

Environmental Assessment
for ConocoPhillips NE-NPRA 2010-2011 Well Abandonment Program
EA# DOI-BLM-AK-F010-2011-0005-EA

Preparing Office: Arctic Field Office

Project Title/Type of Action: **Well Plugging NPR-A Right of Way (2884.01)**

Serial/Lease/Case File Number: **Serial #FF095760/ AA081854**

Land Use Plans/Acts:

Northeast National Petroleum Reserve-Alaska Supplemental Integrated Activity Plan/Environmental Impact Statement (IAP/EIS) dated July 16, 2008

Applicant: **ConocoPhillips Alaska, Inc.**

Address: **P.O. Box 100360**
Anchorage, Alaska 99510-0360

Date: **February 4, 2011**

Land Description (All Umiat Meridian)

Snow trail to wells

Township	Range	Section		
12 North	2 East	1	No BLM Managed Lands	Kuukpik
12 North	3 East	3-6	No BLM Managed Lands	Kuukpik
12 North	4 East	4-6	No BLM Managed Lands	Kuukpik
13 North	2 East	6,7,33-36	No BLM Managed Lands	Kuukpik
13 North	4 East	25-27, 32-34	No BLM Managed Lands	Kuukpik
13 North	5 East	14,29,30	No BLM Managed Lands	State
13 North	6 East	7-12	No BLM Managed Lands	State
13 North	7 East	7,8,9,16,26	No BLM Managed Lands	State
13 North	8 East	13,23,24,26,27,31- 34	No BLM Managed Lands	State & Private
13 North	9 East	5,7,8,18	Oliktok Dewline,	State & Private
14 North	1 East	17-27, 36		
14 North	2 East	30,31	No BLM Managed Lands	Kuukpik
14 North	1 West	7-9,13-18,24		
14 North	2 West	7,8,11-18		
14 North	3 West	12-15,19-23		
14 North	4 West	5,6, 8, 14-17,21-24		Contains Private Inholding
15 North	4 West	30-32		
15 North	5 West	7,8,14-18, 23-25		
15 North	6 West	3,10,12-15,23		
15 North	8 West	2,3,15-21,29		
15 North	9 West	1,12		
16 North	6 West	19,20,28-34		
16 North	7 West	13-15, 19-24		
16 North	8 West	24-26, 34,35		
16 North	9 West	19-25,36		Contains Private Inholding
16 North	10West	19-24, 29,30		Contains Private Inholding

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Glossary/Acronyms

105C Study- A study conducted in 1977 & 1978 at the direction of the Secretary of the Interior under section 105C of the NPRPA of 1976

AAC.....Alaska Administrative Code

ACEC.....Area of Critical Environmental Concern

ADEC..... Alaska Department of Environmental Compliance

ADFG/ADF&GAlaska Department of Fish and Game

AFO.....Arctic Field Office

AGL.....Above ground level

ANILCA- The Alaska National Interest Lands Conservation Act passed in 1980, modified and established designation of federal lands in Alaska for conservation and wilderness. These lands are managed by the National Park Service, US Fish and Wildlife Service, and US Forest Service.

ADNR..... Alaska Department of Natural Resources

AO..... Authorized Officer

AOGCC.....Alaska Oil and Gas Conservation Commission

BLM.....Bureau of Land Management

Cat Camp- A cat-camp is the equivalent of a camper. It is a small, typically 2 to 4 person self-contained, ski-mounted unit with sleeping quarters, generator and kitchenette.

CFR.....Code of Federal Regulations

CPAI.....ConocoPhillips Alaska, Inc.

CRSA.....Colville River Special Area

EA.....Environmental Assessment

EFH.....Essential Fish Habitat

EIS.....Environmental Impact Statement

EO.....Executive Order

EPA.....Environmental Protection Agency

ESA.....Endangered Species Act

FEX.....FEX L.P. Inc.

FLPMA – The Federal Land Policy And Management Act of 1976 is a Public Law 94-579 passed by Congress October 21, 1976 that gave direction to the way in which the public lands administered by the Bureau of Land Management are managed.

IAP.....Integrated Activity Plan

Injection Well – Term for use of a well for disposal of produced fluids. For this EA the produced fluids are from the P&A of previously drilled wells.

NAD- The North American Datum is the datum used for the geodetic (measurement and representation of the earth) network in North America.

NEPA- National Environmental Policy Act. This law, passed in 1969, went into effect on January 1, 1970. It requires all Federal Agencies to disclose the environmental effects of their actions.

NPRA- National Petroleum Reserve Alaska, formally named The Naval Petroleum Reserve #4(NPR-4) is an area of more than 23 million acres in the northernmost part of Alaska, and was established by executive order on February 27, 1923.

NOAA.....National Oceanic and Atmospheric Administration

NPDESNational Pollutant Discharge Elimination System

NPRPA- The Naval Petroleum Reserves Production Act of 1976 (PL 94-258), dated April 5, 1976, transferred jurisdiction of NPR-4 to the Secretary of the Interior and renamed it the NPR-A. This act authorized the Secretary to begin further petroleum exploration and closed the NPR-A to all forms of appropriation under the public land laws, including mining and mineral leasing laws.

NPR-4- The Naval Petroleum Reserve No. 4 was established by Executive Order 3797, dated February 27, 1923.

P&A- The plugging and abandonment of an oil and gas exploration well.

USFWS (FWS)United States Fish & Wildlife Service

**Environmental Assessment
for ConocoPhillips NE-NPRA 2010-2011 Well Abandonment Program
EA# DOI-BLM-AK-F010-2011-0005-EA**

Chapter 1 Introduction

ConocoPhillips (CPAI) has applied for the plugging and abandonment of the Puviaq #1 well, and a Right of Way (ROW) grant for activity in the National Petroleum Reserve Alaska (NPR-A). CPAI (the Applicant) also has submitted permit applications to Federal and State agencies and the North Slope Borough (NSB).

The well site is located at 70⁰ 42' 5.328" North and 154⁰ 24' 9.72". CPAI has contracted with Solsten XP (formerly Fairweather E&P Services, Inc.) to perform well engineering, well work permits, field operations and logistics. Solsten XP subcontracted Marsh Creek, LLC to provide camp operations. CPAI contracted with ARCADIS to acquire all other required permits. The applications were filed in accordance with the regulations contained in 43 Code of Federal Regulations (CFR) 2800, 3100 and under the authority in the Naval Petroleum Reserve Production Act of 1976 (NPRPA).

