural Resources (TWUP A2011-05) at any permitted lake.
6. Provide the BLM with photographs documenting the condition of the access road channel crossings of Seabee Creek and the Colville River at the end of the winter operation period.

NE IAP/EIS ROD Stipulations and Required Operating Procedures

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

A-1 Required Operating Procedure

Objective: Protect the health and safety of oil 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 Required Operating Procedure

Objective: Minimize impacts on the environment from non-hazardous and hazardous waste generation. Encourage continuous environmental improvement. Protect the health and safety of oil field workers and the general public. Avoid human-caused changes in predator populations.

Requirement/Standard: Lessees/permittees shall prepare and implement a comprehensive waste management plan for all phases of exploration and development, including seismic activities. The plan shall be submitted to the AO for approval, in consultation with Federal, state, and NSB regulatory and resource agencies, as appropriate (based on agency legal authority and jurisdictional responsibility), as part of a plan of operations or other similar permit application. Management decisions affecting waste generation shall be addressed in the following order of priority: 1) Prevention and reduction, 2) recycling, 3) treatment, and 4) disposal. The plan shall consider and take into account the following requirements:

- a. Methods to avoid attracting wildlife to food and garbage. All feasible precautions shall be taken to avoid attracting wildlife to food and garbage. (A list of approved precautions, specific to the type of permitted use, can be obtained from the AO.)
- b. Disposal of putrescible waste. Requirements prohibit the burial of garbage. Lessees and permitted users shall have a written procedure to ensure that the handling and disposal of putrescible waste will be accomplished in a manner that prevents the attraction of wildlife. All putrescible waste shall be incinerated, backhauled, or composted in a manner approved by the AO. All solid waste, including incinerator ash, shall be disposed of in an approved waste-disposal facility in accordance with USEPA and ADEC regulations and procedures. The burial of human waste is prohibited except as authorized by the AO.
- c. Disposal of pumpable waste products. Except as specifically provided, the BLM requires that all pumpable solid, liquid, and sludge waste be disposed of by injection in accordance with USEPA, ADEC, and the Alaska Oil and Gas Conservation Commission regulations and procedures. On-pad temporary muds and cuttings storage, as approved by ADEC, will be allowed as necessary to facilitate annular injection and/or backhaul operations.
- d. Disposal of wastewater and domestic wastewater. The BLM prohibits wastewater discharges or disposal of domestic wastewater into bodies of fresh, estuarine, and marine water, including wetlands, unless authorized by a NPDES or state permit.

A-3 Required Operating Procedure

Objective: Minimize pollution through effective hazardous-materials contingency planning.

Requirement/Standard: For oil- and gas-related activities, a Hazardous Materials Emergency Contingency Plan shall be prepared and implemented before transportation, storage, or use of fuel or hazardous substances. The plan shall include a set of procedures to ensure prompt response, notification, and cleanup in the event of a hazardous substance spill or threat of a release. Procedures applicable to fuel and hazardous substances handling (associated with transportation vehicles) shall consist of Best Management Practices (BMPs) if approved by the AO. The plan shall include a list of resources available for response (e.g., heavy-equipment operators, spill-cleanup materials or companies), and names and phone numbers of Federal, state, and NSB contacts. Other Federal and state regulations may apply and require additional planning requirements. All appropriate staff shall be instructed regarding these procedures. In addition contingency plans related to facilities **developed** for oil production shall include requirements to:

- a. provide refresher spill-response training to NSB and local community spill-response teams on a yearly basis,
- b. plan and conduct a major spill-response field-deployment drill annually,
- c. prior to production and as required by law, develop spill prevention and response contingency plans and participate in development and maintenance of the North Slope Subarea Contingency Plan for Oil and Hazardous Substances Discharges/Releases for the National Petroleum Reserve

- Alaska operating area. Planning shall include development and funding of detailed (e.g., 1:26,000 scale) environmental sensitivity index maps for the lessee's operating area and areas outside the lessee's operating area that could be affected by their activities. (The specific area to be mapped shall be defined in the lease agreement and approved by the AO in consultation with appropriate resource agencies). Maps shall be completed in paper copy and geographic information system format in conformance with the latest version of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration's Environmental Sensitivity Index Guidelines. Draft and final products shall be peer reviewed and approved by the AO in consultation with appropriate Federal, state, and NSB resource and regulatory agencies.

A-4 Required Operating Procedure

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 AO 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 AO 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 Required Operating Procedure

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 of small caches (up to 210 gallons) for motor boats, float planes, ski planes, and small equipment, e.g. portable generators and water pumps, will be permitted. The AO may allow storage and operations at areas closer than the stated distances if properly designed to account for local hydrologic conditions.

