

**PLAN OF COOPERATION
NORTH SLOPE AREAS OF OPERATION, ALASKA**

July, 2019

Submitted by



Hilcorp Alaska, LLC

**3800 Centerpoint Drive
Suite 1400
Anchorage, AK 99503**

to

**National Marine Fisheries Service
Office of Protected Resources
1315 East–West Hwy, Silver Spring, MD 20910-3282**

and

**Marine Mammals Management Office
United States Department of the
Interior Fish and Wildlife Service
1011 E. Tudor Rd.
Anchorage, AK 99503-6199**



Table of Contents

1.0 INTRODUCTION AND PURPOSE	1
2.0 DESCRIPTION OF OPERATING AREAS	1
2.1 MILNE POINT	3
2.2 ENDICOTT	4
2.3 NORTHSTAR	4
2.4 LIBERTY	7
2.4.1 Access to Project Area	8
2.4.2 Island Construction	11
2.4.3 Pipeline Construction	11
2.4.4 Drilling.....	11
3.0 COOPERATION AND COORDINATION	12
3.1. MILNE POINT, ENDICOTT, AND NORTHSTAR.....	12
3.3. LIBERTY.....	13
4.0 MEASURES TO REDUCE IMPACTS	14
4.1 PACIFIC WALRUS AND POLAR BEAR.....	14
4.2 WHALES AND SEALS	14
5.0 FUTURE PLAN OF COOPERATION CONSULTATIONS.....	17

Attachments:

Attachment A: 2014-2015 Plan of Cooperation Meeting Minutes.

Attachment B: Meeting Materials and Presentations

Attachment C: Distribution List

Attachment D: Liberty Stakeholder Engagement Log

Attachment E: Bear Interaction Plan

Attachment F: Ice Road BMPs



1.0 Introduction and Purpose

This Plan of Cooperation (POC) was prepared in accordance with the following federal requirements:

- 50 CFR 216.104(a)(12), which requires a POC be submitted in support of a request for an Incidental Harassment Authorization (IHA) from the National Marine Fisheries Service (NMFS); and
- 50 CFR 18.124(c)(4), which requires a record of community consultation to be submitted in support of a request for a Letter of Authorization (LOA) from the U.S. Fish and Wildlife Service (USFWS).

This POC is intended to document Hilcorp's stakeholder engagement and to describe the measures Hilcorp has taken and will take to minimize adverse effects that its proposed and ongoing North Slope operations may have on the availability of marine mammals for subsistence use. Hilcorp's LOA and IHA applications for general North Slope activities, ice road construction and operations, and proposed Liberty construction and operation activities, along with associated Marine Mammal Monitoring and Mitigation Plans (4MP), and Ice Road Best Management Practices (BMPs) detail measures that are or will be implemented during North Slope Operations to minimize or prevent conflicts with subsistence activities. Hilcorp intends to maintain open communication with all stakeholders throughout the Liberty Development project permitting and development process. A copy of this Plan of Cooperation will be provided to affected communities for their review and comment. Feedback received will be incorporated into the document and into future operations.

2.0 Description of Operating Areas

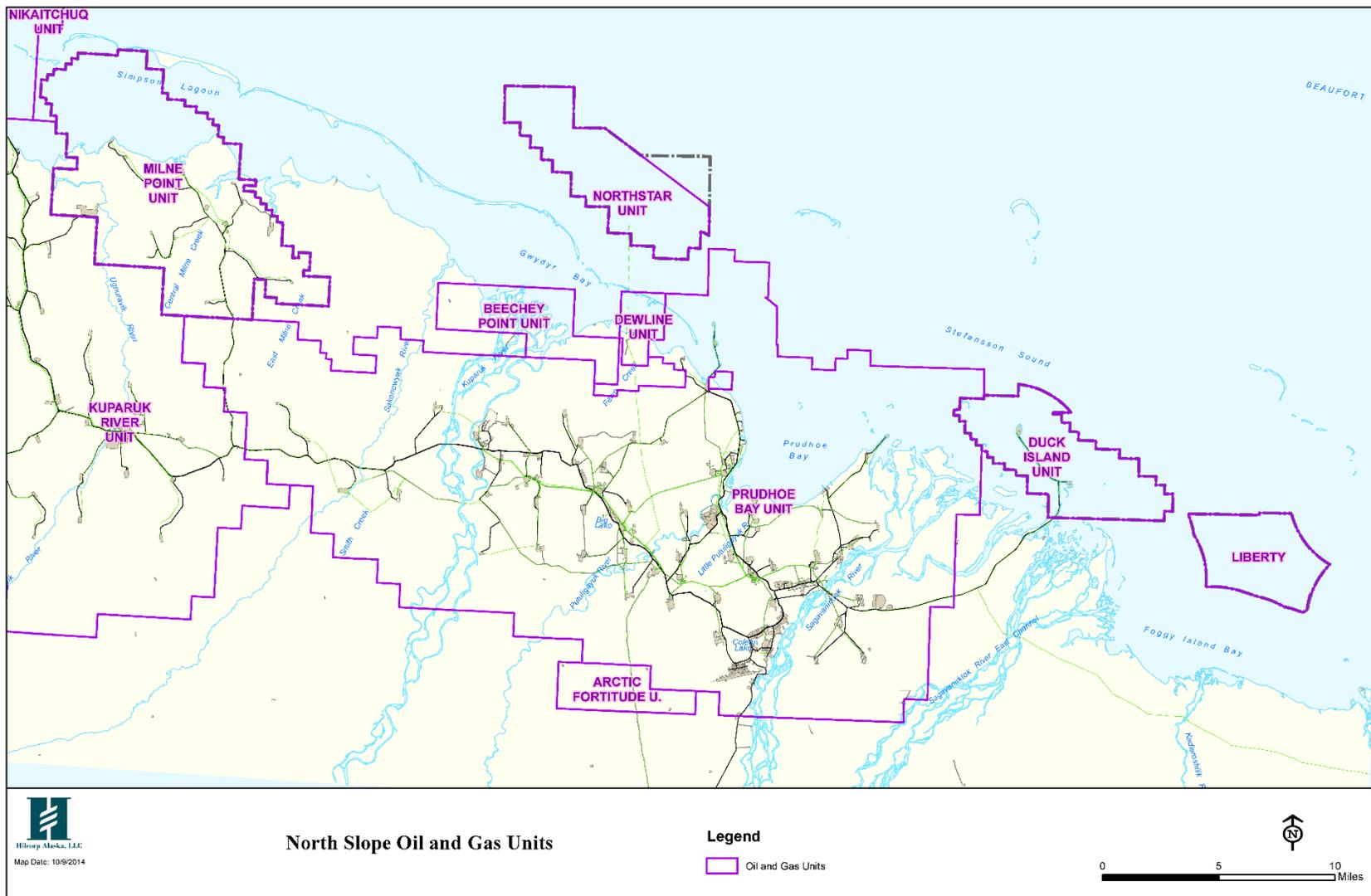
Hilcorp operates the Milne Point, Northstar, and Endicott Units year-round (Figure 1). In addition, Hilcorp is proposing to develop the Liberty Oil Field, also shown on Figure 1. These units are made up of several oilfields in which personnel are actively producing and processing oil and gas, while maintaining infrastructure and transportation systems to accommodate such activities. Hilcorp routinely operates hovercraft, boats, and helicopters for access to the Northstar facility during the ice-free periods and constructs an ice road for vehicle access during the iced-over period. Hovercraft are also used during freeze-up and break-up periods.

Other routine activities include maintenance of existing oil and gas production infrastructure, including wells, pipelines, processing facilities, roads, pads, and other support equipment. As new opportunities for oil recovery are developed, additional similar infrastructure may be required to more fully develop the reservoir.

Producing fields may also incorporate construction and maintenance projects, and additional pad development to enhance oil recovery within the unit. These processes could involve such activities as winter construction of ice pads and ice roads, construction of gravel roads and pads, seismic acquisition, and remediation and rehabilitation work or research that could require off-pad work.



Figure 1. Eastern Beaufort Sea Oil and Gas Units





2.1 Milne Point

Located approximately 56 kilometers (km) (35 miles [mi]) northwest of Prudhoe Bay, the Milne Point oilfield consists of more than 220 wells drilled from 12 gravel pads (Figure 2). The total area of Milne Point and its satellites is 94.4 hectares (236 acres) of tundra, including 31 km (19 mi) of gravel roads, 64 km (40 mi) of pipelines, and one gravel mine site. The Milne Point Operations Center has accommodations for up to 300 people (Figure 3).

Figure 2. Milne Point Overview





Figure 3. Milne Point Central Facility Pad and Operations Center



2.2 Endicott

The Endicott oilfield is located approximately 16 km (10 mi) northeast of Prudhoe Bay (Figure 4). The Endicott oilfield was developed from two man-made gravel islands connected to the mainland by a gravel causeway. The operations center and processing facilities are located on the 18-hectare (45-acre) Main Production Island. Approximately 80 wells have been drilled to develop the field. Two satellite fields drilled from Endicott's Main Production Island access oil from the Ivishak formation. The total area of the Endicott development is 156.8 hectares (392 acres) of land with 25 km (15 mi) of roads, 47 km (29 mi) of pipelines, and one gravel mine site. Approximately 100 people are housed at the Endicott Operations Center.

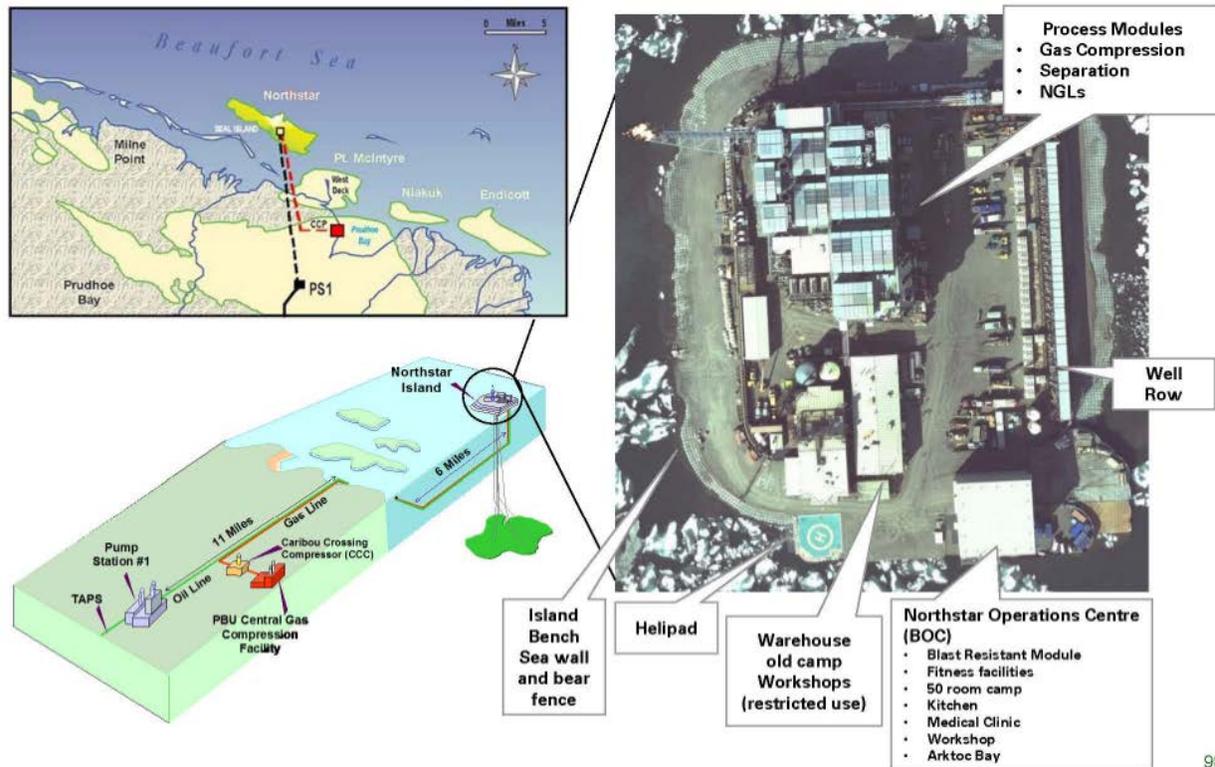
2.3 Northstar

The Northstar oilfield is located 6 km (4 mi) northwest of the Point McIntyre field and 10 km (6 mi) from Prudhoe Bay in about 39 feet of water (Figure 5). The reservoir has been developed from a 2-hectare (5-acre) artificial island. The island will eventually contain 19 producing wells, six gas injector wells, and one solids injection well. A subsea pipeline connects facilities to the Prudhoe Bay oilfield. Access to Northstar is via helicopter, hovercraft, and boat in the summer, hovercraft and helicopter during freeze-up and break-up. During the ice-covered season, Hilcorp constructs annual ice roads and trails to connect and allow access between West Dock and Northstar (Figure 6).

**Plan of Cooperation
North Slope Areas of Operation**



Figure 4. Endicott Overview



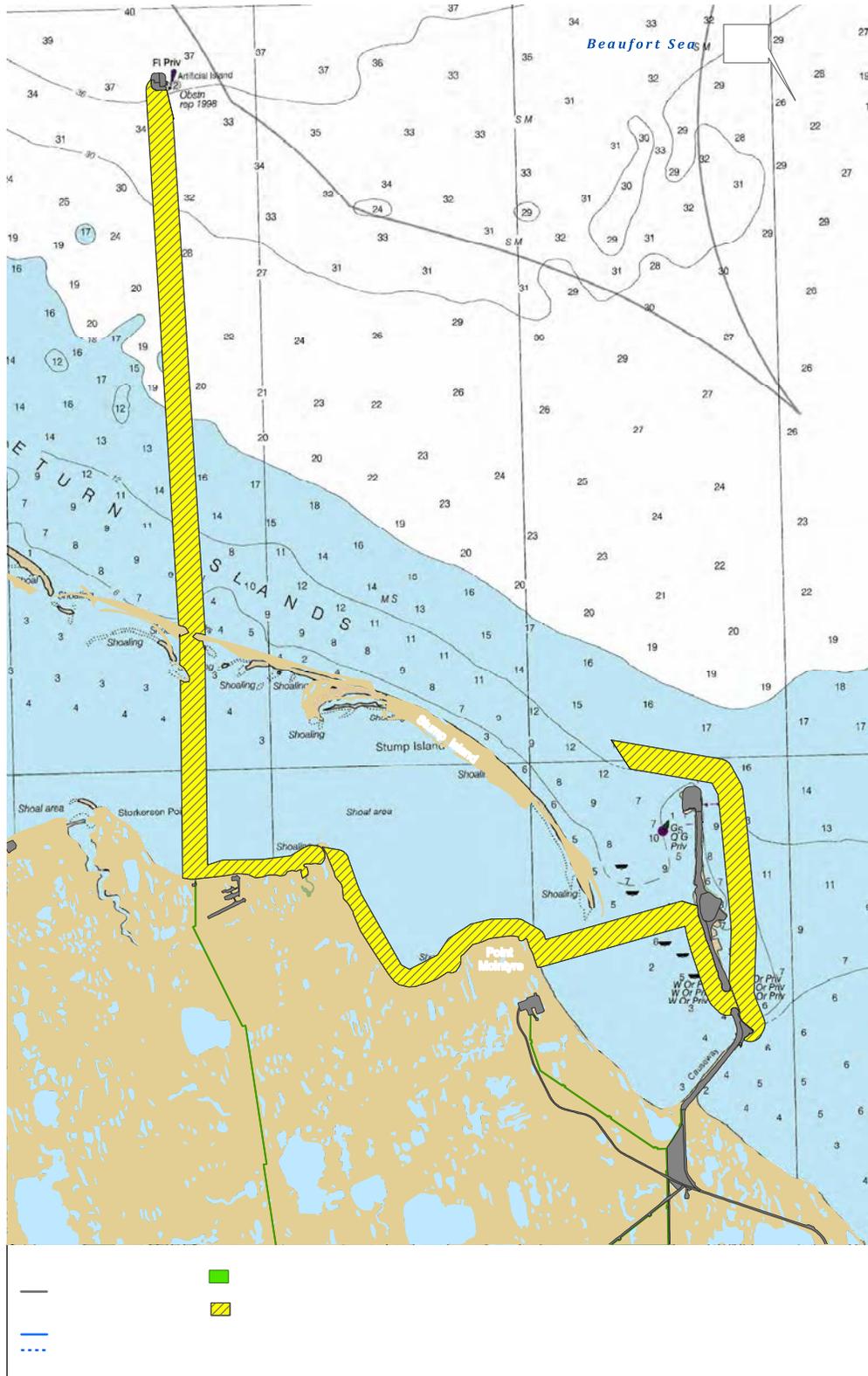
98

Figure 5. North Star Island Overview





Figure 6. Northstar Island Ice Road and Ice Trails





2.4 Liberty

Hilcorp Alaska, LCC (Hilcorp) is proposing to develop the Liberty Oil Field, located on the Outer Continental Shelf (OCS), in Foggy Island Bay in the Beaufort Sea (Figure 8). Activities related to the Liberty Development project will occur in both federal and state waters of Foggy Island Bay during the annual open water season. The proposed Liberty Development includes the Liberty Drilling and Production Island (LDPI), which will be constructed of reinforced gravel in 19 feet of water about 5 miles offshore in Foggy Island Bay of the Beaufort Sea OCS. The proposed development involves the construction of the LDPI over the reservoir, facility development, and the installation of a subsea pipeline to transport sales quality crude oil to shore, where an above ground pipeline will transport crude to the existing Badami pipeline.

The proposed Liberty Project includes the construction of a gravel island, ice roads, development of a mine-site to supply gravel for the construction of the LDPI, and installation of an undersea pipeline that reaches shore from the LDPI, transitions to an above ground, vertical support member (VSM)-mounted pipeline, and then connects to the existing above-ground Badami pipeline. The LDPI is a self-contained offshore drilling and production facility and will contain infrastructure to support construction and operations including a drill rig and associated equipment, utilities, and living quarters. Table 1 shows the timing of project construction activities.

TABLE 1. PROJECT ACTIVITY TIMELINE

ACTIVITY	TIMING
<i>Summer & Winter Access</i>	Year 1 - Year 3
Annual Ice Road (#1)	Year 1 - Year 3, January – mid-May
Support Ice Roads (#2 - #4)	Year 1 – Year 4, December – mid-May
Sea-going Barges	Year 1 - Year 5, June - November
Small Marine Vessels	Year 2 - Year 4, June - November
<i>Island Construction¹</i>	Year 1, February – September ²
Pile and Pipe Driving and Slope Shaping	Year 1, July – August ²
<i>Facilities Construction</i>	Year 2, February - Year 3, June
<i>Pipeline Construction</i>	Year 2, January - May
<i>Summer & Winter Access</i>	Year 2 - Year 5
Annual Ice Road (#1)	Year 2 - Year 4, January – mid-May, <i>additional las</i>
Sea-going Barges	Year 2 - Year 4, June - November
Small Marine Vessels	Year 2 - Year 4, June - November
<i>Rig Mobilization and Well Drilling</i>	Year 2 – Year 5
<i>First Oil/Commissioning</i>	Year 3, December - Year 5, May

Source: DRAFT Marine Mammal Monitoring and Mitigation Plan Liberty Development and Production Project (Hilcorp, 2018).

¹No takes are being requested for mine site development.

²Would occur in Year 3 only if island construction occurs over two winter seasons as ice conditions allow.



2.4.1 Access to Project Area

The LDPI is separated from existing North Slope infrastructure by water; the nearest gravel pad and road is the Endicott Satellite Drilling Island (SDI) and causeway, about 7.3 miles west-northwest of the site. Transportation and re-supply needs include the ability to safely transport personnel, supplies, and equipment to and from the site at any time of year.