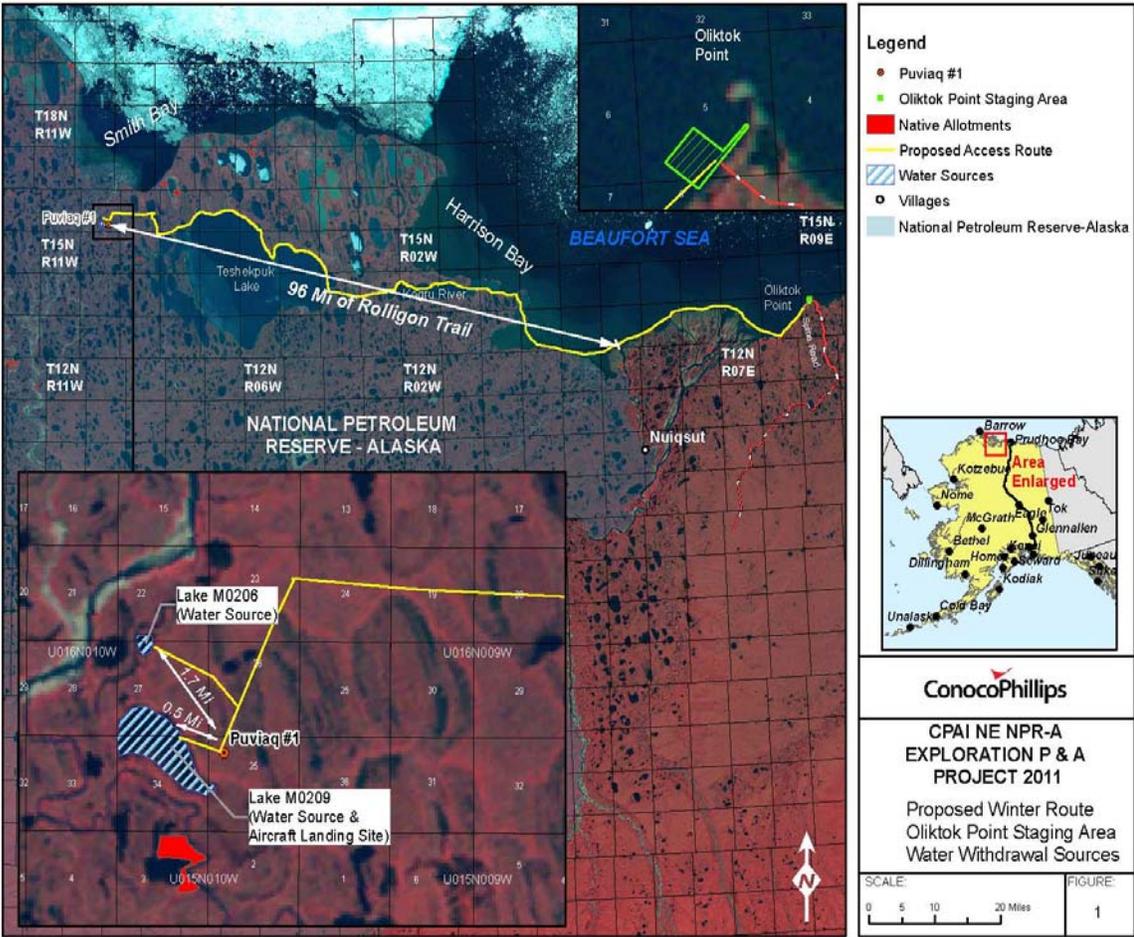


Figure 1: CPAI Application map

1.1 Need for Action

The project is needed to allow CPAI to fulfill the federal requirements of relinquishing their lease sites that have previously had drilling activity. If the proposed action does not proceed federal laws would be violated and site would degrade and there would be a risk for increased environmental pollution.

1.2 Purpose of Action

The specific objectives of this project are to:

- Permanently Plug and Abandon the Puviaq #1 well.
- Transportation of equipment, materials and personnel from North Slope oilfield infrastructure to the work location.
- Interim staging of equipment on the sea ice adjacent to Oliktok Point prior to mobilization onto the tundra.
- Traveling on tundra via use of off-road approved vehicles pulling a Cat Train
- Collecting water from approved water withdrawal sources.
- Class II injection of drilling fluids into Puviaq #1.
- Well Abandonment of Puviaq #1

1.3 Laws, regulations, other EAs that influence this EA

This EA will be based on the findings, management controls, and protective measures of the NE NPR-A Supplemental Integrated Activity Plan/ Environmental Impact Statement (SIAP/EIS) and the 2008 NE NPR-A SIAP/EIS ROD, as well as other laws and regulations. The action, as proposed, is consistent with the objectives outlined in these documents and not in conflict with other resources in the area. The proposed use is in conformance with current policy of the Arctic Field Office, BLM.

The proposed action is in conformance with the NE SIAP/EIS, associated ROD, 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.

1.4 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, 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)). The scope, location, and timing of potential summer monitoring and mitigation are currently undefined, and are subject to future BLM evaluation.

1.5 Scoping and Issues

Public notification of the Environmental analysis was announced in the NEPA register on file at the Arctic Field Office Environmental Assessment web site. Development of the 2008 NE IAP/EIS involved extensive input from other Federal agencies, the State, the NSB, thousands of individuals, and many institutions. A number of permits and approvals are required for oil and gas operations. These are described in the 2008 NE IAP/EIS (Vol. 5, Appendix B), many of which are available for public review prior to agency decision-making. **Table 1.1** summarizes permits and approvals associated with the proposed project.