A-6 Required Operating Procedure

Objective: Minimize the impact on fish, wildlife, and the environment from contaminants associated with the exploratory drilling process.

Requirement/Standard: Surface discharge of reserve-pit fluids is prohibited.

A-7 Required Operating Procedure

Objective: Minimize the impacts to the environment of disposal of produced fluids recovered during the **development** phase on fish, wildlife, and the environment.

Requirement/Standard: Discharge of produced water in upland areas and marine waters is prohibited.

A-8 Required Operating Procedure

Objective: Minimize conflicts resulting from interaction between humans and bears during leasing and associated 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 areas to minimize human/bear interactions.
- c. Warn personnel of bears near or on drill sites and identify proper procedures to be followed.
- d. Establish procedures, if authorized, to discourage bears from approaching the drill 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 site and in the immediate area.
- h. Encourage lessee/permittee to participate and comply with the Incidental Take Program under the Marine Mammal Protection Act.

Water Use for Permitted Activities:

B-1 Required Operating Procedure

Objective: Maintain populations of, and adequate habitat for, fish and invertebrates.

Requirement/Standard: Water withdrawal from rivers and streams during winter is prohibited.

B-2 Required Operating Procedure

Objective: Maintain natural hydrologic regimes in soils surrounding lakes and ponds, and maintain populations of, and adequate habitat for, fish and invertebrates, and waterfowl.

Requirement/Standard: Water withdrawal from lakes may be authorized on a site-specific basis depending on water volume, and depth, and fish population and species diversification. Current water withdrawal requirements specify:

- a.** Lakes that are ≥ 7 feet with sensitive fish (any fish except ninespine stickleback or Alaska blackfish), water available for withdrawal is limited to 15% of calculated volume deeper than 7 feet; lakes that are between 5 and 7 feet with sensitive fish, water available for withdrawal would be calculated on a case by case basis.
- b.** Lakes that are ≥ 5 feet with only non-sensitive fish (i.e., ninespine stickleback or Alaska blackfish), water available for withdrawal is limited to 30% of calculated volume deeper than 5 feet.
- c.** Any lake with no fish present, regardless of depth, water available for withdrawal is up to 35% as specified within the permit.
- d.** A water-monitoring plan may be required to assess draw down and water quality changes before, during, and after pumping any fishbearing lake or lake of special concern.
- e.** The removal of naturally grounded ice may be authorized from lakes and shallow rivers on a site-specific basis depending upon its size, water volume, and depth, and fish population and species diversification.
- f.** Removed ice aggregate shall be included in the 15% or 30% withdrawal limits—whichever is the appropriate case—unless otherwise approved.
- g.** Any water intake structures in fish bearing or non-fish bearing waters shall be designed, operated, and maintained to prevent fish entrapment, entrainment, or injury. Note: All water withdrawal equipment must be equipped and must utilize fish screening devices approved by the Alaska Department of Natural Resources (ADNR).
- h.** Compaction of snow cover or snow removal from fish-bearing water bodies shall be prohibited except at approved ice road crossings, water pumping stations on lakes, or areas of grounded ice.

The following lease stipulations and ROPs apply to overland moves, seismic work, and any similar cross-country vehicle use of heavy equipment on nonroaded surfaces during the winter season. These restrictions do not apply to the use of such equipment on ice roads after they are constructed.

Winter Overland Moves and Seismic Work:

C-1 Required Operating Procedure

Objective: Protect grizzly bear, polar bear, and marine mammal denning and/or birthing locations.

Requirement/Standard:

- a.** Cross-country use of heavy equipment and seismic activities is prohibited within $\frac{1}{2}$ mile of occupied grizzly bear dens identified by the ADFG unless alternative protective measures are approved by the AO in consultation with the ADFG.
- b.** Cross-country use of heavy equipment and seismic activities is prohibited within 1 mile of known or observed polar bear dens or seal birthing lairs. Operators shall consult with the USFWS and/or NOAA Fisheries, as appropriate, before initiating activities in coastal habitat between October 30 and April 15.

C-2 Required Operating Procedure

Objective: Protect stream banks, minimize compaction of soils, and minimize the breakage, abrasion, compaction, or displacement of vegetation.