During winter, ice roads will be built to support island and pipeline construction activities, and will be used in subsequent years to support drilling and production operations. During the first five years of construction, there would be an increased number of ice roads and traffic which would diminish after Year 5. An ice road connecting SDI to LDPI is expected to be constructed annually to resupply the island and transport personnel. Ice roads are commonly used on the North Slope for winter tundra travel typically from January through mid-April, and for offshore access typically from February through mid-May. All ice roads will be permitted by the State of Alaska, Department of Natural Resources (ADNR), Division of Mining, Land and Water (DMLW) and the North Slope Borough (NSB). Approximate ice road routes during island and pipeline construction are shown in Figure 7. The ice road route to support ongoing re-supply and production operations is shown in Figure 8.

Figure 7 – Ice Road Locations for Island and Pipeline Construction

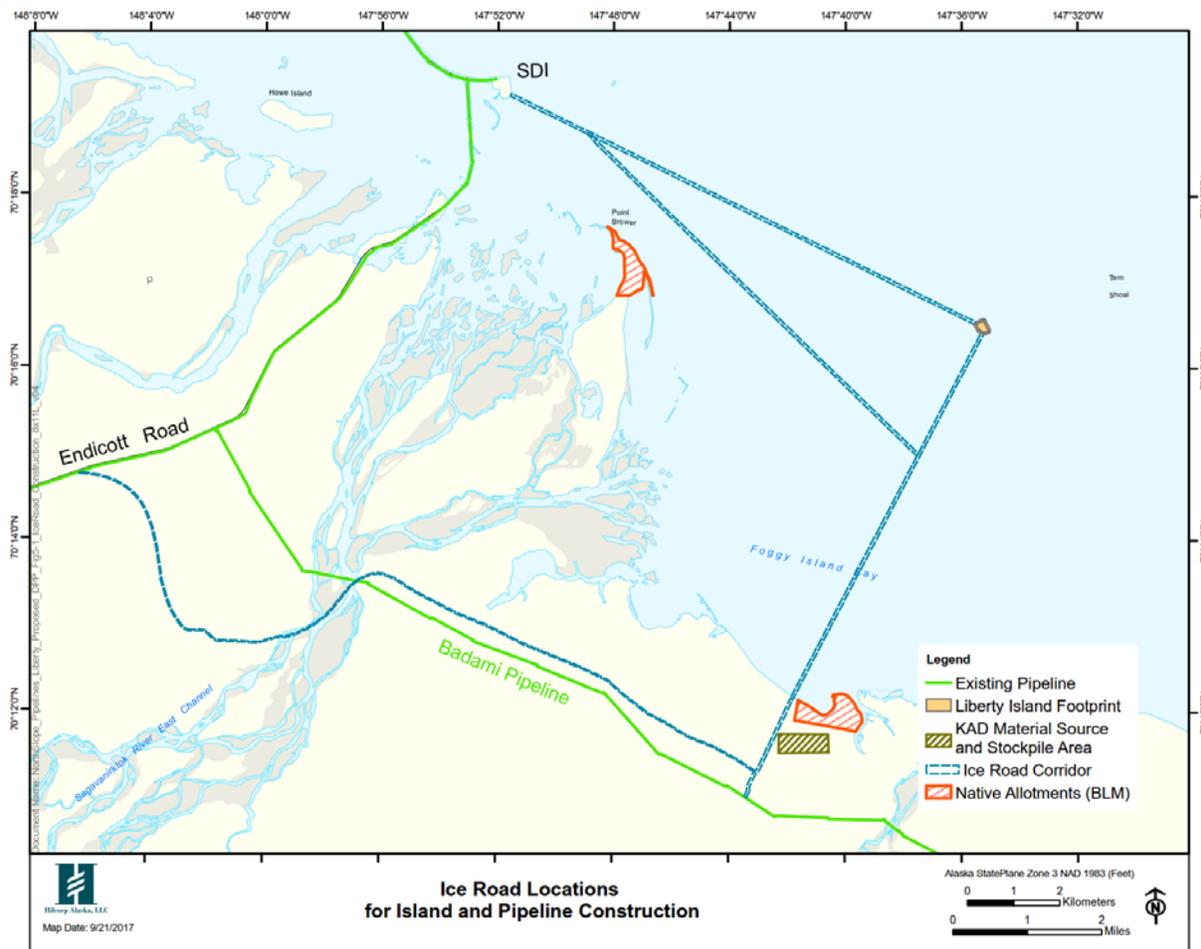
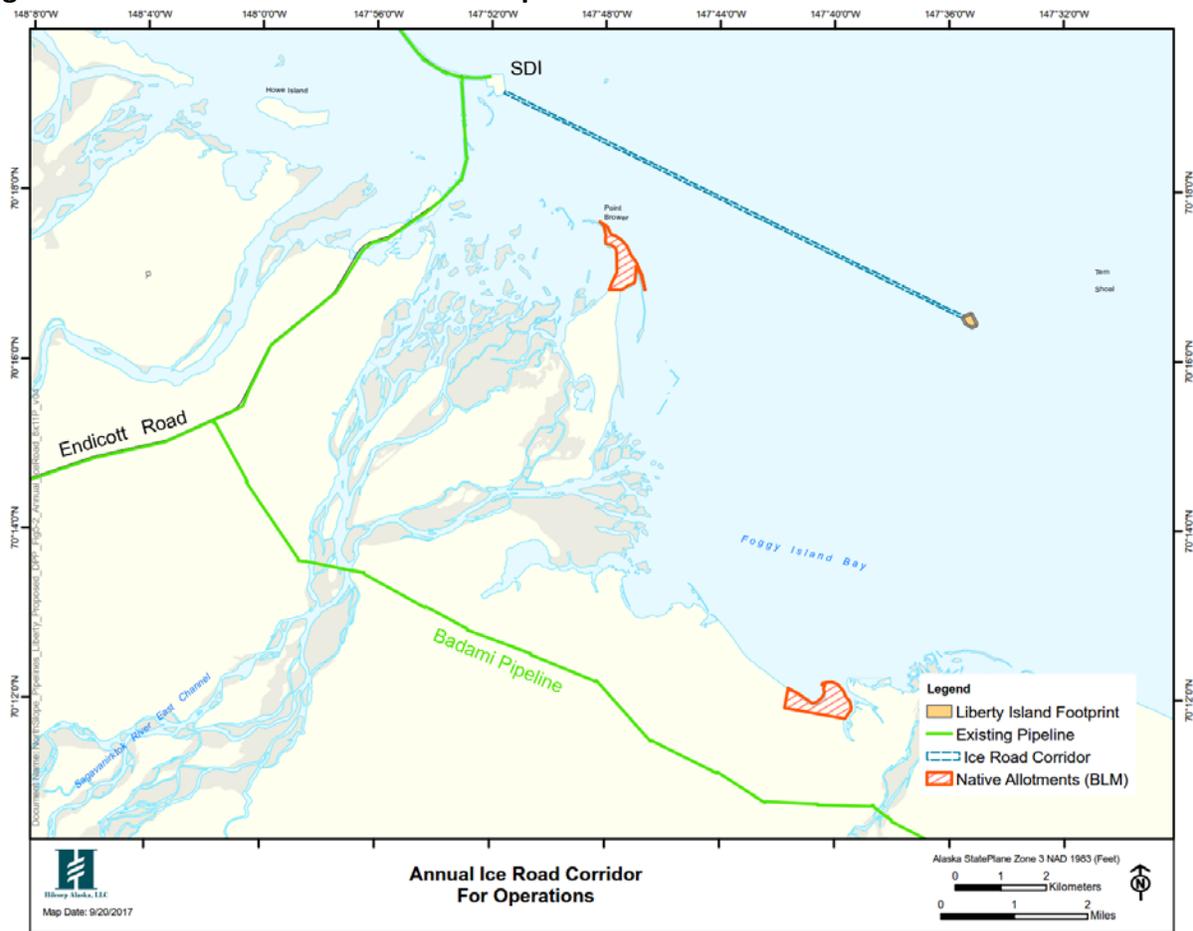




Figure 8 – Annual Ice Road Corridor for Operations



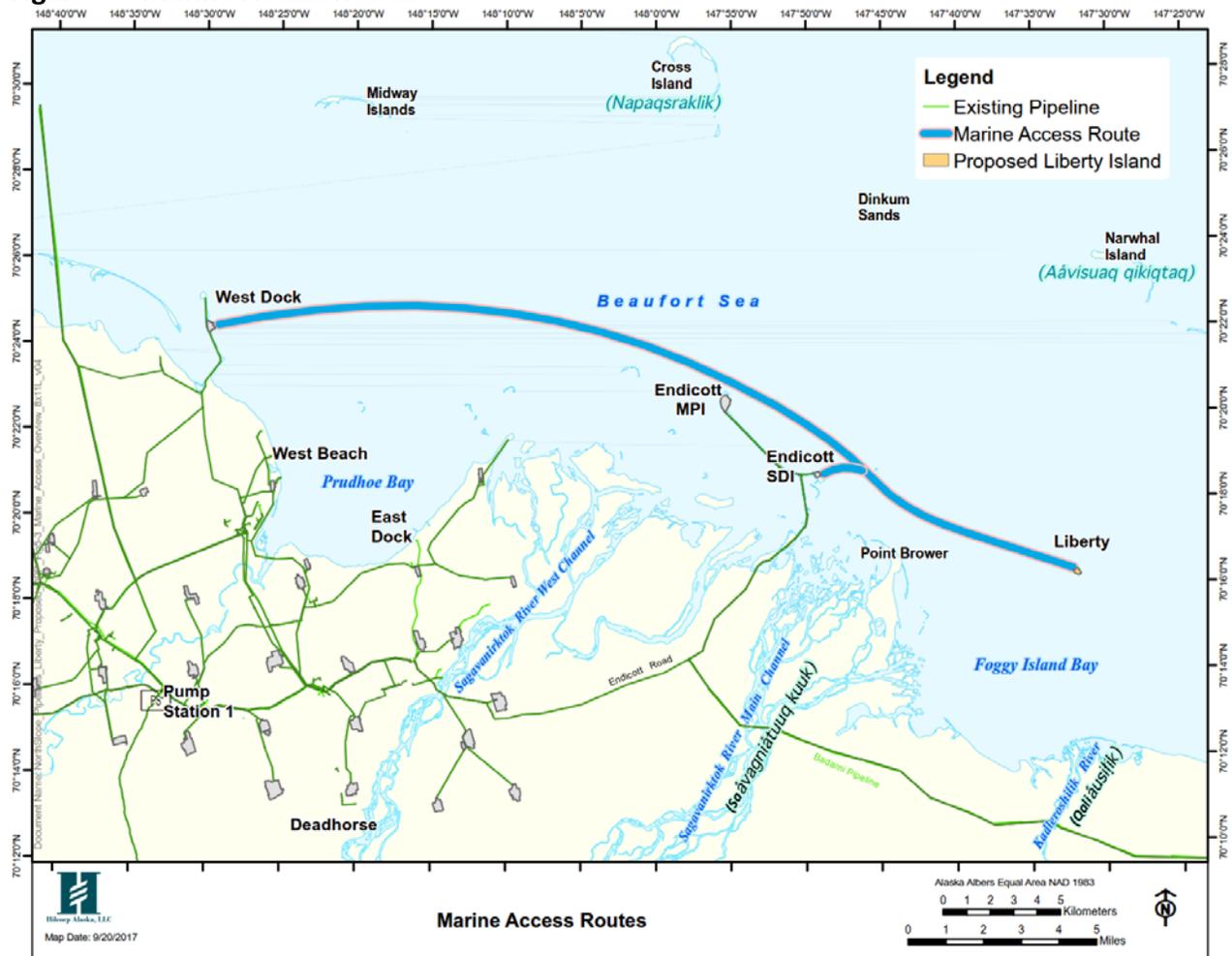
Marine Access

During the open-water season, barges, hovercraft, and other vessels will be used to transport equipment, personnel, and supplies to LDPI. Large vessels can winter in the Prudhoe Bay area and travel to the LDPI in the open-water season, and will be generally chartered on a seasonal basis or long-term contract. Vessels will include barges and tugs to move large modules and equipment. Barges may originate from West Dock, SDI, or Deadhorse, as well as from Southern Alaska or the Lower-48. Smaller vessels will be used to move personnel, supplies, tools, and smaller equipment. Hovercraft will transport personnel and small loads during shoulder seasons when ice roads and open-water vessel support are not available. Arktos™ all-terrain machines will be used for emergency evacuation.

The marine routes to move equipment from West Dock (Prudhoe Bay) to LDPI, and to support operations from SDI are shown in Figure 9. Additional information regarding estimated traffic and access to the Liberty project area is provided in the DPP Section 5.



Figure 9 – Marine Access Routes



Air Access

Year-round helicopter access to the LDPI is planned, and a helicopter landing site will be constructed on LDPI near the living quarters. A permanent heliport facility will be developed at the end of the pipeline, to provide access to the Badami Tie-In Pad for maintenance purposes. Air operations are often limited by weather conditions and visibility. In general, air access will be used for movement of personnel and foodstuffs, and for movement of supplies or equipment when necessary. Helicopter use is also planned for pipeline surveillance, personnel transport, re-supply during the broken ice seasons, and access for maintenance and inspection of the onshore pipeline system. Typically air traffic routing is as direct as possible from departure locations such as the SDI, West Dock or Deadhorse to the LDPI, with routes and altitude adjusted to accommodate weather, other air traffic, and subsistence activities. If safe to do so, aircraft will use an established corridor to the extent practicable and to minimize potential impacts to marine mammals or subsistence activities. Fixed wing aircraft are not planned for use under normal operations; fixed wing aircraft would only be used at Liberty on an occasional, as-needed basis for purposes of spill response (spill delineation) and aerial reconnaissance of anomalous conditions, or unless otherwise required by regulatory authority.



2.4.2 Island Construction

The LDPI is an artificial island to be constructed in 19 feet of water in Foggy Island Bay in the Beaufort Sea OCS. Construction of the artificial island includes the placement of approximately 929,900 cubic yards of gravel, secured with sheet piling, and armored with linked concrete mats. The surface of the island is designed to be 15 feet above sea level with a working surface of approximately 9.3 acres and a design seabed footprint of approximately 24 acres. The island will be constructed of gravel from the proposed mine site west of the Kadleroshilik River.

2.4.3 Pipeline Construction

Sales oil will be exported from the LDPI through a subsea 12-inch x 16-inch pipe-in-pipe (PIP) system that is bundled to a nominal 4-inch coiled utility line, along with an armored fiber optic cable. The utility line will be installed as a contingency for possible future use as a fuel gas delivery line or to allow for a circulation loop with the 12-inch export line for upset conditions. The export line and the utility line will be a U.S. Department of Transportation (DOT) regulated pipelines. A detailed description of the Liberty pipeline system is provided in BOEMs Liberty EIS.

2.4.4 Drilling

The Liberty reservoir depletion plan is based on five producers and four injectors. The well row arrangement on the island is designed to accommodate up to 16 wells in case additional wells are required to increase reserves recovery or account for wells that need replacement. The rock and fluid properties are excellent. This fact allows for conventional wells to be drilled from an artificial island that is optimally located over the reservoir. Once the drilling unit is commissioned, drilling operations will continue uninterrupted for approximately 2 years.

A detailed drilling schedule is shown in Figure 8-1 of the DPP. The drilling unit will be mobilized during open-water barge season of Year 1. Re-assembly of the drilling unit with moving system and functional testing will occur in Year 2. Much of the drilling support equipment unit will be delivered during open-water season of Year 2. Remaining equipment to commission the drilling facilities will be delivered as soon as the ice road is operational in Year 2. Subsurface drilling operations are scheduled to begin in the 4Q of Year 2.

Drilling will continue as either year-round batch drilling down to and including the intermediate casing above the reservoir, or with reservoir drilling during the open-water and frozen ice seasons. Drilling through the reservoir section will be limited to the frozen ice season, when there are 18 inches of ice as prescribed in the BOEM Record of Decision (ROD).

A detailed description of the proposed drilling activities, support modules, and equipment on LDPI is provided in Section 8 of the DPP.



3.0 Cooperation and Coordination

3.1. Milne Point, Endicott, and Northstar

In 2014, Hilcorp began the community outreach process with a series of meetings with North Slope stakeholders. These meetings continued into 2015 and served multiple purposes:

- To introduce Hilcorp as a new North Slope operator to North Slope stakeholders.
- To understand how local stakeholders harvest and utilize marine mammals as a subsistence resource.
- To gather feedback on regular operations and to incorporate this feedback into on-going planning for our oilfield assets.

In addition, Hilcorp has coordinated with federal, state and local regulatory agencies for the same purposes. In preparation for operating the North Slope assets, Hilcorp has had the opportunity to engage with a number of North Slope stakeholder groups. These meetings are listed below:

- June 9, 2014 – Held transition meeting with North Slope Borough (NSB) Planning Department at BP offices to talk about starting permit transfer process
- June 10, 2014 – Met with NSB representatives Charlotte Brower and John Boyle at Hilcorp offices
- July 17, 2014 – Attended Alaska Eskimo Whaling Commission (AEWC) meeting in Fairbanks
- August 5, 2014 – Met with Barrow Assembly (with Mayor present), Wildlife Management Department, and Ilisagvik College
- August 5, 2014 – Met with the Native Village of Barrow
- October 21, 2014 – AEWK meeting in Anchorage – a full presentation was done outlining the environmental team and assets to be purchased
- December 11, 2014 – Attended AEWK in Anchorage
- October 30, 2014 – Made a presentation to the NSB Planning Commission
- October 30, 2014 – Met with Jacob Adams and Lauren Berdow (NSB attorney) at NSB offices
- December 2, 2014 – Held a Community Meeting in the Village of Nuiqsut
- December 2, 2014 – Met with Kuukpik Subsistence Oversight Panel (KSOP) Leadership in Nuiqsut
- January 8, 2015 – Attended Inupiat Community of the Arctic Slope (ICAS) meeting in Barrow and presented Hilcorp's planned operations



Plan of Cooperation North Slope Areas of Operation

- January 12-14, 2015 – Plan of Cooperation meetings were held with the following groups to specifically talk about mitigation measures to limit effects of our operations on subsistence activities:
 - NSB Mayor’s office
 - NSB Planning Department
 - NSB Wildlife Department
 - Alaska Eskimo Whaling Commission members
 - City of Barrow
 - Native Village of Barrow
 - Barrow Whaling Captains
 - Ukpeagvik Inupiat Corporation
 - City of Nuiqsut
 - Native Village of Nuiqsut
 - Nuiqsut Whaling Captains
 - Kuukpik Corporation
 - City of Kaktovik
 - Native Village of Kaktovik
 - Kaktovik Whaling Captains
 - Kaktovik Inupiat Corporation
- February 4-6, 2015 – Attended AEWG in Barrow

Plan of Cooperation Meeting Minutes for these meetings are presented in Attachment A. Meeting materials and presentations are in Attachment B. Hilcorp will continue to engage with community members as well as federal, state, and local regulatory agencies to gather and incorporate feedback into our on-going operations.

3.3. Liberty

In late 2014, Hilcorp began the community outreach process with a series of meetings with North Slope stakeholders. These meetings have continued and served multiple purposes:

- As a new operator on the North Slope, meetings were an opportunity to introduce Hilcorp to North Slope stakeholders.
- To present the Liberty Development project plans to local communities and provide updates on project development.
- To gather feedback on the proposed operations and to incorporate this feedback into project planning.

In addition, Hilcorp has coordinated with federal, state and local regulatory agencies for the same purposes. In preparation for the Liberty Development project activities, Hilcorp has had the opportunity to engage with a number of North Slope stakeholder groups. Attachment C provides the distribution list and Attachment D is Stakeholder Engagement Log for Liberty.



Meetings with various North Slope stakeholders include the following:

- North Slope Community Visits: This includes public meetings in the communities of Barrow, Nuiqsut and Kaktovik. Also, meetings with local government entities (Native Village Government, Native Corporation representatives, Village Mayor, community whaling captains, etc.). North Slope community visits typically occur 1-2 times a year, or more frequently as needed.
- Alaska Eskimo Whaling Commission Meetings: Hilcorp attends all AEWC meetings, which occur quarterly. Presentations are given on the Liberty project as needed.
- North Slope Borough Planning and Wildlife Departments: project coordination and pre-application meetings in advance of Rezoning and Master Plan application submittal. Also, ongoing coordination with Wildlife Department on Liberty project, monitoring and mitigation.
- Hilcorp has also coordinated with Native Allotment owners whose property is in the proximity of the project area.