Table 1.1 Permits and Approvals for Proposed Project in the NPR-A

Federal Authorizations Requirements and Approvals	
Bureau of Land Management	Right-of-Way (ROW) for Tundra Travel Access Reclamation Plan Comprehensive Waste Management Plan Aircraft Use Plan Subsistence Plan Orientation Program Plan Threatened and Endangered Species Determination Essential Fish Habitat Assessment Alaska National Interest Lands Conservation Act (ANILCA) 810 Evaluation and Findings Archaeological and Cultural Resources Clearance
U.S. Fish and Wildlife Service	Concurrence on BLM Threatened and Endangered Species Determination Letter of Authorization – Intentional and Incidental Take Polar Bears
U.S. Environmental Protection Agency	Spill Prevention, Control, and Countermeasures Plan (drilling contractor)
State Authorizations and Approvals	
Alaska Department of Natural Resources	<u>Division of Coastal and Ocean Management</u> Coastal Management Consistency Determination (modification) <u>Division of Mining, Land and Water</u> Temporary Water Use Permits (ice roads and ice pads construction and maintenance, drilling and human use) Land Use Permit Access - renewal
Alaska Department of Fish and Game	Fish Habitat Permits for water extraction/use and stream crossings with fish habitat
Alaska Oil and Gas Conservation Commission	Annular Disposal Approval (optional)
Alaska Department of Environmental Conservation	Temporary Storage of Drilling Wastes Air Quality Minor Source General Permit (MGP-1) Oil Discharge Prevention and Contingency Plan (ODPCP) and Certificate of Financial Responsibility Grey Water Discharge Authorization or Waste Water Disposal Permit
Local Government Authorizations and Approvals	
North Slope Borough	Development Permits (for related elements)

BLM guidelines include a list of issues that are addressed, where applicable, in NEPA assessments, (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 by AFO Field Staff is provided in **Table 1.2**.

Table 1.2 Issues Considered in Evaluating Impacts

Resources/Environmental Considerations for Issues and Analysis	Determination	Basis of Determination (See Note)
ACEC's	Not Present	
Air Quality	Minimally Impacted	Protection provided by: State of Alaska Air Non-Point and Mobile Program and regulations (18 AAC 50); and Permit Stipulations II., VI. A, VI. B, and X.
Cultural and Paleontological Resources	Not Present	
Environmental Justice	Not Present	Protection provided by: EO 12898
Fish	Minimally Impacted	Protection provided by: ROP A-4, A-5, B-1, B-2, C-3, C-4; Project-Specific Stipulations; ADFG Fish Habitat Permits.
Flood Plains/Wetlands and Riparian Zones	Minimally Impacted	Protection provided by Permit Stips/ROPs A-4, A-5, C-2, C-3, EO 11988 and EO 11990.
Invasive, Non-native species	Not Present	
Native American Religious Concerns	Not Present	
Recreation	Minimally Impacted	Protection Provided by Stipulations A-1, A-5, C-3, C-4, E-6, F-1, and I-1.
Socialcultural Systems	Not Present	
Subsistence	Minimally Impacted	Protection provided by: ANILCA
Threatened & Endangered Species Spectacled and Steller's eider	Not Present	Protection provided by section 7 of the Endangered Species Act (J), ROP A-4, A-5, E-9
Threatened & Endangered Species Polar Bear	Minimally Impacted	Letter of Authorization for the Incidental and Intentional Take of polar bears issued under sections 101 (a) (4) (A) (c), 109(h) and 112(c) of the Marine Mammal Protection Act. In accordance with section 7 of the Endangered Species Act of 1973, as amended (ESA), issuance of these LOAs also fulfills the requirements for Tier 2 Consultation of the Programmatic Biological Opinion. ROP A-4 - A-8, C-1, C-2, F-2 and permit specific stipulation #3.
Non threatened and endangered birds	Minimally Impacted	Protection provided by ROP A-2a, A-4 – A-6, E-9, E-10, E-9-b
Non threatened and endangered mammals	Minimally Impacted	Protection provided by Permit Stipulations A-4, A-5, A-6, A-7, A-8, C-1, and F-1.
Vegetation	Minimally Impacted	Protection provided by Permit Stipulations A-4, A-5, A-6, A-7, and C-2.
Visual Resource Management	Minimally Impacted	Protection Provided by Stipulations A-1, A-3, A-4, A-5, A-6, C-2, C-3, C-4, E-6, and F-1.

Table 1.2 Issues Considered in Evaluating Impacts

Resources/Environmental Considerations for Issues and Analysis	Determination	Basis of Determination (See Note)		
Water Resources	Minimally Impacted	Protection provided by Permit Stips/ROPs A-1, A-3,through A-7, B-1, B-2, C-2, C-3, and C-4		
Waste (Hazardous/Solid)	Minimally Impacted	Protection provided by: EPA SPCC Plan and NPDES permit; State of Alaska regulations 18 AAC 30, 60, 62, 63, 72, and 75; and by Stips/ROPs A-1, and A-3 through A-8		
Wild & Scenic Rivers	Not Present			
Wilderness Characteristics & Wild Lands	Potentially Impacted	See Chapters 3 and 4. Protection provided by ROPS A-1, A-4, A-5, A-6, C-1, C-2, C-3, C-4,E-6,E,-10,E-13,and I-1		
<p>Key to Table 1.1:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"> AAC- Alaska Administrative Code ACEC- Area of Critical Environmental Concern ADFG- Alaska Department of Fish and Game ANILCA- Alaska National Interest Lands Conservation Act BLM – Bureau of Land Management EFH – Essential Fish Habitat </td> <td style="width: 50%; border: none;"> EO- Executive Order EPA- Environmental Protection Agency ESA- Endangered Species Act NPDES- National Pollutant Discharge Elimination System ROP- Required Operating Procedure SPCC- Spill Prevention Control and Counter measures </td> </tr> </table> <p>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.</p> <p>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.</p> <p>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.</p>			AAC- Alaska Administrative Code ACEC- Area of Critical Environmental Concern ADFG- Alaska Department of Fish and Game ANILCA- Alaska National Interest Lands Conservation Act BLM – Bureau of Land Management EFH – Essential Fish Habitat	EO- Executive Order EPA- Environmental Protection Agency ESA- Endangered Species Act NPDES- National Pollutant Discharge Elimination System ROP- Required Operating Procedure SPCC- Spill Prevention Control and Counter measures
AAC- Alaska Administrative Code ACEC- Area of Critical Environmental Concern ADFG- Alaska Department of Fish and Game ANILCA- Alaska National Interest Lands Conservation Act BLM – Bureau of Land Management EFH – Essential Fish Habitat	EO- Executive Order EPA- Environmental Protection Agency ESA- Endangered Species Act NPDES- National Pollutant Discharge Elimination System ROP- Required Operating Procedure SPCC- Spill Prevention Control and Counter measures			

Note: Determination tiered from: 2008 NE IAP/EIS; and 2008 NE ROD, and laws and regulations as noted.

