

# United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
Arctic Field Office  
1150 University Avenue  
Fairbanks, Alaska 99709-3844  
<http://www.blm.gov/ak>

In reply refer to:  
FF093215  
2890.07 (AK012)

## PLAN CONFORMANCE / NEPA COMPLIANCE RECORD

DOI-BLM-LLAKF012-2011-0008-CX

### A. Background

**BLM Office:** Arctic Field Office, Bureau of Land Management

**Case File No.:** FF093215

**Applicant:** United States Department of Energy  
Climate and Environmental Sciences Division

**Address:** 1000 Independence Avenue  
SW – SC-23.3 G-139/GTN  
Washington, D.C. 20585

**Authorized Agent:** Argonne National Laboratory  
Computing, Environment, and Life Sciences Division  
9700 South Case Avenue  
Argonne, IL 60439

**Proposed Action Title/Type:** Right of Way Renewal.

**Location of Proposed Action:** Barrow

**Description of Proposed Action:** The applicant, United States Department of Energy (USDOE) has requested to renew their current Bureau of Land Management (BLM) right-of-way (ROW) grant at Barrow Alaska, for a period of 20 years.

The North Slope of Alaska (NSA) site is providing data about cloud and radiative processes at high latitudes. Centered at Barrow and extending to the south (to the vicinity of Atqasuk), west (to the vicinity of Wainwright), and east (towards Oliktok), the NSA site has become a focal point for atmospheric and ecological research activity on the North Slope. The principal instrumented facility was installed near Barrow in 1997, followed by a smaller remote site in Atqasuk in 1999, which operated through 2010.

High latitude data are being used to refine models and parameterizations as they relate to the Arctic and are receiving increasing attention as the interactions of the atmosphere-ocean climate system become better understood.

The USDOE, Climate and Environmental Sciences Division, funds scientific user facilities that provide the broad scientific community with climate-related atmospheric and geophysical data essential to current scientific research in global climate change. The primary goal of the Atmospheric Radiation Measurement (ARM) Program is to refine the treatment of cloud and radiation physics in global climate models, and to improve the climate simulation capabilities of these models. ARM's scientists research issues that span remote sensing, physical process investigation, and modeling on all scales. ARM's site operators focus on obtaining continuous field measurements and providing data products to promote the advancement of climate models.

The DOE ARM has a Memorandum of Participation (MOP) with the National Oceanographic & Atmospheric Administration (NOAA) and the United States Geological Survey (USGS) for operation of a DOE ARM Site at Barrow. The USGS and NOAA have provided BLM with non-objection letters for the renewal of the DOE ROW.

Typically there are 2 people working on the site, 5 days per week, with short visits on weekends for balloon launches. Once or twice per year, the timeframe which varies greatly, they host a field experiment during which larger teams, typically 4 to 8 scientists, are on site for 1 to 6 weeks.

The researchers would occasionally use a few common solvents in small quantities, less than 1 liter. Small quantities of items such as lubricants, paints, and general cleaners, would be used at times. Some items such as commercial cleaners and spray paints would also occasionally be used. Ethyl alcohol would be used for cleaning optics with several quarts on location at a time. WD40, oil and grease may be used for the normal maintenance of items. All activities involving chemical use and storage would be performed in keeping with Environmental Hazards and Controls (ESH) procedures.

Gasoline, both pre-mixed for 2-stroke engines, and regular gasoline, would continue to be kept in the maintenance building in small quantities to refuel all-terrain vehicles and snow machines that are required on occasion for site access. Secondary containment would be used for the storage of the pre-mixed and regular gasoline. Small amounts of solid waste may be created during installation or upgrades of the listed instruments and facilities. Scrap waste could include wire, metal, and lumber. Used electrical and road material could also be generated. The applicant would dispose of the waste in accordance with the existing plan for solid waste disposal, and in accordance with guidelines from Environmental compliance Coordinators, and local North Slope authorities.

Use of aircraft is not associated with the proposed action.

Typical equipment on site is as follows:

- Remote Balloon Launcher
  - with deck and conex
- RASS (Radio Acoustic Sounding Systems) deck
  - 2 (8' x 20') conexes
  - Scanning cloud radar with two radomes

AERI (Atmospheric Emitted Radiance Interferometer)  
HSRL (High Spectral Resolution Lidar)  
22'x 22' RASS deck  
User Facility  
16" x 16' deck below  
20x 16" upper deck  
Two ARCs (Atmospheric Radiation Cloud) containers  
Great White Shelter 8' x 43'  
Sky deck 20' x 20'  
Tip Tower 10m  
Strobe controls, power  
Met enclosures  
3 Antennas - 20 feet tall  
Meteorological Tower 40m

For a full description of the site see the following website:  
<http://www.arm.gov/sites/nsa/C1/instruments>

## **B. Land Use Plan Conformance**

Land Use Plan Name: The area is covered under the Northwest National Petroleum Reserve-Alaska (NW NPR-A) Integrated Activity Plan/Environmental Impact Statement and the Northeast National Petroleum Reserve-Alaska Supplemental Integrated Activity Plan/Environmental Impact Statement (IAP/EIS).

Date Approved: 2004 and 2008

The proposed action is in conformance with the applicable IAP/EISs, because it is specifically provided for in the following IAP/EIS decision: NW NPR-A IAP/EIS and NE SIAP/EIS Record of Decisions.

## **C. Compliance with NEPA:**

The proposed action is categorically excluded from further documentation under the National Environmental Policy Act (NEPA) in accordance with 516 DM 11.9; this proposed action qualifies as a BLM Categorical Exclusion E.9. Realty (BLM H-1790-1),

**“Renewals and assignments of leases, permits, or rights-of-way where no additional rights are conveyed beyond those granted by the original authorizations”.**

This categorical exclusion is appropriate in this situation because there are no extraordinary circumstances potentially having effects that may significantly affect the environment. The proposed action has been reviewed, and none of the extraordinary circumstances described in 516 DM2 apply. The proposed action will not meet any of the extraordinary circumstances listed below.

<b>Extraordinary Circumstances</b>	<b>Yes</b>	<b>No</b>
2.1 Have significant impacts on public health or safety.		<b>X</b>
2.2 Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation or refuge lands; wilderness areas; wild lands; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds; and other ecologically significant or critical areas.		<b>X</b>
2.3 Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA Section 102(2) (E)].		<b>X</b>
2.4 Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.		<b>X</b>
2.5 Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects.		<b>X</b>
2.6 Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects.		<b>X</b>
2.7 Have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by either the bureau or office.		<b>X</b>
2.8 Have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species.		<b>X</b>
2.9 Violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment.		<b>X</b>
2.10 Have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898).		<b>X</b>
2.11 Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007).		<b>X</b>
2.12 Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112).		<b>X</b>