Hilcorp will continue to engage with community members as well as federal, state, and local regulatory agencies to gather and incorporate feedback into the proposed activities. Additional meetings and consultations will continue throughout project execution.

4.0 Measures to Reduce Impacts

4.1 Pacific Walrus and Polar Bear

The probability of encountering a Pacific walrus within the vicinity of Hilcorp's North Slope assets along and in the Beaufort Sea is low, and for the life of the facilities walrus sightings have been rare. However, if a walrus encounter were to occur, all employees and contractors are trained to follow Hilcorp's policy of non-interference with all wildlife and are instructed to never approach, pursue, harass, hunt, capture, collect, or kill, or attempt to approach, pursue, harass, hunt, capture, collect, or kill any animal. Unlike walrus, the probability of encountering a polar bear within the vicinity of Hilcorp's North Slope assets is high. Hilcorp intends to operate in a manner that will minimize impacts to polar bear subsistence activities from on-going operations. In addition, Hilcorp has developed a Bear Interaction Plan (Attachment E) that instructs proper oilfield-worker behavior to minimize impact to polar bears. In the event that authorized hazing is required to protect worker safety, Hilcorp employs specially trained security personnel that receive Level III Polar Bear Interaction and Hazing Training from U.S. Fish and Wildlife Service personnel so that any hazing efforts put forth to protect workers will have the least adverse impact on polar bears as possible.

4.2 Whales and Seals

Hilcorp intends to operate in a manner that will minimize impacts to subsistence species from ongoing North Slope Operations and from future Liberty Development construction and project activities. Hilcorp has developed Marine Mammal Monitoring and Mitigation Plans (4MPs) for

Plan of Cooperation North Slope Areas of Operation



Liberty and for the construction, maintenance and use of ice roads and sea ice trails at Northstar. The 4MPs outline measures that are or will be implemented to reduce the likelihood of impacts on marine mammals or subsistence, and combine active monitoring of the area of operations and the implementation of mitigation measures designed to minimize operational impacts to marine resources. In addition, in conjunction with NMFS, Hilcorp has developed Best Management Practices (BMPs) for Ice Road Construction, Management, and Use (Attachment F).

The 4MPs and BMPs outline how the mitigation and monitoring objectives will be met by:

- Conducting specific training for personnel involved in ice road construction maintenance to include but not limited to: identification of seal pups and adults, habitat and diet, importance of lairs and potential effects of disturbance of seals and lairs;
- Initiating ice road construction prior to March 1st to minimize potential impacts to ringed seals establishing birthing lairs;
- After March 1st limiting tracked vehicle operations to previously disturbed ice roads and trails, as safety allows;
- Notifying the Environmental Specialist and NMFS if seals are observed within 150 ft of the ice roads;
- Monitoring and marking seal and seal lair locations;
- Vehicles will not stop within 150 ft of seals and within 500 ft of identified seal lairs;

Specifically for Liberty, the following measures will be followed:

- Scheduling island and pipeline construction, including pile driving activities, during the ice covered season (similar to Northstar), when cetaceans will not be present;
- Using PSOs and unmanned aerial systems for marine mammal monitoring during Liberty construction activities ;
- Using soft-start techniques for pile driving;
- Following the existing Conflict Avoidance Agreement (CAA) between North Slope Industry participants and the Alaska Eskimo Whaling Commission (AEWC), for all North Slope oil and gas activities to minimize potential interference with bowhead subsistence hunting;
- Scheduling all non-essential boat, hovercraft, barge, and air traffic to avoid conflicting with the timing of the Cross Island bowhead hunt;
- Ceasing impact pile driving to avoid the period of Cross Island bowhead whale subsistence hunting, if this activity occurs in open water conditions; and
- Conducting acoustic monitoring during the first five years of Liberty (i.e., construction and initial operation), as outlined in the 4MP.

**Plan of Cooperation
North Slope Areas of Operation**



**Plan of Cooperation
North Slope Areas of Operation**



In addition to the measures outlined in the 4MP, Hilcorp has provided ongoing support for subsistence hunters:

- Hosting the Nuiqsut Com-Center at Endicott in support of the Cross Island bowhead whale hunt.
- Installed a VHF Antenna/radio repeater at Milne Point, to provide improved communication for whaling crews traveling from Nuiqsut to Cross Island.
- Providing ongoing support to Michael Galginaitis' Cross Island Whaling Study
- Hilcorp has entered into a Memorandum of Understanding with the Nuiqsut Whaling Captains Association, formalizing a commitment to provide monetary and logistical support to the Nuiqsut whale hunt at Cross Island
- Ratified the Good Neighbor Policy, under which Hilcorp maintains a twenty million dollar bond with Wells Fargo Bank.

5.0 Future Plan of Cooperation Consultations

Hilcorp plans to continue to engage with affected subsistence communities regarding its Liberty Development project and ongoing North Slope operations.

Projected outreach activities for 2019 include the following:

- Attendance at AEWC Quarterly Meetings
- Nuiqsut Community Meeting and meeting with Nuiqsut Whaling Captains Association
- Liberty Project Coordination meetings with the North Slope Borough Planning Department and Wildlife Department
- Participation in the NSB-lead Camden Bay/Central Alaska Beaufort Sea Study Meeting.

Hilcorp has requested and encourages all stakeholders to contact Hilcorp directly if there are any concerns with Hilcorp operations interfering with subsistence activities. Lori Nelson, External Affairs Manager, and Beth Sharp, Wildlife and Habitat Specialist can be contacted at any time:

Lori Nelson
Hilcorp External Affairs Manager 3800
Centerpoint Dr., Ste. 1400
Anchorage, AK 99503
Office: 907-777-8392
lnelson@hilcorp.com

Beth Sharp
Hilcorp Wildlife and Habitat
Specialist 3800 Centerpoint
Dr., Ste. 1400
Anchorage, AK 99503
Office: 907-777-8436
esharp@hilcorp.com

Attachment A

2014-2015 Plan Of Cooperation Meeting Minutes
(arranged chronologically)



Uum's Consulting, LLC
3705 Arctic Blvd, Unit 1187
Anchorage, Alaska 99503
907-350-9527

10-21-14 | Alaska Eskimo Whaling Commission | 3rd Quarter Meeting | Sheraton | Anchorage, Alaska

In attendance:

Lesley Hopson Admin-	George Noongwook -	Jenn Hall-Brown – USFW
Barrow Harry Brower Jr -	Raymond Seetook Sr –Wales	Craig George – NSB
Barrow John Hopson Jr -	Mark Brundage – Exxon	Wildlife Jenny Evans –
Wainwright Price Leavitt Sr. -	Anthony Pannino –Exxon	AEWC
Barrow	Takpaan Nukapigak – Nuiqsut	Lori Nelson –
Henry Soolook-Little	Billy Adams –NSB Wildlife	Hilcorp Ella Ede –
Diomedes Julius Rexford –	Maniksaq Baumgardner –Shell	Statoil
Point Lay Raymond Hawley -	Greg Balogh-USFW	Dolly Norton – Uums
Kivalina Merlin Kanooka -		Consulting Tasha Edwardson -
Savoonga		Umiaq Hiroko Ikuta – DF&G

930-chairman report

- Arctic marine mammal coalition-John Hopson Jr. did AEWG authorization to join the coalition? Has the AEWG board been invited or are you just responding?
- Harry Brower Jr. Communication thru concerns of assessments it was at the request of the coast guard.
- John Hopson Jr. I was trying to find it in our minutes, I recall the coast guard discussing and doing a presentation, I don't recall AEWG agreeing to join the coalition in our minutes.
- Jessica Lefevre, they are in the meeting minutes in 2012,
- John Hopson Jr. is there any way we can clarify the discussion. We are not having meetings in Wainwright, if this is a way to cut down meetings, they are wanting the organization to come to Anchorage to have meetings. We need to have the meetings in our village not just the executive committee.
- Jessica Lefevre - how can we manage meetings without spending too much time and money, how do we find out all the mammal hunters in this area? They want to go to the villages, but cannot because of funding.
- John Hopson Jr., I want to see the minutes before I can make a decision. If we do not have them, then we need to discuss this, it is Coast Guard to come to the villages to discuss our hunting, this is a way the coast guard can avoid going to our villages.
- Jessica Lefevre -AEWG was one of the 5 marine mammal hunting groups.
- Harry Brower Jr. I don't have the minutes right now, it will take time to find them. Any other discussion?

Motion passes to accept the chairs report.



Uum's Consulting, LLC
3705 Arctic Blvd, Unit 1187
Anchorage, Alaska 99503
907-350-9527

- Executive report
 - conflict resolutions, individual strategy plan for 6 months to 3 years based on individual subordinates. I will discuss with finance personnel to do individual report, decision making process and structure in the whaling communities. Need procedural steps in place for the future.



-WIP, quality control has been discussed primarily for safety and update a manual for WIP, standardize procedures for safety. Dr. Owen's contract has been approved, same price.

Disassemble of the penthrite, and measure dimensions of the end pieces and come up with specifics. Dr. Agle Owens, to refurbish the unused components with grenade and sands, the firing pins need to be water proofed. Current dimensions and diagrams of penthrite, the question is working with ATF, doing background checks to using the penthrite, used for better tracking.

2014 and 2015.

- Financials, travel for executive, office maintenance, oak grants, use grant writer and will, continue using Jenny. Evaluation will used to measure our group, q. Build organization to develop staff, 2. Ongoing support open water conflict agreement relating for OCS 3.
- Develop subsistence and commercial strategy, qtr. meetings, 800000 grant, mini convention and IWC thanks to NSB mayor's office. 2-15 mini convention, barrow whaling captains resolution 1405 request funding from industry for whaling communities that are directly affect by CAA.
- Harry Brower Jr.-motion to accept 2nd discussion-taken a different position with the NSB,
- John Hopson Jr. -we are sad you are leaving us, we appreciate your time and efforts for making us more respectful. I appreciate your responses to my questions, even we put you thru hell.
- George Noongwook-leaving AEW, I want to thank you for your professional attitude, and your efforts to make our organizations successful.
- Merlin Kakoona, we are hoping you would stay on longer, i would like to hear your recommendation for your position.

Break: 10:18-10:43

- Legal report:
 - Jessica Lefevre spring management scientific meeting, commission meeting every other year. Mike Tilman is chair. IWC meeting is 2 weeks long. During quota meetings, if a country has an issue dealing with subsistence this is when to deal with them, if you don't then they won't go for the quota. Austria, Latin countries are tough on subsistence, delegations not hunters meetings. Don't come in and repeat what we have heard already. Tell us what that means to subsistence. Efficiency, how do you hunt, don't be wasteful hunters. AEW had the most thorough presentation, 30 minutes long.
 - Greenland hunting will affect whale watching. They want to define hunting encompass any other animals that are controlled.
 - Craig George-in relation to animal welfare, did the entanglement issue come up on estimated time of death? Jessica Lefarve-No entanglement discussion came up,
 - George Noongwook-2012 request a quota of their own, critical impact, members demand ASW countries do something to additional burden, what are the new burdens on the requested quota? Jessica Lefevre: Defer till I get to that part of presentation
 - Harry Brower Jr. - Subsistence affect whale watching in Argentina. Can we revert to then and address as an impact to whales not as subsistence.



- John Hopson Jr. - humane killing, Harry Brower Jr. Brought out whale watching and whale strikes, will die slowly, we need to fight these people who are trying to take our whaling away from us. Take on with IWC on whale watching issue. Work on shipping, oil and gas to protect the efficiency of your hunt. We submit documentation on how we hunt and the efficiency of our hunts.
- Jessica Leferve -ASW caucus, meeting of the hunting countries. Russians, Greenland, Grenadines, and AEWC. The caucus is not a commission of the IWC, it is just a hunting body. Have our work done in 2016, if we wait till 2018, this proposal needs to be resolved before 2018 quota.
- Harry Brower Jr.- recommend we work on this proposal, besides what you said, other countries, making demands on our animals, and work with our constituents on aboriginal subsistence.
- Merlin Kanooka- they are trying to dictate our 1000 year hunting tradition. In the past we dealt with humane killing and penthrite. This is preposterous.
- Jessica Lefevre -On those points are very important, ASW is willing to work with AEWC, you can to wait for the US to resolve the issue. Delay procrastination, grab the wheel and make the US get on board. Miscounting the meeting numbers. Meeting 66 will be on 2016 meeting. 66a scientific committee, 66b will be aboriginal hunting for our renewal of quotas. Do we add our statisticians to our mini convention to start discussing this issue? You are ahead of the game here, if we look at page 6 and 7 of report discussion 5 and 6. Recommended action board of commissions set your dates for February mini commission. Jenny Compton, ASW chair for committee, very important for AEWC. In February lay out the ground work for AEWC to get the ball rolling. If they don't have whale census the information will be unreliable. SLA rerun the numbers. That is the strategy moving forward. Proposal to go forward hold an intercessional working group to discuss, biannual meetings working group intercessional meeting, ASW countries pick up the slack for IWC meeting, cuts budget. The recommendation hold February meeting bring in ASW committee, and work to push the meeting to be 2015 instead of 2016.
- Harry Brower Jr. - it's insulting for IWC to question our subsistence hunting, now we are being insulted by those questions. The trigger behind this is Greenland. Please see do a summary sheet, so we can make recommendations from that.
- John Hopson Jr. Motion, 2nd, Discussion; thank you for representing AEWC. Did we set our calendar?
- Jessica Lefevre - Get the summary to us. Motion passes.
- John Hopson Jr. request to be excused for NSB Assembly meeting.

Reconvene 1:23pm

- Financial report-sarah espelin not present. HB giving fr. Motion passes to accept fr.
- NOAA Greg Balogh took over Brad Smith.
- Hilcorp-Jessica Lefevre:Thank you, so you retain BP personnel, and environmental program, do you know your plans for Northstar platform? Things need to be done differently, we want to steward our process, and we don't have an answer yet.
- Jessica Lefevre: encourage you to talk to wildlife agency. Encourage maintain a level of data.



- Craig George: Northstar pipe, off shore, maintenance schedule, to maintain pipeline schedule. Is there something different, we want to keep day one like day 10? Acquired Chevron's integrity program. Change agent will improve but maintain integrity management. We may be doing things differently.
- Harry Brower Jr.-Do you have a fish and wildlife person. Communications we had with them, safety meeting, will that continue to grow as you go forward?
- John Barnes- There will be lots of dialog with entities. We have follow thru and go forward. We will do what we say and follow thru.
- Harry Brower Jr. - Relationships we had with industry, your rig is by Nuiqsut, and I guess that is in the works. We will have to wait and see. Thank you for your presentation.

- EXXON-Marc Brundage- Pt, Thompson project. Barged mods from Singapore. Will use AIS, and satellite phone.
 - John Hopson Jr.-the device, how much does it cost? \$300.00 and the annual fee 25.00 a month.
 - Harry Brower Jr. -there was some kind of time lapse or timing to get the instrument to the hunters.
 - George Noongwook-they used for Iditarod trail, there are some restrictions for the instrument?
 - Craig George-product endorsement, the software is awkward. They work in the Grand Canyon.
 - Jessica Lefevre: thank Exxon it was an exciting project. What complications did you have getting the equipment hooked up at the comcenters. Set up you have the two components, AIS at the com-centers.
 - Jenny Evans-grant writer asking members too be on the scholarship committee. New members of the scholarship fund are: Raymond Hawley, George Noongwook, Julius Rexford, and Jenny Evans they will have first draft by December.
 - John Hopson Jr- We have thousands of students in our three regions is there industry willing to donate \$100,000 dollars.

- ADF&G- 5 whaling communities, Barrow, Kaktovik, Nuiqsut, Wainwright and Point Hope. Exxon funded through the NSB Wildlife Department and Native Village of Barrow, information will be gathered in Barrow.
 - JH-why don't you want to go to Wainwright? Why? We are going to be in Wainwright already, the information being gathered, will it be different?

-No. There are people in Wainwright doing different studies already. If you want us to go to Wainwright, then write us a letter indicating so. We can see what we can do.

- Shell-Maniqsak Baumgartner-Ecosystem studies. Share info with NOAA,
 - JH-slide 5 has a map shows you what is what for your operations, we have spoken to Shell in the past, the coastal communities would be trained in spill response, we would be trained, that hasn't happened yet, when will these actions start happening?
 - Susan, once we get our schedule we will go forward. Wainwright is 300, 400 hundred miles from drill site, why can't we hold the training closer to the drill sites. In the event of an incident the onsite vessel the Nuna is in the immediate response.



Uum's Consulting, LLC
3705 Arctic Blvd, Unit 1187
Anchorage, Alaska 99503
907-350-9527

- John Hopson Jr., my community supports responsible development, what you do will affect us, when you are working in our community, our community works to bring income for their families. You have no idea what it's like to live in the North Slope, they are making decisions based on info not collected by hunters.
- Billy Adams – Wales, St. Lawrence Island, they see ships going by during summer months. Why is Little Diomedede and Anaktuvuk Pass being left out?
- Julius Rexford-my concern is Shell Oil has equipment there, they are behind a fence. What type of boats are you going use to move them? 30 feet long. We have a prevailing wind, the water in the lagoon drops to 68 inches, there is no way you can get the equipment to the barrierisland. Ilisagvik, for training purposes for our future generations.
- Craig George- tow on Norwegian waters, they must be going thru long distance, how are you towing them?
- Maniksaq Baumgartner - using a dry tow.

- Bill-BP-North, Liberty shallow hazard survey, Northstar. 40 ft. shallow hazard 190 sq. miles, 2 air gun vessels.
 - What are the differences on the wave lengths?
 - Bill - It would be difficult to determine the measurement of 2 air guns shot at the same time
 - CG- show us where the fish nets were located?
 - Bill - I understand there was seismic on Liberty, we have a pretty sophisticated analysis, what is the closest a marine mammal that came close to your barrier?
 - Northstar- Harry Brower Jr. - did you hear submarines? No.
 - Harry Brower Jr.-What was the sound, what make them veer?
 - Bill - Sounds that turn on and off not sure what it exactly was that made it veer off to a different direction. There are 2 options: 1. do the whales care if they will be harmed, 2. what about hunters, will they be affected by displacement. Maybe we can understand what did that and we can prevent that from happening. What caused it, something on land, sea or barge vessel?

- Inutaq letter for Barrow Whaling Captains: Question of concern, would it be a good time to set up a meeting at that time? Use the Barrow whaling captains and share with them your concerns. Inutaq-come into Barrow after Christmas.
 - John Hopson Jr.-I was reading your letter, this was focused on Barrow, why did it go thru AEWCC? I do not think this should go thru AEWCC, because this is a Barrow issue. Maybe if you were to enter into other villages you could then address AEWCC, until then see Barrow Whaling Captains.
 - Set up time to swear new commissioners in.

 - Reconvene at 9am.

Motion to adjourn: 443pm



Uum's Consulting, LLC
3705 Arctic Blvd, Unit 1187
Anchorage, Alaska 99503
907-350-9527

10-22-14 | Alaska Eskimo Whaling Commission | 3rd Quarter Meeting | Sheraton | Anchorage, Alaska

In attendance:

Lesley Hopson Admin-
Barrow Harry Brower Jr -
Barrow John Hopson Jr -
Wainwright Price Leavitt Sr. -
Barrow
Henry Soolook-Little
Diomedes Julius Rexford –
Point Lay

Raymond Hawley -Kivalina
Merlin Kanooka -Savoonga
George Noongwook -
Raymond Seetook Sr –Wales
Billy Adams –NSB Wildlife
Maniksaq Baumgardner –Shell

Greg Balogh-USFW
Jenn Hall-Brown – USFW
Craig George – NSB
Wildlife Jenny Evans –
AEWC
Ella Ede –Statoil
Dolly Norton – Uums Consulting



Uum's Consulting, LLC
3705 Arctic Blvd, Unit 1187
Anchorage, Alaska 99503
907-350-9527

- Dr. Craig George – International Whaling Commission (IWC) issues are more policy issues on restructuring policies.
-IWC SC 2014 science summary, bowhead longevity/anticancer research, 2014 summer/fall Aerial/surveys

-Harry Brower Jr.-provide us with a copy of your presentation.