In summary, BLM resource specialists have identified the following issue for further evaluation in this EA: Wilderness Characteristics and Wild Lands

1.6 Public Involvement

For this project, the applicant consulted with the North Slope Borough Wildlife and Planning departments on December 16, 2010. They attended and participated in the Subsistence Advisory Panel meeting in Barrow, Alaska in December.

Chapter 2 Alternatives Including the Proposed Action

2.1 Introduction

This chapter both describes the alternatives (potential actions) and compares the alternatives in terms of their environmental impacts (from Section 1.5) and their achievement of objectives (from Section 1.2).

2.2 Description of Alternatives

2.2.1 Alternative A: No Action

Under No Action, CPAI would not plug and abandon the Puviaq #1 Well and not conduct reclamation at the sites. The current situation as described below would continue. The well was drilled in 2003 and currently has an above ground well head that is encased in visqueen to discourage birds from using it as a nesting site. The cover is temporary and would need to either be replaced or repaired as time goes on.

See Chapter III (Affected Environment) of the NE IAP/EIS for a more detailed profile of the current environmental situation at the sites.

2.2.2 Alternative B: Proposed Action

The proposed action as submitted by the applicant is that of construction, operation, maintenance of an NPR-A right-of-way, and reclamation at the Puviaq #1 well site. This project has several aspects including plug and abandonment of the wells and removal of waste. Details are provided in the Applicant's Plan of Operations, submitted to multiple agencies, and on file with the BLM Arctic Field Office. Additional information on winter access can be found in the 2008 NE IAP/EIS (Volume 2, Chapter 4.2).

2.2.2.1 Access and Construction

CPAI has an agreement with FEX LP, Inc. to share resources for winter work. EA# DOI-BLM-LLAK010-2011-0001-EA was completed by the Arctic Field Office for FEX's plugging and abandonment of wells in the NPR-A this winter. CPAI will follow and use the same route as FEX up to the point that they will head south to their well site. This point is located at Section 23, Township 16 North, Range 10 West, Umiat Meridian. After the completion of the FEX program, Solsten XP would follow the designated route to the Puviaq #1 well. At that time preparation for the Puviaq #1 well abandonment would commence.

The proposed ROW from Oliktok Point to the well site reaches BLM managed lands at approximately Atigaru Point. This portion of the proposed trail is approximately 96 miles in length with an additional 2.2 miles of route to lakes. The total ROW mileage is approximately 98.2 miles.

The camp, equipment and materials would be mobilized on trucks using the existing road system from Deadhorse to Oliktok Point. A designated staging area would be established on the sea ice adjacent to Oliktok Point. Fuel would not be stored on location at the staging area.

From the staging area the work site access would be accomplished through the use of off-

road vehicles pulling a Cat Train Camp and skid sleighs with support equipment following the proposed ROW trail. CPAI does not propose to perform any hard packing of snow or ice road or pad construction.

A resupply Cat Camp would travel between Deadhorse and the work sites to provide fuel, ancillary equipment and supplies. The Resupply Cat Camp which would consist of two or more Steigers, two 2,500 bbl fuel tanks and one survival unit sleigh traveling back and forth between Deadhorse and the work site throughout the project.

Air support would augment the resupply Cat Camp for personnel rotations and perishable items. Air support would be called upon as needed however it is expected that aircraft would be operated approximately every 3 to 4 days. There are no runways proposed for the project. Landing areas would be constructed by either clearing a strip on frozen lake ice by scraping snow off the ice or by gently packing a flat spot in the snow. CPAI submitted the required aircraft plan to the BLM.

2.2.2.2 Camp

The actual layout of the well work pad would depend on weather conditions, terrain and any other factors that might dictate arranging equipment around the wellhead. The camp would utilize about a 60 by 250 foot space and be separate from the work pad. There would be no midway camp established on the trail. The proposed equipment is listed below.

Camp & Equipment Transport

2 - Case Steigers (mob/demob)

4 - Case Steigers

1 - Dozer - Cat D07 or similar

1 - Loader - Cat 977 or similar

1 - Tucker Snow Cat

Approx 4 Attaco sleighs or tracked trailers - TBD at Load Out

Note: Additional equipment may be added as needed for mobilization/demobilization and camp moves

Resupply

1 - Case Steiger

1 - Survival Sleigh (2 man)

2 - Fuel tank sleighs (4,800 gal usable)

Note: Additional equipment may be added as needed for resupply

P&A Specific Support Equipment

Excavator 200 EX with frost bucket and teeth

Air Compressor 185 cfm

Triplex Pump

2 Heaters
 4 Light Plants or as needed
 Guzzler Vacuum unit (with Cat Track trailer) 3,000 gal
 Generator 85W
 Boiler Unit (150 gal)
 Batch Mixer (2 tanks @ 35 BBL each)

16-Man Camp

Clinic/Washroom (1 bunk, 1 patient bed)
 Office (2 bunks)
 Wash House
 Storage/Generator
 Shop
 Sleeper (6 bunks)
 Sleeper (6 bunks)
 Diner
 Kitchen
 Storage/Generator
 Incinerator
 Water Maker (3000 gal)
 Fuel Station sleigh 2,500 gal
 4 Fuel tanks sleighs - 2 tanks ea @ 2,500 gal - total per sleigh 5,000 gal (4,800 usable)
 Sleeper (6 bunks) - Mob/Demob Only

2.2.2.3 Schedule

CPAI proposes to start their winter activity after FEX concludes their plug and abandonment activities. The camp and equipment would mobilize to Puviaq #1, set up camp and prepare the site. As soon as this is done, they would begin the well work. Following final well abandonment work and agency inspection of Puviaq #1 the camp and equipment would be demobilized back to Deadhorse. The demobilization would occur prior to tundra travel closure.

