



December 21, 2021

Ms. Diana Biesanz  
Regional Realty Officer  
U.S. Fish & Wildlife Service  
1011 East Tudor Road  
Anchorage, Alaska 99503-6199

RE: 9184/JK – Arctic ROW Permit R-353-AR

Dear Ms. Biesanz,

Kaktovik Inupiat Corporation (KIC) is providing the below responses to your request of additional information to the above referenced Arctic ROW Permit R353-AR. We trust that the responses adequately address your request. In our response we are listing your request first and our response second in *italics* in the order they are listed in your letter dated 10.01.2021 in your signature block. Again, if you have any questions or require additional information about this response to your questions related to our application for Arctic ROW Permit R353-AR please do not hesitate to contact me or Teresa Imm at

Respectfully,

Matthew Rexford - Vice President  
Kaktovik Inupiat Corporation

ATTACHEMENT

Cc: Brian Glaspell –  
Steve Berendzen –  
Jacqueline Keeler –  
Lor Socheata –

KIC RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION Right-of-Way (ROW) Permit Application  
Number R-353-AR

ADDITIONAL/CLARIFYING INFORMATION FOR R-353-AR

1. Box 7 – Project Description – A, B, C, D, E, F, G and H

- Type of use or occupancy
  - R-353-AR lists winter overland snow, rolligon trail, or other best available future technology. Please further define the anticipated use of the proposed route. For example, moving permanent school materials for Kaktovik, other building module transport, movement of community vehicles; movement of diesel fuel for school and community power station; and other consumables. This will aid our analysis of the nature of and need for the access and the associated environmental impacts of that access.
  - ***RESPONSE -There is an element of Environmental Justice in this Right-of-Way (ROW) application; it seeks to provide access to the community of Kaktovik, which has been isolated by the federal lands within the Arctic National Wildlife Refuge (ANWR). The 1980 Alaska National Interest Lands Conservation Act (ANILCA) Section 1110(b) states “Notwithstanding any other provisions of this Act or other law, in any case in which State owned or privately owned land, including subsurface rights of such owners underlying public lands, or a valid mining claim or other valid occupancy is within or is effectively surrounded by one or more conservation system units, national recreation areas, national conservation areas, or those public lands designated as wilderness study, the State or private owner or occupier shall be given by the Secretary such rights as may be necessary to assure adequate and feasible access for economic and other purposes to the concerned land by such State or private owner or occupier and their successors in interest. Such rights shall be subject to reasonable regulations issued by the Secretary to protect the natural and other values of such lands. Our interpretation is that this section provides KIC, as the in-holder of lands within the expanded refuge, a guarantee of access across refuge lands to provide “the in-holder such rights as may be necessary to assure adequate and feasible access for economic and other purposes”. For KIC as the in-holding landowner we want to be clear that our application for our ROW is not just for use by the North Slope Borough, although transporting the new school is a major focus for our community, it is to also provide for other economic opportunities for KIC as a business and to allow the Kaktovikmiut residents to enjoy transportation rights commonly enjoyed by the rest to the United States. KIC anticipates that the ROW will be utilized for the following:***
    - 1. To establish an alternative to air freight and seasonal barge hauling to satisfy community supply needs, including building materials and other supplies.***
    - 2. To allow for KIC business development opportunities for its economic benefit to the corporation and its shareholders.***

3. *Movement of permanent school buildings necessary to rebuild the Harold Kaveolook School that burned down in February 2020.*
  4. *Establish the viability of seasonal overland transportation access for Kaktovik, Alaska, a community that is geographically isolated by federal and state land ownership.*
  5. *Support local and regional community economic development opportunities in Alaska Native communities including personal vehicle use and freight hauling.*
  6. *Identify preferred routing for a permanent transportation corridor and potential material sites for construction.*
- If anticipated, please identify any other form of transport that may be utilized including other low-ground pressure vehicles that may be utilized.
  - **RESPONSE – Other than rolligons identified in our original ROW application other types of low-ground pressure vehicles that may be used for transportation across the ROW are:**
    1. *Ford F-350 w/Matt Tracks*
    2. *Tucker Sno-Cat(s) – 1.38 psi*
    3. *Piston Bully(s) - 0.81 psi*
    4. *Steiger Tractor(s) – 6.37 psi*
    5. *Foremost Delta 3(s) – 4.7 psi*
    6. *Marcep Trailer(s) – similar psi to a rolligon*
    7. *500-gallon fuel tank on sled – 9.37 psi*
    8. *Sleigh camp (for safety) – 4.7 psi*
  - Per R-353-AR, one rolligon will have extra double-walled fuel storage of 400 gallons. Please verify the rolligon will contain sufficient fuel for the entire route. If refueling is required, please describe how refueling would be accomplished. Please provide additional information regarding the use of CONNEXs. If this use is anticipated, please verify whether rolligons will pull them, their expected ground PSI, and where/how refueling may occur if needed.
  - **RESPONSE – the volume of fuel identified in the original ROW application is sufficient for transport from a staging area at Point Thomson to Kaktovik. No fueling is anticipated to occur over the ROW between Point Thomson to Kaktovik except if the event of an emergency due to winter weather and storms where the caravan may have to remain stationary for a period of time. As identified in the above list of additional types of equipment that may be used over the ROW. CONNEX'S are safety for personnel shelter in the event of a storm where the caravan may have to remain stationary for a period of time, they will most likely be pulled by a Steiger. Other CONNEX'S that may be transported to the community for buildings will be transported as cargo on a Rolligon, Marcep or Foremost Delta 3.**
  - Related Structures
    - No additional information needed.

- Physical Specifications
  - Please verify whether the proposed width of the ROW is sufficient to include all construction, operation, and maintenance activities.
  - **RESPONSE – Construction of the overland snow road to Kaktovik along the ROW will utilize the same standards for snow packing currently used by the North Slope Borough for construction of the Community Winter Access Trails across the National Petroleum Reserve – Alaska (NPR-A). The NPR-A CWAT ROWs are permitted and approved for a width of 200 feet to allow for movement of the trail year-to-year to mitigate impact to the tundra, turn arounds, and two-way vehicular movement. On an annual basis the NPR-A trails are built to a width of 30 feet to allow for 2-way movement of vehicles and turn-arounds. KIC would like to amend its original ROW application to increase the width of the ROW to 200 feet to match the NPR-A ROWs. There has not been winter access trail to Kaktovik for several decades and KIC would like flexibility with respect to the ROW width to allow for changes of the trail within the ROW.**
- Term of days/years needed
  - No additional information needed. Service regulations do not allow ROW permits with a perpetual term but do allow for 20-year permits with opportunities for renewal.
  - **RESPONSE – KIC respectively requests to amend our ROW application from a perpetual ROW to a 20-year ROW with the opportunity for renewal.**
- Time of year of use or operation
  - No additional information needed.
- Volume or amount of product to be transported
  - Please describe volume of trips traveled per day, week, and/or month as well as weight/gallons of product for proposed cross-tundra winter travel. For example: permanent school modules for Kaktovik; other building module transport; movement of community vehicles; movement of diesel fuel for school and community power station; other consumables. Please define any additional products along with estimated quantities.
  - **RESPONSE – We are unable to provide the above requested information at this time. The North Slope Borough is still in working through its design and procurement for the Harold Kaveolook school replacement. KIC is requesting this ROW ahead the actual need to transport the school. There may be a need for a proof-of-concept trail to transport pre-construction materials for the school prior to actual movement of the school components. Once we have the requesting information, we will provide it to the agency. Over the period of the 20-year ROW approval KIC will address changes in contractors and types of winter use within the ROW.**
  - Please provide a copy of the CWAT best practices documents.

- **RESPONSE** – *Please find attached the current NSB Traveler Safety and Environment Plan for the Community Winter Access Trail (CWAT) Project revised February 2018. This document provides information for the CWATs to Utqiagvik, Atkasuk, Wainwright, and Anaktuvuk Pass. We anticipate that the winter access snow road to Kaktovik will use similar practices. This document provides for the NSB best practices, should KIC enter into an agreement with another party for use of its ROW it will ensure that party follow the NSB best practices for construction, mitigations of winter access to KIC lands across refuge lands.*
- Please explain what pre-scouting will entail, including time of year, type, and number of personnel/vehicle/equipment used.
- **RESPONSE** – *Pre-scouting will be done by 4 to 5 local residents on snow machines to identify snow cover over the transit distance for the ROW. This will be done in between mid-December to mid-January. The scouting team will document snow cover and record the proposed annual route and their travel through GPS.*
- Please explain what “pioneering” entails. Verify if any construction is necessary for the trail (e.g., hardening, clearing, etc.).
- **RESPONSE** – *Pioneering of the route will occur in January through early February timeframe where the contractor will undertake pre-packing of snow, snow fence setting, and initial trail marking using Carsonite markers and GPS coordinates. This is typically conducted using two to four Steigers or Piston Bullies. Estimated timeframe required to pioneer the trail from Point Thomson to Kaktovik is expected to take from five to ten days depending on weather and snow depth. Since there has been no overland transport to Kaktovik for several decades the first couple of years of trail location and establishment may take longer. The trail to the community will not be an ice road therefore there is no hardening of the trail. The trail will be made of packed snow. There may be times when snow may have to be moved from deeper snow areas to low snow depth areas for localized trail maintenance, but it is not expected that large volumes would be moved as part of the operation.*
- Please verify how the trail will be marked and/or surveyed.
- **RESPONSE** – *the trail will be marked with Carsonite markers and GPS coordinates. The snow road will be ‘cut’ at the end of the season to prohibit any late season vehicular movement at the end of the community winter haul. All Carsonite markers will be removed on the last return from Kaktovik to Point Thomson. A summer survey over the ROW via helicopter will be conducted to pick up any debris remaining following the winter season.*
- Please verify if the location of the trail will change annually.
- **RESPONSE** – *At this time we are anticipate that the winter trail will have the same routing year-to-year but after the first-year operation there may need to be adjustments to the trail that may be requested by KIC, the NSB,*

*or your agency. KIC is requested a certain level of flexibility within the proposed 200-foot ROW to allow for changes in conditions and to mitigate any potential impacts to the tundra. The primary goal for the ROW is to allow for meaningful, lower cost alternative barge and air freight to Kaktovik through the winter access trail.*

- Duration and timing of construction
  - No additional information needed.
- Temporary work areas needed for activity/construction
  - No additional information needed.

2. Box 8 – Map

- In order to properly evaluate impacts to the proposed ROW area, please provide a more detailed description. Please provide both a KMZ file and a Shapefile (with metadata) of the proposed route.
- ***RESPONSE – Please find attached files of the ROW. Please let us know if you require more detailed maps of the proposed ROW.***

3. Box 12 – Requests a statement of technical and financial capability to construct, operate, maintain, and terminate system for which authorization is being requested.

- A letter from the Office of the Mayor of the North Slope Borough (NSB) was provided as Attachment #4. While Attachment #4 provides notification of support from NSB, it does not provide a statement of technical and financial capability to construct, operate, maintain, and terminate the overland trail. Please provide a statement of technical and financial capability in response to Box 12.
- ***RESPONSE – Please refer to attachment NSB Traveler Safety and Environment Plan for the Community Winter Access Trail (CWAT) Project revised February 2018 which presents statements regarding the NSB’s technical and financial capability to construct, operate, maintain, and terminate the overland trail. This document was provided to KIC by the North Slope Borough in response to this request. Should KIC enter into an agreement with another party for use of its ROW it will ensure that party provide a statement of its technical and financial capability to KIC, alternately if KIC or a KIC subsidiary becomes the operator of this ROW in the future KIC will demonstrate its technical and financial capacity.***

4. Box 13c – R-353-AR indicates “changing sea conditions necessitates change to methods for transporting goods and materials safely and reliably. Storms and minimal sea ice required us to have overland transportation to ensure survival.”

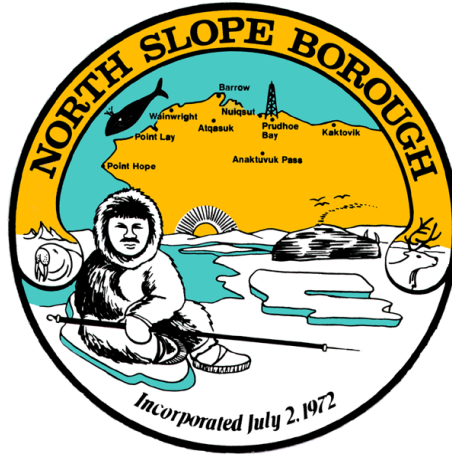
- Please provide any supplementary information on how the impacts from storms and minimal sea ice conditions are negatively impacting current transporting methods or are expected to do so in the future.
- ***RESPONSE – Changes in volume of sea ice, summer storm surges, and coastal erosion have been well documented by your agency and other agencies along the coastal area around Kaktovik. For a sampling of information and data please refer to the following, <https://www.fws.gov/refuge/arctic/climatechange.html>, [here](#), and [here](#). This risk of summer barge transport can have a significant negative effect on the long-***

- term sustainability of our community. In reading the climate news today we only expect this risk to grow.*
5. Box 15 – R-353-AR indicates winter overland snow access “provides for lower cost of living to residents and the NSB for life, health and safety of Kaktovik.”
    - If practicable, please provide more detailed information concerning the cost, capacity, and reliability benefits of transport via the requested ROW as compared with existing means of transport options (i.e., air, barge, sea ice).
    - ***RESPONSE – The NSB estimates the current cost of air freight is 10 times higher than the cost of overland freight as demonstrated through the last several years of their CWAT Program in NPR-A as referenced in the NSB attached document.***
  6. Box 16 – R-353-AR indicates “lowering the cost of living in a remote community ensuring its long-term economic sustainability and growth. Please see community letter of [here](#), attachments 5 & 6”.
    - Please provide any additional economic information describing how the proposed access route would cause the intended effect of ensuring long-term sustainability and growth.
    - ***RESPONSE – To lower the cost of goods delivered to the residents of Kaktovik by a factor of 10 provides a significant savings to our residents, the unemployment rate in Kaktovik is 152% higher than the national average. Many of our employment aged residents are unemployed or are dependent on a single source of income to provide for their families in a high-cost environment. Any relief on personal costs to our residents is meaningful. Kaktovik is considered an underserved community by federal standards. Having the opportunity of having goods and consumables delivered a lower cost allows for a certain level of economic freedom for our residents. The cost savings as determined by the North Slope Borough speak for themselves.***
  7. Box 18 – R-353-AR indicates “a. there will be no impact to fish, plant life, wildlife, and marine life. A Wildlife Management and Polar Bear Avoidance Plan will be developed with respect to large animals and threatened species (polar bears) for the temporary overland access program. B. there will be no hunting, capturing, collecting, or killing of any animals allowed under this operation.”
    - Please verify if any surveys (e.g., Forward Looking Infrared [FLIR]) will be conducted to identify polar bear dens.
    - ***RESPONSE – The current NSB CWAT does not perform FLIRs to identify polar bear dens in the NPR-A. However, a request for a Letter of Authorization will be submitted for the incidental take of small numbers of polar bears as identified under Section 4.2.1 as part of the ROW Wildlife Interaction & Reporting program.***
  8. Box 19 – Response on R-353-AR indicates there may be hazardous materials (petroleum products) that will be transported during operation, such as diesel fuel annual stocking for the community of Kaktovik.
    - Please provide additional information: frequency and duration of shipment of petroleum products; estimated volume to be transported; method of transport of the DOT certified double-walled tanks and approximate weight; emergency spill prevention and response; describe the need to transport annual community diesel fuel

stock over the proposed route rather than using established barge, air carrier, and special use permitting for transport via shore fast ice.

- ***RESPONSE - At this time there are no immediate plans to deliver fuel to Kaktovik over this ROW however, if the NSB decides that the cost savings are significant to want to utilize this ROW for fuel delivery it will be done in a manner that is safe to the environment. All contractors are required to have a current Oil Discharge Prevention and Contingency Plan, they are also required to have Spill Prevention Control and Countermeasure Plans in-place. Please see the NSB Traveler Safety and Environment Plan for the Community Winter Access Trail (CWAT) Project revised February 2018 for further mitigation measures with respect to fuel transport, storage, transfer, and delivery. Again, should KIC enter into an agreement with another party for use of its ROW it will ensure that party has the appropriate permits and financial capability to address fuel haulage along the ROW. Despite that most of the route is over federal refuge lands these lands are also the ancestral lands of the Kaktovikmiut. If KIC or a KIC subsidiary becomes the operator of this ROW we will hold ourselves to the same standard to haul fuel over the ROW.***





NSB Traveler Safety and Environment Plan  
for the  
Community Winter Access Trails (CWAT) project

November 2017  
(revised February 2018)

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# Community Winter Access Trails – Operations Plan

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## Introduction

Traveler safety is the focus of the CWAT program. As such, coordination among the Borough departments and their contractors is critical to the success of the project. Our project is not a commercial project and is strictly focused on resident use of existing snow trails. Commercial activity would require its own permits. Other commercial activity is outside our focus and this permit request. If other activity is permitted along the same trails, it would be expected for the other users to provide for some degree of trail maintenance and waste management.

## Project overview

The NSB proposes the development of the Community Winter Access Trail (CWAT) program to connect residents of the communities of Utqiagvik, Atkasuk, Wainwright, Nuiqsut and Anaktuvuk Pass to the state road system by use of improved snow trails. The CWAT would allow for regular caravan transits to and from the communities to the Dalton Highway.

## General Project Description and purpose

**Project Title** - North Slope Borough (NSB) Community Winter Access Trails (CWAT)

### Project Description

During the next five State and Federal Permitted Tundra Travel seasons, the North Slope Borough plans to contract for the construction and maintenance of improved snow trails<sup>1</sup> for the purpose of use by local residents along the historically established trails between Utqiagvik (Utqiagvik), Atkasuk, Wainwright, Nuiqsut and Drill Site 2P, and between the Dalton Highway and Anaktuvuk Pass. The Borough annually contracts for the fuel haul to Atkasuk which involves bringing equipment from the Deadhorse area to Utqiagvik, establishing a trail, and delivering fuel to Atkasuk from stockpiles in Utqiagvik, establishing a trail and maintaining it for the duration of the fuel haul. In future years, the Borough is likely to have additional projects that will involve overland travel and would plan to open additional trails to local use.

In the first year, this project focuses on maintaining already existing trails and managing public safety for local resident use on the routes from Deadhorse to Utqiagvik, Utqiagvik to Atkasuk and the Dalton Highway (Galbraith) to Anaktuvuk Pass. The term of this permit will be for the next five years (the Winter 2017-18 through the Winter of 2022-23). The NSB would also like to permit alternative routes along the sea ice in the event snow conditions do not allow for tundra travel. This project will be known

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<sup>1</sup> We do not envision construction of ice roads as part of our project; but we are identifying some potential water sources for minor enhancement along the AKP route, but will defer to the contractors if needed. The trails are more similar to those used by other projects like a seismic operation, not a heavy haul that would require ice or ice aggregate.

as the NSB Community Winter Access Trail, located entirely within the State of Alaska and is expected to be a demonstration of the NSB's capability to provide winter overland access to the NSB communities located adjacent to or within the confines of the Federal National Petroleum Reserve-Alaska (NPR-A).

Various NSB projects have extended the use of the trail system to support Borough capital and Public Works projects. Many local and industrial projects have used these trails, but have done so without specific coordination between regulators and sponsors. There is a need to formally establish the trail system as something more than a project specific use facility and develop the necessary agreements and protocols with the regulatory agencies and industrial users that also allow for local community uses. Conceivably, where necessary, shared use facilities may be used that benefit both local and industrial development activities in the area.

Currently, several area-wide transportation planning efforts are underway including the update of the North Slope Borough Comprehensive Plan (including an area-wide transportation plan update), the Northwest Alaska Transportation plan (AKDOT), The North Slope Management Plan (AKDNR), the Arctic Strategic Transportation and Resources plan (ASTAR – AKDNR) and the Central Yukon transportation plan (BLM), plus the development of the North Slope Port Authority development plan.

It is the NSB's position that this type of transportation access is encouraged by the Utqiagvik Gas Field Transfer Act (BGFTA), the Alaska Department of Natural Resources' ASTAR Program, and the Borough's Home Rule Charter that provides under Title 12 for Transportation Planning and Development Coordination. BGFTA provides the legislative initiative to create transportation corridors between communities for the purpose of sharing the natural gas resources in the Utqiagvik Gas Fields and other lands granted under this legislation. The ASTAR will eventually provide a transportation corridor to Utqiagvik (Utqiagvik) from Nuiqsut. The Borough's own transportation planning authority makes it clear that the communities of the North Slope were never intended to be isolated and detached from the rest of Alaska.

There is an element of Environmental Justice in the Borough's proposal to receive a permit to provide access to its Central Arctic communities. The application seeks to provide access to predominantly Alaska Native communities that have been isolated by the federal lands that surround the named communities. Access would allow the Alaska Native residents to enjoy transportation rights commonly enjoyed by the majority of Alaskans.

### **Technical and Financial Capability**

The NSB is technically and financially capable of support in the type of operation proposed in this application. The NSB will utilize the NSB Police, Search and Rescue, and Planning & Community Services staff (in coordination with Risk Management) to plan and execute this operation. Additionally, it is able to contract for professional services needed to survey and stake the route to be taken and to plan the operation. The NSB will establish a plan that will address safety and environmental considerations, check points and professional guides. The NSB is a Home Rule Municipality with an excellent reputation for financial management of multiple municipal services for North Slope Communities. The NSB is willing to post financial assurances in the form of insurance or bonding to satisfy this commitment.

## Purpose

- Provide safe, orderly and equitable overland access to NSB communities to reduce the disproportionate and extraordinarily high cost of air transportation to these communities. Establish an alternative to air freight and seasonal barge hauling to satisfy community supply needs, including building materials and other supplies for a longer period of time during the year.
- Provide safe, orderly and equitable overland access to Anaktuvuk Pass to reduce the disproportionate and extraordinarily high cost of air transportation to these communities. Establish an alternative to air freight and seasonal barge hauling to satisfy community supply needs, including building materials and other supplies for a longer period of time during the year.
- Establish the viability of seasonal overland transportation access for predominantly Alaska Native communities that are geographically isolated by federal and state land ownership.
- Support local and regional community economic development opportunities in Alaska Native communities including personal vehicle use and freight hauling.
- Identify preferred routing for a permanent transportation corridor and potential material sites for construction.

## NSB Commitments

- Use NSB resources where and when necessary to coordinate with NSB contractors to construct and maintain appropriate improvements for operation of approved vehicles on the Community Winter Access Trails during the approved winter travel season using tundra travel approved vehicles. Local resident vehicles will be subject to inspection prior to access.
- Use NSB resources where and when necessary to coordinate with NSB contractors to construct and maintain appropriate improvements for operation of approved vehicles on the Anaktuvuk Pass Community Winter Access Trail during the approved winter travel season using tundra travel approved vehicles.
- The NSB will establish a Traveler Safety & Environmental Plan (TS&EP) prior to utilization of the Community Winter Access Trails. The TS&EP will:
  - Address types of vehicles permitted;
  - check point procedures;
  - safety contact procedures;
  - prohibited materials to transport;
  - removal of vehicles that may breakdown due to unforeseen circumstances;
  - limitations of the amount of fuel that may be transported by non-business entities without liability insurance;
  - training for travelers planning to use the Community Winter Access Trails; and
  - other measures deemed appropriate by the land owner's representatives to ensure there is adequate monitoring of the safety and soundness of the trail use.
- The NSB envisions use of a scheduled caravan that will depart from the gravel roads from either Drill Site 2P or the disembarking community under the leadership of a skilled guide utilizing GPS, and locator beacons provided to each traveling caravan for emergency response purposes. Existing Borough facilities in Deadhorse are most likely to be used for the staging and inspections prior to departure to DS-2P. The Community Winter Access Trail will be limited to a single route and direction of travel during the times and dates allowed. The trail will be visibly marked with temporary markers and GPS coordinates given to each guide/caravan leader.