Harry Brower Jr. -Research did he give any indication on the length of research from Rochester University? Within a year they will have a Gene study, bloodline.

-George Noongwook- What does this research entail, collecting tissue in barrow or all the villages? They take cells and do different test for cancer. Making sure the MOU is signed, and -Dr. Craig George - no tissues will be shared with any other labs.

NOAA took over the work for MMS. Really closer to Camden bay thru demarcation point along the beach in shallow waters. Extensive feeding, close to town in Kaktovik. 3 whales in 3 days. 50% of the whales were feedings on krill, fewer calves this year. Hump backs, Minkes, Grey whales and fin whales south of point hope.

Baseline studies, stress monitoring, baleen provide stress monitoring and reproductive hormones. If you would like to see certain studies done let NSB wildlife know.

-Harry Brower Jr. - What is this research providing for us whalers, what are the questions being asked? Helicopter effect, seismic studies, and how they are affected by shipping and off shore drilling, teamed up with North Atlantic whale studies. They can get calving information from the baleens. And that is using chemical signatures. HK- Can the artists get contaminants from the baleen? No these are trace levels. Bowheads have a very low levels of contaminants.

-George Noongwook-bowheads having low levels why compared to other whales, is it the feed or what? Location matters, Greenland have higher levels, belugas are high than whales. Whales eat lower levels of food that are contaminated.

The movie will be shown at AFN.

-Herbert Kinneeveauk - your aerial studies being done in the Bering Straits with the increase of vessel traffic?

-Dr. Craig George -No, the studies are coming from NOAA from Seattle. Sometimes we forget about the vessel traffic is already happening. The only survey is the seal studies.

-Merlin Kanooka-are there some shipped base surveys? Walrus for fish and game.

-George Noongwook- USGS and ADF &G, seal and walrus and looking at the birds.



Uum's Consulting, LLC
3705 Arctic Blvd, Unit 1187
Anchorage, Alaska 99503
907-350-9527

-Craig George –I would like to see a resolution passed for a study to NMFS, to do a study for the passage.

-Merlin Kanooka- is there a study for the Russian coast?

-Harry Brower Jr. - We will discuss this in IWC, are you able to give information for the scientific study for the IWC and legal counsel, for our quota. Strength level algorithm (SLA) is complex programs that looks at population. Make the system less political and the debate got into a computer and mathematical computation for bowhead, then we could do Minke, Humpback, and Fin whales. Bring the SLA study to IWC.

-Jessica Lefevre- this study is to provide information for the quotas. The SLA has to be done right. The humpbacks study is done, but for the Minke it may be difficult to do.

Break 10:10-10:30

- WIP-letter from Dr. Agle Owens-

- Price Leavitt-last week from WIP- main specific, propellant charge, has been developed by a Fairbanks company. In the user manual close to finalizing the manual. With the latest by the WIP is ready for review. 80 grain be developed by the WIP use pyrotechnic 80 grain. He is scheduled to come up to Barrow on 11-11-14. John Holmgren, Billy Adams and Harry Brower Jr., refurbish or rebuild the penthrite. Waiting to see what type of materials we will be using from Dr. Owens.

- Jessica Lefevre- there are concerns on the planned testing trip, Christina have their tickets to go to Barrow, concerned about the other consultant and residents in barrow be on longer y with Dr. Owens, hunters and Christina. JH- What is making his concern for the testing? The quality control is coming from other consultant's and other contractors not from Dr. Owens. I hope you meet his concerns because he is building the penthrite, be professional about the letter we are sending to the government. Use spell check with with..., page 4, AEWC commissioner's will have access to conex and to have one person to access the conex is not there, how they going to get the projectiles while the one person is out of town. We need to have alternate person have access to conex. JL-outsider, it is difficult to describe nonnative are able to hunt whales. The projectiles are being handled by the selected crew members that are part of the hunt. Use nonmembers seek permission to handle. ATF wants to know who will be handling the projectiles from the time they land to the time they explode in the whale. The trained members are the captains, co-captains, and the harpooner. Transportation the coast guard transfer the projectile, why don't we use members of the whaling crew, natives of the crew.

BA-thank you for allowing me to be here. Thank EB for handling the WIP. It really works fine when you are trained properly with the penthrite. Taikuu.

Lunch break 1200-130



Uum's Consulting, LLC
3705 Arctic Blvd, Unit 1187
Anchorage, Alaska 99503
907-350-9527

Executive session 130-415pm

-Harry Brower Jr. 2014-005 Resolution from the Barrow whaling captain's Association for using the Conflict Avoidance Agreement (CAA) to acquire funds from industry where the villages are directly impacted by the CAA to use for whaling officers to attend meetings for the Mini Convention to discuss the CAA.

-John Hopson Jr. - What is the purpose of the funds, if the whaling captains are already in Barrow? Be used for the officers to travel, because of their size they want all the officers to attend. Treasure, Secretary, vice president, Sgt. at arms, etc...

-Julius Rexford- I don't recall passing the resolution at the Mini Convention. Was it passed? Majority passed it at the convention.

-Price Leavitt - whereas the AEWC asked the industry that operate at the Chukchi Sea, Bering Sea, and Beaufort Sea.

Julius Rexford -I want to ask the last chair to see if it passed.

Jessica Lefevre -no record that this passed. Two comments, last year the meeting was held in Anchorage area, due to lack of room to house board of directors in Barrow.

-Harry Brower Jr. - without the finance director here we cannot go forward.

-Merlin Kanooka- this convention I do not recall this resolution being passed.

-Harry Brower Jr. - this coming year, will be in Barrow. Table the conversation till December meeting.

-Julius Rexford- the barrow whaling captains association said it passed.

Harry Brower Jr. - Like I said we are tabling this conversation until December's meeting.

- Village Concerns

- Kivalina, Alaska - no concerns
- Point Hope-thanks to the villages that transferred strikes this spring/fall whale hunting seasons, harpoon, the paddle we have no more paddles in the store, it would be nice to have new paddles sent. The new style paddles are too small. Erosion in our villages, our sigluuqs are close to being washed away, walk in freezers. Our sigluuqs will wash out, funding from AEWC, Corporate has to buy rope, we have sent letters to NSB for blocking tackle, the corporation paid for it. Wooden blocks, and it would be a while to get them, funding for AEWC is important for our villages.
- Price Leavitt- Bureau of Indian Affairs financial systems are down until 26-28th BIA provide funding for block and tackle for the villages.
 - Wainwright – John Hopson Jr.-Thank you to the presenters that presented the last two days, I went and bought the locator device. Thank you to the villages that transferred strikes, block and tackle, walk-in freezer, congrats to those that caught whales.



Uum's Consulting, LLC
3705 Arctic Blvd, Unit 1187
Anchorage, Alaska 99503
907-350-9527

- Jenny Evans-Can we get an inventory for all villages. Stocking some the equipment in Barrow. JH-the last few years you have heard about blocking tackles, walk-in freezers, rope,
- Jenny Evans- We need specifics.
 - Nuiqsut-
 - Wales-good to hear input, we thank you
 - Gambell-generosity to PIZ we are thankful that they helped us out, USCG for hauling our tackle for our village, they also came by plane to meet the captain and the school. I did not see any harvest report for this fall hunt. I would like to see that continue, congrats to Barrow, Nuiqsut, Kaktovik for fall hunt.
 - Savoonga- thanks for responding so quickly to our concerns. Bibs, one individual counting how many we need, original combined fur coats and bibs. I want to thank JL on how we can pursue 501 status to seek funds to be more responsible and efficient. The penthrite projectiles that are spent, we need to know how to dispose them. Our winter hunt is now in December. Hope to have our hunt in front of the village.
 - Barrow-Harry Brower Jr. -the walk in freezers. They keep failing. They were refurbished, 4 or 5 would be good as a start. Keep looking at those resolutions and keep on track of them.
 - Little Diomedede - no concerns
 - Point Lay -He wants the conex for the penthrite be used for our block and tackle, transfer of whales to Point Hope, Nuiqsut received food about 3 weeks ago, sent to wales. The USCG captain came ashore in march. Jana Harcharek Inupiaq Agviiqsiuk, came and talked about what we want back in our schools.

John Hopson Jr. -set a February meeting date - mini convention - first week of 2-7 February 2015, in Barrow.

-John Hopson Jr. -request 1 full day for our bylaws.

-12/11-12/14 4th quarter meeting.

Motion to adjourn- 5:41pm



Uum's Consulting, LLC
3705 Arctic Blvd, Unit 1187
Anchorage, Alaska 99503
907-350-9527

10-22-14 | Alaska Eskimo Whaling Commission | 3rd Quarter Meeting | Sheraton | Anchorage, Alaska

In attendance:

Lesley Hopson Admin-	Raymond Hawley -Kivalina	Greg Balogh-USFW
Barrow Harry Brower Jr -	Merlin Kanooka -Savoonga	Jenn Hall-Brown – USFW
Barrow John Hopson Jr -	George Noongwook -	Craig George – NSB
Wainwright Price Leavitt Sr. -	Raymond Seetook Sr –Wales	Wildlife Jenny Evans –
Barrow	Billy Adams –NSB Wildlife	AEWC
Henry Soolook-Little	Maniksaq Baumgardner –Shell	Ella Ede –Statoil
Diomedes Julius Rexford –		Dolly Norton – Uums Consulting
Point Lay		

- Dr. Craig George – International Whaling Commission (IWC) issues are more policy issues on restructuring policies.

-IWC SC 2014 science summary, bowhead longevity/anticancer research, 2014 summer/fall Aerial/surveys

-Harry Brower Jr.-provide us with a copy of your presentation.

Harry Brower Jr. -Research did he give any indication on the length of research from Rochester University? Within a year they will have a Gene study, bloodline.

-George Noongwook- What does this research entail, collecting tissue in barrow or all the villages? They take cells and do different test for cancer. Making sure the MOU is signed, and -Dr. Craig George - no tissues will be shared with any other labs.

NOAA took over the work for MMS. Really closer to Camden bay thru demarcation point along the beach in shallow waters. Extensive feeding, close to town in Kaktovik. 3 whales in 3 days. 50% of the whales were feedings on krill, fewer calves this year. Hump backs, Minkes, Grey whales and fin whales south of point hope.

Baseline studies, stress monitoring, baleen provide stress monitoring and reproductive hormones. If you would like to see certain studies done let NSB wildlife know.

-Harry Brower Jr. - What is this research providing for us whalers, what are the questions being asked? Helicopter effect, seismic studies, and how they are affected by shipping and off shore drilling, teamed up with North Atlantic whale studies. They can get calving information from the baleens. And that is using chemical signatures. HK- Can the artists get contaminants from the baleen? No these are trace levels. Bowheads have a very low levels of contaminants.

-George Noongwook-bowheads having low levels why compared to other whales, is it the feed or what? Location matters, Greenland have higher levels, belugas are high than whales. Whales eat lower levels of food that are contaminated.

The movie will be shown at AFN.

-Herbert Kinneveauk - your aerial studies being done in the Bering Straits with the increase of vessel traffic?



Uum's Consulting, LLC
3705 Arctic Blvd, Unit 1187
Anchorage, Alaska 99503
907-350-9527

-Dr. Craig George -No, the studies are coming from NOAA from Seattle. Sometimes we forget about the vessel traffic is already happening. The only survey is the seal studies.

-Merlin Kanooka-are there some shipped base surveys? Walrus for fish and game.

-George Noongwook- USGS and ADF &G, seal and walrus and looking at the birds.

-Craig George –I would like to see a resolution passed for a study to NMFS, to do a study for the passage.

-Merlin Kanooka- is there a study for the Russian coast?

-Harry Brower Jr. - We will discuss this in IWC, are you able to give information for the scientific study for the IWC and legal counsel, for our quota. Strength level algorithm (SLA) is complex programs that looks at population. Make the system less political and the debate got into a computer and mathematical computation for bowhead, then we could do Minke, Humpback, and Fin whales. Bring the SLA study to IWC.

-Jessica Lefevre- this study is to provide information for the quotas. The SLA has to be done right. The humpbacks study is done, but for the Minke it may be difficult to do.

Break 10:10-10:30

- WIP-letter from Dr. Agle Owens-

- Price Leavitt-last week from WIP- main specific, propellant charge, has been developed by a Fairbanks company. In the user manual close to finalizing the manual. With the latest by the WIP is ready for review. 80 grain be developed by the WIP use pyrotechnic 80 grain. He is scheduled to come up to Barrow on 11-11-14. John Holmgren, Billy Adams and Harry Brower Jr., refurbish or rebuild the penthrite. Waiting to see what type of materials we will be using from Dr. Owens.

- Jessica Lefevre- there are concerns on the planned testing trip, Christina have their tickets to go to Barrow, concerned about the other consultant and residents in barrow be on longer y with Dr. Owens, hunters and Christina. JH- What is making his concern for the testing? The quality control is coming from other consultant's and other contractors not from Dr. Owens. I hope you meet his concerns because he is building the penthrite, be professional about the letter we are sending to the government. Use spell check with with..., page 4, AEWC commissioner's will have access to conex and to have one person to access the conex is not there, how they going to get the projectiles while the one person is out of town. We need to have alternate person have access to conex. JL-outsider, it is difficult to describe nonnative are able to hunt whales. The projectiles are being handled by the selected crew members that are part of the hunt. Use nonmembers seek permission to handle. ATF wants to know who will be handling the projectiles from the time they land to the time they explode in the whale. The trained members are the captains, co-captains, and the harpooner. Transportation the coast guard transfer the projectile, why don't we use members of the whaling crew, natives of the crew.

BA-thank you for allowing me to be here. Thank EB for handling the WIP. It really works fine when you are trained properly with the penthrite. Taikuu.

Lunch break 1200-130



Uum's Consulting, LLC
3705 Arctic Blvd, Unit 1187
Anchorage, Alaska 99503
907-350-9527

Executive session 130-415pm

-Harry Brower Jr. 2014-005 Resolution from the Barrow whaling captain's Association for using the Conflict Avoidance Agreement (CAA) to acquire funds from industry where the villages are directly impacted by the CAA to use for whaling officers to attend meetings for the Mini Convention to discuss the CAA.

-John Hopson Jr. - What is the purpose of the funds, if the whaling captains are already in Barrow? Be used for the officers to travel, because of their size they want all the officers to attend. Treasure, Secretary, vice president, Sgt. at arms, etc...

-Julius Rexford- I don't recall passing the resolution at the Mini Convention. Was it passed? Majority passed it at the convention.

-Price Leavitt - whereas the AEWC asked the industry that operate at the Chukchi Sea, Bering Sea, and Beaufort Sea.

Julius Rexford -I want to ask the last chair to see if it passed.

Jessica Lefevre -no record that this passed. Two comments, last year the meeting was held in Anchorage area, due to lack of room to house board of directors in Barrow.

-Harry Brower Jr. - without the finance director here we cannot go forward.

-Merlin Kanooka- this convention I do not recall this resolution being passed.

-Harry Brower Jr. - this coming year, will be in Barrow. Table the conversation till December meeting.

-Julius Rexford- the barrow whaling captains association said it passed.

Harry Brower Jr. - Like I said we are tabling this conversation until December's meeting.

- Village Concerns

- Kivalina, Alaska - no concerns
- Point Hope-thanks to the villages that transferred strikes this spring/fall whale hunting seasons, harpoon, the paddle we have no more paddles in the store, it would be nice to have new paddles sent. The new style paddles are too small. Erosion in our villages, our sigluuqs are close to being washed away, walk in freezers. Our sigluuqs will wash out, funding from AEWC, Corporate has to buy rope, we have sent letters to NSB for blocking tackle, the corporation paid for it. Wooden blocks, and it would be a while to get them, funding for AEWC is important for our villages.
- Price Leavitt- Bureau of Indian Affairs financial systems are down until 26-28th BIA provide funding for block and tackle for the villages.
 - Wainwright – John Hopson Jr.-Thank you to the presenters that presented the last two days, I went and bought the locator device. Thank you to the villages that transferred strikes, block and tackle, walk-in freezer, congrats to those that caught whales.



Uum's Consulting, LLC
3705 Arctic Blvd, Unit 1187
Anchorage, Alaska 99503
907-350-9527

- Jenny Evans-Can we get an inventory for all villages. Stocking some the equipment in Barrow. JH-the last few years you have heard about blocking tackles, walk-in freezers, rope,
- Jenny Evans- We need specifics.
 - Nuiqsut-
 - Wales-good to hear input, we thank you
 - Gambell-generosity to PIZ we are thankful that they helped us out, USCG for hauling our tackle for our village, they also came by plane to meet the captain and the school. I did not see any harvest report for this fall hunt. I would like to see that continue, congrats to Barrow, Nuiqsut, Kaktovik for fall hunt.
 - Savoonga- thanks for responding so quickly to our concerns. Bibs, one individual counting how many we need, original combined fur coats and bibs. I want to thank JL on how we can pursue 501 status to seek funds to be more responsible and efficient. The penthrite projectiles that are spent, we need to know how to dispose them. Our winter hunt is now in December. Hope to have our hunt in front of the village.
 - Barrow-Harry Brower Jr. -the walk in freezers. They keep failing. They were refurbished, 4 or 5 would be good as a start. Keep looking at those resolutions and keep on track of them.
 - Little Diomedede - no concerns
 - Point Lay -He wants the conex for the penthrite be used for our block and tackle, transfer of whales to Point Hope, Nuiqsut received food about 3 weeks ago, sent to wales. The USCG captain came ashore in march. Jana Harcharek Inupiaq Agviiqsiuk, came and talked about what we want back in our schools.

John Hopson Jr. -set a February meeting date - mini convention - first week of 2-7 February 2015, in Barrow.

-John Hopson Jr. -request 1 full day for our bylaws.

-12/11-12/14 4th quarter meeting.

Motion to adjourn- 5:41pm



Uum's Consulting, LLC
3705 Arctic Blvd, Unit 1187
Anchorage, Alaska 99503
907-350-9527

10-30-14 | North Slope Borough CAO | Introduction Meeting | Mayor's Office | Barrow, Alaska

In Attendance: Jacob Adams, Lauren NSB Attorney, Hilcorp: John, Kevin, Kelley, Kate,

Lori, John informing Jacob and Lauren about Hilcorp.

Lauren- You couldn't own 100%?

John - Only if they sell 50% of their share.

Lauren- Your slide said 100% in the United States? 1/3's LA, TX, AK,

Lauren- Arctic experience, in terms of hiring BP workers?

John- We are in the market as equal to the lower 48 market. Cost competitive.

Lauren-How much have you had to deal with natives living off the land?

Lauren- Native corporations owning surface and subsurface,

John- Different levels of expertise in the Corporation, village corporations, and the tribe, bulk of our expertise is slope wise, there are a lot of things we need to learn still.

Jake-How many oil fields are you taking over? 4

Lauren-Have you been out to Nuiqsut, Eli wanted to pull all Caelus Energy, LLC permits because of the transition. Assume you are taking over the responsibility of permits, taxes?

Lori, we just in our first NSB permit to travel.

Jake-All this technology you use will prolong the life or cut costs? Lauren-Quite an interesting way to run your business.

John-Open book policy...

Jake-Project, residential learning center, expose to crafts and trade from the village and bring them here to train.

John-Have you heard much about us?

Lauren no. We are trying to learn about Hilcorp. I am sure you are already aware of our new application process online

Jake-Anymore questions?

John-No, thank you for your time.



Uum's Consulting, LLC
3705 Arctic Blvd, Unit 1187
Anchorage, Alaska 99503
907-350-9527

10-30-14 | Planning Commission | Monthly Meeting | NSB Assembly Chambers | Barrow, Alaska

In attendance: NSB Planning Commission, Richard Agvluk, Richard Glenn, Paul Bodfish Sr, Eli Nukapigak, Matthew Rexford, on phone, Caroline Cannon, Willard Neakok,

Repsol, Exxon, Hilcorp, Nordaq, UAA, -

- LMR Report-
-Richard Glenn: LMR report, cluster permits on Repsol, how many wells for Repsol?