2.2.2.4 Water Use

CPAI estimates that their water needs for the proposed action to be 20,000 gallons (Table 2.1). Potable water would be hauled from commercial sources and is not included in this estimate. Water would be withdrawn for P&A activities only. No ice pads are planned for the well site and no ice roads would be constructed.

On December 10, 2010 CPAI applied for new Temporary Water Use Permits (TWUPs) from the Department of Natural Resources (ADNR) for the use of lakes M0206 and M0209 (Table

2.2) for the P&A activities. These lakes were not previously permitted during the exploratory drilling phase. CPAI would coordinate with other permit holders to stay in compliance with total permitted volumes for each water/ice source.

Water quantities, withdrawal pumping velocities, and screening techniques would be implemented in accordance with Alaska Department of Fish and Game (ADF&G) requirements. Compliance with these requirements would be included in the contract with the well work and field operations contractor. A water hauling unit (“water hauler”) would be used to pump and transport lake water. The water hauler is a 3,000 gallon self contained unit with power and heat that is pulled behind a tracked vehicle. The water hauler would be towed to the water source for extraction and removed from the water source when not in operation. No pump houses would be used during water withdrawals.

Table 2.1 CPAI estimated water use requirements.

ACTIVITY	TOTAL GALLONS
Puviaq #1 well abandonment	18,500
Contingency	1,500
TOTAL ESTIMATED GALLONS:	20,000

Table 2.2 CPAI P&A Lake Information

Lake Name	Township Umiat Meridian	Range	Section	Surface Area (acres)	Maximum Depth (feet)	Latitude (N) (NAD83)	Longitude (W) (NAD83)
M0206	16N	10W	22, 27	54.6	19.5	70.71744	154.44455
M0209	16N	10W	27, 34, 35	168.8	10.0	70.70453	154.44969

Lake Name	Sensitive Fish Species Present	Resistant Fish Species Present	Liquid Water Permitted 15% Under 7 ft of Ice (MG)	Liquid Water Permitted 30% Under 5 ft of Ice (MG)	Requesting Additional Ice Chips	ROP B-2 Exception Required
M0206	LC	NS	6.29	1.1	No	No
M0209	--	NS	--	12.21	No	No

Key: MG = million gallons; -- = not estimated or not required; LC = least cisco; NS= ninespine stickleback

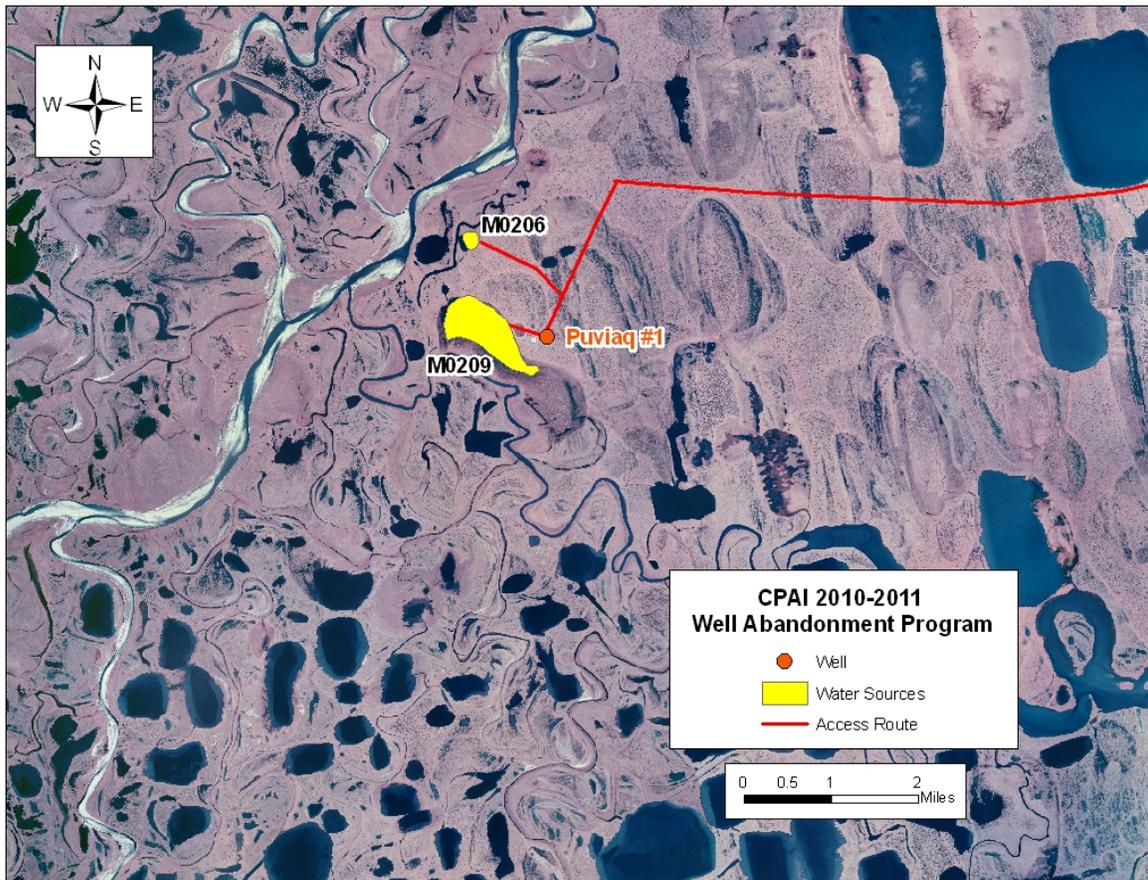


Figure 2 Water Sources Map

NE NPR-A IAP/EIS ROD ROP Clarification

ROP C-4 prohibits travel up and down rivers and streams. It should be clarified that the Kogru River is only a “river” by its placename; in reality its physical form makes it an arm of Harrison Bay. As such, this waterbody is not included as a “river” under the terms of ROP C-4.

2.2.2.5 Fuel use

Fuel would not be stored on lake or river ice. All fuel storage containers would have double wall containment. Fuel storage would consist of the following:

- 1 ea 2,000 gallon fuel station
- 1 ea 3,000 gallon fuel station
- 4 ea 4,800 gallon fuel tanks

Total fuel storage capacity is 24,200 gallons and includes the volume of deliverables during resupply.