Requirement/Standard:

- a. Ground operations shall be allowed only when frost and snow cover are at sufficient depths to protect the tundra. Ground operations shall cease when the spring snowmelt begins (approximately May 5 in the foothills area where elevations reach or exceed 500 feet and approximately May 15 in the northern coastal areas). The exact dates will be determined by the AO.
- b. Only low-ground-pressure vehicles shall be used for on-the-ground activities off ice roads or pads. A list of approved vehicles can be obtained from the AO. Limited use of tractors equipped with wide tracks or “shoes” will be allowed to pull trailers, sleighs or other equipment with approved undercarriage. Note: This provision does not include the use of heavy equipment such as front-end loaders and similar equipment required during ice road construction.
- c. Bulldozing of tundra mat and vegetation, trails, or seismic lines is prohibited; however, on existing trails, seismic lines or camps, clearing of drifted snow is allowed to the extent that the tundra mat is not disturbed.
- d. To reduce the possibility of ruts, vehicles shall avoid using the same trails for multiple trips unless necessitated by serious safety or superseding environmental concern. This provision does not apply to hardened snow trails for use by low-ground-pressure vehicles such as Rolligons.
- e. The location of winter ice roads shall be designed and located to minimize compaction of soils and the breakage, abrasion, compaction, or displacement of vegetation. Offsets may be required to avoid using the same route or track in the subsequent year.
- f. Motorized ground-vehicle use within the CRSA associated with overland moves, seismic work, and any similar use of heavy equipment shall be minimized within the Colville River Raptor, Passerine, and Moose Area from April 15 through August 5, with the exception that use will be minimized in the vicinity of gyrfalcon nests beginning March 15. Such use will remain ½ mile away from known raptor nesting sites, unless authorized by the AO.

C-3 Required Operating Procedure

Objective: Maintain natural spring runoff patterns and fish passage, avoid flooding, prevent streambed sedimentation and scour, protect water quality and protect stream banks.

Requirement/Standard: Crossing of waterway courses shall be made using a low-angle approach. Snow and ice bridges shall be removed, breached, or slotted before spring breakup. Ramps and bridges shall be substantially free of soil and debris. Except at approved crossings, operators are encouraged to travel a minimum of 100 feet from known overwintering fish streams and lakes.

C-4 Required Operating Procedure

Objective: Avoid additional freeze-down of deep-water pools harboring over-wintering fish and invertebrates used by fish.

Requirement/Standard: Travel up and down streambeds is prohibited unless it can be demonstrated that there will be no additional impacts from such travel to over-wintering fish or the invertebrates they rely on. Rivers and streams shall be crossed at shallow riffles from point bar to point bar whenever possible.

Facility Design and Construction:

E-9 Required Operating Procedure

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

Requirement/Standard:

a. Lessee shall utilize best available technology to prevent facilities from providing nesting, denning, or shelter sites for ravens, raptors, and foxes. The lessee shall provide the AO with an annual report on the use of oil and gas facilities by ravens, raptors and foxes as nesting, denning, and shelter sites.

b. Feeding of wildlife is prohibited and will be subject to noncompliance regulations.

E-13 Required Operating Procedure

Objective: Protect cultural and paleontological resources.

Requirement/Standard: Lessees shall conduct a cultural and paleontological resources survey prior to any ground-disturbing activity. Upon finding any potential cultural or paleontological resource, the lessee or their designated representative shall notify the AO and suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the AO.

E-14 Required Operating Procedure

Objective: Ensure the passage of fish at stream crossings.

Requirement/Standard: To ensure that crossings provide for fish passage, all proposed crossing designs shall adhere to the best management practices (BMPs) outlined in "Stream Crossing Design Procedure for Fish Streams on the North Slope Coastal Plain" by McDonald et al. (1994), "Fundamentals of Culvert Design for Passage of Weak-Swimming Fish" by Behlke et al. (1991), and other generally accepted best management procedures prescribed by the AO. To adhere to these BMPs, at least three years of hydrologic and fish data shall be collected by the lessee for any proposed crossing of a stream whose structure is designed to occur, wholly or partially, below the stream's ordinary high water mark. These data shall include, but are not limited to, the range of water levels (highest and lowest) at the location of the planned crossing, and the seasonal distribution and composition of fish populations using the stream.

E-18 Required Operating Procedure

Objective: Avoid and reduce temporary impacts to productivity from disturbance near Steller's and/or spectacled eider nests.

Requirement/Standard: Ground-level activity (by vehicle or on foot) within 200 meters of occupied Steller's and/or spectacled eider nests, from June 1 through August 15, will be restricted to existing thoroughfares, such as pads and roads. Construction of permanent facilities, placement of fill, alteration of habitat, and introduction of high noise levels within 200 meters of occupied Steller's and/or spectacled eider nests will be prohibited. In instances where summer (June 1 through August 15) support/construction activity must occur off existing thoroughfares, USFWS-approved nest surveys must be conducted during mid-June prior to the approval of the activity. Collected data would be used to evaluate whether the action could occur based on employment of a 200m buffer around nests or if the activity would be delayed until after mid-

August once ducklings are mobile and have left the nest site. The BLM will also work with the USFWS to schedule oil spill response training in riverine, marine, and inter-tidal areas that occurs within 200 meters of shore outside sensitive nesting/brood-rearing periods or conduct nest surveys. The protocol and timing of nest surveys for Steller's and/or spectacled eiders will be determined in cooperation with the USFWS, and must be approved by the USFWS. Surveys should be supervised by biologists who have previous experience with Steller's and/or spectacled eider nest surveys.