-Gordon Brower- 4 wells, but permitted 5,

-Richard-how many wells they plan to drill, permitted 5 but drill 3. Did they make an overall presentation? Gordon Brower- They can, it's their drilling program, they don't drill maybes, they let their permits expire if they don't use alternate plan.

-Eli Nukapigak. - Their permits need to be elevated, there are concerns in Nuiqsut with permits, 130, 159, 155, 161, 179, 180. This is close to the village and we need to have public hearing in NUI.

-Gordon Brower -The public comment period time was done 10-5-14, there were no comment. The permits were finalized with no comments. The permits can be appealed, title 1930-30, appeals section 120-2, and an appeal may be admitted, 30 days after. Man camp for Nuiqsut project.

-Lauren - The administrative elevates the permits, feel uncomfortable the admin can do it on their, the commissioner can elevate a permit can be elevated in written format. Pull all of Caleous permits, because they have not worked closely with the village. The lands are on State lands.

-Richard-Matto Construction-project is a proposal, does that mean you got the approval, does Matto Construction stay out of the camp, sling from Cape Simpson, and sling to island and then barge.

-Eli-177 how far from land, we have freeze up rather quickly. Will the ice be frozen enough to work? The ice island, is being done by golden associates. 130 mph wind.

-Nordaq-Richard drilling time, winter to winter, spud February 15-April 26, 2015.

-Gordon Brower-Nordaq has a presentation today, let them present and that might answer our questions.



Uum's Consulting, LLC
3705 Arctic Blvd, Unit 1187
Anchorage, Alaska 99503
907-350-9527

- Exxon-Anthony Pannino
 - Willard, how many wells will you be working on, this winter 2?
 - Eli- thank you for your cooperation on fall whaling,
 - Gordon, seems like this is a fantastic technology for conflict avoidance we are working with, the AIS is at the com-center is able to see everyone.
 - Richard Agvluk- are you doing local hire?
 - Anthony -Yes, it is a contract requirement.
 - Matthew Rexford-Taikuu for working with Kaktovik. Keep it up?
 - Richard Glenn- 2 wells, are completed use 15 and 1 will be producing condensate and 1 extracting. If full develop 3 well, will deal with condensate.

- Nordaq- Richard- can we talk about which routes you will use, what will remain, it will be plugged and abandoned, will be backfill.
 - Gordon Brower -concerns, having been responder for Repsol, one of the thing came up, the depth of the capping, you need to do there mitigation for surface casing.
 - Richard-Drill 2500 vertical feet.
 - Gordon-During cleanup activities we need to look at how the diverter for such an incidents be more optimal for clean up after a small clean up, are you planning to mitigate for that type of action.
 - Richard -Berming and containment we need to explore. On any containment problem the diverter is 16 inch.
 - Gordon, the issues of resident use of these pads, how Nordaq plans to assist the hall road systems, one issue needs to be dealt with. Nordaq will not restrict any use
 - Gordon Brower suggest a meeting with SAR, there is an exclusionary road buffer and meeting with the SAR would be beneficial for this type of interaction.
 - Eli, the north by northwest, west wind, what type of evacuation plan do you have.
 - Richard -Onshore is where the camp and airstrip will be.
 - Gordon Brower-Land use policy, we use them religiously. I hope we can meet soon.
 - Roy Nageak, ocean site, historical information on smith bay, the dead of winter the ice would turn mushy, how do you plan to move the equipment, we will test the saline, if we find saline, we will flood and sink the ice. There was a leak where the old well was drilled and had eroded that caused a leak in the ocean.



Uum's Consulting, LLC
3705 Arctic Blvd, Unit 1187
Anchorage, Alaska 99503
907-350-9527

-Dora Neakok, I don't see where you are dealing with fish, you are in the front of the rivers that is where I fish.

-Richard-Lake 64 was picked for no fish in the lake, we want to use fresh water that has no fish activity.

-Gordon are you doing any precautionary steps for fish. Do you have a plan to meet with subsistence land owners, and hunters?

-Richard-Using ASRC. DNR we specific screens not to get Nickle backs. We will be crossing a channel we need to confirm solid ice, we will flood and not block the channel.

-Gordon is there ADF&G required for flow meters?

-Richard, recent satellite images if you use real time satellite images.

-Richard Glenn -Can you deepen our channel?

- Hilcorp-

-Richard Glenn -how many relief wells

-John - will be 7 miles from where Nuiqsut,

-Eli- whales are sensitive when they migrate, are you going to make the noise pump on the island. What kind of mitigation measure are you going to put in place if we don't catch any whales?

-John-Sound mitigation we will discuss during permitting process. We have the good neighbor policy. A new island, knowledge has been gained and do a better job than before.

-Eli- before Northstar was built, I got a whale less than a mile from where the island is, now we have to go miles from the island.

-Gordon Brower-pleased to hear, mitigation, CAA and good neighbor policy, concern with Northstar, sent to BP, our 2004 audit of rezone. July 17-23 sent a letter regarding mitigation measure for whale hazing, no dialog with BP, we need to discuss this, because we didn't hear back from BP. If you will be 100 operator, need to understand our dilemma with substantial fines for this particular ordinance, we wanted meeting times, notes and dates on activation of that notice.

-John -I can't speak to you about BP, but we will discuss this with you in the future.

Project Name:	Hilcorp Alaska, Inc.		
Type of Meeting:	Kuukpik Subsistence Oversight Panel – Leadership Meeting		
Meeting Location	Nuiqsut, Alaska		
Meeting Facility	Kisik Community Center		
Date and Time of Meeting:	December 02, 2014 at 2:00 pm		
Hilcorp Alaska, Inc. (HILCORP) and ASRC Energy Services Alaska, Inc. (AES) staff:			
Hilcorp: John A Barnes (JB)	Hilcorp: William “Bill” Britt (BB)		
Hilcorp: Lori Nelson (LN)	Hilcorp: Elizabeth “Beth” Sharp (BS)		
AES: Robin Demoski (RD)			
ATTENDED BY:		ORGANIZATION:	
Helen Kasuk (HK)		Kuukpik Subsistence Oversight Panel	
Eli Nukapigak (EN)		Kuukpik Subsistence Oversight Panel	
Bruce Nukapigak (BN)		Kuukpik Subsistence Oversight Panel	
Herbert Ipalook Sr. (HI)		Kuukpik Subsistence Oversight Panel	
Item	Agenda Item		
1.	Introductions		
2.	Hilcorp Presentation		
3.	Questions or Comments		
Item	Action Item	Action By	Follow up Deadline
1.			
2.			
KEY ISSUES:			
1.	Who is Hilcorp?		
2.	What are we buying? – Endicott, Northstar, Milne Point, Liberty Development		
3.	North Slope Team – Retained 90% of existing field personnel, Experienced Alaskan Support, Transparent and Responsible		
4.	Responsible Development		
5.	Environmental Team		
6.	Looking Ahead – Milne Point, Northstar, Endicott, Liberty Project		

HILCORP
Kuukpik Subsistence Oversight Panel Leadership Meeting

DISCUSSION ITEMS:	
1.	<p>Question (Q): Eli Nukapigak (EN) asked, “How are you going to improve our air quality? Are you going to improve your infrastructures?”</p> <p>Answer (A): Bill Britt (BB) replied, “We have not purchased Prudhoe, our facilities are fairly new and have passed the air quality test.”</p>
2.	<p>Q: EN asked, “Arctic traffic is increasing every year. In regards to Northstar monitoring, we have not seen any bowhead whale studies. The whales do not feed in the Northstar area anymore. What studies have you done with Liberty? What mitigation measures have you started for Liberty? That is the heart of whaling. How will you mitigate our whales?”</p> <p>A: Beth Sharp (BS) replied, “We are still in the process of discussing mitigation measures.”</p>
3.	<p>Q: Panel Member asked, “Have you signed the Alaska Eskimo Whaling Commission’s (AEWC) Conflict Avoidance Agreement (CAA)?”</p> <p>A: BB replied, “We fully intend to sign the AEWC CAA.”</p> <p>Comment (C): by Panel Member, “Offshore scares us, it is beyond our control.”</p> <p>A: JB replied, “We fully intend to put up a bond with AEWC. We would like to continue dialog on what we can do.”</p>
4.	<p>Statement by JB: “We have purchased Endicott, Northstar, Milne Point and the Liberty Development.”</p>
5.	<p>Q: Bruce Nukapigak (BN) asked, “What are you going to do with waste discharge? We have a zero tolerance for grey water.”</p> <p>A: JB replied, “We will have the same environmental standards as before. We will consult with the community and with the NSB on waste handling. We’ve inherited one location at Milne Point for rehabilitation.”</p>
6.	<p>Suggestion by Panel Member: “On the Environmental Team slide, add specific areas of expertise.”</p>
7.	<p>Q: BN asked, “So your plan is basically to extend the legacy wells?”</p> <p>A: JB replied, “Yes, that is correct. We plan to extend the legacy wells in Endicott and Milne Point.”</p>
8.	<p>Q: Herbert Ipalook Sr. (HI) asked, “How far along is your development on Liberty?”</p> <p>A: JB replied, “It will be a two year permitting process. Then final approval takes around 30 months.”</p> <p>A: BB replied, “There will be an EIS, you are right, we are taking existing production and we are extending its life cycle.”</p>
9.	<p>Q: HI asked, “Are you using BP’s modules for Liberty?”</p> <p>A: JB replied, “We are using smaller truck able modules that will have a small footprint. The modules are similar to the ones used in the Cook Inlet, still winterized, instillation will be quicker.</p> <p>C: by HI, “The reason I asked, BP gave us left over lumber, instead of burning it, we reused it.”</p> <p>A: JB replied, “Lumber may be available; there will be some plusses from this project.”</p> <p>Statement by EN: “There is no lumber at Cross Island. We’ve received mattresses from BP as well. We’ve had to change and adapt to hunt bowhead; we don’t want to give up. Cross Island has been an existing whaling island. We’ve had to maintain communication with oil companies to maintain our subsistence.”</p> <p>A: JB replied, “Both sides need to understand both sides. Hilcorp will talk of production and cost, we have a lot of managing to do together. On our next trip, we can bring a production plot.”</p>
10.	<p>Q: EN asked, “We have some people who are trained in responding to an emergency. Is there a plan for people to be trained within your company?”</p> <p>C: by BN, “We enjoyed our hands on experience with Alaska Clean Seas.”</p> <p>A: JB replied, “We can look into the program.”</p> <p>C: by BN, “Currently, there is a lack of training.”</p>
11.	<p>Q: EN asked, “Have you acquired BP’s Master Plan? Have you made any changes?”</p> <p>A: JB replied, “No changes, we haven’t proposed any changes.”</p>

12.	<p>Q: EN asked, “Are you planning to continue the offshore studies in regards to the Arctic cisco? We are interested in how many fish go through near Endicott.”</p> <p>A: BS replied, “We are continuing these studies.”</p>
13.	<p>Q: EN asked, “Will you continue the studies of bowhead whales near NorthStar?”</p> <p>A: BS replied, “Yes, absolutely, we’ll get the information to you.”</p> <p>Q: JB asked, “Is there another venue in which you would like to discuss these studies besides AEWC?”</p> <p>A: EN replied, “You will need to meet with the Nuiqsut Whaling Captains.”</p> <p>A: HI replied, “We like operations done after whaling, no disturbance during whaling. If there is disturbance, the further and longer we will have to be out whaling. Isaac Nukapigak is our commissioner and passes on information.”</p> <p>Statement by EN: “Impacts will be the biggest assets on both sides oil and subsistence/Nuiqsut residents. A good neighbor policy is hard to go by because we have to meet and communicate. Things may be very frustrating.”</p> <p>Statement by HI: “As a whaling captain, we’ve developed an understanding. Should be an interesting meeting tonight if we get a lot of people.”</p>
14.	<p>Q: EN asked, “Why are you creating two gravel islands for Liberty?”</p> <p>A: JB replied, “We would only create one island. The distance was too far beyond drilling capabilities to drill from SDI.”</p>
15.	<p>Q: HI asked, “If we don’t catch a whale within three years of Liberty Island being developed, how will you mitigate us?”</p> <p>A: JB replied, “We will need to have more communication.”</p>
16.	<p>Statement by EN: “Northstar used to be our whaling spot. Same thing will happen to Liberty. The whales feed within 30 miles and hangout in Camden Bay.”</p>
17.	<p>Q: JB asked, “How deep of waters can the whales travel through?”</p> <p>A: Panel Member replied, “The whales can migrate through the barrier islands which are 6 feet in depth.”</p> <p>C: by JB, “We will have more conversations as to where the Liberty island will be.”</p> <p>A: Panel Member replied, “People do watch whales from Endicott and from the barrier islands. We do get swells and we have a channel.”</p>
18.	<p>Statement by LN: “We plan on having a Liberty meeting next month and present this to the Alaska Eskimo Whaling Commission.”</p> <p>A: EN replied, “We will fight for our rights.”</p> <p>A: JB replied, “We should have a meeting with the whaling captains; we will call Isaac to set this up.”</p>
19.	<p>Q: EN asked, “Are you doing a full EIS?”</p> <p>A: JB replied, “We are not sure whether it will be another EIS or a SEIS or an EA at this point.”</p>

HILCORP - NUIQSUT OPEN HOUSE MEETING

December 2, 2014

Project Name:	Hilcorp Alaska, Inc. Plan of Cooperation Minutes
Type of Meeting:	Open House
Meeting Location	Nuiqsut, Alaska
Meeting Facility	Kisik Community Center
Date and Time of Meeting:	December 02, 2014 at 6:00 pm

Hilcorp Alaska, Inc. (HILCORP) and ASRC Energy Services Alaska, Inc. (AES) staff:

Hilcorp: John A Barnes (JB)	Hilcorp: William "Bill" Britt (BB)
Hilcorp: Lori Nelson (LN)	Hilcorp: Elizabeth "Beth" Sharp (BS)
AES: Robin Demoski (RD)	

ATTENDED BY:	ORGANIZATION:	ATTENDED BY:	ORGANIZATION:
Lottie Evikana		Eunice Pausanna	
Mary Cabinboy		James Taalak	City of Nuiqsut
Edward Nukapigak	Inupiaq Translator	R. Nukapigak	
Clarence Ahnupka		Sara Oyagak	City of Nuiqsut
Cora Tagarook	Nuiqsut	Lucy Nukapigak	
Isaac Nukapigak	AEWC	Vera Tagarook	
Bruce Nukapigak		Dorcas Ahkiviana	
Carolyn Ahkiviana		Dora Ahkiviana	
Billy Oyagak		Dorcas Kittick	
Ryan Oyagak		Wendy Brower	
Kyle Brower		Willie Sielak	
Patrick E.		Annie Lampe	
Clayton Kaigelak		Roxy Oyagak	

Item	Agenda Item		
1.	Invocation by Edward Nukapigak		
2.	Introduction by John Barnes		
3.	Presentation by John Barnes, translated by Edward Nukapigak		
4.	Questions or Comments		

Item	Action Item	Action By	Follow up Deadline
1.	ACS Standards for clean up on broken Ice	John Barnes	January

KEY ISSUES:

1.	Who is Hilcorp?
2.	What are we buying? – Endicott, Northstar, Milne Point, Liberty Development
3.	North Slope Team – Retained 90% of existing field personnel, Experienced Alaskan Support, Transparent and Responsible
4.	Responsible Development

HILCORP - NUIQSUT OPEN HOUSE MEETING

December 2, 2014

5.	Environmental Team
6.	Looking Ahead – Milne Point, Northstar, Endicott, Liberty Project
DISCUSSION ITEMS:	
1.	<p>Statement by Nuiqsut Resident: “I eat fish, whitefish, make sure you are responsible for your actions.”</p> <p>Answer (A): John Barnes (JB) replied, “I eat fish too.”</p> <p>Comment (C): by Nuiqsut Resident, “I eat whitefish, I don’t want to eat contaminated fish.” A: JB replied, “What I do know, is that for Liberty, it will be similar to North Star and the Cook Inlet, zero discharge, You’re right there should never be a discharge. We will continue to monitor and conduct fish studies. We look forward to more dialog to make sure that these studies are done correctly and that that they are beneficial to you and beneficial to us and done correctly.”</p> <p>C: by Nuiqsut Resident, “I eat the walrus, seals but what I love to eat is the whale, that is my favorite food. I don’t want it contaminated.”</p> <p>A: JB replied, “That makes a lot of sense.”</p> <p>C: by Nuiqsut Resident, “I don’t want a disease from the oil companies.”</p>
2.	<p>Statement by Isaac Nukapigak (IN): “I want to thank you for coming in. I am speaking as an individual, a commissioner for the AEWC, and from a private sector. I want to thank you for coming to Nuiqsut and to be noted to the community of your acquisition of the assets that Hilcorp has acquired from BP. Thank you for that effort, I know the challenge. Thank you for knowing and expecting the good neighbor policies put forth that the community supports. It was a two way exchange in the early 1980’s when BP first came in to talk about the first offshore island within the barrier islands. Establishing a good neighbor policy provides assurance that there will not be any mishaps. The Conflict Avoidance Agreement is another venue for us. You are in our front yard. How can we work together to minimize impacts? We know the migration corridor; you’re going to have to work with this community. I hope that you continue the dialog.”</p> <p>A: by JB, “If Liberty happens, two things will happen, we will have to find the right cost structure and acceptance from the community.”</p> <p>C: by IN, “Man made in a shallow area will affect the bowhead migration.”</p>
3.	<p>Statement by IN: “You are a new player; you are going to be rebuked.”</p> <p>A: Lori Nelson (LN) replied, “We are happy to hear that you want this dialog.”</p> <p>C: by IN, “There will have to be a little give and take.”</p>
4.	<p>Statement by Edward Nukapigak (EN): “Hilcorp will be here for some time. We need dialog. My biggest concern is the bowhead whale. If there is an impact to whales they will travel further North up to 45 miles North. If Hilcorp wants to move forward they need to consult with AEWC and the NSB Wildlife Department. We’ve dealt with acoustic monitors during our whaling season.</p> <p>A: JB replied, “Thank you for that clarification.”</p> <p>C: by EN, “The less that you are in this area, the less of an impact you will have on our whaling. Crowley won’t sign the CAA and they are the biggest interference.”</p>
5.	<p>Q: Nuiqsut Resident asked, “What seasons are you working? Year round?”</p> <p>A: JB replied, “The existing fields, will be working year round, we will not be drilling at Endicott or Northstar, the new wells are at Milne Point.</p>
6.	<p>Q: Nuiqsut Resident asked, “Are you going to repair the pipes and what not?”</p> <p>A: JB replied, “We will have an integrity plan that will identify needs for repairs. Similar to the Cook Inlet Plan.”</p>
7.	<p>Q: Nuiqsut Resident asked, “What will you do if there is a spill?”</p> <p>A: JB replied, “We have contracted Alaska Clean Seas (ACS) to respond to spills. They are equipped.”</p>

HILCORP - NUIQSUT OPEN HOUSE MEETING

December 2, 2014

8.	<p>Q: EN asked, "How will you clean up on ice?"</p> <p>A: JB replied, "Worst case is on broken ice, we can share that plan with you. I will get back to you on the ACS standards."</p> <p>C: by EN, "ACS failed on a broken ice exercise with Inupiat observers. I think a lot more dialog needs to happen."</p>
----	---

HILCORP - NUIQSUT OPEN HOUSE MEETING

December 2, 2014

9.	Comment by Annie Lampe – “Thank you for coming.” EN translated Annie Lampe’s speech: “Her concerns were for the fish and spills. We have to work together. She has concerns for the beluga. She’s happy that we are here to talk to Nuiqsut. A lot of her concerns are for the wildlife and ocean. Our Colville is not like it used to be over the past 40 years. Something is happening to our fish.”
10.	C: by Nuiqsut Resident, “Before you start this project you need to study the krill the whales eat.”
11.	Statement by EN: “I want us to have a good relationship with Hilcorp because BP took care of us.”