2.2.2.6 Waste Management

Wastes will be handled according to the comprehensive waste management plan submitted by the applicant as required by the BLM under ROP A-2, which is summarized below.

Garbage, domestic combustible refuse and putrescible waste would be stored on location in approved containers to prevent wildlife access until being incinerated. Solid, non-burnable waste would be deposited in dumpsters or other approved waste containers and backhauled to a permitted facility.

Waste would be temporarily stored and periodically hauled to existing North Slope facilities for proper treatment and disposal. Used oil would be recycled or packaged in drums and hauled to Deadhorse for disposal in an approved recycle facility. All wastes that require transportation to their ultimate disposal location would be labeled, properly contained and stored on site, and manifested prior to transportation.

Waste drilling fluids would be processed on-site where possible, or transported to an approved facility for injection.

The estimated volume of recovered clean diesel Puviaq #1 is 37 barrels. The diesel would be placed in up to three clearly labeled 2,000 gallon fuel sleighs while P&A activities are carried out at the well. The estimated volume of recovered diesel/brine mixture is 60 barrels. The diesel/brine mixture would be disposed of down the Puviaq #1 annulus. Fuel tanks would be cleaned at the Prudhoe Bay CH2MHill wash bay and returned to project operations.

Brine and cement rinsate would be produced during P&A activities. The estimated volume of waste brine is 82 barrels. This waste stream would be temporarily held in the guzzler vac unit and disposed in the annulus of Puviaq #1.

2.2.2.7 Contingency Plans

AOGCC and ADEC have made the determination that it is unlikely that an accidental release from well plugging could occur and have established the response planning standard (RPS) as zero.

Recognizing that a small release from operations other than well plugging could result in an incidental release to the environment, the CPAI Oil Discharge Prevention and Contingency Plan, North Slope Exploration identifies prevention, reporting, response and clean up procedures to address any accidental release to the environment.

CPAI would have a number of contingency plans in place. These include an Oil Discharge Prevention and Contingency Plan (C-Plan), Comprehensive Waste Management Plan, Aircraft Use Plan, Wildlife Avoidance and Interaction Plan and a Polar Bear Avoidance and Interaction Plan.

2.2.2.8 Well Abandonment

CPAI has the State and Federal Oil and Gas Bonds required for the proposed plugging and abandonment operations. The well abandonment procedures are outlined in CPAI's surface plan of operations submitted to BLM. The proposed activity would not commence until camp operations have been established, personnel are settled in and all equipment and materials required for the job are onsite. The actual plugging procedure is similar to other plugging and abandoning completed on the North Slope. A BLM State Office Energy Branch employee would be present to observe the procedure. Once the well has been cemented shut they propose to use an excavator around the wellhead to a depth of five feet below tundra level. All casing and tubing would be severed at 4 to 5 feet below tundra level once the cement has set. The original guardrail, cellar, wellhead and severed casing/tubing would be removed and transported to Prudhoe Bay. After photographically documenting the condition of the top of the well the marker plate would be welded on top of the well.

CPAI would then back-fill the sites with original soil, topping off with five yards of clean gravel from Prudhoe Bay, mounding it over the well to compensate for settling as soil thaws.

2.2.2.9 Abandonment and Restoration

The objective of the reclamation program is to remove all surface expression of the former facility and return the site as near as possible to its pre-construction condition. Key factors as provided by CPAI are to provide adequate thermal protection during work activities at the site to avoid thermokarsting and help facilitate revegetation through natural processes. CPAI plans to mound clean gravel at the former wellhead to allow for subsidence and to avoid thermo-karsting. The soil in the reclaimed area would be left loose to allow for natural seeding and revegetation. Monitoring and compliance site inspections would occur in the summer months of 2011 and the final reclamation success assessment would occur in the summer of 2012.

Chapter 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, with some site-specific features described below.

Based on the proposed project and the issues analysis in Section 1.5, the following discussion of the affected environment covers Wilderness Characteristics and Wild Lands.

3.1 Wilderness Characteristics and Wild Lands

The NPR-A was evaluated for wilderness characteristics in Section 105(c) studies during 1977 and 1978. Although activities such as oil and gas leasing, subsistence practices, overland moves, excavation, recreation, aircraft use, site clean-ups, and scientific research or

monitoring continue in NPR-A, most of the area remains in a natural state as it was during that study. Residents of the area do occupy seasonal dwellings or fish camps and people travel extensively by motorized vehicle over parts of NPR-A, but there are no roads outside the established communities. The overall character of NPR-A (excluding private lands) remains natural, and there are relatively few obvious signs of modern human influence or presence. A visitor to the area or an inhabitant from the settlements in or near the NPR-A can easily find opportunities for solitude (USDOJ, BLM, 1978). Some areas within NPR-A contain excellent ecological, geological, scientific, educational, scenic, and historical values.

Chapter 4 Environmental Impacts

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 (NE NPR-A SIAP/EIS 2008), 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

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 RODs. Related discussions of impacts are found in 2008 NE NPR-A IAP/EIS, Vol. 2, Chapter 4.6 (Environmental Consequences of Alternative D, the preferred alternative).

Issues specifically identified in Section 1.5 for further analysis in this EA are discussed below.

4.1.1 Wilderness Characteristics and Wild Lands

Activities associated with the proposed action, including use of temporary structures, vehicles (e.g., Rolligons or low pressure ground vehicles), noise from generators, aircraft, human presence, and associated activity all would have some minimal short-term impact on solitude, or naturalness. These adverse, short-term impacts would be confined primarily to the activity sites (travel routes, camps, etc.) and view shed (i.e., approximately ½ mile in any direction from the sites).

A longer lasting impact from overland moves could occur from "green trails." In addition to the short-term impacts that would result from overland moves a seasonal visual concern could result from greening of vegetation from travel routes. This greening of the vegetation does not necessarily develop wherever ice pads are constructed or snow is compacted but when it does, it can be detectable from the air for 2 to 5 years.