- The NSB envisions use of a scheduled caravan that will depart from a location off the Dalton Highway (near Galbraith Lake) or Anaktuvuk Pass under the leadership of a skilled guide utilizing GPS, and locator beacons provided to each traveling caravan for emergency response purposes. The Anaktuvuk Pass Community Winter Access Trail will be limited to a single route and direction on travel during the times and dates allowed. The trail will be visibly marked with temporary markers and GPS coordinates given to each guide/caravan leader.
- Incorporate Wildlife Interaction Guidelines (including those for Polar Bears, Marine Mammals that may be on the sea ice and rabid animals) as part of the public information campaign and training. Polar Bear sightings will be required collected information from all travelers of the Community Winter Access Trails.
- Utilize human and financial resources at its disposal to ensure the success of the NSB Community Winter Access Trails Project.

### Consistency with North Slope Borough Municipal Code (NSBMC)

- The NSB requires transportation facilities to be consolidated to the maximum extent possible (NSBMC 19.70.050 K(6)). This application seeks to utilize a well-used route that previous contractors have used to access the mentioned communities. Exploration contractors have also used this same route. This proposed use is consistent with municipal code provision.
- The NSB must give consideration to a proposed development for which there is a significant public need for the proposed use and activity (NSBMC 19.70.050 J(1)). The need for access to overland access is significant and desire by NSB residents to reduce the cost of good consumed by them. Overland access would allow access to the highway system and eliminate the need to air freight all goods. This proposed use is consistent with municipal code provision.
- The NSB requires development to be located, designed and maintained in a manner that prevents adverse impacts to the environment (NSBMC 19.70.050 K(2)). The application the NSB proposes will prevent adverse impacts and address safety concerns. This proposed use is consistent with municipal code provision.

### Application Specific Issues – Northern routes

- Route Choice – the NSB route is based on an historic route utilized by both Borough contractors and Oil exploration contractors in recent years. It is a well-established route with few unknown challenges. The NSB wishes to utilize this route, consistent with its Borough-wide land use policy (NSBMC 19.70.050 K(6)) to consolidate facilities on one route to minimize impacts and reduce the needless potential impacts to other areas.
- Alternate Routes – while the NSB recognizes the need to consolidate facilities like access trails to a single route, they also recognize to plan for contingencies when the planned route may be made impassible or unsafe to travel. It is for this reason that the NSB proposes an alternate route along the Beaufort Sea coastline to provide alternate access with NSB management/maintenance and use of the TS&EP. If the Sea Ice alternative route is necessary, the construction will be permitted separately.



- Crossing Federal Lands – there is no other reasonable alternative to providing overland access to Utqiagvik (Barrow), Atqasuk, Wainwright, and Nuiqsut because these communities are essentially surrounded by federal land. These communities are predominantly Alaska Native communities that does not enjoy the right of road access that is enjoyed by the majority of Alaska residents. It is a matter of equitable access to the transportation infrastructure provided in Alaska. Granting this application would help the NSB develop an overland access route to reduce the cost of goods and encourage economic development opportunities in the mentioned communities. This NSB demonstration project will also help determine the level of support needed for such an endeavor as well as determine if the economic benefits justify the cost.
- Similar Authorizations: Northern Routes– US Department of Interior – Bureau of Land Management, Alaska Department of Natural Resources; and North Slope Borough.<sup>2</sup>

The following permits were applied for September 29, 2017. A 20 day public comment period was held and the final permits were issued November 1, 2017<sup>3</sup>

- NSB 18-113F, Development Permit, NSB Community Winter Access Trails (CWAT) Drill Site 2P (DS-2P) to Utqiagvik
- NSB 18-114F, Development Permit, NSB Community Winter Access Trails (CWAT) Utqiagvik to Atqasuk
- NSB 18-115F, Development Permit, NSB Community Winter Access Trails (CWAT) Wainwright to Atqasuk
- NSB 18-116F, Development Permit, NSB Community Winter Access Trails (CWAT) Oliktok Point to Utqiagvik

- Similar Authorizations: AKP routes – US Department of Interior – Bureau of Land Management, Alaska Department of Natural Resources; and North Slope Borough.<sup>4</sup>

The following permit was applied for November 2, 2017 and the final permit was issued November 28, 2017.

- NSB 18-198F, Development Permit, NSB Community Winter Access Trails (CWAT) Dalton Highway to Anaktuvuk Pass

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<sup>2</sup> Recent permits include NSB 13-184 (Peak Tundra travel) and NSB 17-213 & 17 –325 (Cruz). The State of Alaska has issued Peak permits ADNLR LAS 24891 and ADF&G FH04-111-0253 for travel across state lands. The BLM has issued permit FF092921 for travel across federal lands. Arnie’s Northern Outfit and Cargo also has permits NSB 14-517 and BLM FF096784. NSB 16-056 and NSB 16-532 (Search and Rescue trail marking between Barrow, Atqasuk and Wainwright); The City of Bettles Winter Trail is also an example of a seasonal snow trail maintained by the community for local benefit.

<sup>3</sup> Permits attached

<sup>4</sup> Recent permits include NSB 13-184 (Peak Tundra travel) and NSB 17-213 & 17 –325 (Cruz). The State of Alaska has issued Peak permits ADNLR LAS 24891 and ADF&G FH04-111-0253 for travel across state lands. The BLM has issued permit FF092921 for travel across federal lands. Arnie’s Northern Outfit and Cargo also has permits NSB 14-517 and BLM FF096784. NSB 16-056 and NSB 16-532 (Search and Rescue trail marking between Barrow, Atqasuk and Wainwright); The City of Bettles Winter Trail is also an example of a seasonal snow trail maintained by the community for local benefit.

- Project need, Economic feasibility, Estimated cost – as mentioned in the earlier narrative, the NSB believes the project is needed because it will allow borough residents and business to transport goods to their home communities at a lower cost than air transportation or seasonal barging provides. It provides an equitable solution to transportation access.

The NSB believes the northern routes within this project are economically feasible based on Project Analysis Reports (PAR) prepared for the Borough – this particular report was prepared by HDL Engineers in Anchorage for the NSB.<sup>5</sup> Given that winter travel conditions can vary widely from one season to the next, the NSB believes the only way to verify its cost assumptions is to put the plan into action and weigh the cultural and economic benefits after five years of operation.

The NSB believes the Anaktuvuk Pass portion of this project is economically feasible based on Project Analysis Report (PAR) prepared for the Borough – this particular report was prepared by HDL Engineers in Anchorage for the NSB.<sup>6</sup> Given that winter travel conditions can vary widely from one season to the next, the NSB believes the only way to verify its cost assumptions is to put the plan into action and weigh the cultural and economic benefits after five years of operation.

As mentioned earlier in this application, the NSB is financially capable of executing this operation and sustaining the operation for a five-year period.

- Effects on the population in the area – this application is anticipated to have a beneficial impact on the population in the area by providing greater access to the overland transportation infrastructure that most other Alaska residents use regularly. This access is expected to reduce the cost of goods in North Slope communities that do not currently have access to the road system.

### **Application Specific Issues – Anaktuvuk Pass routes**

- Route Choice – the NSB route is based on an historic route utilized by both Borough contractors and Oil exploration contractors in recent years. It is a well-established route with few unknown challenges. The NSB wishes to utilize this route, consistent with its Borough-wide land use policy (NSBMC 19.70.050 K(6)) to consolidate facilities on one route to minimize impacts and reduce the needless potential impacts to other areas.
- Alternate Routes – in 2014, the NSB contracted with HDL to conduct a project analysis report (PAR) for an Anaktuvuk Pass Seasonal Overland Route. Alternative routes from Bettles to Anaktuvuk Pass (the Hickel Trail), Galbraith Lake to Anaktuvuk Pass and Umiat to Anaktuvuk Pass for considered and evaluated, along with a No Build Alternative. The NSB recognizes the need to consolidate facilities like access trails to a single route whenever possible; they also recognize to plan for contingencies when the planned route may be made impassible or unsafe to travel. Working with ASRC, a variation of the Galbraith Lake route was also identified that would be more viable for rolligon traffic. It is for this reason that the

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<sup>5</sup> NSB - Sea Ice Route Study, HDL 2014

<sup>6</sup> NSB – Anaktuvuk Pass Seasonal Overland Route, HDL 2014

NSB proposes an alternate route from the PAR for access in favor of ASRC's recommended route.

- Crossing Federal Lands – there is no other reasonable alternative to providing overland access to Anaktuvuk Pass because the community is essentially surrounded by federal land. The community is predominantly composed of Alaska Natives and does not enjoy the right of road access that is enjoyed by the majority of Alaska residents. It is a matter of equitable access to the transportation infrastructure provided in Alaska. Granting this application would help the NSB develop an overland access route to reduce the cost of goods and encourage economic development opportunities in the community. This NSB demonstration project will also help determine the level of support needed for such an endeavor as well as determine if the economic benefits justify the cost.

### **General Operations Plan:**

The Borough will contract with a firm that is also currently permitted for overland tundra travel. Annually, the Borough contracts for fuel delivery to Atqasuk and often has other contracts for Borough projects that involve overland trail permits. Additional days will be added to the otherwise contracted activity to set temporary snow fencing as needed, GPS locate the trail, and install temporary markers as needed. For estimating purposes, the pioneering trip will allow for an additional five transit days for these activities. Either Piston Bullies or Steigers may be used for this trip to establish crossing and best trail locations.

Caravans, with a lead and trailing vehicle approved for tundra travel, will depart from one of the six general congregation points (Utqagvik, Atqasuk, Wainwright, Nuiqsut, Anaktuvuk Pass, Toolik and Deadhorse) on a regularly scheduled basis. The tundra travel season is generally open from early January to mid April. Inspections of personal vehicles will be conducted in the embarking community prior to the schedule caravan departure. Vehicles will also be assessed as to trail travel worthiness and be notified of all safety protocols and other requirements. Risk Management, Search & Rescue and the Planning Department will work to coordinate the inspection activities at each departure point. Volunteer Search & Rescue groups will be utilized where possible to assist.

Transit time for the Deadhorse to Utqagvik trail is estimated to be between 20 - 30 hours. Caravan travel will likely be on a weekly basis. Transit time for the Utqagvik to Atqasuk trail is estimated to be 10 hours. Transit time for the Wainwright to Atqasuk is also estimated to be 10 hours. Nuiqsut transit time is estimated at 3 hours. Western village caravans would likely congregate in Utqagvik for the eastbound trip to Deadhorse. 2 Steigers will likely be used to manage the caravan, provide trail maintenance and recovery operations if needed.

Commercial agreements are still being worked out, but will likely include BP and CPAI road use agreements for the caravan passage on gravel road infrastructure in the Prudhoe Bay and Kuparuk River Units to the DS 2-P area. In this area one of the ice pads that is otherwise being constructed to support operations will be a temporary way point for the caravan prior to departing on the snow trail westbound.

Copies of these agreements will be provided to regulators prior to operations beginning. Final trail routes will also be updated following the pioneering trip.

Records will be kept of each caravan trip including the date, time and route. Passage time, number of vehicles and trail status will be also noted. Individual freight volumes will be estimated.

Users of the trail system for subsistence purposes will not be required to travel in the caravan, but will be encouraged to check in with Search & Rescue and check out a Personal Locator Beacon (PLB) during their travel.

#### Details of the proposed operations plan – first year activities

The Borough and Eskimos Inc. will establish road use agreements to facilitate the weekly caravans traveling to and from SA#10 in Deadhorse to the end of the Meltwater gravel road near DS-2P.

The following roles and responsibilities distributed among the NSB subcontractors as follows:

□ Ukpeagvik Inupiat Corporation (UIC) will be responsible for prepacking, establishing and maintaining approximately 235 miles of snow trail from DS-2P to Utqiagvik; and for prepacking and establishing (but not maintaining) 68 miles of snow trail from Utqiagvik to Atqasuk. This includes river crossings at Kachekmach River, Itkillik River, Colville River, Ublutuooh River, Judy Creek, Inicok Creek, Kalikpik River, Kealok Creek, Ikpihpuk River, Alaktak River, Chipp River, Topagoruk River, Meade River, Nigisaktuvik River, and Inaru River, for the purpose of delivering fuel transport equipment and providing access for personal transport caravans. If snow and ground conditions do not allow for an overland route, UIC may choose to establish and maintain an alternative 202-mile sea-ice along the Beaufort Sea coastline from Oliktok Point to Utqiagvik.

□ OC will be responsible for maintaining approximately 68 miles of snow trail from Utqiagvik to Atqasuk, including river crossings at the Nigisaktuvik and Inaru rivers. OC will also be responsible for transporting fuel from Utqiagvik and delivering fuel to Atqasuk under a separate permit.

□ Cruz Construction, Inc. will be responsible for establishing and maintaining approximately 93 miles of snow trail from the Dalton Highway to Anaktuvuk Pass, including river crossings at the Itkillik River, May Creek, Nanushuk River, Kanayut River, and the Anaktuvuk River. Toolik Station is the preferred departure point, but Galbraith Lake will be considered as an alternate.

Eskimos Inc. is the prime contractor and will work with their subcontractors to pioneer, prepack and groom/maintain a snow trail from the Drill Site 2P area to Utqiagvik and Atqasuk. Weekly caravan transits along these routes are planned. Caravan escort and trail maintenance are expected to be concurrent activities, with an NSB inspection vehicle and staff accompanying the transit.

Staging/inspection areas will be located at the SA#10 facility in Deadhorse, near the gravel pit on the west side of Atqasuk, south of Utqiagvik near the tank farm and gravel pit and north of Anaktuvuk Pass at the road terminus or at the Public Works facility. A final staging area near the Galbraith Lake gravel pit is proposed.

Olgoonik Corporation will operate Steigers from the DS-2P area to Utqiagvik and haul fuel from Utqiagvik to Atqasuk under a separate permit. OC will pioneer, prepack and maintain the trail for caravan transits between Utqiagvik and Atqasuk. Caravan escort and trail maintenance are expected to be concurrent activities, with an NSB inspection vehicle and staff accompanying the transit.

UIC will operate Piston Bullies pulling low ground pressure sleds from the DS-2P area to Utqiagvik and maintain the trail as needed and manage the caravan transits between Utqiagvik and Deadhorse. UIC will coordinate with the NSB regarding all traveler safety and emergency supplies, equipment, fuel and requirements are followed as noted in this project requirement. Caravan escort and trail maintenance are expected to be concurrent activities, with an NSB inspection vehicle and staff accompanying the transit.

Cruz Construction will pioneer, prepack and maintain the trail from Galbraith to Anaktuvuk Pass. Cruz will coordinate with the NSB regarding all traveler safety and emergency supplies, equipment, fuel and requirements are followed as noted in this project requirement. Biweekly caravan transits are planned. Caravan escort and trail maintenance are expected to be concurrent activities, with an NSB inspection vehicle and staff accompanying the transit.

Types of vehicles anticipated for use:

| <b>NSB Inspection vehicles</b>  | <b>Est. Weight</b> | <b>Quantity</b> |
|---------------------------------|--------------------|-----------------|
| <b>Ford F-350 w/Matt Tracks</b> | <b>8,000</b>       | <b>2</b>        |

**Vehicles and Weight (contractor supplied)**

| <b>Vehicle</b>               | <b>Weight (pounds)</b> | <b>Quantity</b> |
|------------------------------|------------------------|-----------------|
| Tucker Sno-Cat               | 15,000                 | 2               |
| Piston Bully                 | 20,000                 | 4               |
| Steiger                      | 56,000                 | 2               |
| Foremost Delta 3             | 45,000                 | 1               |
| Marcep Trailer               | 40,000                 | 1               |
| 2,500 gallon fuel sloop      | 25,000                 | 2               |
| 500 gallon fuel tank on sled | 4,500                  | 1               |
| Sleigh camp                  | 40,000                 | 1               |
| Water truck (if needed)      | 87,000                 | 1               |

**Personal vehicles**

Vehicles that may include cars or trucks that have passed a vehicle inspection and are determined to be capable of operating on the snow trail could be included. Personal vehicles would generally fall in to the category of highway vehicles under 10,000 pounds.

**Equipment allocation:**

**Deadhorse-DS 2P-Utqiagvik-Atqasuk route**

**UIC Project Description**

Pioneering a trail from DS-2P Pad in the Prudhoe Bay area to Utqiagvik and Atqasuk, followed by ongoing maintenance and escort services on said trail from DS-2P Pad to Utqiagvik. Equipment utilized are Piston Bully track vehicles manufactured by Kassbohrer of Germany which are Tundra Certified by the ADNRR, which will be pulling low ground pressure sled to as contingency in case of any vehicles we are escorting experience break down. Also, one of the Piston Bullies will be equipped with trail grooming equipment.

- A minimum of 10 round trips are estimated based on NSB provided scope of work.
- A crew of 4 people, 2 Piston Bullies, one with sled, one with trail groomer.

- No field camps locations are planned at this time.
- No helicopter or fixed-wing aircraft will be used.
- Running 24hr crews to and from the destinations noted.
- No fuel storage locations are necessary as the Cat train will carry approximately 500 gallons of ULSD in one 500 gallon double wall Trans Cube fully transportable fuel tank.
- Human waste will be managed utilizing the Portable Environmental Toilet (PETT) and Cleanwaste Wag Bag waste bags pack out of the field, Leave-no-Trace standards.
- All food waste and general refuse will be stored in leak-proof containers and packed out.
- 1 NSB inspection vehicle

### **Galbraith Lake-Anaktuvuk Pass route**

#### **ACCESS AND TRANSPORTATION METHODS**

Personnel will be flown into Prudhoe Bay and driven to Galbraith Lake to access the project.

Access to the trail will be from Galbraith Lake.

Cruz plans to have 2EA Tucker Sno-Cats ahead of the packing crew scouting the route and profiling ice with hand drills.

Two Piston Bully 400s will be used for pre-packing and constructing the trail. The Piston Bullies will be pulling groomers.

Two Steigers will also be used to pre-pack and construct the trail. One Steiger will be pulling a 2,500 gallon fuel tank on skis. The second Steiger will be pulling a CAT camp on skis. The fuel tank and CAT camp will be staged along the route on a daily basis and advanced along the trail as construction progress allows.

One Delta ATV (w/ 2,500 gallon fuel tank) will be used to transport fuel to the Steiger with fuel tank. The Delta will travel back and forth between Galbraith Lake and the trail building equipment. Fuel will be provided for the Delta at Galbraith Lake via a mobile fuel truck.

Cruz will stage a third Steiger with Marcep trailer at Galbraith Lake. This will be used in case of emergency to transport broken down equipment or parts as needed.

#### **FIELD CAMP LOCATION**

Cruz personnel will remain on the trail throughout construction. They will sleep in the CAT camp on day/night rotations. The CAT camp is equipped with a Pacto toilet. Human waste will be bagged and stored for disposal at an approved facility upon arrival in Anaktuvuk Pass. Food waste will be bagged and disposed of in Anaktuvuk as well.

Emergency crew change-outs will be handled using the Delta ATV.

#### **FUEL**

Approximately 20,000 gallons of diesel will be used over the course of the project. No stationary fuel storage tanks will be used. Fuel will be trucked from Prudhoe Bay to Toolik Station as needed.

Equipment on the trail will be fueled from the 2,500 gallon tank behind a Steiger. Fuel transfers will follow the SPPC.

As necessary, 2,500 gallons will be transferred between the Steiger tank and the Delta ATV. These transfers will follow the SPPC.

## EQUIPMENT TO BE USED

Cruz will use the following equipment:

- 2EA Tucker SnoCats
- 2EA Piston Bully 400s
- 3EA Steiger Tractor (1 w/ 2,500 gallon tank, 1 w/ CAT camp, (1 w/ Marcep trailer emergency only))
- 1EA Fuel ATV (tundra tires)
- 1EA Water truck (tundra tires) – if needed
- 1 NSB inspection vehicle

How will snow trails be established and maintained?

AKP route: Season start will be approximately Feb 20 through end of season around April 15 – weather dependent. Proposed routes are included in attached maps. Eskimos Inc. and Cruz have identified a proposed route.

Utqiagvik/Atqasuk route: Season start will be approximately Feb 10 through end of season around April 30 – weather dependent. Proposed routes are included in attached maps. Route is the same as that pioneered by Olgoonik Corporation (OC) for the Atqasuk Fuel Haul. UIC will maintain trail after OC pioneer trip.

We do not anticipate use of a temporary camp.

Stream crossings will be checked for ice thickness prior to road construction and road use.<sup>7</sup> Streams will be profiled prior to thickening, and then visually inspected for degradation when crossing.

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<sup>7</sup> Stream crossings will be profiled using an electric drill or hand powered auger to verify ice thickness. An example of such equipment can be found here:

<https://kovacsicedrillingequipment.com/mechanical-drilling/ice-thickness-kit/>

If ice is deemed safe for personnel they will advance by foot across the stream, testing thickness in regular intervals. The minimum thickness required for one human in arctic gear is 3 inches. Ice thicknesses for various equipment is provided in the attached spreadsheet, but generally follows the following formula for freshwater ice developed by Lewellen Arctic Research, Inc.:

$$P=38h^2$$

Where:

P= ice load in pounds,

H= ice thickness in inches.

The following notes apply:

(1) The formulas are for a contiguous ice sheet of natural ice; or, free-flooded man-made ice bridge.

For minimum ice thickness required for vehicles that will be allowed on the road during construction and operation, see attached spreadsheet as it relates to the specific equipment we propose using.

Snow ramps are not expected to be required for the stream crossings on the Utqiagvik/Atkasuk trail, but will likely be needed along the Anaktuvuk Pass trail.

What are the limits to the type, weight, and drive gear (tracks or wheels?) of the vehicles that will be allowed on the snow roads?

Vehicles using the trail are anticipated to range from 10,000 – 90,000 pounds. Tracked and wheeled vehicles will be used, see equipment list above.

## Expected Outcomes

The primary expected outcome is to document the need for lower cost connectivity for village residents to the state road system. Collection the data described above should help to quantify the potential benefit of establishing seasonal trails for all North Slope communities and eventually assist in the identification of material sources and routing for permanent infrastructure.

Historic Search and Rescue activity is being compiled. This will be used as the baseline for comparison.

The current cost of air freight is approximately 10 times the cost of overland freight. The current cost of Search and Rescue activities related to resident use of snow trails is significant. By maintaining and policing a Community Winter Access Trail program, local freight costs will be lower and Search and Rescue rescues will be lower.

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- (2) For cold ice at <15°F.
  - (3) The equipment must be moving less than 10 mph, and not bouncing (no dynamic loading).
  - (4) For one wet fracture divide the ice load by a factor of 2; for two intersecting wet fractures divide the load, P above, by 4.
  - (5) Ice thickness will have to be determined by drilling a hole through the ice sheet and measured.
  - (6) Daily air temperatures, snow cover, and water movement need to be evaluated.
  - (7) Progressive loading, and measurements on the deflection of the ice sheet, are very useful.
  - (8) The ice sheet needs to be monitored during use.
  - (9) Do not exceed the freeboard, and watch for perched or hung-up conditions between the ice sheet and local banks, piers, and pilings.
  - (10) The best loading situation is with the ice sheet or bridge grounded (not floating).