Uum's Consulting, LLC
3705 Arctic Blvd, Unit 1187
Anchorage, Alaska 99503
907-350-9527

01/08/15 | Inupiat Community of Arctic Slope | Introduction Meeting | ICAS Office | Barrow, Alaska
ICAS Conference call number 18003156338 42271 code

ICAS, Barrow - George Olemaun, Doreen Lampe, George Edwardsen, Rosemary Attungarauk, Fred Miller, Mary Sage, Martha Koonaloak, Point Lay - Celia Attungarauk, Atqasuk - Ethel Burke, Pt. Hope - May Hank, Doreen Ahgeak

Not present: Robert Suvlu, Nuiqsut - Dwayne Hopson, and Matthew Rexford, Pt. Hope Jack Schaeffer, Rachel Riley, Wainwright - Raymond Agvluk Jr.

ASRC - Teresa Imm, Dawn Winalski – NSB Assistant Attorney, Hilcorp: Mike Dunn, Lori Nelson, Kate Kaufman, Beth Sharp, Uum's Consulting, LLC: Ms. Dolly Norton

Call to order: 640pm

Invocation: dolly

702 executive session. 723 out of executive session

NSB: Dawn Winalski Assistant NSB Attorney, ICAS joined NSB on the designation of the ringed seal litigation.

Hilcorp:

George Edwardsen: What kind of privately owned company? Used to be panama Oil Company

May Hank: disturbance of noise get closer to mic.

George Edwardsen: we are a very good tax shelter. DL: Rama starts at 10, donating to bingo game.

George Olemaun: have you hired any local employees from our area? Our people can help find if you got lost.

Rosemary Attungarauk: with your renovations are you reducing emissions? With water injection process to increase production you injecting water that creates h2s

George Edwardsen: increasing injection your production creates h2s.

Rosemary Attungarauk Contamination how are you handling the contaminants,

Rosemary Attungarauk Is there transparency for us to look at your increased productions as to what is injected and at what rate? The assessments of your activities, are inadequate to human health for our future generations. It is important for me to see your processes, I opposed the building of the North Star field. The risk continues with us

May Hank: does not have the packet.

George Edwardsen: heavy oil? You will have to learn to dilute the heavy oil.

Rosemary Attungarauk You have signed the CAA?

Doreen Lampe good neighbor policy was signed by NSB Mayor and ICAS President where are you with that?

Mae Hank: does the Good Neighbor Policy have an agreement with ICAS

Member of ACS, how is your contract with ACS how are you involved with process of a spill? Is your contract being modified with liberty?



Uum's Consulting, LLC
3705 Arctic Blvd, Unit 1187
Anchorage, Alaska 99503
907-350-9527

Rosemary Attungarauk CAA signing is important to have good transparent to process, need to the fact that we were overlooked is a concern to me, it is very important to us, you need to work with our people and train them, it is important that you work with our generation of family go thru training, we have response for oil spill response, we need to be gainfully employed not just spill response, but other training opportunities for our future generations.

I don't support your liberty project but do appreciate your working with us, I want to know what you are using in your processes and how it will affect our future.

Have you done any work with pipeline safety trust? Safety with pipeline in Washington State.

Rosemary Attungarauk: Do you have a good communication process to contact your people, in the event of a spill? Communication with Martha and Doreen about what is being re-injected into the wells.



Uum's Consulting, LLC
3705 Arctic Blvd, Unit 1187
Anchorage, Alaska 99503
907-350-9527

01/08/15 | NSB-Wildlife Department | Introduction Meeting | NSB Wildlife

Department | Barrow, Alaska In Attendance: NSB - Dr. Craig George, Admin. Leslie,

Intern John Brower

Hilcorp – Mike Dunn, Lori Nelson, Kate
Kaufman, Beth Sharp Uum's Consulting,
LLC – Ms. Dolly Norton

Norway- shoot in the fjords the fish would drop. Seismic study to contribute to marine mammal. No one has the data set like that related to Endicott project. Written into the permit for Endicott. Benny is leading project, for Qaaqtaaq studies.

What the time frame is and decided if the questions were answered. American fisheries journal, Bill Wilson, Betty Galloway.

The point is to do sensible studies, move towards useful studies. We could hear Canadians work through shallow water, seismic, could analyze the North Star studies off the island. Asked Bill to look drilling to Endicott,

Array out? There set number of recorder out every year, decide to put one and record island sounds. Bowhead increasing at an incredible rate. Mid-April to end of May.

Cumulative environmental, effects of oil and gas activities on Alaska's North Slope National Research Council of the national academies.

NMFS-Per review panel, Robert Suydam,

Uum's Consulting, LLC | 3705 Arctic Blvd, Unit 1187 | Anchorage, AK 99503 | 907-350-9527 | missdolly@uumsconsulting.org

Project Name:	Hilcorp Alaska, Inc. Plan of Cooperation Minutes		
Type of Meeting:	Native Village of Barrow Meeting		
Meeting Location	Barrow, Alaska		
Meeting Facility	Native Village of Barrow Conference Room		
Date and Time of Meeting:	January 12, 2015 at 1:00 pm		
Hilcorp Alaska, Inc. (HILCORP) and ASRC Energy Services Alaska, Inc. (AES) staff:			
Hilcorp: Walton Crowell (WC)	Hilcorp: Kathryn Kaufman (KK)		
Hilcorp: Lori Nelson (LN)	Hilcorp: Elizabeth Sharp (BS)		
AES: Robin Demoski (RD)			
ATTENDED BY:	ORGANIZATION:	ATTENDED BY:	ORGANIZATION:
Thomas Olemaun, President (TO)	NVB	Charlie Brower, Manager (CB)	NVB

<u>Item</u>	<u>Agenda Item</u>		
1.	Introduction		
2.	Presentation		
3.	Questions or Comments		
<u>Item</u>	<u>Action Item</u>	<u>Action By</u>	<u>Follow up Deadline</u>
1.	NVB can provide Subsistence Advisors	TO	
2.	The NVB request communication.	LN	

KEY ISSUES:

1.	Introduction and History of Hilcorp in Alaska <ul style="list-style-type: none"> - North Slope Properties Acquired from BP: Milne Point, Northstar and Endicott - North Slope Development Project Acquired from BP: Liberty
2.	Description of Upcoming Liberty Work <ul style="list-style-type: none"> - Geotechnical Surveys – March 2015 - Shallow Hazard Surveys – July 2015
3.	Questions or Concerns About Interference with Subsistence Activities in Relation to Upcoming Liberty Work? <ul style="list-style-type: none"> - Polar Bears - Whales and Seals
4.	Question or Concerns About Interference with Subsistence Activities in Relation to Existing North Slope Operations? <ul style="list-style-type: none"> - Polar Bears - Whales and Seals

DISCUSSION ITEMS:

1.	Statement by Kate Kaufman (KK): “We will be hiring Subsistence Advisors to avoid seal layers and polar bear dens.” Comment (C): by Thomas Olemaun (TO), “The Native Village of Barrow can hire SA’s as well.”
2.	Statement by KK: “As for summer work, we will be out for five days and we will be hiring MMO’s.”
3.	Statement by TO: “That area is pretty shallow. The NVB request communication.”

HILCORP – NATIVE VILLAGE OF BARROW MEETING
January 12, 2015

4.	Answer (A): Lori Nelson (LN) replied, “We plan on meeting and presenting at AEWC.”
5.	Statement by Charlie Brower (CB): “No problem during the winter time and spring. They are herding over there. Just stay in compliance.”
6.	Statement by Beth Sharp (BS): “BP is still 50% owner of Liberty. We’ve purchased Northstar, Endicott and Milne Point. We will continue with existing monitoring and studies.”
7.	Statement by TO: “Just keep me in the loop.” A: LN replied, “I’ll keep you in the loop.” C: by CB, “Good to have open communication.” Q: KK asked, “Do you coordinate with the NSB?” A: TO replied, “No sometimes, we are forgotten.”
8.	Statement by CB: “Polar bears are migrating to the east more often.”

Project Name:	Hilcorp Alaska, Inc. Plan of Cooperation Minutes		
Type of Meeting:	North Slope Borough Mayor's Office Meeting		
Meeting Location	Barrow, Alaska		
Meeting Facility	North Slope Borough Mayor's Office		
Date and Time of Meeting:	January 12, 2015 at 2:00 pm		
Hilcorp Alaska, Inc. (HILCORP) and ASRC Energy Services Alaska, Inc. (AES) staff:			
Hilcorp: Walton Crowell (WC)	Hilcorp: Kathryn Kaufman (KK)		
Hilcorp: Lori Nelson (LN)	Hilcorp: Elizabeth Sharp (BS)		
AES: Robin Demoski (RD)			
ATTENDED BY:	ORGANIZATION:	ATTENDED BY:	ORGANIZATION:
Charlotte Brower, Mayor (CB)	NSB	Lauren Berdow, Attorney (LB)	NSB
Rhoda Ahmaogak (RA)	NSB	Gordon Brower (GB)	NSB
Jacob Adams (JA)	NSB		

<u>Item</u>	<u>Agenda Item</u>		
1.	Introduction		
2.	Presentation		
3.	Questions or Comments		

<u>Item</u>	<u>Action Item</u>	<u>Action By</u>	<u>Follow up Deadline</u>
1.	Contact Native Allotment Owners	LN	
2.	Read the Ooguruk Ordinance	KK	
3.	Provide Financials and Transfer Documents	LN	
4.	Set up a monthly or bi-monthly meeting with the Planning Dept.	KK	

KEY ISSUES:	
1.	Introduction and History of Hilcorp in Alaska <ul style="list-style-type: none"> - North Slope Properties Acquired from BP: Milne Point, Northstar and Endicott - North Slope Development Project Acquired from BP: Liberty
2.	Description of Upcoming Liberty Work <ul style="list-style-type: none"> - Geotechnical Surveys – March 2015 - Shallow Hazard Surveys – July 2015
3.	Questions or Concerns About Interference with Subsistence Activities in Relation to Upcoming Liberty Work? <ul style="list-style-type: none"> - Polar Bears - Whales and Seals
4.	Question or Concerns About Interference with Subsistence Activities in Relation to Existing North Slope Operations? <ul style="list-style-type: none"> - Polar Bears - Whales and Seals

HILCORP – NSB MAYOR’S OFFICE MEETING

January 12, 2015

DISCUSSION ITEMS:	
1.	<p>Statement by Lori Nelson (LN): “We’ve only committed to permitting and stakeholder engagement on Liberty. There is a high chance of not pursuing if there’s a conflict. We have not committed to building. We expect the permitting process to last two years. Do you have any questions, concerns with the transition of ownership from BP? We are a flat, small organization; the people in this room are the owners.”</p>
2.	<p>Statement by Charlotte Brower (CB): “Liberty has been on the books for some time now. When BP informed Commissioner Balash, we weren’t made aware that the transfer documents were about to be signed. I had to ask Commissioner Balash to hold off five days to review the documents. We wanted to review the transitioning documents. We wanted to know why we were not included. By 5 pm that day, we were told other than that, Liberty has its own problems. The planning department can help you with Liberty questions. NSB does not plan to intervene.”</p>
3.	<p>Question (Q): Rhoda Ahmaogak (RA) asked: “Where is Hilcorp now? We discussed the boulder patch and studies.”</p> <p>Answer(A): Walton Crowell (WC) replied, “We are using the same studies; we are 50% owner of Liberty. BP is still helping. We’ve looked at BPs proposals. We’ve looked into the strudel scours.”</p> <p>A: Kate Kaufman (KK) replied, “We’ve just picked up the Liberty Project where BP left off. Hilcorp went back to the original design; Island and pipeline to Badami.”</p> <p>Comment (C): by GB, “Protecting the boulder patch, this is an oasis of species. Whatever BP was planning was to protect the boulder patch.”</p> <p>A: KK replied, “We expect 24 months of permitting.”</p> <p>Q: Jacob Adams (JA) asked: “Is Liberty on a Federal Lease?”</p> <p>A: KK replied, “Yes, it is.”</p> <p>Q: RA asked, “Explain the boulder patch?”</p> <p>A: Beth Sharp (BS) replied, “The boulder patch is off of Foggy Island Bay, it is a rich ecosystem, physically important role in the food chain.”</p> <p>A: WC replied, “The boulder patch was located through bathymetry.”</p> <p>Q: CB asked, “How far will it be from the island?”</p> <p>A: WC replied, “Two to five miles, five miles more condensed.”</p> <p>A: KK replied, “In regards to the pipeline, we want go south and minimize the impact.”</p> <p>C: by GB, “Ultra extended reach pipeline was proposed by BP, from the island to the boulder patch.”</p> <p>A: WC replied, “With this design, we barely will touch the boulder patch.”</p>
4.	<p>Q: GB asked, “Being in Federal waters, how do we present this to the NSB Assembly?”</p> <p>Q: JA asked, “Will production take place in Federal waters?”</p> <p>A: KK replied, “Yes.”</p> <p>Q: Loren Berdow (LB) asked, “Would we need to talk to Lisa Murkowski?”</p> <p>A: CB replied, “Could be.”</p> <p>C: by KK, “I see what you mean about the extended reach.”</p> <p>Statement by GB: “For example, CD-4 was a conventional reaching to CD-5. We’ve seen this technology for many years now. If you move it and it becomes a jurisdictional matter. So moving this island a mile is very close to the edge.”</p> <p>A: WC replied, “As for the reservoir, it is smaller then what BP was advertising and a high expense on drilling.”</p> <p>A: GB replied, “The Assembly will look at the State vs. Federal reservoir.”</p>
5.	<p>Q: JA asked, “Your development plan was sent to BOEM?”</p> <p>A: KK replied, “Yes, we’ve submitted the plan in December, we expect questions.”</p> <p>C: by CB, “I was surprised how soon you came after you filed.”</p>

HILCORP – NSB MAYOR’S OFFICE MEETING

January 12, 2015

6.	<p>Statement by GB: “The ice island grounded was the original plan.”</p> <p>Q: CB asked, “Floating island?”</p> <p>A: BS replied, “Similar to Northstar, gravel island.”</p> <p>Q: JA asked, “Similar in size to Northstar?”</p> <p>A: WC replied, “Slightly larger to accommodate the processing plant. Moves oil quicker, environmentally safer, logistically better and cost effective.”</p>
7.	<p>Statement by LN: “We will be conducting subsea studies this summer, gathering samples this winter in March near the Badami ice roads. We will have wildlife observers and will be out for 20 to 25 days.”</p> <p>C: by GB, “We’ve approved IHLC and permits for this project.”</p> <p>A: KK replied, “Yes, and for this summer, we will be out for five days for bathymetry and floor surface studies.”</p>
8.	<p>Q: GB asked, “What will you use as a gravel source? Permits that came in from last year, suggest a more central point.”</p> <p>A: WC replied, “Yes, we’ve reduced the amount of gavel need by 63% and moved away from the Native Allotments and river.”</p> <p>C: by GB, “Shark Tooth Project, the Borough has a consolidation policy. CPAI approved permit not gravel source. Be aware that there are regional gravel sources that can save you money.”</p>
9.	<p>Statement by KK: “We plan to meet more with the Plan of Cooperation. We want to do more of a one on one type of meeting first.”</p>
10.	<p>Statement by GB: “As for your geotechnical surveys, be aware of the seal lairs.”</p> <p>A: KK replied, “We will work with subsistence advisors.”</p> <p>C: by GB, “BP used Charlie Hopson.”</p>
11.	<p>Statement by BS: “As part of the IHA, we will conduct studies.”</p> <p>C: by LB, “You should meet with the Wildlife Department.”</p> <p>KK: “We’ve met with Craig George and spoke with Robert Suydam, which helped us make some of our decisions. “</p> <p>Q: BS asked, “Applied for a LOA on polar bears. Are there any concerns? We will be working close with Fish and Wildlife; we will be participating in their FLIRing.”</p> <p>C: by LN, “We spoke with Craig George, we fully plan to conduct the research and studies. We don’t want to spend money on studies if it’s not useful.”</p>
12.	<p>Statement by GB: “Risk Analysis on Northstar done by AEWG, maybe that ordinance should be revisited. If we audit Northstar there may be dated items.”</p> <p>C: by RA, “We are considering an audit of all of our ordinances.”</p> <p>Q: BS asked, “What is the process of getting information to you?”</p> <p>A: RA replied, “We have inspectors go onsite for routine inspections.”</p> <p>A: GB replied, “When there is a difference we want to know if the Master Plan has changed.”</p> <p>C: by JA, “They won’t be doing a Master Plan to us, it’s in Federal waters.”</p> <p>Q: RA asked, “We need to rezone? Take this to the Assembly?”</p> <p>Q: BS asked, “Do you anticipate BOEM not approving?”</p> <p>A: LN replied, “There’s a heavy voice on the environmental side in administration. Locally we are receiving support. We had interagency presentation on the Federal level.”</p> <p>Q: CB asked, “Is there any way to influence voices with the departments working group? We are concerned about the appointed one who’s living in Hawaii. She is using what she knows on the NSB. You’re in a predicament when I ask BOEM. You see where Duck Island is, 60 polar bears go there during the day.”</p>

HILCORP – NSB MAYOR’S OFFICE MEETING

January 12, 2015

13.	<p>Q: RA asked, “How close are you to Native Allotments?” A: WC replied, “2,000 feet.” Q: GB asked: “May be approach them and make them an offer?” Q: RA asked, “Whose Native Allotment?” A: LN replied, “I’ll have to get back with you on that.” C: by RA, “The Planning Commission applies buffers.” A: WC replied, “We know there are archeological sites.” C: by RA, “Meet with the families.” C: by GB, “Read the Ooguruk Ordinance. We don’t have jurisdiction on Native Allotments, but we have jurisdiction on impacts through Title 19, subsistence impacts.”</p>
14.	<p>Q: LB asked, “Commissioner Balash, short time, transfer finance, wanted to see financials and transfer documents, can you help?” A: LN replied, “Yes, I can look into this.”</p>
15.	<p>Statement by KK: “It’s our expectation to work with the NSB. BOEM will facilitate the MOU.” A: RA replied, “We want a monthly and bimonthly meeting set up.”</p>
16.	<p>Q: CB asked, “Will you be attending AEWG and sign the CAA?” A: LN replied, “Yes.”</p>
17.	<p>Q: LN asked, “Do you want information delivered to you through the planning department?” A: CB replied, “Yes.”</p>

Project Name:	Hilcorp Alaska, Inc. Plan of Cooperation Minutes		
Type of Meeting:	North Slope Borough Planning Department Meeting		
Meeting Location	Barrow, Alaska		
Meeting Facility	North Slope Borough Planning Department's Office		
Date and Time of Meeting:	January 12, 2015 at 4:00 pm		
Hilcorp Alaska, Inc. (HILCORP) and ASRC Energy Services Alaska, Inc. (AES) staff:			
Hilcorp: Walton Crowell (WC)	Hilcorp: Kathryn Kaufman (KK)		
Hilcorp: Lori Nelson (LN)	Hilcorp: Elizabeth Sharp (BS)		
AES: Robin Demoski (RD)			
ATTENDED BY:	ORGANIZATION:	ATTENDED BY:	ORGANIZATION:
Rhoda Ahmaogak (RA)	NSB	Gordon Brower (GB)	NSB
Thomas Brower (TB)	NSB	Ralph Burke (RB)	NSB
Quincy Adams (QA)	NSB	Ned Arey Sr. (NA)	NSB
Bart Ahsogek (BA)			

<u>Item</u>	<u>Agenda Item</u>		
1.	Introduction		
2.	Presentation		
3.	Questions or Comments		

<u>Item</u>	<u>Action Item</u>	<u>Action By</u>	<u>Follow up Deadline</u>
1.	Read Title 19	KK	
2.	Need to meet and present to the Assembly	LN	
3.	Contact Native Allotment Owners	KK	
4.	Schedule regular meetings with the Planning Dept.	KK	
5.	Beth and Rhoda to meet on ordinances and look for outdated information and changes	BS	