The impacts from the proposed action would have minor to negligible impacts, within a relatively small area. Activities such as winter overland moves and transport of materials have occurred for decades in NPR-A, and are considered as typical winter activities

consistent with the current management of these lands. Also typical is the activity of plugging and abandonment of oil and gas exploration wells. These types of activities are consistent with the current laws and regulations, in particular the Naval Petroleum Reserves Production Act of 1976 (NPRPA). Measures to protect the characteristics of these lands, including ROPS A-1, A-4, A-5, A-6, C-1, C-2, C-3, C-4, E-6, E-10, E-13, and I-1 are described in Section 4.3 Mitigation and Monitoring.

4.1.1.1 No Action Alternative

Under the No Action Alternative the ROW for overland travel and the injection well would not be granted and the plugging and abandonment of the proposed wells by the proponent would not be allowed. Left in the current state there could be a future long term risk of degradation to wilderness characteristics or wild lands if there were to be leakage of oil or contaminants into the environment. Aircraft use would increase, and there could be higher noise levels in areas near the landing fields. Such impacts would be short term and localized.

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. Additional past, present, and future activities in the area include 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 cumulative effects of these and activities associated with oil and gas were analyzed in the 2008 NE NPR-A IAP/EIS and are incorporated by reference in this EA.

Prior to CPAIs winter proposed work, FEX applied and BLM completed an EA and authorized their plugging and abandonment work this winter. The routes would be the same up until the point of CPAIs well. The FEX route would travel on past to their sites which are approximately 30 miles past the Puviaq site.

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. 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.

4.2.1 Wilderness Characteristics and Wild Lands

Impacts from temporary trails and disturbance from noise and other activities would be short term, localized, and not accumulate.

4.3 MITIGATION AND MONITORING

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

The BLM will incorporate the following additional mitigation measures into approval for the CPAI authorizations. CPAI shall:

1. The applicant will file an application to the Arctic Field Office for the summer work required for this project as soon as the information of what work is to be conducted becomes available. The summer work will be authorized separately.
2. The applicant will file weekly progress reports to the Arctic Field Office detailing their surface use of public lands. These reports may be e-mailed to: Donna_Wixon@ak.blm.gov, or faxed to 907-474-2386.
3. The applicant shall follow the 13 stipulations contained in the attached document entitled "Polar Bear Stipulations for Winter Authorizations in NPR-A".

The following five permit stipulations implement practices that will help reduce the likelihood of impacts to fish habitat and water resources (adapted from Noel et al. 2008).

CPAI shall:

- 1.) Provide the BLM with an as-built of all snow roads and camp locations at the time the infrastructure is completed. Data should be in the form of ESRI shapefile(s) referencing the North American Datum of 1983 (NAD83) with a defined projection and supplementary metadata (text or .xml file).
- 2.) Post a sign on the access road to each lake being utilized as a water source, clearly identifying the lake by its number.
- 3.) For each lake utilized as a water source, maintain a daily record of water removed. Provide the BLM with this daily tracking record in conjunction with the weekly progress report. The BLM will provide CPAI with a formatted spreadsheet that must be used for the reporting.
- 4.) Notify the BLM within 24 hours if water removal exceeds the volume approved at any lake.
- 5.) Notify the BLM within 24 hours of any observation of dead or injured fish on intake screens or in the hole being used for pumping. Temporarily cease pumping from that hole until discussions with the BLM or ADF&G Division of Habitat result in the application of additional preventative measures to avoid further impacts to fish.

4.4 SUMMARY OF ENVIRONMENTAL CONSEQUENCES

The potential issue that was identified in the evaluation of the proposed action for this EA was Wilderness Characteristics and Wild Lands. The analysis found that impacts would be short term and localized and that mitigation measures in Appendix A would adequately reduce any adverse effects to identified issues in the area. Likewise, the analysis also found that mitigation measures would adequately reduce any adverse effects to Wilderness Characteristics and Wild Lands, which would also be short term and localized. The proposed

action would not contribute to significant cumulative effects to Wilderness Characteristics and Wild Lands in the proposed project areas

Chapter 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. The applicant consulted with the North Slope Borough Wildlife and Planning departments on December 16, 2010. They attended and participated in the Subsistence Advisory Panel meeting in Barrow, Alaska in December.

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
Roger Sayre, NEPA Specialist

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 this case file).

Bibliography

Alaska Department of Fish and Game (ADFG). 2010. Fish distribution database (reviewed 2/02/2011). Alaska Department of Fish and Game, Division of Sport Fish. Worldwide web address: <http://www.sf.adfg.state.ak.us/SARR/FishDistrib/anadcat.cfm>.

Noel, L.E., L.L. Moulton, M.S. Whitman, and L. Bontrager. 2008. NPR-A Fisheries Monitoring Implementation Plan. Prepared by ENTRIX for U.S. Department of the Interior, Bureau of Land Management, Arctic Field Office, Fairbanks, AK.
USDOI. Northeast National Petroleum Reserve-Alaska Supplemental Integrated Activity Plan/Environmental Assessment. July 2008.

APPENDIX A: BLM Arctic Field Office Right of Way

Stipulations/Required Operating Procedures ConocoPhillips Alaska, Inc. Oil & Gas Exploration Well Plugging & Abandonment Stipulations Winter 2011

Project Specific Stipulations:

1. The applicant will file an application to the Arctic Field Office for the summer work required for this project as soon as the information of what work is to be conducted becomes available. The summer work will be authorized separately.
2. The applicant will file weekly progress reports to the Arctic Field Office detailing their surface use of public lands. These reports may be e-mailed to: Donna_Wixon@ak.blm.gov, or faxed to 907-474-2386.
3. The applicant shall follow the 13 stipulations contained in the attached document entitled "Polar Bear Stipulations for Winter Authorizations in NPR-A".