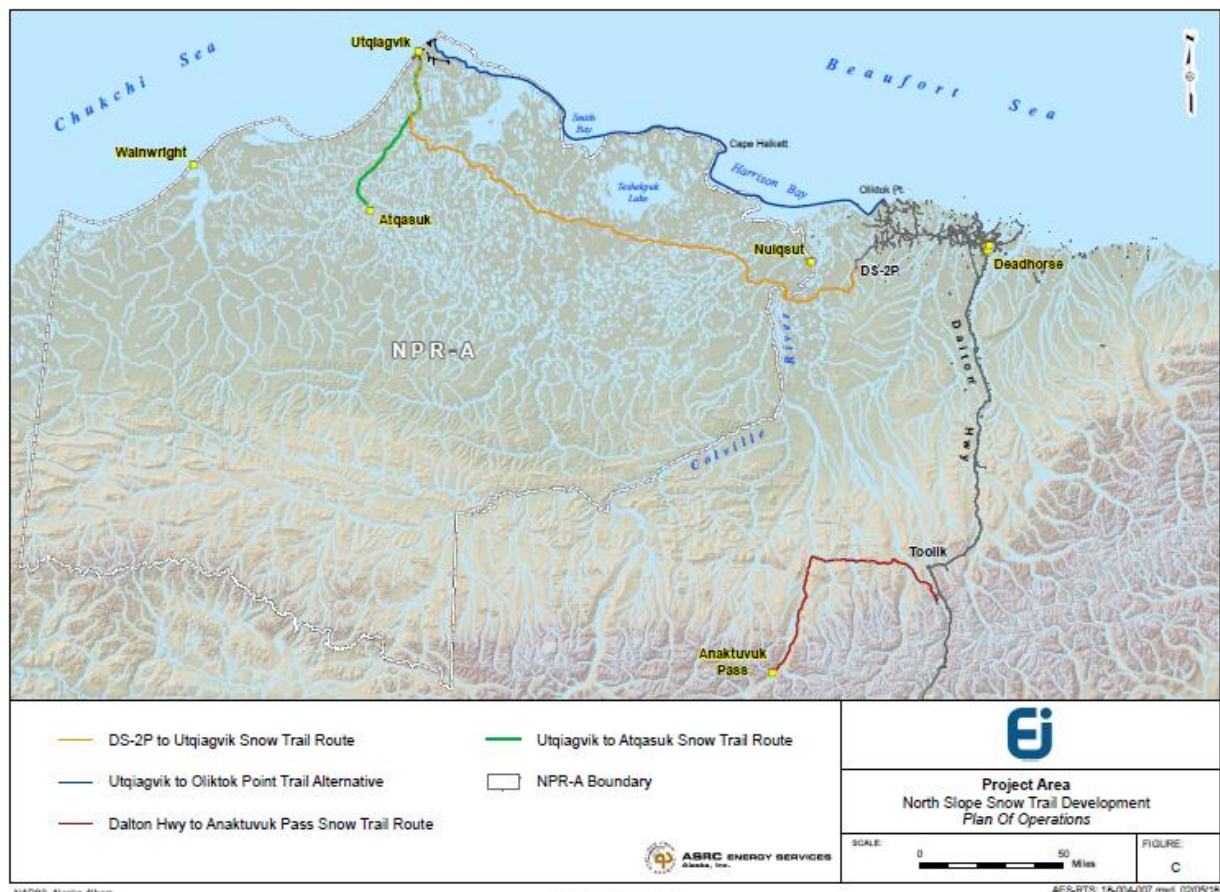


The Plan includes the following information:

- Project description and impacts of human activity
- Procedures for prevention of human-bear interactions, protection of workers/travelers, den avoidance and reporting
- Training
- Take actions
- Community Plan of cooperation

## Schedule and Field Activities

The term of this permit will be for the next five years (the Winter 2017-18 through the Winter of 2022-23). The trails that are identified with this project are very similar to Historical trails and potential transportation routes identified by the State of Alaska Department of Natural Resources in the 1970's and 1990's<sup>8</sup> and most recently this year as part of the ASTAR plan.<sup>9</sup>



<sup>8</sup> [http://www.dnr.alaska.gov/gis/raster/map\\_library/y1993/Iris/rs2477\\_rev2.pdf](http://www.dnr.alaska.gov/gis/raster/map_library/y1993/Iris/rs2477_rev2.pdf)

<sup>9</sup> <http://soa-dnr.maps.arcgis.com/apps/Cascade/index.html?appid=ab8be9349a08477ebfb66d017e0aec8d>

## Land ownership

The trail systems cross public lands managed by the BLM and the State of Alaska, in addition to lands owned by Arctic Slope Regional Corporation (ASRC), Ukpeagvik Inupiat Corporation (UIC), Nunamiut Corporation, Olgoonik Corporation (OC) and Atqasuk Corporation. Several native allotments are near the trail system and will be avoided by at least 500 feet. In the areas where the trail system enters privately owned lands, the Borough will work with the individual land owners to ensure non-objection to the final trail routing and compliance with the landowners' requirements for access across their lands.

## Basic Annual Timeline of the project

November/December to January- pre-packing route and installing markers- pre-packing is needed to secure first snow fall prior to the wind to blow snow around. The pre-packing may be on summer approved vehicles by a firm contracted out to provide for overland tundra travel

December/January to February- trail grooming with contractors to create initial improved snow trail- will include monitors from the NSB Planning Inspectors to provide oversight

February to May 1<sup>st</sup>- or the close of tundra- Routine travel along route with resident use of the improved snow trail

February to May 1<sup>st</sup>- or close of tundra travel- Routine passage by inspectors with Mattrack enforcement vehicles

February to May 1<sup>st</sup>- or close of tundra travel- vehicle inspection by Public Safety officers -prior to routine access to improved snow trail

February to May 1<sup>st</sup>-or close of tundra travel- Contractor supported maintenance of the improved snow trail

May 1<sup>st</sup> to July of each year- completion reports- inspection of snow trail and clean-up- evaluate route for next seasons activities.

## Dates of Use

A contractor will be employed to do the Pioneering trail development and will likely begin in December 2017 or early January 2018. The contractor will be seeking it's own permits for tundra travel if there is to be activity outside the NSB permitted activity and contract. The dates will be coordinated with other users of the trail routing to minimize resident travel impacts on oil and gas and other commercial activities.

Subject to weather and snow conditions, caravan transits will be planned on a weekly basis for the longer route from Deadhorse to Utqiagvik. Feeder caravans from the villages near Utqiagvik will be scheduled to minimize the wait time for those that are bound for Deadhorse.

A separate contractor will likely be engaged for the trail work into Anaktuvuk Pass. They will also be responsible for their own permits. Caravan travel to and from Anaktuvuk Pass will likely begin later in the season subject to tundra opening in the upper foothills. A weekly schedule is anticipated.

## **Estimated users**

Assuming each roundtrip caravan averages 10-15 local vehicles between Deadhorse and Utqiagvik, with weekly transits over the tundra travel season, about 200-300 vehicles would be using the right-of-way. Inter-village travel is estimated to be about 1/3 of the volume coming into and out of Utqiagvik, and into and out of Anaktuvuk Pass. This would add about 70-100 more vehicles to the feeder routes in the north and the Anaktuvuk Pass to Dalton route in the south.

In the event of more travelers arriving at the check point than is anticipated, a second transit may be planned, or additional escorts will be provided to ensure safe passage.

## **Record Keeping/Reporting**

NSB staff, working with a contractor, will keep all of the records associated with the CWAT. Each caravan passage will record the name of the drivers, the types of vehicles used, the number of passengers, along with the starting and ending point for each traveler. Date and time of transit will be recorded for each trip and any issues that occurred during the trip including accidents, weather and trail observations, and any wildlife interaction.

## **Field Camps**

It is likely that a mobile camp/trailer would be used in the caravans between Utqiagvik and Deadhorse. Depending on the first caravan trips transit times and trail conditions, it may be necessary to locate a temporary shelter in the mid-section of the trail. If this is needed the regulatory agencies will be all notified.

Temporary field camps are not planned for the routes between Utqiagvik and Atqasuk, Atqasuk and Wainwright, Nuiqsut and Deadhorse, and Anaktuvuk Pass and the Dalton Highway.

## **Pioneering trail development**

The NSB will employ a contractor to undertake pre-packing, snow fence setting and initial trail marking. The contractor is likely to use a fleet of Steigers or Piston Bullies to perform this work along the historic rolligon trail from the Drill Site 2-P area to Utqiagvik (Barrow). The Borough will also work with contractors that are otherwise employed for snow trail development for the fuel haul and gravel haul projects on the trails to Atqasuk and Wainwright.

## **Ongoing trail maintenance and marking**

The Borough does not anticipate the need for any water use or ice aggregate in the maintenance of the trail system to Utqiagvik/Atqasuk. Limited water use may be necessary for the Anaktuvuk Pass Trail. As

needed, the contractor will set temporary snow fencing to trap snow where it is needed, or use tundra travel approved vehicles to groom the trail, build up snow where needed, or plow drifting to ensure that tundra damage does not occur when the trail is used. As the trail is established and used, Borough staff and volunteers will be used to install temporary trail markers. The trail marking program will be based on the program already mostly completed between Utqiagvik, Atkasuk and Wainwright.

The Piston Bullies proposed to conduct the pre-packing will be approximately 20 feet wide. Snow trails are expected to be up to 30 feet wide. Prepacking in summer approved tundra travel vehicles can prepack trails with minimal snow depths; however, prepacking will generally be conducted with a minimum of 6 inches of snow on the ground to provide a reasonable trail base and to ensure a cost effective prepacking operation. Snow may also be scraped and pushed from snow depositional to wind scoured areas. The placing of snow fencing may be used sparingly in wind-blown areas where snow scour regularly limits snow accumulations. If used snow fencing will be placed by: 1) placing the snow fence supports into snow adjacent to the road; 2) placing snow fence supports in a weighted tripod or footing; or 3) driving or pounding the snow fence supports into the frozen ground. Driving or pounding the snow fence into the frozen ground would be the most labor intensive technique to deploy and remove snow fence and would only be done if options 1) and 2) are not practical. No snow anchors are anticipated for the snow fence deployment as described above. Vertical snow fence supports made of wood (survey lathe or 2x2's) or metal garden type fence posts. It is estimated that vertical snow fence supports/posts would be placed every 8 to 10 feet as site conditions dictate.

Snow fencing will be used only in areas where trail conditions require additional snow to prevent tundra damage. It is expected that the snow fencing deployment would be temporarily used in small areas less than 100 feet in length.

Snow fencing is not expected to provide polar bear denning habitat. By the time the snow fencing would be deployed along the trail segments in late December or January, female polar bears will have already excavated and should be occupying their maternal dens. The small amount of snow fencing that would be used to supplement trail conditions will be removed from the area at the close of winter trail operation each year to ensure snow fencing does not collect the autumn and early winter snow that polar bears seek for denning habitat.

Additionally, only a minuscule portion of the overland winter trail system is located near coastal polar bear denning habitat. The overland trail segment in closest proximity to polar bear denning habitat is immediately south of Utqiagvik, along the historic trail between Utqiagvik and Atkasuk. This trail is an established winter trail between the communities and will have considerable snow machine use prior to the proposed winter snow trail development.

The only potential polar bear denning habitat would be along the coastal trail alternate route that will only be used if the overland route between Drill Site 2P and Utqiagvik is not passible due to poor trail conditions. The coastal alternate route will not be used in 2018. It is also anticipated that snow fencing would not be used along the coastal route since this route will be established on shorefast and bottomfast ice and will not require supplemental snow.

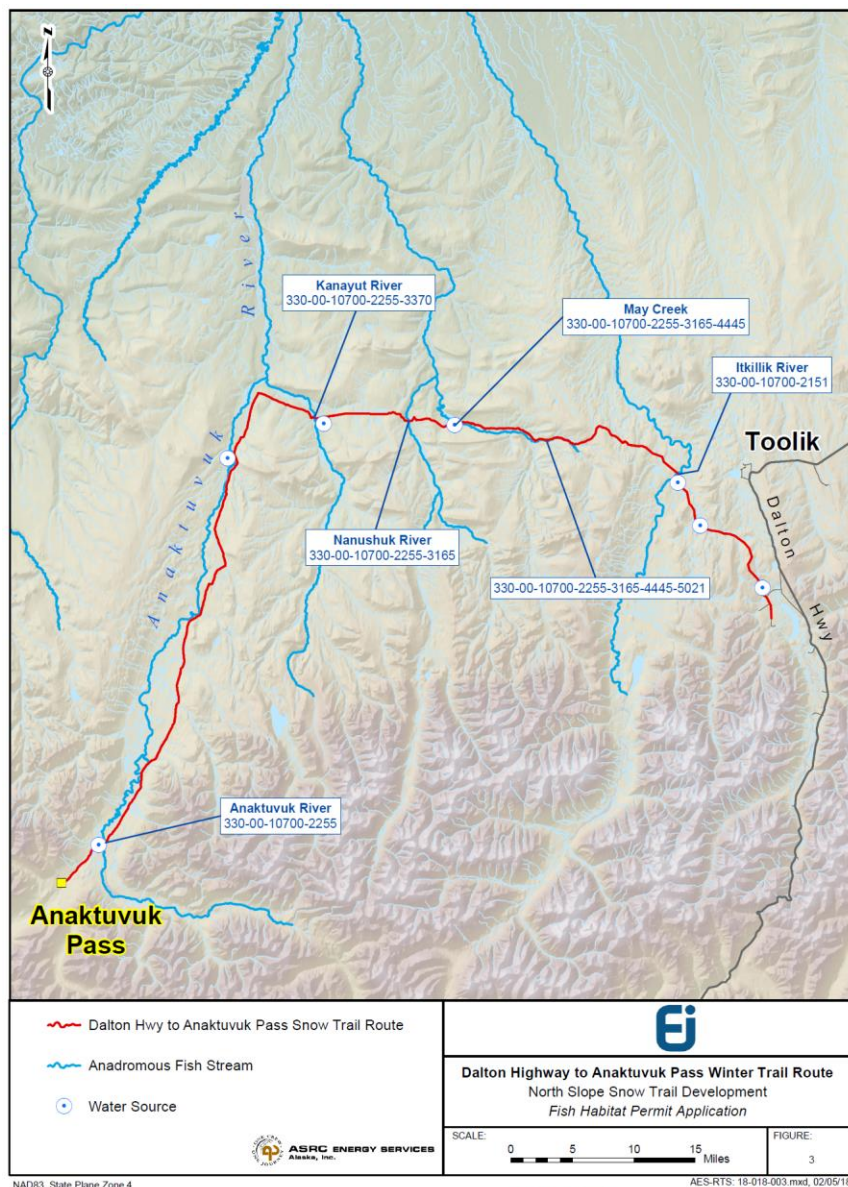
Trail markers for the proposed winter snow trail project will be placed temporarily and removed before the close of the winter trail operations for each year. Trail markers will be used only in critical areas



where trail conformity is required for trail user safety or to protect sensitive habitats. Trail markers would likely be used at stream crossing locations and in areas where hazardous terrain needs to be avoided.

All trail markers would be placed in the snow adjacent to the trail as conditions allow. If trail markers need to be driven into the tundra, they would be placed to a depth of 3 to 5 inches below ground level to ensure they remain in place.

Potential water use locations referenced in Fish Habitat permit request to ADF&G – Anaktuvuk Pass Trail



## Consultations and Communication

### Public Engagement

The public engagement process has been ongoing over the last two years as the Borough has been updating village comprehensive plans. During this process, it became apparent that more and more community members have expressed interest in development of inter-village travel systems.

Two Planning Commissions meetings included discussions related to the ASTAR project – expanding surface transportation networks across the North Slope. Also, two North Slope Borough Assembly meetings this past summer included discussions with Commissioner Mack from the Department of Natural Resources. The ASTAR discussions were focused on the eventual development of permanent road infrastructure to all of the communities of the North Slope Borough, but with an intermediate step of managing a snow trail system and traveler safety program. The CWAT program would help to prove the benefits of overland versus air travel to satisfy community needs.

The Borough staff has met multiple times with DNR MLW and DOT NRO staff to describe the project. Pre-applications meetings were also held with DNR and BLM. Individual stakeholder meetings were held with ASRC (the regional corporation), UIC (Utqiagvik Village Corporation), Olgoonik Inc. (Wainwright Village Corporation), Kuukpik (Nuiqsut Village Corporation) and members of the Borough staff in the Department of Wildlife, Search and Rescue, the Police Department and the Public Works Department.

A continuation of these discussions will be ongoing over the next two months, prior to the project beginning to solicit additional comments, address concerns that may arise, and determine the best ways to address subsistence interaction. We will also be finalizing the contract with the operator of one of our other projects – that also has land use permits for tundra travel and commercial activity along the same routes. These will clarify the roles of the Borough and the contractor.

Public Service Announcements on the local radio station, along with notices posted at the village liaison office, police department and volunteer Search & Rescue base will be used to notify residents of the scheduled departures of caravans from the participating communities.

### Safety Program

Village residents have been using the snow trail system for subsistence and personal travel for as long as the trails have existed. The need to create a more formal system to ensure traveler safety has been discussed for some time. The recent development of the Traveler Safety program by the volunteer Search & Rescue organizations is one step in this process.

After considering several options, the Borough plans the use of a “caravan” model for local resident use on the snow trail network. This model would use a combination of contractors and Borough staff to allow resident to use personal vehicles on the trails. A pilot vehicle (either a rolligon or Steiger) would lead the caravan on each trail segment. We estimate that a caravan could include 10-15 vehicles per trip. A trailing vehicle would also be used to ensure that the trail is groomed during each trip and address any safety issues that occur on the trip. The ability to winch vehicles back on the trail or tow them in the event of a problem will be provided for.

Prior to each scheduled caravan, Borough staff (Risk Management or the Planning Department) will perform vehicle inspections and determine the trail worthiness of the vehicles. The inspection programs will occur at NSB facilities in the communities of Utqiagvik, Atqasuk, Wainwright, Nuiqsut and Anaktuvuk Pass. Inspection staff will be commonly trained on the requirements associated with Tundra Travel including environmental compliance, wildlife interaction and traveler safety.

Road use agreements are being negotiated with the Prudhoe Bay and Kuparuk Unit operators and commercial agreements will be completed with operators that are constructing ice roads, ice pads or trails over and along the same paths that minimize potential conflicts with industrial activities and maintain compliance with environmental safety.

NSB inspectors/compliance officers will regularly transit the trail system to monitor tundra conditions and maintain a clean trail system. Inspectors will be on the trail system as part of the caravan travel and independently as part of their duties.

At each of these future meetings, NSB staff will specifically inquire about subsistence patterns of use, impacts that could occur, and mitigation measures that could reduce or eliminate those concerns. NSB staff attended the BLM-NPRA Subsistence Advisory Panel Meeting on September 2-3, 2013 in Utqiagvik, Alaska. During this meeting, potential polar bear and seal subsistence hunting in the area will be discussed.

Working with the North Slope Borough Planning Department, the CWAT program has identified all cabin and camp owners within an approximate five mile radius of the planned trail routes. Each cabin owner will receive periodic notification letters, informing them of our intended activities and a means to notify CWAT program staff should they have any questions or comments about our use and proximity.

The NSB will have a liaison position in each community and, when needed, will assist to minimize conflicts with subsistence activities. The liaison position is responsible for coordinating with the community on CWAT plans and to review these activities for any potential impacts to subsistence resources. A communications line was established to ensure North Slope residents have the ability to relay comments or concerns on the project in a convenient and timely manner. The messages will be checked daily and forwarded to the CWAT coordinator or the appropriate project personnel for a quick response.

### **Estimated transit times and safety way points**

Travel between the communities of Utqiagvik and Atqasuk, Atqasuk and Wainwright, Utqiagvik and Wainwright, and Anaktuvuk Pass and Toolik are all estimated to be accomplished in a single day. Travel between Nuiqsut and Deadhorse has been occurring for several years through coordination with ConocoPhillips and generally takes less than half a day. Travel from Utqiagvik to Deadhorse is estimated to take more than a single day and these transits will use either a towable safety trailer or use a temporary structure that contractor provides near the midway point of the trail. Any structures that are used for this project would be permitted separately with the contractor as part of their tundra travel permits.

### Check Point procedures

Caravan participants would be expected to check in at the designated check point at least two hours prior to the scheduled departure. Personal vehicles are to be inspected for trail worthiness and if necessary provided with duck ponds or pads to address any potential fluid leakage.

### Safety Contact procedure

NSB inspectors will accompany the caravans and will have a complete list of contractors/subcontractors and agencies to contact in the event of a safety or emergency issue.

### Prohibited materials to transport

Caravan participants would be subject to the same prohibitions as provided by law for transport of hazardous or illegal materials. Any caravan participants transiting from or to Deadhorse crossing the Spine Road would also be notified of additional restrictions related to materials that are prohibited on industrial roads as indicated in the Prudhoe Bay Unit and Kuparuk River Unit road use agreements. Outside of the industrial road complex, the general responsibilities will also apply, but will be handled by NSB staff.

### ***PBU General Responsibilities***

1. The possession, transportation, use or sale of illegal drugs, any alcoholic beverages or unapproved firearms on the PBU Road System is prohibited.
2. The driver and all passengers must use seat belts when a vehicle is in motion if the vehicle is equipped with seat belts.
3. Vehicle and equipment operators and passengers on the PBU Road System shall wear ANSI approved safety glasses with side shields. When traveling by bus, it is recommended that passengers in the first four (4) rows wear eye protection.
4. Every person entering on or traveling across the PBU Road System shall be deemed, by such entering or traveling, to have consented to reasonable search by the PBU Operator's security personnel of their person, their effects, and any vehicle in which the person is entering or traveling.
5. Hunting, trapping, feeding, molesting, hazing, or interacting with wildlife while on the PBU Road System are prohibited.
6. Behavior disrupting or interfering with use of the PBU Road System is prohibited.
7. Drivers using the PBU Road System shall comply with all traffic procedures, including but not limited to the PBU specific speed limits, Foul Weather Standard Operating Procedures ("SOPs"), Alaska Safety Handbook ("ASH") SOPs, oversized vehicle standards, other restrictions applicable to the PBU Road System and all applicable laws and regulations. The driver or his/her safety representative shall meet with the PBU Operator's Safety Team Lead, (907) 659-4457, to review specifics of the PBU Foul Weather SOPs and applicable sections of the ASH and other road rules prior to commencing travel.
8. At any time that a vehicle is stopped while within the PBU, whether with the engine running or not, the vehicle shall be provided with proper secondary containment to contain any fuel, oil, or other vehicle-sourced leaks (i.e., "duck pond") and prevent any discharge, as provided in the North Slope Environmental Field Handbook and the ASH. Drivers shall consult with the GPB Environmental Advisor (Services) at (907) 659-5893 regarding the equipment and procedures that NSB and its Related Companies will be using for such compliance. No vehicle shall be operated within the PBU if it is leaking any fuel, oil or other substance
9. NSB and its Related Companies must immediately report all spills, injuries to personnel, or vehicle accidents to PBU Operator. This reporting does not replace any of NSB's or its Related Companies' requirements for reporting required by federal, state, and local agencies.



|           |                 |               |          |
|-----------|-----------------|---------------|----------|
|           | Emergency       | Non-emergency | Spills   |
| GPB – EOA | 659-5300 or 911 | 659-5631      | 659-5700 |
| GPB – WOA | 659-4222 or 911 | 659-5631      | 659-5700 |

10. No person is allowed to ride on/in truck beds.

11. From October 1 to May 1, drivers and passengers in all vehicles except buses and heavy equipment must carry arctic gear suitable for survival in the current or forecast weather conditions.

### ***Driver Responsibilities***

1. All drivers shall comply with all traffic and safety procedures, including but not limited to PBU specific speed limits, Foul Weather SOPs, ASH Safety Handbook SOPs, other restrictions applicable to the PBU Road System and all applicable laws and regulations. All drivers shall drive in a manner that takes into account weather and road conditions.