Use of Aircraft for Permitted Activities:

F-1 Required Operating Procedure

Objective: Minimize the effects of low-flying aircraft on wildlife, traditional 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 ROP is not intended to restrict flights necessary to survey wildlife to gain information necessary to meet the stated objective of the stipulations and ROPs. **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 (AGL) when within ½ mile of cliffs identified as raptor nesting sites from April 15 through August 15 and 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 AGL (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 AO. The AO 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 AGL (except for takeoffs and landings) over the Teshekpuk Lake Caribou Habitat Area (Map 1) 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.

Oil Field Abandonment:

G-1 Lease Stipulation

Objective: Ensure the final disposition of the land meets the current and future needs of the public.

Requirement/Standard: Upon abandonment or expiration of the lease, all oil and gas-related facilities shall be removed and sites rehabilitated to as near the original condition as practicable, subject to the review of the AO. The AO may determine that it is in the best interest of the public

to retain some or all facilities. Within the Goose Molting Area, the AO, when determining if it is in the best interest of the public to retain a facility, will consider the impacts of retention to molting geese and goose molting habitat.

Orientation Programs Associated with Permitted Activities:

I-1 Required Operating Procedure

Objective: Minimize cultural and resource conflicts.

Requirement/Standard: All personnel involved in oil and gas and related activities shall be provided information concerning applicable stipulations, ROPs, standards, and specific types of environmental, social, traditional, and cultural concerns that relate to the region. The lessee/permittee shall ensure that all personnel involved in permitted activities shall attend an orientation program at least once a year.

FF095495
2884.01

Finding of No Significant Impact

Type of Action: National Petroleum Reserve-Alaska Right-of-Way Grant Amendment

Serial Number: FF095495

Environmental Assessment Number: DOI-BLM-LLAK01000-2012-0008-EA

Applicant: U.S. Army Corps of Engineers – Alaska

Address: P.O. Box 6898
JBER, Alaska 99506-0898

District: Arctic Field Office

Planning Unit: **Northeast National Petroleum Reserve-Alaska Supplemental Integrated Activity Plan/Environmental Impact Statement (IAP/EIS) 2008 Colville River Special Area Management Plan (CRSAMP) 2008**

Lands Involved: Umiat 6 - Section 3, Township 1 South, Range 1 West, Umiat Meridian
69.38731°N 152.13252°W
Umiat 7 – Section 10, Township 1 South, Range 1 West, Umiat Meridian
69.37434N -152.10561W (WGS84)

Context and Intensity of Environmental Impacts

Based upon a review of the EA prepared by the Arctic Field Office and the supporting documents, I have determined that the proposed action will not have a significant effect on the quality of the human environment, individually or cumulatively with other actions in the general area. The effects of activities by US Corp of Engineers at Umiat were also analyzed

in a previous EAs, EA AK-023-2004-025 and DOI-BLM-LLAKF010-2011-007-EA. The activities proposed for the current proposed action are sufficiently similar to those analyzed in the 2004 and 2011 EAs.

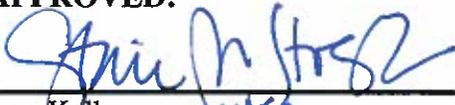
No environmental effects meet the definition of significance as defined at 40 CFR 1508.27. Therefore, an environmental impact statement is not required. We reviewed the context of the proposed action and found that it would not result in any significant effects to resources and values. The mitigation measures and environmental protections would ensure that the Proposed Action would not add significantly to incremental impacts.

The following factors were considered in the EA to evaluate the significance of this proposal (40 CFR 1508.27): Beneficial and adverse impacts; effects on public health and safety; unique cultural or ecological areas within or near the project area; potentially controversial or uncertain effects; whether the action may establish a precedent for future actions with significant effect; cumulative effects; adverse impacts to important scientific, cultural or historical resources; effects to endangered or threatened species or habitat; or whether the action threatens a violation of federal, state, local or tribal law, regulation or policy imposed for the protection of the environment, where non-federal requirements are consistent with federal requirements:

Monitoring and Mitigation

BLM will monitor on the ground activities periodically. Mitigation measures will be implemented as described in the attached authorization stipulations.

APPROVED:


Lon Kelly
Arctic Field Office Manager

3/14/2012
Date