KEY ISSUES:

1.	Introduction and History of Hilcorp in Alaska <ul style="list-style-type: none"> - North Slope Properties Acquired from BP: Milne Point, Northstar and Endicott - North Slope Development Project Acquired from BP: Liberty
2.	Description of Upcoming Liberty Work <ul style="list-style-type: none"> - Geotechnical Surveys – March 2015 - Shallow Hazard Surveys – July 2015
3.	Questions or Concerns About Interference with Subsistence Activities in Relation to Upcoming Liberty Work? <ul style="list-style-type: none"> - Polar Bears - Whales and Seals
4.	Question or Concerns About Interference with Subsistence Activities in Relation to Existing North Slope Operations? <ul style="list-style-type: none"> - Polar Bears - Whales and Seals

HILCORP – NSB PLANNING DEPT. MEETING

January 12, 2015

DISCUSSION ITEMS:	
1.	<p>Question (Q): Rhoda Ahmaogak (RA) asked, “Have you read Title 19?” Answer (A): Kate Kaufman (KK) replied, “I am working on it.”</p>
2.	<p>Statement by RA: “Need to meet and present in front of the Assembly.” A: Lori Nelson (LN) replied, “Strictly permitting and stakeholder engagement. We are seeking input; we haven’t committed funds for the project. It is in Federal waters, we are being responsive and transparent. The Plan of Cooperation efforts seek feedback. Walton will talk about the winter and summer Liberty projects. Beth will talk about existing projects at Northstar Endicott and Milne Point.”</p>
3.	<p>Statement by Walton Crowell (WC): “On March 1st, we will follow the Badami ice road, drill holes on the ice corridor to the island and out on the island location. We will have subsistence advisors for seal lairs and polar bear dens. We will be participating in Fish and Wildlife’s FLIRing.” Comment (C): by Kate Kaufman (KK), “We are wrapping up the polar bear LOA permit. POC meet with individual groups initially and continuing with communications.”</p>
4.	<p>Q: Gordon Brower (GB) asked, “Ralph, in resource district map?” A: Ralph Burke (RB) replied, “Yes, I’ve verified. Not in Federal though.”</p>
5.	<p>Statement by WC: “As for the summer shallow hazard survey, we will be out there for five days, staying at Endicott and working near the corridor. Focus is not to reduce data; we’ve reduced our scope quite a bit. We are validating archeological data in the corridor providing to SHPO as well. We’ve looked at all of BP’s different scenarios.” C: by KK: “I haven’t submitted the summer permits yet. We will have MMO’s on the boat. We want feedback.” C: by WC: “We will be conducting acoustic monitoring.”</p>
6.	<p>Q: GB asked, “Will you be encountering the boulder patch?” A: WC replied, “We will go across a low concentration of the boulder patch, near the Outer Continental Shelf.” Q: GB asked, “Is there a categorization for the boulder patch? Is it categorized to be protected? Wildlife may know.” A: WC replied, “Yes, the ecosystem is an anomaly.” C: by GB, “Important information for permitting the pipeline.” A: KK replied, “Acoustic monitoring near Foggy Island Bay is a part of Shallow Hazard permit.” Q: GB asked, “Is the purpose to identify sound propagations?” A: KK replied, “For baseline data.” C: by GB, “Pioneer may have some information near Ooguruk. Mitigate effects on marine mammals.” A: Beth Sharp (BS) replied, “We will be monitoring for ambient sounds like whale calls and sound propagation through the boulder patch.”</p>
7.	<p>Q: GB asked, “Plan of Operation maybe further down the line?” A: KK replied, “We acquired this in December from BP and submitted the development plan to BOEM on December 30th. We have 25 days to deem it permitted. We expect a full blown EIS. I will be the contact.” Q: GB asked, “Including community life on the boulder patch?” A: KK replied, “Incorporating all studies that have been done, yes.” Q: RA asked, “Will you continue studies on the boulder patch?” A: WC replied, “Yes, will look at the data first.”</p>
8.	<p>Q: GB asked, “Look at what we did on the extended reach pipeline, in regards to rezone. Requires meeting quite often. What is your schedule?” A: WC replied, “Not on the laid back schedule.” C: by KK, “We expect 18-24 months for permitting, third quarter of 2016 we will start moving gravel. BOEM NEPA process is the driver.” A: WC replied, “We want to be notified by the end of August.”</p>

9.	<p>Statement by KK: “Pre-application meetings, rezoning, and Master Plan.”</p> <p>C: by RA, “Mitigation Plan, close to Native Allotments.”</p> <p>C: by GB, “Could be an update to the Badami Master Plan.”</p> <p>A: WC replied, “Miller Energy holds the plan as of January 2015.”</p> <p>Statement by GB: “Application for additional information, we will be a part of the agency meetings. Be ready to start looking at the state and NSB side.”</p> <p>A: KK replied, “A Memorandum of Understanding will set more for a timeline and schedule.”</p>
10.	<p>Q: GB asked, “Have you touched base with Native Allotments?”</p> <p>A: KK replied, “No, but have noticed to meet.”</p> <p>C: by GB, “Our policies are covered to impacts and mitigation.”</p>
11.	<p>Q: KK asked, “What’s the process for rezoning? Does the planning commission recommend it to the assembly?”</p> <p>A: GB replied, “Yes, but we haven’t decided what our plan forward is yet. Possibly update to Badami, or Plan of Operations. There are different triggers for an audit like conditional use. Updates and conditional use end at the planning commission. If your island comes closer to shore, then it issues a Master Plan that goes to assembly. This will need to be adopted by Assembly as an ordinance, which could take six to eight months.”</p> <p>A: KK replied, “Preferred alternative, hoping for the same result.”</p> <p>Statement by Thomas Brower (TB): “Part of the plan is in a conservation district. Has to go to the assembly and go through a public hearing.”</p> <p>C: by RA, “It’s just a study.”</p> <p>A: GB replied, “Anything offshore is development.”</p> <p>A: TB replied, “Studies can be done as long as there are no impacts.”</p>
12.	<p>Q: Quincy Adams (QA) asked, “Will the ice get bottom grounded?”</p> <p>A: WC replied, “Half way.”</p> <p>Q: RA asked, “Will the proposed island float away?”</p> <p>A: KK replied, “No floating ice.”</p> <p>Q: RA asked, “Will you need big rocks?”</p> <p>A: WC replied, “No, rock concrete.”</p>
13.	<p>Statement by GB: “Title 19, offshore in compliance. May need to take a full 20 day public review. The winter project will need a 20 day public review and the summer project will need a 20 day review. It is up to Hilcorp to rezone for permit.”</p> <p>A: RA replied, “Best to start meeting regularly. Final outcome is a workshop. Point of contact would be Rhoda, Thomas and Gordon.”</p>
14.	<p>Q: GB asked, “Resource District Map?”</p> <p>A: BS replied, “No.”</p>
15.	<p>Statement by RA: “Let us know if you need assistance with speaking with the land owners and Native allotments.”</p> <p>Q: BS asked, “As for subsistence impacts, the biggest concern is Native allotments?”</p> <p>A: RA replied, “We’ll start getting Wildlife involved with our discussions.”</p>
16.	<p>Q: BS asked, “Any concerns with Milne Point, Endicott and Northstar?”</p> <p>A: RA replied, “Print the ordinances and sit down to look for outdated information and changes.”</p> <p>Q: GB asked, “Are you done transferring your permits?”</p> <p>A: KK replied, “Some, not all.”</p> <p>Statement by RA: “Whale hazing with Northstar. It’s sufficient now and is a closed issue. Ordinance is still there.”</p> <p>A: GB replied, “When AEWC has part of the review, they did an oil spill response analysis. If we had the capacity we would request it.”</p> <p>C: by RA, “Right now, it’s impossible to meet that ordinance on whale hazing.” Beth and Rhoda agree to work on ordinances.</p>

Project Name:	Hilcorp Alaska, Inc. Plan of Cooperation Minutes		
Type of Meeting:	NSB Wildlife Department and Barrow Whaling Captain's Meeting		
Meeting Location	Barrow, Alaska		
Meeting Facility	Top of The World Hotel Meeting Room		
Date and Time of Meeting:	January 12, 2015 at 12:00 pm		
Hilcorp Alaska, Inc. (HILCORP) and ASRC Energy Services Alaska, Inc. (AES) staff:			
Hilcorp: Walton Crowell (WC)	Hilcorp: Kathryn Kaufman (KK)		
Hilcorp: Lori Nelson (LN)	Hilcorp: Elizabeth Sharp (BS)		
AES: Robin Demoski (RD)			
ATTENDED BY:	ORGANIZATION:	ATTENDED BY:	ORGANIZATION:
Dr. Craig George (CG)	NSB Wildlife	Dr. Brian Person (BP)	NSB Wildlife
Crawford Patkotak (CP)	Barrow Whaling Captain	Arnold Brower (AB)	AEWC

<u>Item</u>	<u>Agenda Item</u>		
1.	Introduction		
2.	Presentation		
3.	Questions or Comments		
<u>Item</u>	<u>Action Item</u>	<u>Action By</u>	<u>Follow up Deadline</u>
1.	None		

KEY ISSUES:

1.	Introduction and History of Hilcorp in Alaska <ul style="list-style-type: none"> - North Slope Properties Acquired from BP: Milne Point, Northstar and Endicott - North Slope Development Project Acquired from BP: Liberty
2.	Description of Upcoming Liberty Work <ul style="list-style-type: none"> - Geotechnical Surveys – March 2015 - Shallow Hazard Surveys – July 2015
3.	Questions or Concerns About Interference with Subsistence Activities in Relation to Upcoming Liberty Work? <ul style="list-style-type: none"> - Polar Bears - Whales and Seals
4.	Question or Concerns About Interference with Subsistence Activities in Relation to Existing North Slope Operations? <ul style="list-style-type: none"> - Polar Bears - Whales and Seals

DISCUSSION ITEMS:

1.	Question (Q): Lori Nelson (LN) asked, "How many whales did Barrow get?" Answer (A): Crawford Patkotak (CP) replied, "Eight Whales."
----	--

**HILCORP – NSB WILDLIFE DEPT. &
BARROW WHALING CAPTAIN’S MEETING**

January 12, 2015

2.	<p>Statement by LN: “We are here today to talk about the Liberty concerns with how operations interact. We’ve purchased a percentage of BP’s holdings. 100% of Northstar, 50% of Milne Point, 100% of Endicott and 50% of Liberty. We are the operator for Liberty. Right now, we are getting input for decision making. We are going through the regulatory and stakeholder process. We will maintain consistency in performance with environmental standards and we’ve retained 90% of BP personnel and grew the environmental team.”</p> <p>Comment (C): by Beth Sharp (BS), “Many of us have worked with BP or have transferred from BP. Many of us have been trained the BP way.”</p>
3.	<p>Statement by Arnold Brower (AB): “I am concerned about projects near the dock and their expired terms on leases, and usage property.”</p>
4.	<p>Statement by LN: “Introduction, as the new owners we will keep the status quo on wildlife studies. Walton is the operations engineer. We have 50% ownership of Liberty. Hilcorp is the operator. We submitted our Development plan to BOEM on December 30th. We expect a full EIS. The Liberty project is not fully sanctioned by Hilcorp. Right now we are checking with the stakeholders and regulators to see if this is even feasible. We are in the beginning stages of the project. We will come back for more meetings and collect data, it’s part of the permitting.”</p>
5.	<p>Q: Craig George (CG) asked, “Will you be conducting seismic?”</p> <p>A: Kate Kaufman (KK) replied, “No seismic.”</p>
6.	<p>Statement by Walton Crowell (WC): “We are going out on the ice for 20 to 25 days off the Badami ice road to conduct a geotechnical survey. This summer we will conduct a shallow hazard survey.”</p>
7.	<p>Q: AB asked, “Have you worked with the state on the three miles?”</p> <p>A: WC replied, “Yes, we have also worked with the Corp of Engineers and the North Slope Borough.”</p>
8.	<p>Q: AB asked, “How long will your summer work last?”</p> <p>A: Hilcorp Representative replied, “Five days of data collecting.”</p>
9.	<p>Q: AB asked, “Will you conduct seismic this summer?”</p> <p>A: Hilcorp representative replied, “No seismic this summer.”</p>
10.	<p>Q: CG asked, “How deep is the water depth in which you will be in?”</p> <p>A: WC replied, “19 feet at the island. 40% of the pipeline.”</p>
11.	<p>Statement by CG: “There are no whales in that area. They rarely go in the barrier islands.”</p>
12.	<p>Statement by AB: “We do get white fish from there. These fish do migrate from Cross Island.”</p> <p>A: BS replied, “We are not changing any of the studies that BP has done. We are continuing to collect data.”</p>
13.	<p>Q: AB asked, “Will you develop the shoreline?”</p> <p>A: BS replied, “We will collect bioacoustics data this summer.”</p> <p>Q: CG asked, “Who will be doing your acoustics?”</p> <p>A: Hilcorp Representative replied, “JASCO.”</p> <p>C: by AB, “Envy of the market.”</p>
14.	<p>Statement by WC: “This project is not fully sanctioned. There are a lot of steps. There are a lot of factors.”</p> <p>C: by KK, “We anticipate 18-24 months of permitting.”</p>

15.	<p>Q: CG asked, “We encourage people to use the existing infrastructure. I assume you will be using the Badami pipeline?”</p> <p>A: WC replied, “Yes, a straight tie in.”</p> <p>Q: BP asked, “How deep will you be trenching the pipeline?”</p> <p>A: WC replied, “13 feet, we will over dig. We will have a pipe in pipe design. The height of the pipeline above the ground will be 7.5 feet. The height of the Northstar pipeline is closer to 8 feet.”</p> <p>Q: CG asked, “Have you had problems with pigging?”</p> <p>A: WC replied, “The assembly was the main issue. “</p> <p>C: by CG, “From the wildlife perspective, that’s a big deal.”</p> <p>A: WC replied, “Pipe in pipe design.” Q:</p> <p>BP asked, “Will you be monitoring?” A:</p> <p>WC replied, “Yes.”</p> <p>Q: CG asked, “Staggering construction?”</p> <p>A: WC replied, “No, not the subsea construction, that’s why we are going a little bit deeper. The erosion rate is 1 to 2 ½ feet per year.”</p> <p>Q: AB asked, “Does the area have a flat bottom?”</p> <p>A: WC replied, “Yes, generally flat. Gathering more information this summer.”</p>
16.	<p>Q: CG asked, “Where is the boulder patch?”</p> <p>A: BS showed a map of where the boulder patch is located</p>
17.	<p>Statement by KK: “Charlie Hopson will help map out seal lairs.”</p>
18.	<p>Q: AB asked, “I haven’t seen any reports about the buried pipe at Northstar. Has this been eroding? Have there been any changes?”</p> <p>A: WC replied, “Every year, we compare the sea floor and the pipe floor. We are looking for strudel scour.”</p> <p>Statement by AB: “Our beach will erode and stretch out like floating erosion. Changes our shoreline. We work with a cooperative agreement through AEW. We would like it if you signed the CAA.”</p>
19.	<p>Q: BS asked, “Are there other agreements with whaling captains?”</p> <p>A: CP replied, “The Barrow Whaling Captains would like to see more cooperation, including agreements for GPS and Satellite phones.”</p> <p>Q: BS asked, “Is that good or disruptive?”</p> <p>A: CP replied, “Useful.”</p> <p>Q: BS asked, “You would be open for feedback?”</p> <p>A: CP replied, “Yes, we are open to engage more. The cost of the hunt is expensive. If we can make it easier, right now would be the time to engage.”</p>

Project Name:	Hilcorp Alaska, Inc. Plan of Cooperation Minutes		
Type of Meeting:	Alaska Eskimo Whaling Commission Meeting		
Meeting Location	Barrow, Alaska		
Meeting Facility	Top of the World Hotel		
Date and Time of Meeting:	January 13, 2015 at 8:00 am		
Hilcorp Alaska, Inc. (HILCORP) and ASRC Energy Services Alaska, Inc. (AES) staff:			
Hilcorp: Walton Crowell (WC)		Hilcorp: Kathryn Kaufman (KK)	
Hilcorp: Lori Nelson (LN)		Hilcorp: Elizabeth Sharp (BS)	
AES: Robin Demoski (RD)			
ATTENDED BY:	ORGANIZATION:	ATTENDED BY:	ORGANIZATION:
Charlie Hopson (CH)	AEWC	Harry Brower (HB)	AEWC
Item	Agenda Item		
1.	Introduction		
2.	Presentation		
3.	Questions or Comments		
Item	Action Item	Action By	Follow up Deadline
1.	Provide a timeline to the whaling captains during the AEWC Mini-Convention	LN	
2.	Charlie Hopson to submit a proposal.	CH	
KEY ISSUES:			
1.	Introduction and History of Hilcorp in Alaska <ul style="list-style-type: none"> - North Slope Properties Acquired from BP: Milne Point, Northstar and Endicott - North Slope Development Project Acquired from BP: Liberty 		
2.	Description of Upcoming Liberty Work <ul style="list-style-type: none"> - Geotechnical Surveys – March 2015 - Shallow Hazard Surveys – July 2015 		
3.	Questions or Concerns About Interference with Subsistence Activities in Relation to Upcoming Liberty Work? <ul style="list-style-type: none"> - Polar Bears - Whales and Seals 		
4.	Question or Concerns About Interference with Subsistence Activities in Relation to Existing North Slope Operations? <ul style="list-style-type: none"> - Polar Bears - Whales and Seals 		
DISCUSSION ITEMS:			
1.	Statement by Charlie Hopson (CH): “I have a lot of background on Liberty, 20 years. I have done the ice studies, manned all of the gun ships for BP. I’ve worked with Harry at AEWC.”		
2.	Kathryn Kaufman (KK) shows Charlie where the proposed island is. Question (Q): CH asked, “Is that close?” Answer (A): KK replied, “Five and a half miles.” Comment (C): by Walton Crowell (WC), “We’ve chosen the route with the least amount of impacts.”		