2. Each driver while operating a vehicle must have a valid and appropriate driver's license on his person.

3. Every driver must be fit to drive and be mentally alert. Operation of any vehicle while the driver is under the influence of intoxicating substances or drugs, including medicinal drugs that impair the driver's abilities, is prohibited. If medication that affects driving ability is being taken, the driver shall not drive.

4. The driver must perform a 360-degree walk around to check vehicle condition and identify any problems, leaks, obstructions or hidden obstacles in the path prior to moving any vehicle.

5. The use of stereo headphones while driving is prohibited.

6. The use of radar detectors is prohibited.

7. The use of "cruise control" is prohibited.

8. Headlights shall be activated whenever any vehicle is being driven.

9. Drivers are encouraged to avoid backing-up. Where possible, drivers are required to park their vehicle in a manner that will eliminate the need to back-up the vehicle upon departure. This will not apply where backing-up imposes a lesser hazard.

10. The driver must check the vehicle for proper operation and condition prior to driving. The driver shall verify that there is adequate fuel, and that lights, instruments and radio are in working order. Do not drive if there is reason to believe the vehicle is not safe.

11. The driver must comply with all posted speed limits and traffic control signs applicable to the area in which the vehicle is to be operated. Every driver is charged with the responsibility to drive defensively, responsibly and according to conditions.

12. It is the driver's responsibility to make known to the passengers that PBU Road Rules require the driver and all passengers to wear seat belts and to ensure that seat belts are properly used in all vehicles equipped with seat belts while the vehicle is in motion.

13. ANSI approved safety glasses with side shields are required for both the driver and the passengers. Safety glasses are recommended while riding in the first four (4) rows of a bus.

14. A driver shall not use a cell phone or a private channel trunk radio while the vehicle is in motion. The trunk radio prohibition applies only when the trunk radio is used as a telephone rather than an open channel communications device. Acknowledging calls and conversations must be deferred until the vehicle can be brought to a full stop in a safe location off the traveled portion of the road. This requirement also applies to hands-free cell phones.

15. Each driver must report all incidents and accidents to NSU Security at (907) 659-4441 and NSU Security Dispatch at (907) 659-5631 as soon as possible. When feasible do not move the vehicle until a security officer arrives on the scene.

16. Driving a vehicle in a safe manner is a condition of use of the PBU Road System. Violation of any of these rules will result in actions ranging from a warning to denial of use, depending on the severity of the violation.

### ***Post-Accident Obligations***

1. Immediately report all vehicle incidents and accidents to NSU Security and the driver's employer. This includes any collisions with wildlife. A complete accident report must be submitted to NSU Security as soon as possible.
2. Do not move the vehicle until a security officer arrives on the scene, when feasible. In some life threatening or blocked access situations, it may be necessary to move the vehicles prior to the arrival of NSU Security.
3. Post-accident physical examinations/drug and alcohol testing may be required in situations where there is any indication that physical impairment may be a contributing factor to an incident or incidents.

## **PBU ROAD USE BADGE RULES**

**The following rules apply to all persons, including drivers, passengers, vehicle and equipment operators, using the PBU Road System.**

1. Unless otherwise approved by the PBU Operator in writing, any person working for or associated with NSB or its Related Companies must obtain a security badge from the PBU Operator or a company approved by the PBU Operator to issue acceptable security badges. The badge must be readily visible at all times while in the PBU.
2. NSB and each of its Related Companies shall designate an authorized sponsor and an alternate, to be approved by the PBU Operator.
3. The authorized sponsor shall send an email to the PBU Operator's Security Manager ([haywwl@BP.com](mailto:haywwl@BP.com)) and to the PBU Operator's Security Lieutenant ([Ron.Belden@BP.com](mailto:Ron.Belden@BP.com)) to request transit security badges for specific individuals. The email shall include:
  - a. Name of the person or persons to be badged
  - b. Initial date of travel
  - c. Origin and destination
  - d. Duration of access requested
4. Each individual requesting a transit badge shall:
  - a. Hold a valid driver's license
  - b. Attend North Slope Training Course ("NSTC")
  - c. Complete a Security Access Card Request Form to include signature by the authorized sponsor
  - d. Travel directly to and from the origin and destination points as specified by the authorized sponsor in the badge request
  - e. Maintain contact with any escorted visitor without a badge at all times while in the PBU
5. PBU Operator may issue a transit badge for a Non-U.S. citizen following a background check conducted by PBU Operator Security. The request for a transit badge for a non-U.S. citizen must be made at least two weeks in advance of the requested travel date. In addition to the items in 3. b.c.d., the email requesting a transit badge for a non-U.S. citizen shall include:
  - a. First, Middle, and Last name of the person(s) to be badged
  - b. Date of birth
  - c. Passport number and name of issuing country or a pdf copy of passport (preferred)
6. It is acceptable for an individual to transit the PBU without a security badge provided:
  - a. The person is escorted by a properly badged person as set forth in Sections 1 through 5 of this Attachment;
  - b. The person maintains photo identification in possession at all times while in the PBU; and
  - c. The authorized sponsor sends an advisory email to the PBU Operator's Security Manager ([haywwl@BP.com](mailto:haywwl@BP.com)) and the PBU Operator's Security Lieutenant ([Ron.Belden@BP.com](mailto:Ron.Belden@BP.com)). The email shall include:
    - a. Name of the escorted person(s)
    - b. Date of birth of the escorted person(s)
    - c. Name of the escort(s)

d. Travel date(s)

e. Origin and destination

7. Security badges issued by BP Exploration (Alaska), Inc. and badges issued by ConocoPhillips Alaska, Inc. or ExxonMobil as operators of other North Slope units and operations, are sufficient to allow use of the PBU Road System under this Agreement without further approval by the PBU Operator.

### ***KRU General Responsibilities***

1. The possession, transportation, use or sale of illegal drugs, cannabis, any alcoholic beverages or unapproved firearms on the KRU Road System is prohibited.

2. The driver and all passengers must use seat belts when a vehicle is in motion if the vehicle is equipped with seat belts.

3. Vehicle and equipment operators and passengers on the KRU Road System shall wear

ANSI approved safety glasses with side shields. When traveling by bus, it is recommended that passengers in the first four (4) rows wear eye protection.

4. Every person entering on or traveling across the KRU Road System pursuant to this Agreement shall be deemed, by such entering or traveling, to have consented to reasonable search by the Operator's security personnel of their person, their effects, and any vehicle in which the person is entering or traveling.

5. Hunting, trapping, feeding, molesting, hazing, or interacting with wildlife while on the KRU Road System is prohibited.

6. Behavior disrupting or interfering with use of the KRU Road System is prohibited.

7. Drivers using the KRU Road System shall comply with all traffic procedures, including but not limited to the KRU Road System specific speed limits, Foul Weather Standard Operating Procedures ("SOPs"), Alaska Safety Handbook ("ASH") SOPs, oversized vehicle standards, other restrictions applicable to the KRU Road System and all applicable laws and regulations. The driver or his/her safety representative shall meet with the KRU Operator's safety engineer, (907) 659-7220, to review specifics of the KRU Foul Weather SOPs and applicable sections of the ASH and other road rules prior to commencing travel.

8. At any time that a vehicle is stopped while traveling the KRU Road System, whether with

the engine running or not, the vehicle shall be provided with proper secondary containment to contain any fuel, oil, or other vehicle-sourced leaks (i.e., "duck pond") and prevent any discharge, as provided in the North Slope Environmental Field Handbook and the ASH.

Drivers shall consult with the KRU Field Environmental Coordinator at (907) 659-7242 regarding the equipment and procedures that Contracting Party will be using for such compliance. No vehicle shall be operated on the KRU Road System if it is leaking any fuel, oil or other substance.

9. Contracting Party must immediately report all spills, injuries to personnel, or vehicle accidents occurring on the KRU Road System to KRU Security at (907) 659-7997 (nonemergency) or (907) 659-7333 (emergency). This reporting does not replace any of Contracting Party's requirements for reporting required by federal, state, and local agencies. Contracting Party shall reimburse Operator for costs to respond, document, and perform any follow-up inspections associated with any spills, injuries to personnel, or vehicle accidents reported to KRU Security.

10. No person is allowed to ride on/in truck beds.

11. From October 1 to May 1, drivers and passengers in all vehicles except buses and heavy equipment must carry arctic gear suitable for survival in the current or forecast weather conditions.

### ***Driver Responsibilities***

1. All drivers shall comply with all traffic and safety procedures, including but not limited to

KRU specific speed limits, Foul Weather SOPs, ASH SOPs, other restrictions applicable to the KRU Road System and all applicable laws and regulations. All drivers shall drive in a manner that takes into account weather and road conditions.

2. Each driver while operating a vehicle must have a valid and appropriate driver's license on his person.

3. Every driver must be fit to drive and be mentally alert. Operation of any vehicle while the driver is under the influence of intoxicating substances or drugs, including medicinal drugs that impair the driver's abilities, is prohibited. If medication that affects driving ability is being taken, the driver shall not drive.

4. The driver must perform a 360-degree walk around to check vehicle condition and identify any problems, leaks, obstructions or hidden obstacles in the path prior to moving any vehicle.

5. The use of stereo headphones while driving is prohibited.

6. The use of radar detectors is prohibited.

7. The use of "cruise control" is prohibited.

8. Headlights shall be illuminated whenever any vehicle is being driven.

9. Drivers are encouraged to avoid backing. Where possible, drivers are required to park their vehicle in a manner that will eliminate the need to back the vehicle upon departure. This will not apply where backing imposes a lesser hazard.

10. The driver must check the vehicle for proper operation and condition prior to driving. The driver shall verify that there is adequate fuel, and that lights, instruments and radio are in working order. Do not drive if there is reason to believe the vehicle is not safe.

11. The driver must comply with all posted speed limits and traffic control signs applicable to the area in which the vehicle is to be operated. Every driver is charged with the responsibility to drive defensively, responsibly and according to conditions.

12. It is the driver's responsibility to make known to the passengers that KRU Road Rules require the driver and all passengers to wear seat belts and to ensure that seat belts are properly used in all vehicles equipped with seat belts while the vehicle is in motion.

13. ANSI approved safety glasses with side shields are required for both the driver and the passengers. Safety glasses are recommended while riding in the first four (4) rows of a bus.

14. A driver shall not use a cell phone or a private channel trunk radio while the vehicle is in motion. The trunk radio prohibition applies only when the trunk radio is used as a telephone rather than an open channel communications device. Acknowledging calls and conversations must be deferred until the vehicle can be brought to a full stop in a safe location off the traveled portion of the road. This requirement also applies to hands-free cell phones.

15. Each driver must report all incidents and accidents to KRU Security as soon as possible.

When feasible do not move the vehicle until a security officer arrives on the scene.

16. Driving a vehicle in a safe manner is a condition of use of the KRU Road System.

### ***Post-Accident Obligations***

1. Immediately report all vehicle incidents and accidents to KRU Security and the driver's employer. A complete accident report must be submitted to KRU Security as soon as possible.

2. Do not move the vehicle until a security officer arrives on the scene, when feasible. In some life threatening or blocked access situations, it may be necessary to move the vehicles prior to the arrival of KRU Security.

3. Post-accident physical examinations/drug and alcohol testing may be required in situations where there is any indication that physical impairment may be a contributing factor to an incident or incidents.

## **SUBSISTENCE COMMITMENT OVERVIEW**

The NSB Community Winter Access Trails (CWAT) project is committed to preventing unreasonable conflicts with subsistence activities and has developed this plan based on consultations with the NSB (Planning and Wildlife Departments) and the Bureau of Land Management (BLM) Subsistence Advisory Panel (SAP).

The Plan is intended to mitigate potential conflicts between the CWAT 2017 winter activities, subsistence hunting, and cultural activities.

All staff and contractors will receive North Slope Environmental and Cultural Awareness training, and will participate in specific training including operational safety and polar bear/Pacific walrus avoidance and human interaction training. A subsistence advisor (SA) or NSB Planning inspector/enforcement officer will be on site and accessible for questions or concerns.

### **Local Hire**

Contractors will be encouraged to hire qualified residents of the North Slope. The CWAT project may

require SAs and/or polar bear guards for all on-ground operations throughout the interim of the project.

### **Visitors**

Visitors in the area are required to make their presence known and must be escorted during the caravan operation if they are intending to join the group. Due to limited space, overnight guests cannot be accommodated. CWAT staff will update information about conducting activities in the project area as necessary so people and resources are not endangered and equipment is not damaged.

### **Employee Training**

All project personnel will be trained to be aware of, and sensitive to the Native cultural values held by residents of the North Slope. The training will include information applicable project stipulations; required operating procedures and standards; and specific environmental, social, traditional and cultural concerns for the region.

Personnel will be trained to avoid disturbing archaeological and biological resources and habitats including endangered species, fisheries, bird colonies, and marine mammals.

All project personnel will be provided information on avoiding conflicts with subsistence activities and pertinent mitigation.

### **Aircraft**

No aircraft are expected to be involved in the CWAT project. But if it does become necessary to involve aircraft for an emergency supply mission or recovery, aircraft will avoid any hunting parties and will fly above 2,000 ft. except during landing approach and takeoff.

### **Public Information**

CWAT staff will keep the Utqiagvik, Atkasuk, Wainwright, Anaktuvuk Pass and Nuiqsut residents informed of the project activities. The NSB/CWAT intends to prevent subsistence conflicts during the project primarily through communication and coordination. The on-site SA duties include communications to ensure the comments and consultation processes are effective and subsistence hunting and resources are not adversely affected.

## **MITIGATION MEASURE**

### **Good Neighbor Plan**

As the local government for the entire North Slope, the NSB is committed to being a good neighbor and good citizen wherever we conduct business. This commitment is reflected in our past and ongoing activities in with our residents and the oil and gas industry.

### **Communication**

The most important aspect of mitigation is communication and avoidance. Communication enables the NSB/CWAT to better schedule operations at and near the various projects that are also operational along the trail routes, and allow hunters to plan their activities, if possible, in areas away from ours. CWAT will describe the location of our work, timing, and means of communication should NSB residents require additional information or have concerns. CWAT staff will also contact the North Slope Borough Planning

and Wildlife Departments with information on our activities and schedule and provide a means of notification, should they receive any information or comments regarding our operations.

## **Subsistence Mitigation**

This section describes the guidelines that will be followed by the NSB/CWAT should there be potential impacts to subsistence activities brought to light by local hunters or regulatory agencies.

CWAT's goal is to conduct caravan activities to allow safe local resident passage across the North Slope and between communities with as little impact as possible. Open communication with communities via use of the communications line, community meetings, NSB Wildlife and Planning Departments, and other regulatory agencies help to identify and reduce impacts. This plan serves as a guide for CWAT project personnel to follow when concerns are expressed. When subsistence hunters or local residents communicate their concerns to CWAT staff, CWAT will endeavor to investigate and mitigate the reported impact through operational changes and emergency assistance. This mitigation plan does not attest to the presence of impacts, but conveys CWAT's willingness to cooperate and remedy conflicts that arise with subsistence hunters or local residents.

Types of mitigation built into the CWAT project have included emergency services (such as a phone or first aid kit), operational and communication changes, a safe house to rest, and hot food and drink. CWAT diesel fuel is not available for hunters or passers-by without an emergency situation or dire need. Minimal gasoline is at the caravan site and is not available even for emergency needs.

## **CONTINGENCY PLANS AND AUTHORIZATIONS**

### **Wildlife**

CWAT prepared a Wildlife Interaction Plan, provided in Appendix B. The procedures contained in the plan will apply whether a polar or grizzly/brown bear is encountered. The CWAT policies to prevent bear encounters include storing food inside vehicles or containers to minimize odors. Feeding or attracting wildlife is prohibited by CWAT policy. Hazardous materials will be kept in drums or other secure containers, by the contractor.

Wildlife that may be in the project vicinity during winter caravan transits includes owls, ravens, arctic fox, musk ox, and a small number of over-wintering caribou. The project is located in upland areas for its primary routes, but if snow conditions dictate use of the Sea Ice route, it is possible, but unlikely to encounter seals or seal lairs. It is likely that polar bears will be encountered along the Sea Ice route, but much less likely they will be encountered across the majority of the trail system.

Grizzly/brown bears are unlikely to be active in the winter. CWAT and its contractors will be cautious and watch for evidence of bears. CWAT policy requires sightings to be reported immediately to the site superintendent. If a polar bear den site is identified U.S. Fish and Wildlife Service (USFWS) will be notified and activities will be altered to avoid disturbing the bear.

Grizzly/brown bear sightings will be reported to the ADFG.

## **Oil Discharge Prevention and Contingency Plan**

An Oil Discharge Prevention and Contingency Plan (ODPCP) will be prepared for this project by the contractor(s) selected to operate the pioneering trip and assistance for the caravans during the project. The NSB/CWAT direct staff will not be engaged in transporting hazardous materials or excess fuel over what is necessary for safe trail passage. The approved plan will be kept on site at all times for guidance in controlling and cleaning up any accidental discharges of fuels, lubricants, or produced fluids. The plan will include immediate response actions, receiving environments, spill cleanup mobilization response times, and well control. The NSB/CWAT staff will be subject to compliance with the contractors approved ODPCP.

## **Spill Prevention Control and Countermeasure Plans**

Various contractors will maintain SPCC plans for drilling, fuel storage facilities, drilling operations, and well testing tanks. The plan includes fuel storage facilities for the camps. Other contractors needing to store fuel will have SPCC plans covering their specific fuel storage and transfer operations.

## **Comprehensive Spill Prevention and Response Contingency Plan**

The NSB staff, caravan participants and Contractors conducting winter snow trail pre-packing, development, and maintenance will not transport any hazardous materials or fuel in excess of the amount necessary to ensure safe passage. In addition to the fuel within tanks of the equipment used to pre-pack and develop the trail, no more than two fuel tanks will be transported with the trail development equipment. The fuel tanks will be towed behind equipment on sleds and will be used to refuel the equipment. These will be double-walled fully transportable fuel tanks with a fuel capacity of less than 2,500 gallons. Drip pans or duck ponds will be placed beneath all vehicles and equipment when not in use.

Refueling of equipment in the field will follow standard procedures to prevent fuel spills. Prior to any fuel transfer, duck ponds are placed beneath each connection point. The fuel handler will perform a visual observation of fuel levels during fuel transfer. The refueling operation and equipment is inspected for any leaks or drips and proceeds until the fuel handler stops pumping, typically when the tank is 90% full. After the fuel transfer is complete, the transfer hose is emptied manually draining the transfer hose towards the receiving tank. The fuel transfer area and equipment is then inspected for any dripped fuel, and cleaned using adsorbent pads.

A 2,500 gallon fuel sloop will be transported along the snow trail between Toolik Station and Anaktuvuk Pass. This fuel sloop will be used to refuel equipment in the field and to power and heat a mobile sleigh camp. This fuel sloop will be refueled by a second 2,500 gallon fuel sloop staged at Toolik Station. The second fuel sloop will be refueled via highway fuel truck. There are no planned fuel storage facilities or camps along the snow trail between Drill Site 2P and Utqiagvik and between Utqiagvik and Atkasuk.

In the unlikely event of a spill, the operator will notify Bureau of Land Management (BLM) and the Alaska Department of Environmental Conservation (DEC) oil spill report number is (800) 478-9300.

BLM and DEC shall be supplied with all follow-up incident reports.



Specific Procedures for Fuel Sled Transfers include the following:

- ☐ Equipment or vehicle refueling shall not occur within the annual floodplain of a river or stream.
- ☐ Operator will position equipment in the fueling position to maintain safe margins from other structures and equipment.
- ☐ Inspection of tank(s) and fueling criteria will be done prior to pumping fuel.
- ☐ Operator will wear safety glasses and rubber gloves when handling fueling equipment.
- ☐ Operator will assist in making sure hoses and valves are in good repair for bladders.
- ☐ Operator will properly prepare for the fueling process by positioning drip trays/duck ponds as required.
- ☐ Operator will ensure spill response equipment is available and there is an adequate number of splash pans, drip guards, absorbent pads, shovels, and oily waste bags. ☐
- ☐ Operator will properly connect the fuel fill/fuel pump line to the fuel bladder coupling. ☐
- ☐ Operator will concentrate on the fueling process only and **NOT** perform any other tasks while fuel transfer is in process. ☐
- ☐ Operator will stay in continuous communication with fuel fill/fuel pump operator at all times. ☐

General requirement for all equipment operations include the following: ☐

1. Throughout all trail operations, whenever equipment is stopped a drip pan will be placed under the engine.
2. Equipment will carry a fuel spill kit with absorbs, oily waste bags, and two shovels.

In case of loss of containment, the operator will adhere to standard clean up procedures, securely contain the waste, and bring the waste to Deadhorse or Barrow for proper disposal.

## Weed Control Plan

NSB, Eskimos Inc. and all contractor and subcontractor personnel will work to prevent the introduction or spread of non-native, invasive plant species in the National Petroleum Reserve-Alaska (NPR-A), in accordance with Best Management Practice M-2<sup>10</sup>.

Eskimos Inc. will certify that all equipment and vehicles are weed-free prior to transporting them into the NPR-A. All travel along the proposed route will be conducted in winter, reducing the likelihood for transportation of invasive plants. Additionally, as part of the vehicle inspection protocol, equipment and vehicles using the CWAT trails will also be inspected for weeds.

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<sup>10</sup> Bureau of Land Management. 2013. National Petroleum Reserve-Alaska Integrated Activity Plan Record of Decision.

## Other Plans

All emergency response situations will be managed by the Incident Management Team (IMT) which will follow the Incident Command System and the Alaska Unified Plan. The IMT is on call 24-hours a day.

Personnel involved in an emergency situation will immediately notify the IMT for response. NSB Environmental Health and Safety Policies and Procedures Manual and Emergency Response Plans will be available at the individual facilities (see Training).

## COMMUNICATION AND SUPERVISION

A CWAT representative will be available during operations. Phone service will be available at the embarkation and destination sites 24 hours a day during caravan transits. Additional contact information will be provided for the volunteer Search and Rescue coordination staff and Planning Department inspectors as soon as it is available. General CWAT contact information is provided below:

Matt Dunn, CWAT, Deputy Director, NSB Planning and Community Services Department  
907-852-0320

Jason Bergerson, CWAT Project Lead, NSB Planning and Community Services Department  
907-646-8211

Contractor Contact #'s : TBD

## TRAINING

All employees working on the CWAT project will be required to receive training, which will include project area orientation, threatened and endangered species information, environmental, social, and cultural awareness, subsistence conflict avoidance, and pertinent mitigation that will be project specific. All personnel will be required to attend annual training. Training records will be maintained while the CWAT program is in winter operation and is active.

Project related North Slope employees and contractors are required to complete an 8-hour training provided by the North Slope Training Cooperative (NSTC). A Field Environmental Handbook, Alaska Safety Handbook, and a North Slope Visitor's Guide are used in the training. The training includes classes on the Alaska Safety Handbook, personal protective equipment, camp and safety orientation, hazard communication, HAZWOPER Level I, environmental awareness hydrogen sulfide awareness, hearing conservation, electrical safety, respiratory protection, energy isolation, confined space entry, asbestos awareness, fall protection/avoidance, toxic substance control, first aid/CPR, and use of an automated external defibrillator.

## Orientation Plan

NSB, Eskimos Inc. and all contractor and subcontractor personnel will receive an Orientation in an effort to minimize cultural and resource conflicts, in accordance with Best Management Practice I-1<sup>11</sup>. The proposed Orientation will be submitted to BLM for approval prior to its implementation. The Orientation will be designed to increase sensitivity and understanding of personnel to community values, customs, and lifestyles in areas in which personnel will be operating.

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<sup>11</sup> Bureau of Land Management. 2013. National Petroleum Reserve-Alaska Integrated Activity Plan Record of Decision.