The following five permit stipulations implement practices that will help reduce the likelihood of impacts to fish habitat and water resources (adapted from Noel et al. 2008). CPAI shall:

- 1.) Provide the BLM with an as-built of all snow roads and camp locations at the time the infrastructure is completed. Data should be in the form of ESRI shapefile(s) referencing the North American Datum of 1983 (NAD83) with a defined projection and supplementary metadata (text or .xml file).
- 2.) Post a sign on the access road to each lake being utilized as a water source, clearly identifying the lake by its number.
- 3.) For each lake utilized as a water source, maintain a daily record of water removed. Provide the BLM with this daily tracking record in conjunction with the weekly progress report. The BLM will provide CPAI with a formatted spreadsheet that must be used for the reporting.
- 4.) Notify the BLM within 24 hours if water removal exceeds the volume approved at any lake.
- 5.) Notify the BLM within 24 hours of any observation of dead or injured fish on intake screens or in the hole being used for pumping. Temporarily cease pumping from that hole until discussions with the BLM or ADF&G Division of Habitat result in the application of additional preventative measures to avoid further impacts to fish.

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-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 ½ 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.

ROP Clarification C-4

ROP C-4 prohibits travel up and down rivers and streams. It should be clarified that the Kogru River is only a “river” by its placename; in reality its physical form makes it an arm of Harrison Bay. As such, this waterbody is not included as a “river” under the terms of ROP C-4.

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-6 Required Operating Procedure

Objective: Reduce the potential for ice-jam flooding, impacts to wetlands and floodplains, erosion, alteration of natural drainage patterns, and restriction of fish passage.

Requirement/Standard: Stream and marsh crossings shall be designed and constructed to ensure free passage of fish, reduce erosion, maintain natural drainage, and minimize adverse effects to natural stream flow. Note: Bridges, rather than culverts, are the preferred method for crossing rivers. When necessary, culverts can be constructed on smaller streams, if they are large enough to avoid restricting fish passage or adversely affecting natural stream flow.

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-10 Required Operating Procedure

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.

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-15 Required Operating Procedure

Objective: Prevent or minimize the loss of nesting habitat for cliff nesting raptors.

Requirement/Standard:

- a. Removal of greater than 100 cubic yards of sand and/or gravel from cliffs shall be prohibited.
- b. Any extraction of sand and/or gravel from an active river or stream channel shall be prohibited unless preceded by a hydrological study that indicates no potential impact by the action to the integrity of the river bluffs.

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 are defined by the AO for the winter of 2010-2011 as all of the NPR-A. The AO has consulted directly with the Alaska Department of Fish and Game in defining this caribou winter range.
- c. Land user shall submit an aircraft use plan as part of an oil and gas exploration or development proposal. **The plan shall address strategies to minimize impacts to**

subsistence hunting and associated activities, including but not limited to the number of flights, type of aircraft, and flight altitudes and routes, and shall also include a plan to monitor flights. Proposed aircraft use plans should be reviewed by appropriate Federal, state, and Borough agencies. Consultations with these same agencies will be required if unacceptable disturbance is identified by subsistence users. Adjustments, including possible suspension of all flights, may be required by the AO if resulting disturbance is determined to be unacceptable. The number of takeoffs and landings to support oil and gas operations with necessary materials and supplies should be limited to the maximum extent possible. During the design of proposed oil and gas facilities, larger landing strips and storage areas should be considered so as to allow larger aircraft to be employed, resulting in fewer flights to the facility.

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.

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. **The proposed orientation program shall be submitted to the AO for review and approval and should:**

a. provide sufficient detail to notify personnel of applicable stipulations and ROPs as well as inform individuals working on the project of specific types of environmental, social, traditional and cultural concerns that relate to the region.

b. Address the importance of not disturbing archaeological and biological resources and habitats, including endangered species, fisheries, bird colonies, and marine mammals, and provide guidance on how to avoid disturbance.

c. Include guidance on the preparation, production, and distribution of information cards on endangered and/or threatened species.

d. Be designed to increase sensitivity and understanding of personnel to community values, customs, and lifestyles in areas in which personnel will be operating.

e. Include information concerning avoidance of conflicts with subsistence, commercial fishing activities, and pertinent mitigation.

f. Include information for aircraft personnel concerning subsistence activities and areas/seasons that are particularly sensitive to disturbance by low-flying aircraft. Of special

concern is aircraft use near traditional subsistence cabins and campsites, flights during spring goose hunting and fall caribou and moose hunting seasons, and flights near North Slope communities.

- g.** Provide that individual training is transferable from one facility to another except for elements of the training specific to a particular site.
- h.** Include on-site records of all personnel who attend the program for so long as the site is active, though not to exceed the 5 most recent years of operations. This record shall include the name and dates(s) of attendance of each attendee.
- i.** Include a module discussing bear interaction plans to minimize conflicts between bears and humans.
- j.** Provide a copy of 43 CFR 3163 regarding Non-Compliance Assessment and Penalties to on-site personnel.
- k.** Include training designed to ensure strict compliance with local and corporate drug and alcohol policies. This training should be offered to the NSB Health Department for review and comment.
- l.** Include training developed to train employees on how to prevent transmission of communicable diseases, including sexually transmitted diseases, to the local communities. This training should be offered to the NSB Health Department for review and comment.

FF095760/AA081854

2884.01/3132.00

Finding of No Significant Impact

Type of Action: Well Plugging/Abandonment, NPR-A Right of Way

Serial Number: FF095631, AA081854

Environmental Assessment Number: DOI-BLM-AK-F010-2011-0005-EA

Applicant: ConocoPhillips Alaska, Inc.

Address: P.O. Box 100360
Anchorage, Alaska 99510-0360

District: Arctic Field Office

Planning Unit: Northeast National Petroleum Reserve in Alaska (NPR-A) Supplemental Integrated Activity Plan/Environmental Impact Statement (IAP/EIS) dated 2008

Lands Involved: The lands are described as proposed well plugging and abandonment (P&A) location within lease tract with access routes. The legal description can be found in the referenced case files. The plugging and abandonment site is in the following location:

Section 35, Township 16 North, Range 10 West, Umiat Meridian
Latitude 70⁰ 42' 5.328 North and Longitude 154⁰ 24' 9.72 West

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. 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 in NPR-A. The mitigation measures and environmental protections would ensure that the Proposed Action would not add significantly to adverse direct, indirect, or cumulative environmental impacts.

The need for this project is to allow CPAI to fulfill the federal requirements of plugging and abandonment of the Puviaq #1 Well that has previously had drilling activity.

The following factors were considered in the EA to evaluate the significance 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:

/s/Lon Kelly
Arctic Field Office Manager

February 4, 2011

Date