The Orientation will be of sufficient detail to ensure that personnel are notified of applicable stipulations and best management practices. It will also serve to inform individuals working on the project of specific types of environmental, social, traditional, and cultural concerns that relate to the region.

The Orientation will include the following:

- A discussion of 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.
- Guidance on the preparation, production, and distribution of information cards on endangered and/or threatened species.
- Information concerning avoidance of conflicts with subsistence and pertinent mitigation.
- A module discussing bear interaction plans to minimize conflicts between bears and humans.

The Orientation will be designed to ensure strict compliance with local and corporate drug and alcohol policies. The Orientation will be offered to the North Slope Borough Health Department for review and comment.

The Orientation will also be developed to train employees on how to prevent transmission of communicable diseases, including sexually transmitted diseases, to local communities. The Orientation will be offered to the North Slope Borough Health Department for review and comment.

Eskimos Inc. will include on-site records of all personnel who attend the program for so long as the site is active, though not to exceed the five most recent years of operations. This record shall include the name and dates(s) of attendance of each attendee. Eskimo's Inc. will provide a copy of 43 CFR 3163 regarding Non-Compliance Assessment and Penalties to on-site personnel.

## **Enforcement**

Public outreach meetings will be conducted to inform local residents of the trail construction and caravan transports. Residents will be encouraged to conform to the caravan transport policies as they ensure safe passage along the route. Residents will be advised non-conformance will expose them to the liabilities associated with NSB Search and Rescue, exposure to extreme cold, potential tundra damage, and extraction of stranded vehicles. The route will not be policed; however, signage will be posted advising travelers of the inherent risks involved with nonconformance.

## **LOCAL HIRE**

Hiring opportunities are limited during CWAT activities. However, subsistence advisors (SAs) at trail sites during operations, translators, and others may be hired for the CWAT project. Applicable traditional knowledge will be used during the project orientation training section.

## **PUBLIC INVOLVEMENT**

NSB/ CWAT will follow the Plan of Cooperation and Good Neighbor Plan that describes NSB's means of communication with the communities and a code of conduct expected of employees and contractors. Initial communications have been conducted and are discussed below. Community consultations are closely linked to the plan, which is presented in Appendix C and further documents NSB's efforts to

maintain communications with residents and subsistence hunters.

CWAT representatives have met with NSB Mayor's office, NSB Wildlife and Planning Departments, Native Village of Nuiqsut, Kuukpik Corporation, Iñupiat Community of the Arctic Slope, Kuukpik Subsistence Oversight Panel, whaling captains, Alaska Eskimo Whaling Commission (AEWC) and BLM NPR-A Subsistence Advisory Panel to introduce the project. The initial discussions included a description of the summer work efforts.

NSB conducted introductory meetings in in Anchorage, Utqiagvik, Atkasuk, and Nuiqsut for the program in summer of 2017. At each of these meetings, NSB will inquire about subsistence patterns of use, impacts that could occur, and mitigation measures that could reduce or eliminate any potential concerns. Additional meetings in each of the target communities will be held prior to the start of trail operations.

The liaison position is responsible for coordinating with the community on company plans and to review these activities for any potential impacts to subsistence resources. The subsistence advisors help identify and minimize conflicts with subsistence activities.

Through coordination with the North Slope Borough, the Iñupiat Community of the Arctic Slope, and the Native Village of Utqiagvik, CWAT has identified native allotment holders and cabin and camp owners near any of the proposed travel routes. Each allotment holder and cabin owner will receive a letter notifying them of CWAT's intended activity and a means to notify CWAT staff should they have any questions or comments about the project.

CWAT will continue to communicate with stakeholders through public announcements on radio and television, project information newsletters, community meetings, and the NPR-A subsistence advisory panel.

## **SAFETY**

Worker safety is NSB/CWAT's highest priority and will be in compliance with state and federal regulations, and NSB requirements. A site specific safety and emergency plan will be developed prior to initiation of the work.

## Wildlife Interaction Plan

### List of Attachments

Attachment 1 Wildlife Interaction Report  
Attachment 2 Ringed Seal Interaction Report  
Attachment 3 Marine Mammal Stranding Report  
Attachment 4 Rabid Fox Report  
Attachment 5 Polar Bear Sighting Report

## ACRONYMS AND ABBREVIATIONS

|       |   |
|-------|---|
| AAC   | Alaska Administrative Code                      |
| ADEC  | Alaska Department of Environmental Conservation |
| ADFG  | Alaska Department of Fish and Game              |
| ADNR  | Alaska Department of Natural Resources          |
| AS    | Alaska Statute                                  |
| BLM   | Bureau of Land Management                       |
| CFR   | Code of Federal Regulations                     |
| ESA   | Endangered Species Act                          |
| HSE   | Health Safety Environmental Specialist          |
| IHA   | Incidental Harassment Authorization             |
| LOA   | Letter of Authorization                         |
| MMPA  | Marine Mammal Protection Act                    |
| NPR-A | National Petroleum Reserve-Alaska               |
| NMFS  | National Marine Fisheries Service               |
| NSB   | North Slope Borough                             |
| SA    | Subsistence Advisor                             |
| USFWS | United States Fish and Wildlife Service         |

### 1.0 Purpose/Scope

The NSB proposes the development of the Community Winter Access Trail (CWAT) program to connect residents of the communities of Utqiagvik, Atkasuk, Wainwright, Nuiqsut and Anaktuvuk Pass to the state road system by use of improved snow trails. The CWAT would allow for regular caravan transits to and from the communities to the Dalton Highway.

The purpose of the Wildlife Avoidance and Interaction Plan (Wildlife Plan) is to provide guidance to NSB employees and contractors working on the project in order to assist them in implementing appropriate, standardized procedures when wildlife is encountered. This Wildlife Plan has been developed to facilitate compliance with wildlife regulations and permit conditions, as well as protection of wildlife and worker safety. Many wildlife species occur on Alaska's North Slope; which travelers or industrial employees may encounter.

Activities have the potential to disturb and even attract wildlife. Some species of animals that inhabit the North Slope (e.g., caribou and fox) present a risk of injury or transmission of disease to field personnel. Some groups of animals are protected by federal regulations, such as marine mammals (e.g. Marine Mammal Protection Act (MMPA)); individual species may also require additional protection under the Endangered Species Act (ESA) (e.g. polar bears; spectacled eiders, Steller's eiders, and bowhead whales).

Additionally, several species (e.g., polar bears, grizzly bears, and wolverine) can pose a serious risk of injury to field personnel.

Proper food and waste management are critical to prevent wildlife attraction to work and camp areas. As a general rule, all wildlife species, regardless of their perceived threat, are to be avoided at all times by personnel. Approaching them, even for a photograph, is prohibited. Feeding wildlife (regardless of species) is prohibited both by the State of Alaska (5 AAC 92.230) and NSB policy.

The scope of this Wildlife Plan includes discussion of:

- ☐ General wildlife interaction and avoidance techniques;
- ☐ Species-specific interaction and avoidance techniques;
- ☐ Proper management of food waste to minimize attraction of wildlife;
- ☐ Guidance for complying with wildlife regulations and permit conditions;
- ☐ Procedures for submitting wildlife interaction reports;
- ☐ Wildlife-related training requirements for all employees, contractors, visitors;
- ☐ General policies and guidance;
- ☐ Roles and responsibilities of key personnel; and
- ☐ Species-specific detection, avoidance, and reporting procedures.

## 2.0 General Requirements

Several regulatory requirements, permits, and NSB policies are included in this document including the U.S. Fish and Wildlife (USFWS) authorization for the non-lethal, unintentional incidental take of small numbers of polar bears pursuant to 50 CFR Part 18 (per 68 CFR 229 Section 101(a)(5)(A) and (D) of the Marine Mammal Protection Act), and the intentional take of polar bears by harassment while conducting oil and gas industry related activities in polar bear habitat. Applicable regulatory requirements include, but are not limited to:

### ***Applicable State Regulations***

18 AAC 60.010 – Treatment of solid waste  
5 AAC 92.230 – Prohibition of baiting and feeding bears and other wild game  
ADFG Policy on Human Food, Solid Waste Management and Bears in Alaska  
AS 16.05, 16.10 Alaska Fish and Game Statutes

### ***Applicable Federal Regulations***

16 U.S.C. 1531-1544 (50 CFR 17 Part 17) ESA  
16 U.S.C. 703-712 Migratory Bird Treaty Act  
16 U.S.C. 1361-1407 MMPA  
50 CFR 18.124 Letter of Authorization (LOA)  
68 CFR 229 Section 101(a)(5)(A) and (D) MMPA

### ***Applicable Local Regulations***

NSB Title 19 – Land Management Regulations

### ***Permits which may contain wildlife stipulations***

Bureau of Land Management (BLM) Permits  
United States Army Corps of Engineers (USACE) Permits  
Land Use Permits (issued by ADNDR)  
Pipeline right-of-way permits  
Water Withdrawal Permits (issued by ADNDR and ADFG)

Ice Road construction/winter vehicle travel (issued by ADNR and ADFG) Tundra  
Travel (issued by ADNR, NSB, and BLM)  
Water withdrawal permits (issued by ADNR ML&W) Fish  
Habitat Permits (issued by ADFG)  
Waste Management Guidelines (issued by ADEC and BLM)  
Public Safety Permits (issued by the ADFG)  
LOA and Incidental Harassment Authorization (IHA) (issued by the USFWS)

### 3.0 Hunting and Subsistence Activities

Some of project team members, including NSB personnel and contractor crews, will be Alaska Natives who would be authorized to take some wildlife species for subsistence use. However, Alaska Natives employed in NSB projects are governed by rules and procedures set out by NSB, which extend to all employees. During periods of their active employment, when traveling to and from the project area, and during their active service for NSB projects, no subsistence hunting is authorized.

Activities of NSB-employed Alaska Natives that are off-shift and not housed at NSB facilities are subject to subsistence and hunting regulations. Uncontrolled harvest of wildlife has not occurred in the North Slope oilfields, due in part, to the following restrictions: the oilfield road system of the North Slope is off-limits to all but industrial users and local residents, companies prohibit firearm use by employees in the oilfields, and ADFG regulations prohibit big game sport hunting in much of the oilfield. As with subsistence hunting, no employee may recreationally hunt in the North Slope oilfield areas while actively employed by NSB for the CWAT project.

NSB will have a subsistence advisor (SA) onsite during the project. Polar bear and seal subsistence hunting in the winter months generally occurs on ice leads. The project area is generally 40 miles or more inland from ice leads and therefore shouldn't interfere or impact with subsistence hunting activities unless there are polar bears transiting across the ice.

### 4.0 Procedure

The objectives of this section include:

- ☐ Describe training requirements necessary for personnel;
- ☐ Provide wildlife mitigation measures for waste management and project planning; and
- ☐ Provide polar bear and other wildlife monitoring and reporting procedures.

#### 4.1 Wildlife Training

NSB requires and provides mandatory safety and environmental orientation training for all North Slope employees and contractor personnel before they are permitted to work on the North Slope. The minimum training, provided through the North Slope Training Cooperative consists of the following courses:

- ☐ Camps & Safety Orientation;
- ☐ Alaska Safety Handbook;
- ☐ Environmental Excellence (including Wildlife Interaction);
- ☐ Hazard Communication;
- ☐ Personal Protective Equipment; and
- ☐ HAZWOPER Awareness.

The first three of these courses specifically address interaction with the variety of wildlife found on

the North Slope. Visitors who do not meet these training requirements are not permitted to travel unescorted.

Additional employee safety training for all NSB personnel will address the following:

- ☐ Wildlife Plan will be reviewed and posted for everyone's awareness;
- ☐ USFWS bear deterrence training as needed; and
- ☐ Bear awareness reinforced at daily safety meetings.

Working in the field requires that personnel take certain common sense precautions regarding wildlife. Workers should always be aware of specific site conditions and adjust their activities accordingly. Crew managers must be aware of the polar bear/personnel encounter plan for their worksite. The NSB safety project and regular in-field briefings are conducted to provide field personnel with the information that they need to ensure their own safety, the safety of others and the safety of wildlife.

The USFWS LOA requires annual general polar bear awareness training for most employees and specialized training for those responsible for hazing or deterrence activities. General awareness training is normally provided through environmental alerts and updates, safety bulletins, safety meetings and other methods as appropriate. Specialized training for Bear Guards or security personnel responsible for deterring of polar bears is provided by the USFWS. The training fulfills the requirements set forth in the LOA. Training consists of a combination of classroom and hands-on field techniques.

#### **4.1.1 Waste Management**

This Waste Management Plan provides guidance for personnel responsible for establishing and maintaining winter trails from Drill Site 2P to Utqiagvik, from Utqiagvik to Atqasuk, and from the Dalton Highway near Galbraith Lake to Anaktuvuk Pass. It is also the guideline by which the NSB and caravan travelers will need to comply.

Waste will be managed according to the following principles:

- Anything brought in, will be brought out.
- Inspect your campsite and rest areas for trash or spilled foods. Pack out all trash, leftover food, and litter.
- Pack out toilet paper and hygiene products.
- Dish water will be carried 200 feet away from streams or lakes, strained, and scattered on the tundra. Biodegradable soap will be used.

Human waste will be managed utilizing Portable Environmental Toilets and WAG Bags manufactured by Cleanwaste and shown in Figure 1.

#### **Figure 1. Portable Environmental Toilet**





Cleanwaste. Retrieved from <http://www.cleanwaste.com/products#pop> on January 10, 2018.

All food waste and general refuse will be stored in leak-proof containers.

Food waste, general refuse, and human waste will be transported to proper disposal facilities in Utqiagvik, Atkasuk, Anaktuvuk Pass, and Deadhorse.

Feeding wildlife is against NSB policy and is extremely dangerous; personnel found in violation of this policy are subject to disciplinary action. All NSB facilities and camps are obligated to reduce impact to local wildlife populations. Handling waste correctly limits the attraction of animals (e.g., foxes, gulls, ravens, and bears) to the project area. Particular care should be taken to ensure that no food wastes are left in places that might attract wildlife. During periods when bears have been reported in the field, personnel should check with security daily for updates on the location of bears.

Taking food into vehicles is discouraged, but if food is taken into vehicles, it must be stored in containers that minimize odors, such as plastic bags or plastic containers with lids, and windows must remain closed. All food waste should be brought back to the appropriate disposal receptacle and all garbage, including used food containers, must be removed from the vehicles at the end of each shift. The cleanliness of the project area will be strictly maintained and eating outside of buildings or vehicles is prohibited.

Non-food materials (e.g., plastic, rubber, motor oil, and chemicals such as antifreeze) can be attractive to some wildlife species, and if these materials are not handled properly, they can increase the likelihood of wildlife encounters. Potentially harmful materials will be stored in secure containers (e.g., 55-gallon steel drums) or inside secure buildings and they will be properly disposed of properly, away from the project area.

The following provides a list of procedures and mandates for waste management:

- ☐ Control food waste and garbage;
- ☐ Never feed animals, including birds;
- ☐ Use appropriate (bear-resistant) dumpsters to dispose of food waste;
- ☐ Cover all dumpsters to prevent animals from getting inside;
- ☐ Consume food in break shacks or other enclosed and secure areas such as pickup trucks;

- ☐ Keep food odors to a minimum by keeping food inside a container that will minimize odors, such as Tupperware® or Ziploc® bags.
- ☐ Dispose of waste in a bear resistant dumpster whenever possible;
- ☐ Employees are prohibited from leaving food or food -contaminated wastes in unoccupied vehicles or other unsecured areas;
- ☐ Never leave used food containers or bags in the flat-bed of a truck;
- ☐ Never empty beverages onto pad, ground, or snow;
- ☐ Personnel should be made aware of the potential for wildlife interactions and should be encouraged to monitor areas around the work site;
- ☐ Report all wildlife interactions to Security;
- ☐ Ethylene glycol (antifreeze) will be stored in a secure building or bear-resistant container;
- ☐ Trash will be collected and separated;
- ☐ No food associated waste will be place in an inappropriate dumpster;
- ☐ Food and food-contaminated waste will be separated and incinerated; and
- ☐ Sewage processing will comply with stringent federal and state regulations.

#### 4.1.2 Project Planning

Wildlife issues have been considered from the beginning of the planning and permitting process for this project. Infrastructure associated with oilfield development can potentially provide nesting or denning cover for wildlife. Wildlife related permitting is an integral part of all projects. USFWS has jurisdiction over all birds, polar bears and Pacific walrus, ADFG has jurisdiction over all terrestrial mammals, and NMFS has jurisdiction over seals and whales. The following list provides examples of infrastructure design and maintenance activities that can help minimize the attraction of wildlife:

- ☐ Prior to tundra travel or ice road construction, ensure that activities maintain one mile separation from known polar bear dens and ½ mile separation from known brown bear dens. Tundra travel should also avoid, to the greatest extent practicable, unnecessary travel near polar bear denning habitat (i.e., maintain a separation from snow accumulations near bluffs). Bluff crossings should be minimized and made perpendicular to a bluff.
- ☐ Ensure proper permits are in place prior to crossing or working in fish habitat (e.g., work in or around streams, stream crossings, water withdrawal).
- ☐ Infrastructure design should incorporate modifications to reduce the attractiveness of a site to wildlife. Where practicable, these could include installation of skirting under elevated buildings, proper lighting, capping of stored pipes, blocking culverts in the winter, and the placement of gates or other barriers on stairwells.
- ☐ Elevated structures, including roads and pads, can collect drifting snow that can potentially serve as artificial denning habitat if not properly managed. The prevailing wind is from the northeast and the direction of drifting should be taken into account when placing barriers or storing materials.
- ☐ If materials must be stored outdoors, they should be arranged in a way to minimize the space where animals could hide.
- ☐ Personnel areas, including all entrance areas, will be illuminated during working hours of darkness.
- ☐ Facility layout, lighting design, and snow management should consider accessibility to wildlife. Ensure good visibility around the work site. Minimize areas where wildlife could hide or be trapped. Ensure adequate lighting in waste management areas and pedestrian traffic areas.
- ☐ Construction activities should be coordinated to ensure that all personnel are in radio contact and that safe areas have been identified and are accessible.
- ☐ Operations should be set up to minimize the chance of wildlife encounters. Regular safety/wildlife briefings should be held.
- ☐ Records should be kept of all significant wildlife sighting and wildlife training, and actions taken to minimize wildlife encounters. Submit the records to the Health, Safety, and Environmental (HSE) Specialist.

## 4.2 Wildlife Interaction & Reporting

This section is designed to provide species specific information for wildlife interactions. Each subject includes references to applicable regulations and permits, as well as general guidelines and contact information. Additionally this section provides general guidance to approved wildlife responders.

### 4.2.1 Polar Bear (*Ursus maritimus*)

#### *Regulatory References:*

16 U.S.C. 1531-1544 ESA

16 U.S.C. 1361-1407 MMPA

50 CFR 18 Section 18

NSB Title 19.70.050(I) (1) Area-wide policies

68 CFR 229 Section 101(a)(5)(A) and (D) MMPA

#### *USFWS Letter of Authorization*

A request for LOA may be submitted in the future to USFWS for the incidental take of small numbers of polar bears and the intentional take of polar bears by harassment (deterrence activities), if it is necessary to make use of the Sea Ice Route from Oliktok to Pt. Barrow, in polar bear habitat.

#### *General Guidelines*

Polar bears on the North Slope of Alaska can be present in the oil fields throughout the year. A portion of the CWAT trail system transits the oil fields.

During the summer, polar bears normally hunt seals for food far out on the pack ice. During the fall, they can be found hunting and foraging on land, especially in coastal areas and along the barrier islands. Polar bears are frequent fall visitors all along the mid-Beaufort sea coast and were regularly observed from the Distant Early Warning (DEW) Line site at Oliktok Point. They may be found in the NW NPR-A area at any time of the year. Polar bears typically den on the pack ice, along the barrier islands, or on the coastline. They can den in any area where topographical relief is greater than three feet.

- ☐ Avoid known polar bear denning habitat by routing roads through areas of poor denning habitat. Route around known den locations by one mile.
- ☐ Use the 'Buddy System' when working in remote areas, and if necessary, designate a polar bear guard to stand watch.
- ☐ Ensure that refuse and other potential polar bear attractants are properly managed at the site.
- ☐ Ensure that the site is well lit.
- ☐ Prior to conducting work, discuss polar bear safety at the work site. Establish a notification system (via radio, blow horns, or sirens) to make people aware of a polar bear in the area. Identify safe areas where personnel will go if a bear is sighted.
- ☐ Notify HSE Specialist of all polar bear sightings.

#### *Training Requirements*

Training is required to fulfill the requirements of the LOA and the Authorization to deter.

Annual general awareness training will be given to all personnel in the field using environmental alerts and updates, safety bulletins, safety meetings and other methods as appropriate.

Training requirements are outlined in LOA applications. Training requirements are outlined below:

- ☐ HSE Specialist is to send out an update or alert regarding polar bear awareness,
- ☐ Each work season watch the AOGA video “Polar Bears: Safety and Survival”
- ☐ Annual training is required for facilities with high probabilities of polar bear encounters.

Videos, handouts, and oral presentations are used as training materials.

For polar bears, selected Security personnel are required to attend Deterrence Training Project conducted by USFWS. The class is called *Polar Bear Deterrence Training Class*, and consists of:

- ☐ classroom information covering polar bear behavior, biology, and hazing techniques,
- ☐ hands-on hazing and deterrence techniques using actual equipment

A “Train the Trainer” project is offered by USFWS. The project is intended to provide enough background information for field personnel to give a short presentation on polar bear awareness and safety. USFWS will present this class upon request by interested groups.

### ***Den Detection Guidelines***

Polar bear dens will be avoided by one mile at all times. Known polar bear denning locations will be obtained from USFWS to allow travel routes to be adjusted. NSB will review maps of the project area to determine good quality denning habitat within close proximity to work areas and route around them. In addition, to detect dens both known and unknown.

### ***Response Actions: ONLY authorized personnel are permitted to respond to wildlife incidents***

- ☐ In cases of harassing, and deterrent activities, a short narrative is required that describes the incident and actions taken. The narrative can be hand written and must be attached to the forms.
- ☐ Notify HSE Specialist of all sightings and hazing incidents.
- ☐ Whenever possible, notify HSE Specialist in advance of any polar bear deterrent activities.

Examples of incidents where pre-notification would not be feasible include activities that require immediate measures be taken for the protection of personnel or bears.

- ☐ HSE Specialist will notify the appropriate agencies, and email or fax the sighting and observation reports to appropriate agencies as listed on the fax cover sheet (see attachments).

### ***Reporting Requirements***

All wildlife observation forms are to be maintained by the HSE Specialist. To avoid potential violations of laws or NSB procedures regarding wildlife interactions, the HSE Specialist should be engaged in all decisions regarding wildlife management and interaction in NSB-operated areas.

Immediate Reporting Requirements:

Polar Bear harassment/hazing or other “take” events are to be reported to the USFWS within 24 hours.

48-Hour Reporting Requirements:

Report all new polar bear dens discovered during operations to ADFG/USFWS within 48 hours.

Annual Reporting Requirements:

An annual polar bear monitoring report will be prepared by the HSE Specialist for submission to USFWS by January 15<sup>th</sup> of the previous year’s sightings, “takes,” observations, and deterrence of polar bears. A final report will be submitted within 60 days of the expiration of any LOA.

### ***4.2.2 Brown Bear (*Ursus arctos*)***

#### ***Regulatory References:***

5 AAC 92.230 Feeding of Game

18 AAC 60.010 Treatment of Solid Waste

NSB Title 19.70.050 Area-wide policies

Although brown bears can come out of their dens unexpectedly, they generally begin to emerge from their dens in April; and by May can be seen throughout the oil fields. Bears on the North Slope generally return to their dens in October. Many people have become used to seeing bears around the fields, but it is important to remember that they are wild animals. They are capable of seriously injuring people, especially if they are approached, cornered, or threatened. When a brown bear is seen near your work area, immediately move to a safe place and notify the HSE Specialist or Bear Guard, who will conduct bear monitoring and deterring if necessary.

### ***General Guidelines***

Employees should always be aware of the following precautions when working in areas where encounters with brown bears are possible:

- ☐ Inspect your work site before leaving your vehicle or building.
- ☐ Designate someone to regularly inspect the work area and scan for bears.
- ☐ Stay in radio contact and use the buddy system.
- ☐ Never approach a bear, even for a photograph.
- ☐ Never separate or come in between a sow and her cubs.
- ☐ Do not leave food or used food containers in the cab or the flat-bed of a truck. Store food in bear-resistant or odor-proof containers inside vehicles. Keep any chemicals or other potential attractants in bear-resistant containers.

### ***Procedure***

- ☐ Immediately report all brown bear sightings to the HSE Specialist. The HSE Specialist will complete the sighting form and include any hazing performed by the HSE Specialist or other authorized personnel (note that only the HSE Specialist, Bear Guard or other trained personnel are authorized to deter wildlife).
- ☐ The HSE Specialist will distribute it to ADFG.
- ☐ Other authorized personnel will notify the HSE Specialist in advance of all deterrent activities whenever possible. In the event that immediate action must be taken for the protection of personnel or brown bears, pre-notification would not be feasible. Contact HSE Specialist immediately after the interaction has taken place to ensure proper reporting.

### ***Response Actions: ONLY authorized personnel are permitted to respond to bear incidents***

- ☐ Notify the HSE Specialist or on-site designated brown bear responders if monitoring or deterrence is required. Remember that personnel safety is foremost when observing or harassing bears. Do not risk safety in attempts to harass or gather information on bears.

If an injured bear is reported, the HSE Specialist will contact the ADFG. For more information, please see “Injured Wildlife” section of this plan.

### ***Reporting Requirements:***

All wildlife observation forms are to be kept on file at the HSE Specialist office.

Immediate Reporting Requirements:

Brown bear interaction(s) must be reported to ADFG within 24 hours. Therefore, submit the completed wildlife interaction report (see section 4.4 of this plan) to the HSE Specialist as soon as possible. Upon receipt of an observation form, HSE Specialist will immediately fax a copy to ADFG.

48-Hour Reporting Requirements:

There are no 48-hour reporting requirements for Brown Bears.

Annual Reporting Requirements:

There are no annual reporting requirements for Brown Bears.

#### 4.2.3 Caribou (*Rangifer tarandus granti*)

##### *General Guidelines*

The Teshekpuk Lake caribou herd is found throughout the project area. Caribou calve in early June and will be more sensitive to vehicle and foot traffic during that time. Large herds of caribou, numbering thousands of animals, may be seen during the summer, particularly on warm days when the insects are abundant. During warm days, caribou will often move to the coast or stand on gravel roads and pads seeking relief from insect harassment.

There are no specific permits in place from ADFG related to caribou. Caribou are not common in NSB operational areas in the winter season. However, human/caribou interactions are still possible. Most often, the best approach is to leave the caribou alone, and, depending on the situation, report their location to the HSE Specialist so additional interactions can be avoided.

##### *Procedures*

Caribou and musk ox moving through the oilfields have the right-of-way. Traffic must slow to allow them to cross roads. Drivers must watch for caribou darting out from under pipelines and onto roadways.

Personnel should not attempt to move groups of caribou or musk oxen off roads, pads, or runways. Honking horns, revving engines, yelling, and excessive speed are unacceptable and considered a form of harassment. If traffic is being unreasonably delayed, persons involved should contact Security, who will then take any necessary, appropriate action. Drivers who violate these policies are subject to disciplinary actions. Personnel should report any driver to Security that does not comply with the above directions. It is NSB policy that personnel do NOT approach caribou or on foot or separate a cow and calf.

##### *Contacts*

Should caribou be observed in an area, contact and inform the HSE Specialist as soon as practicable.

##### *Response Actions: ONLY authorized personnel are permitted to respond to wildlife incidents*

The following observed situations must be reported to Security: 1) dead caribou, 2) vehicle-wildlife encounter, and/or 3) injured caribou. If necessary, dead caribou should be moved to a remote location within the field so as not to provide an attractant to other wildlife. If meat from a recent caribou or musk ox kill appears to be salvageable, the NSB Wildlife Department should be contacted by the HSE Specialist, who may arrange for the meat to be provided to NSB community residents.

#### 4.2.4 Arctic Fox (*Alopex lagopus* ) and Red Fox (*Vulpes vulpes*)

##### *Regulatory References:*

5 AAC 92.230 Feeding of Game  
18 AAC 60.010 Treatment of Solid Waste  
NSB Title 19.70.050 Area-wide policies

##### *General Guidelines*

Arctic foxes, and to a lesser extent red foxes, are residents of the North Slope. Pups are generally born in April and May, and fox numbers increase during the summer when food is plentiful. Foxes are clever



when it comes to obtaining food. Foxes and wolves are predators that can bite out of aggression or fear, and can transmit diseases such as rabies. Take every precaution to avoid fox interactions by preventing access to food and waste in buildings, and by keeping trash bins away from windows and doors. Do not leave open doors and windows unattended. Rabies is endemic in the fox population and foxes will not show symptoms of rabies until they are close to death: therefore you cannot tell that an animal is rabid just by looking at it.

If you see foxes, consider them dangerous and avoid them. Personnel should not leave open doors and windows unattended because foxes may enter unnoticed. All NSB facilities and camps are obligated to prevent impact to local wildlife populations, such as attracting predatory animals to the project area. No hunting, fishing, or trapping is authorized while working for NSB. If a dead fox or wolf is observed on the tundra, it should be left in place unless it is in close proximity to infrastructure where it could attract bears and possibly result in a human/bear interaction. Once the HSE Specialist or Security is contacted, they may direct that, the carcass be retrieved by trained personnel and disposed of by incineration. Hazing of foxes is authorized by Public Safety permits (hazing of wolves is not).

### ***Procedures***

- ☐ Overly friendly, curious, or aggressive animals should be reported to Security. Notify Security immediately if you see a fox or any other animal behaving abnormally.
- ☐ Dispose of your trash carefully. Never leave food scraps in your truck or at your job site. Prevent access to food and/or waste in buildings by keeping windows and doors closed, and placing trash cans away from doors and windows. Contact the HSE Specialist if you notice any improperly managed food waste or have questions on refuse management.
- ☐ Never feed foxes or other animals. It is against company policy and is very Inspect your work area.
- ☐ Prevent foxes gaining access to areas that could be used as artificial den sites, such as underneath temporary buildings.
- ☐ Dead fox observed within the project area should be removed from area of activities. If a fox is found on or near a roadway, and its presence could attract bears, birds, or other foxes, collect the fox using steps 1-4 above. If the animal is not expected to be rabid, it can be incinerated.
- ☐ If a dead fox is observed on the tundra, it should be left in place.
- ☐ If an injured fox is reported, please refer to “Injured Wildlife” section of this plan.

### ***Contacts***

Should a problem fox be observed in an area, you should immediately call Security.

### ***Response Actions: ONLY authorized personnel are permitted to respond to wildlife incidents***

The primary response for fox control is to ensure adequate refuse management. Trash containers or other attractants should be stored well away from entryways.

In the event that a fox is in the area despite adequate refuse management, a permit may be obtained from the Alaska Department of Fish and Game to harass or relocate the animal. NSB CWAT program does not currently maintain this permit.

### ***Rabid Fox Management***

When a fox is observed exhibiting abnormal behavior (unusual aggressiveness, attacking individuals or other animals, unusual amounts of mucous and/or blood from the muzzle area), the HSE Specialist may request that Security dispatch the fox to protect personnel. Security personnel must have and comply with a current hunting license to dispatch a fox.

When a report is received of a fox exhibiting abnormal behavior, personnel should:

- ☐ Tell the caller to keep personnel away from the animal, but to keep track of its location as best as possible.
- ☐ Determine if anyone has been bitten or otherwise exposed.
- ☐ If persons have been bitten, inform the caller to send them to the medical clinic immediately.
- ☐ Contact Security and inform them of the incident and the location.
- ☐ Inform Security they are authorized to locate and kill the animal even if it has not bitten anyone and is only exhibiting unusual or abnormal behavior. Inform Security they should attempt to keep the head and neck intact when shooting the animal. ADFG suggests using plastic bullets, if available.
- ☐ Ensure the responding Security personnel fill out a rabid fox report (See attachments).

### ***Treatment of Fox Bites***

The rabies virus is transmitted by saliva. Once it enters your body through a wound, it travels through the nervous system to the brain, causing seizures, severe pain, paralysis, and death. Unless antibodies are administered quickly, the disease cannot be treated. The vaccine is a highly controlled substance; it is not available on the Slope. (See treatment for fox bites, below.) Wash the wound thoroughly with copious amounts of soap and water and seek medical aid immediately.

### ***Authorized personnel should perform the following:***

To confirm the presence of rabies in a wild animal, send the frozen, undamaged head to a virology lab, using the following procedures:

1. Wear plastic or rubber gloves when handling animals.
2. Wrap head (or entire fox carcass) in absorbent materials and place in plastic bag – secure the bag.
3. Place plastic bag in leak-proof container with some refrigerant material.
4. Remove gloves and wash hands. Contact HSE Specialist regarding incineration of the gloves. Do not dispose of gloves in the regular waste stream.
5. Wrap package and freeze immediately if possible. Call the number listed below for information on mailing. When mailing, mark package perishable and ship prepaid via fastest means to laboratory. Call lab and notify as to flight and arrival time.

Specimens from animals suspected to be rabid should be sent to:

**Alaska State Virology Laboratory  
Arctic Health Research Building, Room 239  
University of Alaska Fairbanks  
Fairbanks, Alaska 99775  
Telephone: 907-474-7017**

(Information provided by Alaska Department of Fish and Game 2015 Hunting and Trapping Regulations)

### ***Reporting Requirements:***

Immediate Reporting Requirements:

If a fox is suspected to be rabid and it is determined that it must be dispatched, notify Alaska Department of Fish and Game, DWC Wildlife Disease Surveillance reporting hotline 907-328-8354 or send an email to [dfg.dwc.vet@alaska.gov](mailto:dfg.dwc.vet@alaska.gov). Hazing of foxes should take place under stipulations outlined in the appropriate permit.

48-Hour Reporting Requirements:

There are no 48-hour reporting requirements for Arctic Foxes.

Annual Reporting Requirements:

There are no annual reporting requirements for Arctic Foxes.



#### 4.2.5 Ringed Seals (*Phoca hispida*)

##### *Regulatory References:*

Marine Mammal Protection Act of 1972 as amended  
National Marine Fisheries Service LOA for Incidental National Marine Fisheries Service IHA NSB  
Title 19.70.050 Area-wide policies

##### *General Guidelines*

Ice seals (ringed, bearded or spotted) can be seen along the coast, on barrier islands, artificial islands, swimming offshore in open water, and hauled out on ice during winter. Ringed seals are most likely to be encountered during on-ice winter operations conducted offshore, when working from boats, and along gravel causeways. The most sensitive period is during pupping in March. Seals are the primary prey of polar bears and the presence of seals may attract polar bears to the area.

All marine mammal species are protected under the MMPA by which seals and whales fall under National Marine Fisheries Service (NMFS) jurisdiction. Under the MMPA, it is prohibited to intentionally or unintentionally kill or harass whales or seals, unless authorized for specific activities. Prior to conducting work in ice seal and whale habitat (waters deeper than 3 meters) all personnel should consult the permitting staff. Seals maintain breathing holes in the ice, and they build ice lairs where their pups are born. Breathing holes and lairs may be difficult to see, so caution must be taken when working on or near the sea ice to avoid these locations. In addition, many whales use near shore polynas for migration, feeding and calving. Below are several guidelines regarding seal behavior and potential interaction:

- ☐ Seals are the primary prey of polar bears and the presence of seals may attract polar bears to the area.
- ☐ Seals, seal holes and lairs, which are generally invisible, should not be approached or touched.
- ☐ Do not touch or attempt to pick up an injured or deceased seal.

##### *Contacts*

Ringed seal interactions must be reported to HSE Specialist personnel immediately, as interactions must be reported to National Marine Fisheries Service within 24 hours.

##### *Response Actions: ONLY authorized personnel are permitted to respond to wildlife incidents*

It is important to immediately report all seal or whale encounters or interactions as listed below to Security, who will contact the HSE Specialist. Depending on the situation, the HSE Specialist will determine the appropriate action(s) to be taken. Under no circumstances should a seal or whale be approached, whether dead or alive, without consulting the HSE Specialist and before the HSE Specialist has obtained written authorization from NMFS.

Ringed Seal Stranding: If a dead marine mammal is found, DO NOT TOUCH IT. Contact NMFS (Barbara Mahoney, 271-3448 or 271-5006) or the 24-hour stranding hotline (877-925-7773) immediately.

Approval to move the animal must be granted from NMFS on a case-by-case basis. A

Marine Mammal Stranding Report must be compiled (see section 3.4 of this document) and sent to NMFS. NMFS may request that samples be collected prior to moving the animal.

NSB holds no permits to collect, hold, capture or intentionally disturb seals or whales. Should such a response be necessary, seek permission from the National Marine Fisheries Service prior to initiating any action.

### **Reporting Requirements:**

#### **Immediate Reporting Requirements:**

If a ringed seal interaction occurs, immediately notify the National Marine Fisheries Service at 271- 3448 or 271-5006. A ringed seal interaction report is included in Section 3.4 of this plan.

#### **48-Hour Reporting Requirements:**

There are no 48-hour reporting requirements for Ringed Seals.

#### **Annual Reporting Requirements:**

There are no annual reporting requirements for Ringed Seals.

## **4.3 Injured Wildlife**

### **General Guidelines**

- ☐ As a general rule, NSB has a non-interference policy regarding wildlife. Therefore, if the cause of injury or stress is natural, NSB will likely not get involved. However, if the injury is a result of field activities, the HSE Specialist may decide to intervene, capture, or help wildlife when appropriate, and with agency approval.
- ☐ Injured birds and mammals can be aggressive and may bite.
- ☐ If you discover an injured or dead animal in the field

### **DO NOT TOUCH IT**

### **DO NOT ATTEMPT TO TREAT IT**

### **DO NOT TAKE IT BACK TO CAMP**

- ☐ Observer must maintain a safe distance and not attempt to capture or contain the animal.
- ☐ Inform HSE Specialist immediately. Relay the species (if known), location and type of injury or problem.
- ☐ Only HSE Specialist and/or qualified environmental personnel are authorized to take any action.

### **Response Actions: ONLY authorized personnel are permitted to respond to wildlife incidents**

- ☐ Notify HSE Specialist regardless of time.
  - ☐ HSE Specialist will then field verify the sighting, condition of the animal, and possible cause of the injury.
  - ☐ If the animal is mobile, is not entangled with any oil field related equipment or debris, and the injury does not appear to be caused by human interaction, it should be left alone.
  - ☐ If the animal is tangled or otherwise trapped in project field-related equipment (e.g., snow fence, wire), contact ADFG (Mammals, Subsistence, or Rabid Foxes)
  - ☐ USFWS (Endangered Species, Marine Mammals, Migratory Birds) for on-scene assistance.
- Do not attempt to approach the animal without ADFG/USFWS authorization.
- ☐ If any potentially dangerous predatory species (e.g., bear) is present, take no action without agency contact.
  - ☐ If an endangered, threatened or otherwise protected species is involved (such as Spectacled Eiders), take no action before contacting USFWS (Endangered Species) and/or ADFG.
  - ☐ If the animal is severely injured, it should be dispatched. Obtain permission from ADFG (terrestrial mammals) or USFWS (birds) prior to taking action. Endangered species should not be dispatched without prior written authorization.

## EMERGENCY CONTACT NUMBERS

### NSB

Matt Dunn 907-852-0320  
HSE Specialist 907-852-2662  
Jason Bergerson 907-646-8211

### Federal Agencies

Christopher Putnam (USFWS) 907-786-3844  
Phillip Martin (USFWS) 907-456-0325  
(endangered species) 907-456-0208 (fax)  
USFWS Migratory Bird Management 907-786-3443  
AK USFWS Safeguard Hotline 800-478-3377  
USFWS Law Enforcement 907-786-3311  
Barbara Mahoney (NMFS) 907-271-3448  
(seal and whale stranding reports)

### State Agencies

Dick Shideler (ADFG) 907-459-7283 (work)  
(brown bears, terrestrial mammals) 907-456-3091 (fax)  
Dr. Kimberlee Beckman (ADFG) 907-459-7257  
(rabid foxes)  
Jack Winters (ADFG) 907-459-7285  
(freshwater fisheries) 907-456-3091 (fax)  
James Simon (ADFG) 907-459-7317  
(subsistence)  
Beth Lenart (ADFG) 907-459-7242  
(caribou, muskox, moose)  
ADFG Office of Wildlife Conservation Region V 907-443-2271  
(Nome) (furbearers) 907 443-5893 (fax)

### Local Agencies

Craig George (North Slope Borough) 907-852-0350  
(North Slope Borough Wildlife Department)

## 4.4 Reporting Forms

This section includes copies of Wildlife Interaction Reports referenced throughout the document.

- ☐ Wildlife Interaction Report
- ☐ Ringed Seal Interaction Report
- ☐ Marine Mammal Stranding Report
- ☐ Rabid Fox Report
- ☐ Polar Bear Sighting Report

Wildlife Interaction Report

Date: \_\_\_\_\_

Time: \_\_\_\_\_

Location:

Observer name:

Weather conditions:

| Fog | Snow | Rain | Clear | Wind Speed | Approx. Temp. |
|-----|------|------|-------|------------|---------------|
|     |      |      |       |            |               |

Species:

| Muskox | Arctic Fox | Grizzly Bear | Caribou | Wolf | Other |
|--------|------------|--------------|---------|------|-------|
|        |            |              |         |      |       |

Total number of animals

Adult \_\_\_\_\_ Subadult \_\_\_\_\_ Juvenile \_\_\_\_\_

Estimated distance of animals

from personnel/facility:

\_\_\_\_\_

\_\_\_\_\_

Possible attractants present:

\_\_\_\_\_

\_\_\_\_\_

Behavior:

| Curious | Aggressive | Predatory | Other |
|---------|------------|-----------|-------|
|         |            |           |       |

Description of encounter:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Duration of encounter:

\_\_\_\_\_

\_\_\_\_\_

Agency/NSB Contacts:

USFWS

Time: \_\_\_\_\_ Date: \_\_\_\_\_

ADFG

Time: \_\_\_\_\_ Date: \_\_\_\_\_

NSB

Time: \_\_\_\_\_ Date: \_\_\_\_\_

Ringed Seal Interaction Report  
(please submit to HSE  
Specialist)

Date: \_\_\_\_\_

Time: \_\_\_\_\_

Location: \_\_\_\_\_

Observer name: \_\_\_\_\_

Weather conditions:

| Fog                      | Snow                     | Rain                     | Clear                    | Wind<br>Speed            | Approx. Temp.            |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Number of Seals: \_\_\_\_\_

Estimated distance of seal  
from Seal Island or ice road:

\_\_\_\_\_  
\_\_\_\_\_

Seal

Behavior:

(please check one of the following)

Swimming

☐

Diving

☐

Hauled on ice

☐

Other

☐

Response of seal to human  
observer or surrounding  
activity

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Injuries sustained  
seal:

\_\_\_\_\_

Duration of encounter:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Agency/NSB Contacts:

NMFS

Time: \_\_\_\_\_ Date: \_\_\_\_\_

NSB

Time: \_\_\_\_\_ Date: \_\_\_\_\_

## MARINE MAMMAL STRANDING REPORT- LEVEL A DATA

FIELD #: \_\_\_\_\_ NMFS REGIONAL # \_\_\_\_\_ NATIONAL DATABASE# \_\_\_\_\_

COMMON NAME: \_\_\_\_\_ GENUS: \_\_\_\_\_ SPECIES: \_\_\_\_\_

EXAMINER: \_\_\_\_\_ Left tider: \_\_\_\_\_

Name: \_\_\_\_\_ Affiliation: \_\_\_\_\_

Address: \_\_\_\_\_ Phone: \_\_\_\_\_

| <b>LOCATION OF INITIAL OBSERVATION</b><br>State: _____ County: _____<br>City: _____<br>Body of Water: _____<br>Locality Details: _____<br>Latitude: _____ N _____ S _____<br>Longitude: _____ W _____ E _____<br>How (a) long determined (Check ONE):<br><input type="checkbox"/> GPS<br><input type="checkbox"/> Map<br><input type="checkbox"/> Internet/Software  |       | <b>OCCURRENCE DETAILS</b> <input type="checkbox"/> Restrained <input type="checkbox"/> GB# _____<br>(NMFS USE)<br>Group Event: <input type="checkbox"/> YES <input type="checkbox"/> NO<br>If Yes, Type: <input type="checkbox"/> Cow/Ca Pair <input type="checkbox"/> Mass Stranding #Animals: -- -- <input type="checkbox"/> actual <input type="checkbox"/> estimated<br>Findings of Human Interaction: <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Could not Be Determined (CBD)<br>If Yes, Check one or more: <input type="checkbox"/> 1. Boat Collision <input type="checkbox"/> 2. Shot <input type="checkbox"/> 3. Fishy Interaction<br><input type="checkbox"/> 4. Other Human Interaction: _____<br>Describe How Determined: _____<br>Gear Collected? <input type="checkbox"/> YES <input type="checkbox"/> NO Gear Disposition: _____<br>Other Findings upon Level A: <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> CBD<br>If Yes, Check one or more: <input type="checkbox"/> 1. Illness <input type="checkbox"/> 2. Injury<br><input type="checkbox"/> 3. Other Findings: _____<br>Describe How Determined: _____ |                                      |                          |                          |         |         |       |       |       |                                      |                          |                          |       |       |       |                      |                          |                          |       |       |       |                       |                          |                          |  |  |
|--|-------|--|--------------------------------------|--------------------------|--------------------------|---------|---------|-------|-------|-------|--------------------------------------|--------------------------|--------------------------|-------|-------|-------|----------------------|--------------------------|--------------------------|-------|-------|-------|-----------------------|--------------------------|--------------------------|--|--|
| <b>INITIAL OBSERVATION</b><br>Date: Year: -- Month: _____ Day: _____<br>First Observed: <input type="checkbox"/> Beach or Land <input type="checkbox"/> Floating <input type="checkbox"/> Swimming<br><b>CONDITION AT INITIAL OBSERVATION (Check ONE)</b><br><input type="checkbox"/> 1. Alive <input type="checkbox"/> 4. Advanced decomposition<br><input type="checkbox"/> 2. Fresh dead <input type="checkbox"/> 5. Mummified/Skeletal<br><input type="checkbox"/> 3. Moderate decomposition <input type="checkbox"/> 6. Unknown<br><b>INITIAL LIVE ANIMAL DISPOSITION (Check one or more)</b><br><input type="checkbox"/> 1. Left at Site <input type="checkbox"/> 7. Transferred to Rehabilitation:<br><input type="checkbox"/> 2. Immediate Release at Site Date: _____ Facility: _____<br><input type="checkbox"/> 3. Rehabilitated<br><input type="checkbox"/> 4. Disentangled <input type="checkbox"/> 8. Died during Transport<br><input type="checkbox"/> 5. Died at Site <input type="checkbox"/> 9. Euthanized during Transport<br><input type="checkbox"/> 6. Euthanized at Site <input type="checkbox"/> 10. Other: _____<br><b>CONDITION/ DETERMINATION (Check one or more)</b><br><input type="checkbox"/> 1. Sick <input type="checkbox"/> 4. Deemed Healthy <input type="checkbox"/> 7. Location Hazardous:<br><input type="checkbox"/> 2. Injured <input type="checkbox"/> 5. Abandoned/Orphaned <input type="checkbox"/> a. To animal<br><input type="checkbox"/> 3. Out of Habitat <input type="checkbox"/> 6. Inaccessible <input type="checkbox"/> b. To public<br><input type="checkbox"/> Unknown/CBD <input type="checkbox"/> 9. Other: _____<br>Comments: _____ |       | <b>LEVEL A EXAMINATION</b> <input type="checkbox"/> Not Able to Examine<br>Date: Year: -- Month: _____ Day: _____<br><b>CONDITION AT EXAMINATION (Check ONE)</b><br><input type="checkbox"/> 1. Alive <input type="checkbox"/> 4. Advanced decomposition<br><input type="checkbox"/> 2. Fresh dead <input type="checkbox"/> 5. Mummified/Skeletal<br><input type="checkbox"/> 3. Moderate decomposition<br><b>MORPHOLOGICAL DATA</b><br><b>SEX (Check ONE)</b> <b>AGE CLASS (Check ONE)</b><br><input type="checkbox"/> 1. Male <input type="checkbox"/> 1. Adult <input type="checkbox"/> 4. Pup/Ca<br><input type="checkbox"/> 2. Female <input type="checkbox"/> 2. Subadult <input type="checkbox"/> 5. Unknown<br><input type="checkbox"/> 3. Unknown <input type="checkbox"/> 3. Yearling<br>Straight Length: _____ D cm <input type="checkbox"/> D in <input type="checkbox"/> actual <input type="checkbox"/> estimated<br>Weight: _____ D kg <input type="checkbox"/> D lb <input type="checkbox"/> actual <input type="checkbox"/> estimated<br>PHOTO/VIDEO TAKEN: <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> 8.<br>Photo/Video Disposition: _____      |                                      |                          |                          |         |         |       |       |       |                                      |                          |                          |       |       |       |                      |                          |                          |       |       |       |                       |                          |                          |  |  |
| <b>TAG DATA</b><br>Tags Were:<br>Present at Time of Stranding (pre-existing): <input type="checkbox"/> YES <input type="checkbox"/> NO<br>Applied during Stranding Response: <input type="checkbox"/> YES <input type="checkbox"/> NO<br><table border="1"> <thead> <tr> <th>10#</th> <th>Color</th> <th>Type</th> <th>Placement</th> <th>Applied</th> <th>Present</th> </tr> </thead> <tbody> <tr> <td>_____</td> <td>_____</td> <td>_____</td> <td>(Check ONE)<br/>D OF L<br/>LF LR RF RR</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> <td>D OF L<br/>LF LRRF RR</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> <td>D OF L<br/>LF LR RF RR</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table> <p><small>D = Dorsal; OF = Dorsal Fin; L = Lateral Body<br/>         LF = Left Fluke; LR = Left Rear; RF = Right Fluke; RR = Right Rear</small></p>  |       | 10#  | Color                                | Type                     | Placement                | Applied | Present | _____ | _____ | _____ | (Check ONE)<br>D OF L<br>LF LR RF RR | <input type="checkbox"/> | <input type="checkbox"/> | _____ | _____ | _____ | D OF L<br>LF LRRF RR | <input type="checkbox"/> | <input type="checkbox"/> | _____ | _____ | _____ | D OF L<br>LF LR RF RR | <input type="checkbox"/> | <input type="checkbox"/> | <b>WHOLE CARCASS STATUS (Check one or more)</b><br><input type="checkbox"/> 1. Left at site <input type="checkbox"/> 4. Towed: Lat _____ Long _____ <input type="checkbox"/> 7. Landfill<br><input type="checkbox"/> 2. Buried <input type="checkbox"/> 5. Sunk: Lat _____ Long _____ <input type="checkbox"/> 8. Unknown<br><input type="checkbox"/> 3. Rendered <input type="checkbox"/> 6. Frozen for Later Examination <input type="checkbox"/> 9. Other: _____<br><b>SPECIMEN DISPOSITION (Check one or more)</b><br><input type="checkbox"/> 1. Scientific collection<br><input type="checkbox"/> 2. Educational collection<br><input type="checkbox"/> 3. Other: _____<br>Comments: _____<br><b>NECROPSIED</b> <input type="checkbox"/> YES <input type="checkbox"/> NO Date: _____<br>NECROPSIED BY: _____<br>PLEASE USE THE BACK SIDE OF THIS FORM FOR ADDITIONAL REMARKS |  |
| 10#  | Color | Type   | Placement                            | Applied                  | Present                  |         |         |       |       |       |                                      |                          |                          |       |       |       |                      |                          |                          |       |       |       |                       |                          |                          |  |  |
| _____  | _____ | _____  | (Check ONE)<br>D OF L<br>LF LR RF RR | <input type="checkbox"/> | <input type="checkbox"/> |         |         |       |       |       |                                      |                          |                          |       |       |       |                      |                          |                          |       |       |       |                       |                          |                          |  |  |
| _____  | _____ | _____  | D OF L<br>LF LRRF RR                 | <input type="checkbox"/> | <input type="checkbox"/> |         |         |       |       |       |                                      |                          |                          |       |       |       |                      |                          |                          |       |       |       |                       |                          |                          |  |  |
| _____  | _____ | _____  | D OF L<br>LF LR RF RR                | <input type="checkbox"/> | <input type="checkbox"/> |         |         |       |       |       |                                      |                          |                          |       |       |       |                      |                          |                          |       |       |       |                       |                          |                          |  |  |

NMFS Form 89-864 (rev. 2004)  
 DMB No. 0649-0178; Expires August 31, 2007





ADDITIONAL  
REMARKS

ADDITIONAL IDENTIFIER \_\_\_\_\_ (If animal is restranded, please indicate any previous field numbers here.)

This image shows a single sheet of white paper with horizontal blue or grey ruling lines, typical of notebook paper. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

DISCLAIMER

THESE DATA SHOULD NOT BE USED OUT OF CONTEXT OR WITHOUT VERIFICATION. THIS SHOULD BE STRICTLY ENFORCED WHEN REPORTING SIGNS OF HUMAN INTERACTION DATA.

DATA ACCESS FOR LEVEL A  
DATA

UPON WRITTEN REQUEST, CERTAIN FIELDS OF THE LEVEL A DATA SHEET WILL BE RELEASED TO THE REQUESTOR PROVIDED THAT THE REQUESTOR CREDIT THE STRANDING NETWORK AND THE NATIONAL MARINE FISHERIES SERVICE. THE NATIONAL MARINE FISHERIES SERVICE WILL NOTIFY THE CONTRIBUTING STRANDING NETWORK MEMBERS THAT THESE DATA HAVE BEEN REQUESTED AND THE INTENT OF USE. ALL OTHER DATA WILL BE RELEASED TO THE REQUESTOR PROVIDED THAT THE REQUESTOR OBTAIN PERMISSION FROM THE CONTRIBUTING STRANDING NETWORK AND THE NATIONAL MARINE FISHERIES SERVICE.

PAPERWORK REDUCTION ACT  
INFORMATION:

PUBLIC REPORTING BURDEN FOR THE COLLECTION OF INFORMATION IS ESTIMATED TO AVERAGE 30 MINUTES PER RESPONSE, INCLUDING THE TIME FOR REVIEWING INSTRUCTIONS, SEARCHING EXISTING DATA SOURCES, GATHERING AND MAINTAINING THE DATA NEEDED, AND COMPLETING AND REVIEWING THE COLLECTION OF INFORMATION. SEND COMMENTS REGARDING THIS BURDEN ESTIMATE OR ANY OTHER ASPECT OF THE COLLECTION OF INFORMATION, INCLUDING SUGGESTIONS FOR REDUCING THE BURDEN TO: CHIEF, MARINE MAMMAL CONSERVATION DIVISION, OFFICE OF PROTECTED RESOURCES, NOAA FISHERIES, 1315 EAST-WEST HIGHWAY, SILVER SPRING, MARYLAND 20910. NOT WITHSTANDING ANY OTHER PROVISION OF THE LAW, NO PERSON IS REQUIRED TO RESPOND TO, NOR SHALL ANY PERSON BE SUBJECT TO A PENALTY FOR FAILURE TO COMPLY WITH, A COLLECTION OF INFORMATION SUBJECT TO THE REQUIREMENTS OF THE PAPERWORK REDUCTION ACT, UNLESS THE COLLECTION OF INFORMATION DISPLAYS A CURRENTLY VALID OFFICE OF MANAGEMENT AND BUDGET (OMB) CONTROL NUMBER.

NCAA Form 89-854 (rev.2004)



OMB No. 0648-0178; Expires August 31, 2007

## Rabid Fox Encounter Form

Date: \_\_\_\_\_

Collector: \_\_\_\_\_

Collection Location: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Description of Collection: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Description of Encounter: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Injuries Sustained? \_\_\_\_\_

\_\_\_\_\_

Attractants Present: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Notifications Made: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

United States Department of the Interior  
Fish And Wildlife Service  
1011 E. Tudor Road  
Anchorage, Alaska 99503-6199

POLAR BEAR SIGHTING REPORT (LAND)

Company: \_\_\_\_\_ Date: \_\_\_\_\_  
Time: \_\_\_\_\_ am / pm / 24 LOA #: \_\_\_\_\_  
Observer Name: \_\_\_\_\_ Phone/Email: \_\_\_\_\_  
Location: \_\_\_\_\_

Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_ Datum: \_\_\_\_\_  
Weather Conditions: Fog \_\_\_\_\_ Snow \_\_\_\_\_ Rain \_\_\_\_\_ Clear \_\_\_\_\_ Temperature \_\_\_\_\_ °F / °C  
Wind Speed \_\_\_\_\_ mph / kts Wind Direction (from) \_\_\_\_\_ N NE E SE S SW W NW  
Visibility: Poor \_\_\_\_\_ Fair \_\_\_\_\_ Good \_\_\_\_\_ Excellent \_\_\_\_\_  
Number of Bears: (total number of bears & how many of each type) Total # Bears \_\_\_\_\_  
adult sub-adult 2 year-old yearling cub of year  
Male \_\_\_\_\_  
Female \_\_\_\_\_  
Unknown \_\_\_\_\_

Closest Distance of Bear(s): from personnel \_\_\_\_\_ facility \_\_\_\_\_

Bear Behavior (Initial Contact): curious ignore aggressive walk run swim hunt feed rest  
other \_\_\_\_\_

Bear Behavior (After Contact): curious ignore aggressive walk run swim hunt feed rest  
other \_\_\_\_\_

Description of Encounter: \_\_\_\_\_

Duration of Encounter: \_\_\_\_\_ Possible Attractants Present: Y / N

Describe Attractants: \_\_\_\_\_

Deterrents Used & Distance: Y / N m / yd / ft

\_\_\_\_\_ Vehicle \_\_\_\_\_ Horn/Siren/Noise \_\_\_\_\_ Spotlight/Headlight \_\_\_\_\_ Crackershell  
\_\_\_\_\_ Rubber Bullet \_\_\_\_\_ Bean Bag \_\_\_\_\_ Other (describe) \_\_\_\_\_

-----  
Agency/Contacts:

USFWS Christopher Putnam

(Christopher\_Putnam@fws.gov) (786-3844) (FAX: 786-3816) Time \_\_\_\_\_ Date \_\_\_\_\_

ADFG Dick Shideler (dick.shideler@alaska.gov) Time \_\_\_\_\_ Date \_\_\_\_\_

(907-459-7283) (FAX: 907-459-7332)

USGS George M Durner (gdurner@usgs.gov); Time \_\_\_\_\_ Date \_\_\_\_\_

USGS Todd Atwood (tatwood@usgs.gov) Time \_\_\_\_\_ Date \_\_\_\_\_

Matt Dunn/Jason Bergerson 907-852-0320 Time \_\_\_\_\_ Date \_\_\_\_\_

Other \_\_\_\_\_ Time \_\_\_\_\_ Date \_\_\_\_\_

United States Department of the Interior  
Fish And Wildlife Service  
1011 E. Tudor Road  
Anchorage, Alaska 99503-6199

POLAR BEAR SIGHTING REPORT (MARINE)

Company: \_\_\_\_\_ Date: \_\_\_\_\_  
Time: \_\_\_\_\_ am / pm / 24 LOA #: \_\_\_\_\_  
Observer/Vessel Name: \_\_\_\_\_ Phone/Email: \_\_\_\_\_  
Location: \_\_\_\_\_

Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_ Datum: \_\_\_\_\_  
Weather Conditions: Fog \_\_\_\_\_ Snow \_\_\_\_\_ Rain \_\_\_\_\_ Clear \_\_\_\_\_ Temperature \_\_\_\_\_ °F / °C  
Wind Speed \_\_\_\_\_ mph / kts Wind Direction (from) \_\_\_\_\_ N NE E SE S SW W NW  
Visibility: Poor \_\_\_\_\_ Fair \_\_\_\_\_ Good \_\_\_\_\_ Excellent \_\_\_\_\_  
Number of Bears: (total number of bears & how many of each type) Total # Bears \_\_\_\_\_  
                                adult      sub-adult      2 year-old      yearling      cub of year  
Male \_\_\_\_\_  
Female \_\_\_\_\_  
Unknown \_\_\_\_\_

Closest Distance of Bear(s): from vessel or location \_\_\_\_\_ m / yd / ft

Bear Behavior (Initial Contact): curious ignore aggressive walk run swim hunt feed rest  
other \_\_\_\_\_

Bear Behavior (After Contact): curious ignore aggressive walk run swim hunt feed rest  
other \_\_\_\_\_

Description of Encounter: \_\_\_\_\_

Duration of Encounter: \_\_\_\_\_ Possible Attractants Present: Y / N  
Describe Attractants: \_\_\_\_\_

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-----  
Agency/Contacts:  
USFWS Christopher Putnam  
(Christopher\_Putnam@fws.gov) (786-3844) (FAX: 786-3816) Time \_\_\_\_\_ Date \_\_\_\_\_  
ADFG Dick Shideler (dick.shideler@alaska.gov) Time \_\_\_\_\_ Date \_\_\_\_\_  
(907-459-7283) (FAX: 907-459-7332)  
USGS George M Durner (gdurner@usgs.gov); Time \_\_\_\_\_ Date \_\_\_\_\_  
USGS Todd Atwood (tatwood@usgs.gov) Time \_\_\_\_\_ Date \_\_\_\_\_  
Matt Dunn/Jason Bergerson 907-852-0320 Time \_\_\_\_\_ Date \_\_\_\_\_  
Other \_\_\_\_\_ Time \_\_\_\_\_ Date \_\_\_\_\_

## **BMP's and Stipulations in the NPR-A**

**In addition to those BMP's and STIP's included in the NSB permits, the project plan will adopt the following addition provisions related the 2013 ROD for the NPR-A where applicable.**

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

The applicable Best Management Practices and Stipulations listed in the 2013 ROD for the NPR-A have been reviewed as a basis for the project management plan.

A-1: Areas of operation shall be left clean of all debris.

*All solid waste will be backhauled to appropriate disposal locations at the end of each segment of the caravan route. No discharge of fluids will be allowed.*

A-2: Prepare and implement a comprehensive waste management plan addressing 1) prevention and reduction, 2) recycling, 3) treatment, and 4) disposal.

*Any spills that are identified will be cleaned up immediately and reported to the appropriated agency. Inspectors will carry spill kits, diapers and duck ponds. Any vehicle standing and running for five minutes or greater will be required to have a diaper or duck pond.*

A-3: Minimize pollution through effective hazardous materials contingency planning.

*Sufficient oil-spill –cleanup materials (absorbents, containment devices, etc.) shall be carried by field crews on all overland moves. Additional cleanup materials will also be stored at each location from which travel begins (each village inspection stations, Deadhorse and Toolik). Oil pans (duck ponds) will be marked with the responsible party's name.*

*No fuel storage along the trail is planned. Fuel transportation, other than for caravan operation is not planned as part of this project.*

A-5: Minimize the impact of contaminants from refueling operations on fish, wildlife and the environment.

Refueling of vehicles/equipment within 500 feet of the active floodplain of any water body is prohibited. Fuel storage stations must be located at least 500 feet from any waterbody, with the exception of small caches (up to 210 gallons) for small equipment.

*A contractor will be employed to lead the caravans and maintain the snow trails. The NSB will maintain compliance with their environmental plans as included in the contractor's permits.*

A-7: Discharge of produced water in upland areas and marine waters is prohibited.

A-8: Minimize conflicts resulting from interaction between humans and bears during activities.

*A CWAT Wildlife Interaction Plan has been developed – see attached.*

*Additionally, the CWAT project transits several areas where other operators have commercial activities. The NSB will work with each operator to be knowledgeable of their wildlife interaction plans and coordinate the caravan activities to minimize conflict with both wildlife and commercial activities.*

A-9: Personal vehicles are the primary users of the CWAT and are not subject to the the Ultra-Low Sulfur Diesel requirements of oil and gas operations.

*The contractor that is employed to maintain the trail will have its own ULSD compliance requirements.*

A-10: Prevent unnecessary or undue degradation of the lands and protect health.

*NSB inspectors will regularly transit the project area and enforce compliance with this BMP. Monitoring of the project area will be an ongoing process as part of NSB policies.*

*It is not expected that caravan transits will have any significant emissions and therefore will have little impact on air quality. Caravans are anticipated to be limited to 10-15 vehicles per one-way trip.*

A-11: Ensure that permitted activities do not create human health risks through contamination of subsistence foods.

*It is not anticipated that the caravan transit activities will create contamination of subsistence foods. NSB inspectors/enforce officers will continue to monitor all activities along the trail system and report any issues that are identified to the appropriate federal, state and local agencies.*

No Water use for CWAT permitted activities is anticipated, except minimal amounts for Anaktuvuk Pass trail.

B-1: Withdrawal of unfrozen water from rivers and streams during winter is prohibited. The removal of ice aggregate from grounded areas <= four feet deep may be authorized from rivers, but is not anticipated within the scope of our project.

B-2: Maintain natural hydrologic regimes in soils, surrounding lakes and ponds, and maintain populations of, and adequate habitat for, fish, invertebrates, and waterfowl.

B-2 Subsections (a)-(f) are not applicable to this project.

(g) Compaction of snow cover or snow removal from fish-bearing waterbodies shall be prohibited except at approved ice road crossings, water pumping stations on lakes, or areas of grounded ice.

*This project does not include ice road construction, but may use sections of ice road constructed by other commercial operators. If any lakes or fish-bearing waterbodies are determined to be necessary to cross, a deviation from the B-2 (g) would be sought, but at this time none have been identified that can't be skirted by the trail routing. The contract operator will address this in their permits.*

Winter Overland Moves and Seismic Work

*This project involves winter overland local traffic with caravan assistance. No seismic activity is part of this project.*

C-1: Protect grizzly bear, polar bear, and marine mammal denning and/or birthing locations.

Cross country use of heavy equipment and seismic activities is prohibited within ½ mile of occupied grizzly dens identified by the Alaska Department of Fish and Game unless alternative protective measures are approved by the authorized officer in consultation with the Alaska Department of Fish and Game.

Cross-country use of heavy equipment and seismic activity is prohibited within 1 mile of known or observed polar bear dens or seal birthing lairs. Operators near the coast areas shall conduct a survey for potential polar bear dens and seal birthing lairs and consult with the USFWS and/or NOAA-Fisheries, as appropriate, before initiating activities in coastal habitat between October 30 and April 15.

C-2: Protect stream banks, minimize compaction of soils, and minimize the breakage, abrasion, compaction, or displacement of vegetation.

- 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 authorized officer.
- b. Low-ground-pressure vehicles shall be used for the on-the-ground activities off ice roads or pads. Low-ground-pressure vehicles shall be selected and operated in a manner that eliminates direct impacts to the tundra by shearing, scraping, or excessively compacting the tundra mat.

*The CWAT project will request a waiver of C-2 (b) since the intent of the project is to allow transit of personal vehicles. Tire pressures will be reduced as necessary. Snow trail compacting and maintenance will be coordinated with the contracted operator to ensure the tundra is not unnecessarily affected.*

- c. Bulldozing of tundra mat and vegetation, trails, or seismic lines is prohibited; however, on existing trails, seismic lines or camps, clearing drifted snow is allowed to the extent 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.

*The CWAT project may also need a waiver for C-2 (d). The intent of our project is to reuse the marked trail route and maintain it in such a way that the tundra remains protected during the tundra travel season.*

- e. The location of 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 subsequent year.

*This project doesn't involve ice road construction, although it may use portions of ice roads constructed by others. Trail offsets will be determined on a case by case basis depending on what is necessary to avoid conflicts with industrial use of existing trails*

*and ice roads. Coordination will be done with other operators to avoid tundra damage and assess the condition of trail locations after each season.*

- f. Motorized ground-vehicle use within the Colville River Special Area associated with overland moves, seismic work, and any similar use of heavy equipment shall be minimized within an area that extends 1 mile west or northwest of the bluffs of the Colville River, and 2 miles on either side of the Kogosukruk and Kikiakrorak rivers and tributaries of the Kogosukruk River 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 authorized officer.

*The NSB will work with its contractor to ensure compliance with this item, although the proposed trail routing does not intersect these rivers systems.*

C-3: Crossing of waterway courses shall be made using low-angle approach. Crossings that are reinforced with additional snow or ice (“bridges”) shall be removed, breached or slotted before spring breakup. Ramps and bridges shall be substantially free of soil and debris.

*The NSB CWAT doesn't plan to construct ice bridges as part of the project. The contractor we employ may under their own permit. Our inspectors will be monitoring this issue for compliance also.*

C-4: 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, streams, and lakes shall be crossed at areas of grounded ice whenever possible.

BMP C-5 is not applicable to this project.

Lease Stipulations for Oil and Gas Exploratory Drilling D-1 & D-2

### ***E-1 Best Management Practice***

Objective: Protect subsistence use and access to subsistence hunting and fishing areas and minimize the impact of oil and gas activities on air, land, water, fish, and wildlife resources.

Requirement/Standard: All roads must be designed, constructed, maintained, and operated to create minimal environmental impacts and to protect subsistence use and access to subsistence hunting and fishing areas. The authorized officer will consult with appropriate federal, State, and North Slope Borough regulatory and resources agencies prior to approving construction of roads. Subject to approval by the authorized officer, the construction, operation, and maintenance of oil and gas field roads is the responsibility of the lessee unless the construction, operation, and maintenance of roads are assumed by the appropriate governing entity.

*The CWAT project trail maintenance is being assumed by the NSB through a contractor.*

### ***E-2 Lease Stipulation***

Objective: Protect fish-bearing water bodies, water quality, and aquatic habitats. Requirement/Standard: Permanent oil and gas facilities, including roads, airstrips, and pipelines, are prohibited upon or within 500 feet as measured from the ordinary high water mark of fish-bearing waterbodies. Essential pipeline



and road crossings will be permitted on a case-by-case basis. Note: Also refer to Stipulations/Best Management Practices K-1 and K-2. Construction camps are prohibited on frozen lakes and river ice. Siting of construction camps on river sand and gravel bars is allowed and encouraged. Where leveling of trailers or modules is required and the surface has a vegetative mat, leveling shall be accomplished through blocking rather than use of a bulldozer.

Facility Design and Construction E-2 & E-3 are not applicable to this project. BMP's E-4 & E-5 are not applicable.

#### ***E-6 Best Management Practice***

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.

*The CWAT project relies on snow trails that are constructed for other purposes for the majority of the trail system. No ice bridges or stream blockages are within the scope of our project.*

*BMP's E-7, E-8, E-9(a) are not applicable to this project.*

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

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

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

*Feeding of wildlife is strictly prohibited in the Wildlife Interaction Plan for the CWAT project.*

BMP E-10, E-11 is not applicable as no construction of permanent oil and gas facilities are part of this project.

#### ***E-13 Best Management Practice***

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 authorized officer and suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer.

#### ***E-14 Best Management Practice***

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 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 authorized officer. To adhere to these best management practices, at least 3 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 watermark. 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.

BMP’s E-15 and E-16 are not applicable.

### ***E-17 Best Management Practice***

Objective: Manage permitted activities to meet Visual Resource Management class objectives described below.

Class I: Natural ecological changes and very limited management activity are allowed. The level of change to the characteristic landscape should be very low and must not attract attention.

Class II: The level of change to the characteristic landscape should be low. Management activities may be seen, but should not dominate the view of the casual observer. Any changes should repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

Class III: The level of change to the characteristic landscape should be moderate. Management activities may attract attention, but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

Class IV: The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize impacts through location and design by repeating form, line, color, and texture.

Requirement/Standard: At the time of application for construction of permanent facilities, the lessee/permittee shall, after consultation with the authorized officer, submit a plan to best minimize visual impacts, consistent with the Visual Resource Management class for the lands on which facilities would be located. A photo simulation of the proposed facilities may be a necessary element of the plan.

*No permanent facilities are included in this project. A temporary shelter may be used at some point, but it will most likely be portable and travel with the caravan.*

*BMP E-18, E-19, F-1 and Lease Stipulation G-1 are not applicable.*

### **Subsistence Consultation for Permitted Activities**

#### ***H-1 Best Management Practice***

Objective: Provide opportunities for participation in planning and decision making to prevent unreasonable conflicts between subsistence uses and other activities. Requirement/Standard: Lessee/permittee shall consult directly with affected communities using the following guidelines:

- a. Before submitting an application to the BLM, the applicant shall consult with directly affected subsistence communities, the North Slope Borough, and the National Petroleum Reserve-Alaska Subsistence Advisory Panel to discuss the siting, timing, and methods of their proposed operations to help discover local traditional and scientific knowledge, resulting in measures that minimize impacts to subsistence uses. Through this consultation, the applicant shall make every reasonable effort, including such mechanisms as conflict avoidance agreements and mitigating measures, to ensure that proposed activities will not result in unreasonable interference with subsistence activities. In the event that no agreement is reached between the parties, the authorized officer shall consult with the directly involved parties and determine which activities will occur, including the timeframes.
- b. The applicant shall submit documentation of consultation efforts as part of its operations plan. Applicants should submit the proposed plan of operations to the National Petroleum Reserve-Alaska Subsistence Advisory Panel for review and comment. The applicant must allow time for the BLM to conduct formal government-to-government consultation with Native Tribal governments if the proposed action requires it.
- c. A plan shall be developed that shows how the activity, in combination with other activities in the area, will be scheduled and located to prevent unreasonable conflicts with subsistence activities. The plan will also describe the methods used to monitor the effects of the activity on subsistence use. The plan shall be submitted to the BLM as part of the plan of operations. The plan should address the following items:
  1. A detailed description of the activity(ies) to take place (including the use of aircraft).
  2. A description of how the lessee/permittee will minimize and/or deal with any potential impacts identified by the authorized officer during the consultation process.
  3. A detailed description of the monitoring effort to take place, including process, procedures, personnel involved and points of contact both at the work site and in the local community.
  4. Communication elements to provide information on how the applicant will keep potentially affected individuals and communities up-to-date on the progress of the activities and locations of possible, short-term conflicts (if any) with subsistence activities. Communication methods could include holding community meetings, open house meetings, workshops, newsletters, radio and television announcements, etc.
  5. Procedures necessary to facilitate access by subsistence users to the permittees' area of activity or facilities during the course of conducting subsistence activities.
- d. During development, monitoring plans must be established for new permanent facilities, including pipelines, to assess an appropriate range of potential effects on resources and subsistence as determined on a case-by-case basis given the nature and location of the facilities. The scope, intensity, and duration of such plans will be established in consultation with the authorized officer and NPR-A Subsistence Advisory Panel.
- e. Permittees that propose barging facilities, equipment, supplies, or other materials to NPR-A in support of oil and gas activities in the NPR-A shall notify, confer, and coordinate with the Alaska Eskimo Whaling Commission, the appropriate local community whaling captains' associations, and the North Slope Borough to minimize impacts from the proposed barging on subsistence whaling activities.

- f. Barge operators requiring a BLM permit are required to demonstrate that barging activities will not have unmitigable adverse impacts on the availability of marine mammals to subsistence hunters.
- g. All vessels over 50 ft. in length engaged in operations requiring a BLM permit must have an Automatic Identification System (AIS) transponder system on the vessel.

*The North Slope Borough is in regular contact with its communities and the subsistence users of resources in the project area. The draft permit notices for each segment of the CWAT trail system have been sent to representatives of each tribal organization, village corporation, regional corporation and local government in the region in addition to all regulatory agencies at the state and federal level. Feedback from the villages during the update of village comprehensive plans was a significant impetus for the development of the project. Two Planning Commission meetings also discussed the ASTAR project along with at least two North Slope Borough Assembly meetings where the DNR Commissioner addressed the issue of connecting communities to the road system.*

*The project description covers the majority of the information that will be communicated to all North Slope Borough residents as part of our public information process. The Operation Plan and Wildlife Interaction Plan cover the rest of the pertinent information. The NSB is very aware of the issues related to subsistence in the area and will work continuously to ensure that impacts of this projects are not negative on the subsistence users and other residents of its communities.*

*No permanent facilities are planned as part of the CWAT project. No barging of facilities, supplies or equipment is proposed. No vessels are proposed as part of the project.*

*BMP H-2 is not applicable.*

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

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

### **Orientation Programs Associated with Permitted Activities**

#### ***I-1 Best Management Practice***

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, best management practices, 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 authorized officer for review and approval and should:

- a. Provide sufficient detail to notify personnel of applicable stipulations and best management practices 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 North Slope Borough 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 North Slope Borough Health Department for review and comment.

*The staff of multiple Borough departments will be involved with the orientation, monitoring, inspecting and enforcement the CWAT project.*

## **Endangered Species Act—Section 7 Consultation Process**

**J.** The lease areas may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or to have some other special status. The BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activities that will contribute to the need to list such a species or their habitat. The BLM may require modifications to or disapprove a proposed activity that is likely to adversely affect a proposed or listed endangered species, threatened species, or critical habitat. The BLM will not approve any activity that may affect any such species or critical habitat until it completes its obligations under

applicable requirements of the Endangered Species Act as amended, 16 USC § 1531 et seq., including completion of any required procedure for conference or consultation.

*ESA Section 7 Consultation is not believed to apply to this project, but the Borough will actively monitor activity on the trail system as part of its own regulatory/enforcement responsibilities across the project area.*

### **Additional Protections that Apply in Select Biologically Sensitive Areas**

*We do not believe the “K” Lease stipulations and Best management practices apply to the CWAT project, but program staff will pay particular attention to any areas that are transited and report issues accordingly.*

*BMP L-1 does not apply to this project.*

### **General Wildlife and Habitat Protection**

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

Objective: Minimize disturbance and hindrance of wildlife, or alteration of wildlife movements through the NPR-A. Requirement/Standard: Chasing wildlife with ground vehicles is prohibited. Particular attention will be given to avoid disturbing caribou.

*This item is covered in the Wildlife Interaction Plan.*

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

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

*As part of the vehicle inspection protocol, equipment and vehicles using the CWAT trails will also be inspected for weeds.*

## **Weed Control Plan**

NSB, Eskimos Inc. and all contractor and subcontractor personnel will work to prevent the introduction or spread of non-native, invasive plant species in the National Petroleum Reserve-Alaska (NPR-A), in accordance with Best Management Practice M-2<sup>12</sup>.

Eskimos Inc. will certify that all equipment and vehicles are weed-free prior to transporting them into the NPR-A. All travel along the proposed route will be conducted in winter, reducing the likelihood for

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<sup>12</sup> Bureau of Land Management. 2013. National Petroleum Reserve-Alaska Integrated Activity Plan Record of Decision.

transportation of invasive plants. Additionally, as part of the vehicle inspection protocol, equipment and vehicles using the CWAT trails will also be inspected for weeds.

*BMP's M-3 and M-4 do not apply to this project.*

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## CWAT Project Areas

### Details of proposed right-of-way (use area)

#### Utqiagvik (Utqiagvik) to DS-2P

| <b>Township</b> | <b>Range</b> | <b>Section</b>                        | <b>Meridian</b> | <b>USGS Quadrangle</b> |
|-----------------|--------------|---------------------------------------|-----------------|------------------------|
| 22N             | 18W          | 7,17,18,20,29,32                      | Umiat           |                        |
| 21N             | 18W          | 5,7,8,18,19,30,31                     | Umiat           |                        |
| 20N             | 19W          | 2,11,13,14,24,25,36                   | Umiat           |                        |
| 19N             | 19W          | 1,12,13,23,24,26,27,33,34             | Umiat           |                        |
| 18N             | 19W          | 3,4,8,9,10,15,17,18,19,22,27,30,34,35 | Umiat           |                        |
| 18N             | 20W          | 25,36                                 | Umiat           |                        |
| 17N             | 16W          | 30,31,32,33,34                        | Umiat           |                        |
| 17N             | 17W          | 20,21,22,23,25,26,29,30               | Umiat           |                        |
| 17N             | 18W          | 6,7,8,9,16,21,22,23,24,25,26,27,34,35 | Umiat           |                        |
| 17N             | 19W          | 1,2                                   | Umiat           |                        |
| 17N             | 20W          | 1,2,11,14,15,21,22,28,29,31,32        | Umiat           |                        |
| 16N             | 15W          | 20,21,22,27,29,30,34,35,36            | Umiat           |                        |
| 16N             | 16W          | 4,5,9,15,16,22,23,25,26               | Umiat           |                        |
| 16N             | 21W          | 2,10,11,15,22,27,28,33                | Umiat           |                        |
| 15N             | 13W          | 31                                    | Umiat           |                        |
| 15N             | 14W          | 15,16,17,18,19,20,21,22,23,25,26,36   | Umiat           |                        |
| 15N             | 15W          | 1,12,13                               | Umiat           |                        |
| 15N             | 21W          | 4,5,7,8                               | Umiat           |                        |
| 15N             | 22W          | 12,13,14,22,23,27,28,33               | Umiat           |                        |
| 14N             | 12W          | 30,31,32                              | Umiat           |                        |
| 14N             | 13W          | 5,6,8,9,10,11,13,14,24,25             | Umiat           |                        |
| 14N             | 22W          | 4,9,16,17,20,21,27,28,34,35           | Umiat           |                        |
| 13N             | 10W          | 19,25,26,27,28,29,30,32,33            | Umiat           |                        |
| 13N             | 11W          | 7,15,16,17,18,22,23,24                | Umiat           |                        |
| 13N             | 12W          | 4,5,9,10,11,12                        | Umiat           |                        |
| 13N             | 21W          | 7,18                                  | Umiat           |                        |
| 13N             | 22W          | 1,2,12                                | Umiat           |                        |
| 13N             | 9W           | 28,29,30,33,34,35                     | Umiat           |                        |
| 12N             | 5W           | 31                                    | Umiat           |                        |
| 12N             | 6W           | 31,32,33,34,35,36                     | Umiat           |                        |
| 12N             | 7W           | 18,19,20,21,22,25,26,27,36            | Umiat           |                        |
| 12N             | 8W           | 2,3,4,5,6,11,13,14                    | Umiat           |                        |
| 12N             | 9W           | 1,2,3                                 | Umiat           |                        |
| 11N             | 1W           | 19,27,28,29,30,34,35                  | Umiat           |                        |
| 11N             | 2W           | 16,17,18,21,22,23,24                  | Umiat           |                        |
| 11N             | 3W           | 13,14,15,16,17,18                     | Umiat           |                        |
| 11N             | 4W           | 6,7,8,9,10,11,13,14                   | Umiat           |                        |
| 11N             | 5W           | 2,3,4,5,6,11,12                       | Umiat           |                        |
| 10N             | 7E           | 1,2                                   | Umiat           |                        |
| 10N             | 7E           | 6,7,8,17,20,21,28,33                  | Umiat           |                        |
| 9N              | 1E           | 4,9,16,21,22,23,24                    | Umiat           |                        |
| 9N              | 2E           | 15,16,17,19,20,22,23,24               | Umiat           |                        |
| 9N              | 3E           | 19,20,28,29,33,34                     | Umiat           |                        |



|    |    |                               |       |
|----|----|-------------------------------|-------|
| 9N | 7E | 3,4,9,16,21,28,33             | Umiat |
| 8N | 3E | 2,3,9,10,11,15,16,22,23,24,25 | Umiat |
| 8N | 4E | 24,25,26,27,28,29,30          | Umiat |
| 8N | 5E | 1,2,3,9,10,16,17,19,20        | Umiat |
| 8N | 6E | 2,3,4,5,6,11,12               | Umiat |
| 8N | 7E | 4,5,7,8,17,18                 | Umiat |

#### Utqiagvik to Atqasuk

| <b>Township</b> | <b>Range</b> | <b>Section</b>               | <b>Meridian</b> | <b>USGS Quadrangle</b>       |
|-----------------|--------------|------------------------------|-----------------|------------------------------|
| 13N             | 21W          | 18                           | Umiat           | Meade River B-3              |
| 13N             | 22W          | 1,2,12,13                    | Umiat           | Meade River B-3/C-3          |
| 14N             | 22W          | 6,7,17,18,20,27,28,29,34,35  | Umiat           | Meade River C-3              |
| 15N             | 22W          | 2,3,9,10,16,17,19,20,30,31   | Umiat           | Meade River C-3              |
| 16N             | 20W          | 5,6                          | Umiat           | Meade River D-2              |
| 16N             | 21W          | 1,11,12,14,15,16,19,20,21,30 | Umiat           | Meade River C-3/D-3/D-2      |
| 16N             | 22W          | 25,35,36                     | Umiat           | Meade River C-3              |
| 17N             | 19W          | 4,5,7,8,18,19                | Umiat           | Meade River D-2              |
| 17N             | 20W          | 24,25,26,34,35               | Umiat           | Meade River D-2              |
| 18N             | 19W          | 3,10,15,16,21,28,33          | Umiat           | Meade River D-2              |
| 19N             | 19W          | 1,12,13,23,24,26,27,34       | Umiat           | Meade River D-2 UtqiagvikA-4 |
| 20N             | 19W          | 2,11,13,14,24,25,36          | Umiat           | Utqiagvik A-4                |
| 21N             | 18W          | 5,7,8,18,19,30,31            | Umiat           | Utqiagvik A-4                |
| 21N             | 19W          | 25,36                        | Umiat           | Utqiagvik A-4                |
| 22N             | 18W          | 7,17,18,20,29,32             | Umiat           | Utqiagvik A-4/B-4            |

#### Wainwright to Atqasuk (Both Route Options)

| <b>Township</b> | <b>Range</b> | <b>Section</b>                             | <b>Meridian</b> | <b>USGS Quadrangle</b> |
|-----------------|--------------|--|-----------------|------------------------|
| 13N             | 21W          | 18   | Umiat           | Meade River B-3        |
| 13N             | 22W          | 1,2,12,13                                  | Umiat           | Meade River B-3/C-3    |
| 13N             | 26W          | 2,3,4,5,6,9                                | Umiat           | Meade River C-5        |
| 13N             | 27W          | 1,2,3,4,7,8,9                              | Umiat           | Meade River B-5/C-5    |
| 13N             | 28W          | 4,5,6,9,10,11,12                           | Umiat           | Wainwright C-1/B-1     |
|                 |              |  |                 | Meade River B-5        |
| 13N             | 30W          | 4,7,8                                      | Umiat           | Wainwright C-2         |
| 13N             | 31W          | 2,3,11,12                                  | Umiat           | Wainwright C-2/B/2     |
| 14N             | 22W          | 6,7,17,18,20,27,28,29,34,35                | Umiat           | Meade River C-3        |
| 14N             | 23W          | 3,4,7,8                                    | Umiat           | Meade River C-4/C-3    |
| 14N             | 24W          | 10,11,12,15,16,17,18                       | Umiat           | Meade River C-4        |
| 14N             | 25W          | 13,14,15,16,20,21,29,30                    | Umiat           | Meade River C-5/C-4    |
| 14N             | 26W          | 25,35,36                                   | Umiat           | Meade River C-5        |
| 14N             | 28W          | 31   | Umiat           | Wainwright C-1         |
| 14N             | 29W          | 7,8,15,16,17,22,23,25,26,31,32,33,34,35,36 | Umiat           | Wainwright C-1         |
| 14N             | 30W          | 4,5,6,9,10,11,12,33,34,35,36               | Umiat           | Wainwright C-1/ C-2    |
| 14N             | 31W          | 4,5,9,16,22,27,34                          | Umiat           | Wainwright C-2         |
| 15N             | 22W          | 30,31                                      | Umiat           | Meade River C-3        |
| 15N             | 23W          | 25,34,35,36                                | Umiat           | Meade River C-3        |
| 15N             | 30W          | 31   | Umiat           | Wainwright C-2         |
| 15N             | 31W          | 16,17,18,21,22,26,27,30,31,32,35,36        | Umiat           | Wainwright C-2         |
| 15N             | 32W          | 13,24,25                                   | Umiat           | Wainwright C-2         |

#### Utqiagvik to Oliktok Point (alternate route from Sea Ice PAR)

| <b>Township</b> | <b>Range</b> | <b>Section</b>                      | <b>Meridian</b> |
|-----------------|--------------|-------------------------------------|-----------------|
| 23N             | 17W          | 7,18,19,30,31,32                    | Umiat           |
| 22N             | 17W          | 3,4,5,10,11,12,13,14                | Umiat           |
| 22N             | 16W          | 7,15,16,17,18,22,23,25,26,36        | Umiat           |
| 22N             | 15W          | 31,32,33                            | Umiat           |
| 21N             | 15W          | 1,2,3,4                             | Umiat           |
| 21N             | 14W          | 6,7,8,9,10,11,12,13                 | Umiat           |
| 21N             | 13W          | 13,14,15,16,17,18                   | Umiat           |
| 21N             | 12W          | 18,19,20,21,26,27,28,35,36          | Umiat           |
| 20N             | 12W          | 1,2,12                              | Umiat           |
| 20N             | 11W          | 7,8,16,17,21,22,26,27,35,36         | Umiat           |
| 19N             | 11W          | 1                                   | Umiat           |
| 19N             | 10W          | 6,7,8,17,20,29,32                   | Umiat           |
| 18N             | 10W          | 5,8,17,20,28,29,33,34,35            | Umiat           |
| 18N             | 9W           | 25,26,31,32,32,34,35,36             | Umiat           |
| 17N             | 10W          | 1,2                                 | Umiat           |
| 17N             | 9W           | 6                                   | Umiat           |
| 18N             | 8W           | 23,24,26,27,28,29,30,31             | Umiat           |
| 18N             | 7W           | 19,20,21,22,23,24                   | Umiat           |
| 18N             | 6W           | 13,19,20,21,22,23,24                | Umiat           |
| 18N             | 5W           | 8,9,10,11,12,13,17,18               | Umiat           |
| 18N             | 4W           | 13,14,15,16,17,18,24                | Umiat           |
| 18N             | 3W           | 19,20,21,22,25,26,27                | Umiat           |
| 18N             | 2W           | 29,30,32,33,34                      | Umiat           |
| 17N             | 2W           | 1,2,3,36                            | Umiat           |
| 17N             | 1W           | 6,7,8,17,20,21,28,29,30,31,32       | Umiat           |
| 16N             | 2W           | 1,11,12,14,22,23,27,33,34           | Umiat           |
| 15N             | 2W           | 4,9,10,15,22,23,24,25               | Umiat           |
| 15N             | 1W           | 29,30,31,32,33,34                   | Umiat           |
| 14N             | 1W           | 2,3,11,12                           | Umiat           |
| 14N             | 1E           | 7,13,14,15,16,17,18                 | Umiat           |
| 13N             | 2E           | 1                                   | Umiat           |
| 13N             | 3E           | 3,4,5,6,10,11,12                    | Umiat           |
| 13N             | 4E           | 7,8,9,10,11,12                      | Umiat           |
| 13N             | 5E           | 1,2,3,4,5,6,7                       | Umiat           |
| 13N             | 6E           | 3,4,5,6                             | Umiat           |
| 14N             | 6E           | 34,35,36                            | Umiat           |
| 14N             | 7E           | 31,32,33                            | Umiat           |
| 13N             | 7E           | 3,4,5                               | Umiat           |
| 13N             | 8E           | 12,13,14,19,22,23,27,28,29,30,32,33 | Umiat           |
| 13N             | 9E           | 5,6,7                               | Umiat           |

#### Anaktuvuk Pass to Toolik

| <b>Township</b> | <b>Range</b> | <b>Section</b>                            | <b>Meridian</b> | <b>Land Owner</b> |
|-----------------|--------------|---|-----------------|-------------------|
| 11S             | 11E          | 3,4,10,14,15,23,26                        | Umiat           | BLM Lands         |
| 10S             | 11E          | 19, 20, 28, 29, 33                        | Umiat           | BLM Lands         |
| 10S             | 10E          | 3, 10, 11, 14, 23,24                      | Umiat           | BLM Lands         |
| 9S              | 10E          | 18, 20,28, 33, 34                         | Umiat           | SOA               |
| 9S              | 9E           | 4, 5, 7, 8, 9, 10, 11, 13, 14, 15, 17, 18 | Umiat           | SOA               |
| 9S              | 8E           | 7, 8, 9, 10, 11, 12, 13, 16               | Umiat           | BLM Lands         |

|     |    |   |       |           |
|-----|----|---|-------|-----------|
| 9S  | 8E | 5, 6  | Umiat | SOA       |
| 9S  | 7E | 11,12                                       | Umiat | BLM Lands |
| 9S  | 7E | 1, 2, 3, 4, 5, 6                            | Umiat | SOA       |
| 9S  | 6E | 1, 2, 3                                     | Umiat | SOA       |
| 8S  | 6E | 31, 32, 33, 34, 35                          | Umiat | SOA       |
| 8S  | 5E | 31, 32, 34, 35, 36                          | Umiat | SOA       |
| 9S  | 5E | 2, 3, 4                                     | Umiat | SOA       |
| 8S  | 4E | 25, 26, 27, 33, 34, 36                      | Umiat | SOA       |
| 9S  | 4E | 3, 9, 10, 16, 21                            | Umiat | SOA       |
| 9S  | 4E | 28, 29, 32                                  | Umiat | BLM Lands |
| 10S | 4E | 5   | Umiat | BLM Lands |
| 10S | 4E | 8, 17, 18, 19, 29, 30, 32                   | Umiat | BLM       |
| 11S | 4E | 5, 6, 7, 18, 19                             | Umiat | SOA       |
| 11S | 3E | 13, 24, 25, 26                              | Umiat | SOA       |
| 11S | 3E | 35  | Umiat | ASRC      |
| 12S | 3E | 2, 11, 14, 15, 22, 23, 26, 27, 34, 35       | Umiat | ASRC      |
| 13S | 3E | 2, 3, 10, 11, 15, 16, 21, 22, 28*, 29*, 32* | Umiat | ASRC      |
| 14S | 2E | 13, 24, 25*, 26*, 34*, 35*                  | Umiat | ASRC      |
| 14S | 3E | 5, 7, 8, 18                                 | Umiat | Nunamuit  |
| 15S | 2E | 3, 4, 8, 9                                  | Umiat | Nunamuit  |

\*Native Allotment

## Mapbooks

### Northern routes

See attached

### Anaktuvuk Pass routes

See attached