HILCORP - AEW C MEETING

January 13, 2015

3.	<p>C: by CH: "We've agreed on this project because this is inside the barrier islands. I am worried about the boulder patch." A: Lori Nelson (LN) replied: "Yes, we've had a lot of discussion about the boulder patch."</p>
4.	<p>Q: CH asked, "What are your intentions? Underground pipeline?" A: WC replied, "Yes, subsea pipeline." Q: CH asked, "This is a shallow area?" A: WC replied, "Yes, 19 feet of water." Q: CH asked, "How deep will the pipeline be?" A: WC replied, "13 feet." C: by CH, "If it's safe, it's good."</p>
5.	<p>Q: HB asked, "So it's just outside the boulder patch?" A: Beth Sharp (BS) replied, "Yes." A: WC replied, "There is one spot that will be going through a low concentration of the boulder patch." C: by CH, "I can point out the boulder patch."</p>
6.	<p>Q: CH asked, "Did you purchase Northstar?" A: BS replied, "Yes, and I am the contact for wildlife studies." C: by KK, "We would definitely like to talk to you more about the project because you have a wealth of knowledge."</p>
7.	<p>Q: CH asked, "What are your plans for the noise around Nuiqsut Whaling?" A: BS replied, "This summer we are doing a geohazard survey to monitor how much noise we are making and monitor how many whales and marine mammals pass through." Q: CH asked, "Who's working for you?" A: KK replied, "JASCO, we are studying how the construction noise affects marine mammals."</p>
8.	<p>Q: CH asked, "When will construction start?" A: LN replied, "We have 18 to 24 months of permitting." C: by HB, "A Timeline would be good to show the whaling captains." A: WC replied, "We are looking at the winter 2017 to start construction. Next winter we install the subsea pipeline."</p>
9.	<p>Statement by KK: "We've submitted our permit to BOEM. It will go through the NEPA process with a full EIS. This summer, we are just conducting shallow hazard work." C: by WC, "We've conducted an analysis of the previous studies, as to not duplicate efforts." C: by KK, "We are doing the boreholes this spring. We are interested in the communities' concerns about that."</p>
10.	<p>C: by HB, "Biggest concern is the seal lairs." A: KK replied, "We've worked with Golder and Associates; they've mentioned your name." C: by CH, "I have a lot of qualified people to work." Q: KK asked, "Do you have someone to help with Subsistence Advisors?" A: CH replied, "I am the guy who goes out with the Subsistence Advisors." C: by HB, "Charlie is a good guy for this kind of work." Q: WC asked, "Who do I contact for a proposal?" A: CH replied, "My partner, Steve Kronick and he can write the proposal. I am willing to work with you and AEW C."</p>
11.	<p>Q: HB asked, "When do you plan to start work?" A: WC replied, "March 1st for 22 days."</p>
12.	<p>Q: HB asked, "Will you be doing any other community meetings?" A: WC replied, "Yes, Nuiqsut and Kaktovik." C: by HB, "It's important to meet with and build relationships in the communities. Archie Ahkiviana in Nuiqsut is a good person to meet."</p>
13.	<p>Statement by LN, "Umiat has an established MSA with us." Q: CH asked, "That would be good. What are you doing at Milne Point?" A: LN replied, "We are the 50% owner and operator. Northstar, 100% owner and operator." C: by CH, "Said in public, I can clean up 70% of oil on ice in all seasons. Steve and I also have a partnership with Kuukpik."</p>

HILCORP - AEWG MEETING

January 13, 2015

14.	<p>Statement by KK, "This summer we are looking for MMOs." A: CH replied, "We have MMOs." C: by WC, "We are looking for 3 MMOs." C: by BS, "NMFS has specific training for MMOs." A: CH replied, "All our folks are trained and can be trained. MMOs can do all the data collecting work."</p>
-----	---

Project Name:	Hilcorp Alaska, Inc. Plan of Cooperation Minutes		
Type of Meeting:	Kuukpik Corporation Meeting		
Meeting Location	Nuiqsut, Alaska		
Meeting Facility	Kuukpik Corporation Conference Room		
Date and Time of Meeting:	January 13, 2015 at 3:30 pm		
Hilcorp Alaska, Inc. (HILCORP) and ASRC Energy Services Alaska, Inc. (AES) staff:			
Hilcorp: Walton Crowell (WC)	Hilcorp: Kathryn Kaufman (KK)		
Hilcorp: Lori Nelson (LN)	Hilcorp: Elizabeth Sharp (BS)		
AES: Robin Demoski (RD)			
ATTENDED BY:	ORGANIZATION:	ATTENDED BY:	ORGANIZATION:
Joseph Nukapigak (JN)	Kuukpik	Isaac Nukapigak (IN)	Kuukpik
Archie Ahkiviana (AA)	Kuukpik		

<u>Item</u>	<u>Agenda Item</u>		
1.	Introduction		
2.	Presentation		
3.	Questions or Comments		
<u>Item</u>	<u>Action Item</u>	<u>Action By</u>	<u>Follow up Deadline</u>
1.	Present to the Kuukpik Board	LN	

KEY ISSUES:

1.	<p>Introduction and History of Hilcorp in Alaska</p> <ul style="list-style-type: none"> - North Slope Properties Acquired from BP: Milne Point, Northstar and Endicott - North Slope Development Project Acquired from BP: Liberty
2.	<p>Description of Upcoming Liberty Work</p> <ul style="list-style-type: none"> - Geotechnical Surveys – March 2015 - Shallow Hazard Surveys – July 2015
3.	<p>Questions or Concerns About Interference with Subsistence Activities in Relation to Upcoming Liberty Work?</p> <ul style="list-style-type: none"> - Polar Bears - Whales and Seals
4.	<p>Question or Concerns About Interference with Subsistence Activities in Relation to Existing North Slope Operations?</p> <ul style="list-style-type: none"> - Polar Bears - Whales and Seals

DISCUSSION ITEMS:

HILCORP – KUUKPIK CORPORATION MEETING
January 13, 2015

1.	<p>Statement by Lori Nelson (LN): "I just want to begin the process, there is no commitment to execute project. Walton is the lead construction engineer."</p> <p>Statement by Walton Crowell (WC): "Proposing March 1st, geotechnical survey holes on the pipeline corridor. Four inch holes, for 20-25 days. We have access to FLIR data. Summer shallow hazard study for five days. Acoustic monitoring, baseline study work to track impacts. During this time, we will have wildlife observers. BP has already conducted a lot of the studies and we have the data."</p> <p>Statement by Kate Kaufman (KK): "The survey will give data on impacts to archeological sites."</p> <p>Statement by Walton Crowell (WC): "We are here to listen to concerns. Earliest we would start construction would be winter of 2017."</p>
2.	<p>Question (Q): Joe Nukapigak (JN) asked, "Will there be an EIS?"</p> <p>Answer (A): Isaac Nukapigak (IN) replied, "Yes, it will take 18 to 24 months."</p>
3.	<p>Q: JN asked, "This is not a unit yet?"</p> <p>A: IN replied, "No, still needs to go through rezoning and permits."</p>
4.	<p>Statement by WC: "We are utilizing all of BP's data collected over the years. We feel like our plan is the best option."</p> <p>Q: JN asked, "Supplementary EIS?"</p> <p>A: KK replied, "I think it will be an EIS."</p> <p>Comment (C): by WC, "The agency is convinced the technology has changed."</p> <p>C: by IN, "You have Kuukpik to influence the agency. We work with all agencies and in DC. They need to weigh the depth between Chukchi and Beaufort."</p>
5.	<p>Statement by WC: "This summer we will be working out of SDI (Endicott Satellite Drilling Island)."</p>
6.	<p>Statement by IN: "Kuukpik plays a significant role in rezoning. We are a significant voice in Northstar using the NEPA process."</p>
7.	<p>Q: JN asked, "There were plans to expand Northstar, is that still happening?"</p>
8.	<p>C: by IN, "We worked with Oooguruk on their island."</p> <p>A: WC replied, "I've been working with Nanuq."</p> <p>C: by IN, "First priority is safety."</p> <p>A: WC replied, "Nanuq will help Hilcorp on the ice road."</p>
9.	<p>Statement by KK: "We will be presenting to the planning commission."</p> <p>C: by IN, "We would like a full presentation to our board."</p> <p>A: LN replied, "Late summer."</p>
10.	<p>Q: JN asked, "Has anyone requested a community meeting?"</p> <p>A: LN replied, "As things progress, we will have a community meeting."</p>

Project Name:	Hilcorp Alaska, Inc. Plan of Cooperation Minutes		
Type of Meeting:	Native Village of Nuiqsut (NVN) Meeting		
Meeting Location	Nuiqsut, Alaska		
Meeting Facility	Native Village of Nuiqsut Office		
Date and Time of Meeting:	January 13, 2015 at 1:30 pm		
Hilcorp Alaska, Inc. (HILCORP) and ASRC Energy Services Alaska, Inc. (AES) staff:			
Hilcorp: Walton Crowell (WC)	Hilcorp: Kathryn Kaufman (KK)		
Hilcorp: Lori Nelson (LN)	Hilcorp: Elizabeth Sharp (BS)		
AES: Robin Demoski (RD)			
ATTENDED BY:	ORGANIZATION:	ATTENDED BY:	ORGANIZATION:
Margaret Pardue (MP)	NVN	Joseph Akpik (JA)	NVN
Hazel Kunaknana (HK)	NVN	John Nicholls Sr. (JN)	NVN
Martha Itta (MI)	NVN		

<u>Item</u>	<u>Agenda Item</u>		
1.	Introduction		
2.	Presentation		
3.	Questions or Comments		
<u>Item</u>	<u>Action Item</u>	<u>Action By</u>	<u>Follow up Deadline</u>
1.	Change degrees on the maps to townships and sections	WC	
2.	The NVN request communication	LN	
3.	Present fish studies	BS	
4.	MI requested an email when studies begin in March.	LN	

KEY ISSUES:

1.	Introduction and History of Hilcorp in Alaska <ul style="list-style-type: none"> - North Slope Properties Acquired from BP: Milne Point, Northstar and Endicott - North Slope Development Project Acquired from BP: Liberty
2.	Description of Upcoming Liberty Work <ul style="list-style-type: none"> - Geotechnical Surveys – March 2015 - Shallow Hazard Surveys – July 2015
3.	Questions or Concerns About Interference with Subsistence Activities in Relation to Upcoming Liberty Work? <ul style="list-style-type: none"> - Polar Bears - Whales and Seals
4.	Question or Concerns About Interference with Subsistence Activities in Relation to Existing North Slope Operations? <ul style="list-style-type: none"> - Polar Bears - Whales and Seals

DISCUSSION ITEMS:

1.	Statement by Lori Nelson (LN): "We have not committed to moving forward with Liberty. We've submitted the Development plan to BOEM."
----	---

HILCORP – NATIVE VILLAGE OF NUIQSUT MEETING

January 13, 2015

2.	Statement by Walton Crowell (WC): “We will be conducting winter and summer studies this year.”
3.	Question (Q): by a Native Village of Nuiqsut (NVN) Representative, “Is the island there?” Q: by a NVN Representative, “Is this different from Shell?” Answer: Hilcorp Representative replied, “No, the island is not there. And yes this is different from Shell. Hilcorp is the operator.”
4.	Q: Margaret Pardue (MP) asked, “With pipe, how safe in the month of March?” Q: John Nicholls Sr. (JN) asked, “Will you affect the whales?” A: WC replied, “The pipe, no disturbance.” Comment (C) by Kate Kaufman (KK): “Soil testing will happen during winter, no disturbance.” C: by LN, “In regards to whaling, we will communicate and cooperate.”
5.	Q: Martha Itta (MI) asked, “Will this be equivalent to the Gulf of Mexico?” A: LN replied, “We aren’t associated with BP other than half owner. The reservoir will not be the same amount of spill.”
6.	Q: Hazel Kunaknana (HK) asked, “How big is the island?” A: KK replied, “9 acres, similar to Northstar.”
7.	Q: HK asked, “When will you start the island?” A: KK replied, “We just developed the plan and submitted it, will take two years of studies and permits.”
8.	Q: MI asked, “What is your restoration plan? Our rivers and waters are shallow. Our subsistence users are struggling.” A: LN replied, “That’s why I’m glad we are participating in a full study.”
9.	Statement by MI: “Our lives are in trouble, when we are stranded in waters and rivers. We are creating a road project to have a straight access to the dock at the Colville channel. We are having setbacks, waiting for gravel.”
10.	Statement by Joseph Akpik (JA): “Change degrees on the map to sections and townships. I can see Native allotments in the way of your project. Is someone studying the currents? Inside and outside the barrier islands? I’d like this addressed in the EIS. Wind shift, water changes, currents change. Cisco fish migration changes. This is our way of life. Currents have been missed in impact statements.”
11.	Q: MI asked, “What studies will you be doing?” A: BS replied, “Open water work, with acoustic data. Measuring the sounds of the work we are doing. Collecting ambient sounds in Foggy Island Bay. Similar to monitors at Northstar.” A: LN replied, “We are also inheriting a lot of the studies conducted by BP.”
12.	Q: HK asked, “Will you be looking for seal lairs?” A: KK replied, “Yes, we will have a subsistence advisor to watch for seal lairs.”
13.	Statement by Beth Sharp (BS): “We will do flights to detect polar bear dens. Another flight will happen this month. We will avoid polar bears and seal lairs.”
14.	Statement by JA: “This is the path of the cisco fish. A lot of seals will be there.” A: BS replied, “BP has funded the studies of the qaaqtaq; we will continue to study the fish.” C: by MP, “BP has not talked to us about the studies.” A: BS replied, “I would like to meet with the president to talk about fish studies.”
15.	Q: MI asked, “Who is handling the permitting?” A: LN replied, “Hilcorp has filed with BOEM, Corp of Engineers, Federal, State of Alaska and NSB.”
16.	Statement by HK: “Our biggest concern is communication. CPAI leaves Native Village of Nuiqsut out. We don’t hear about it until it happens. We need communication.” A: LN replied, “Will provide info if requested, we are still learning about the project. We came in the fall for community meetings. The one on one meetings work. I will send out a mailer with the project information.” A: BS replied, “In the meantime, you can contact us.” C: by HK, “Leave your cards.”
17.	Statement by WC: “We want to talk about the summer work. In July for about 5 to 7 days.” Q: MP asked, “Will this irritate the animals?” A: BS replied, “The sonar, low decibels, in shallow water is quieter, the impacts are low.”

18.	Statement by KK: "We will sign the CAA." Q: MP asked, "Who are you hiring through?" A: KK replied, "We are taking proposals."
19.	Q: HK asked, "Only studies for now?" A: LN replied, "Yes."
20.	Q: MI asked, "When do you receive your approvals?" A: LN replied, "We are still working on getting approvals from the NSB and the state." A: KK replied, "The same work was done on a larger scale by BP. Ours is on a smaller scale."
21.	Statement by MI: "We are bombarded with Federal and State Agencies. We know the processes. There's a lot of strife in the communities. I want you to keep your word on communications." Q: KK asked, "Do you like meeting like this or do you prefer community meetings?" A: MI replied, "We like both, community members have a lot of traditional knowledge. The last few years, we've had a lot of hunting concerns. Hunters wanted to shoot down helicopters." A: BS replied, "We will do our best on communicating and if you need information, please email."
22.	Statement by JA: "I would like to see a fisherman on the east side of these projects, the corridor. This is the real cisco study. The current carries the fish. Migration begins at the McKenzie River." A: BS replied, "The fish studies, I can present to you."
23.	Q: JA asked, "Do you have a camp out at Badami?" A: BS replied, "No."
24.	Q: JA asked, "What's going on the east side?" Q: BS asked, "We are operators of Milne Point, Endicott and Northstar. Do you have any concerns on polar bears?" A: by NVN Representative, "Only when a nuisance."
25.	Q: MP asked, "When do you plan on building Liberty?" A: WC replied, "Winter 2017, we will build the island. 2018, we will build the subsea pipeline."
26.	Q: JA asked, "20,000 barrels per day?" A: WC replied, "BPs numbers are higher than ours, we project it will be similar to Endicott." C: by JA, "Big investment in the barrier islands." A: WC replied, "That's the thing, cost. We may walk away from this project."
27.	Q: JA asked, "Has there been seismic?" A: WC replied, "Yes."
28.	Q: JA asked, "Why so far? Why not closer?" A: KK replied, "We are positioned right above the reservoir."
29.	Q: JA asked, "The hole is silty, sandy and risky." A: KK replied, "Shallow hazard testing, solid is conclusive, fairly conventional drilling process." C: by JA, "I can imagine at the end of the barrier islands, it is silty and sandy." A: KK replied, "Drilling muds will be re-injected. No waste discharge." Q: JN asked, "What if you can't put it back down?" A: KK replied, "We'd have to contain the waste and bring to Prudhoe Bay for disposal."
30.	Q: JA asked, "No directional drilling?" A: WC replied, "No, down and slightly deviated."
31.	Q: BS asked, "Have you received acoustic data from Northstar?" A: MI replied, "I would very much like to see those reports as a non-profit. We do have all the traditional knowledge, the reason why we request the reports are there is a lack of trust."
32.	Q: MP asked, "When do you start the studies?" A: LN replied, "March." Q: MI asked, "Can you email us to inform us when you start?" A: Hilcorp Representative replied, "Yes."

Project Name:	Hilcorp Alaska, Inc. Plan of Cooperation Minutes		
Type of Meeting:	Nuiqsut Whaling Captain's Meeting		
Meeting Location	Nuiqsut, Alaska		
Meeting Facility	Kuukpik Hotel		
Date and Time of Meeting:	January 13, 2015 at 12:00 pm		
Hilcorp Alaska, Inc. (HILCORP) and ASRC Energy Services Alaska, Inc. (AES) staff:			
Hilcorp: Walton Crowell (WC)		Hilcorp: Kathryn Kaufman (KK)	
Hilcorp: Lori Nelson (LN)		Hilcorp: Elizabeth Sharp (BS)	
AES: Robin Demoski (RD)			
ATTENDED BY:	ORGANIZATION:	ATTENDED BY:	ORGANIZATION:
Isaac Nukapigak, Commissioner (IN)	Nuiqsut Whaling Captain	Edward Nukapigak (EN)	Nuiqsut Whaling Captain
Herbert Ipalook (HI)	Nuiqsut Whaling Captain	Jimmy Oyagak (JO)	Nuiqsut Whaling Captain
Archie Ahkiviana (AA)	Nuiqsut Whaling Captain		
Item	Agenda Item		
1.	Introduction		
2.	Presentation		
3.	Questions or Comments		
Item	Action Item	Action By	Follow up Deadline
1.	Nuiqsut Whaling Captain's requested communication		
2.	Whaling Captains requested a separate agreement for Liberty.		
3.	IN requested information on sonar and decibels regarding fish impacts.	WC	
KEY ISSUES:			
1.	Introduction and History of Hilcorp in Alaska <ul style="list-style-type: none"> - North Slope Properties Acquired from BP: Milne Point, Northstar and Endicott - North Slope Development Project Acquired from BP: Liberty 		
2.	Description of Upcoming Liberty Work <ul style="list-style-type: none"> - Geotechnical Surveys – March 2015 - Shallow Hazard Surveys – July 2015 		
3.	Questions or Concerns About Interference with Subsistence Activities in Relation to Upcoming Liberty Work? <ul style="list-style-type: none"> - Polar Bears - Whales and Seals 		
4.	Question or Concerns About Interference with Subsistence Activities in Relation to Existing North Slope Operations? <ul style="list-style-type: none"> - Polar Bears - Whales and Seals 		

HILCORP – NUIQSUT WHALING CAPTAINS MEETING

January 13, 2015

DISCUSSION ITEMS:	
1.	Statement by Lori Nelson (LN): “We’ve filed our development and production plan with BOEM. We are just committed to permitting and stakeholder engagement. Our interests are in the survey this spring and our shallow hazard studies this summer. We are taking this step by step; this is pending our success on regulatory areas.”
2.	Statement by Walton Crowell (WC): Pointing to the Liberty Map, “We will be conducting our geotechnical survey on the pipeline corridor. We need this information for the design to go deeper. We will begin this survey on March 1 st . We will have a wildlife observer to detect for seal lairs.” Question (Q): Archie Ahkiviana (AA) asked, “Are you just getting your core samples? No mud?”
3.	Q: AA asked, “How deep from the sea floor?” A: WC replied, “8 feet.” Q: Edward Nukapigak (EN) asked, “Five miles out?” A: WC replied, “Yes.” Q: EN asked, “Wouldn’t it be easier to come closer to shore? Migrations of marine mammals are in the barrier islands. Marine mammals travel between Cross Island and West Dock when it’s snowing. It is rare for Beluga to come. Walrus are now inside the Barrier Islands. Why will Liberty Island be 5 miles out and 20 feet deep? Where is the reservoir?” A: Kate Kaufman (KK) replied, “Close to the island.”
4.	Q: EN asked, “Will it be a vertical well?” A: KK replied, “Yes, vertical with a small amount of directional drilling.”
5.	Q: Isaac Nukapigak (IN) asked, “How many acres will the island be?” A: WC replied, “9 acres.”
6.	Q: IN asked, “How many wells?” A: KK replied, “Up to 16.” Q: IN asked, “Stand alone?”
7.	Statement by KK: “A processing plant will be built on the island.” Q: IN asked, “Why?” A: WC replied, “Because of the boulder patch. We won’t affect the ecosystem negatively.”
8.	Statement by KK: “The pipeline will have a pipe in pipe design and will be subsea.”
9.	Statement by Herbert Ipalook (HI): “That’s where we start getting fish.” Q: HI asked, “Will you shut down for whaling?” A: IN replied, “They will not shut down for whaling.” A: KK replied, “We are looking at mitigation measures.”
10.	Q: IN asked, “What other options are there for the processing plant?” A: KK replied, “To tie into Endicott, but it goes through the boulder patch.” C: by EN: “The other option was to tie into Northstar.” C: by IN: “They screwed up and are in litigation.”
11.	Statement by LN: “Beth is working on the acoustic studies. Measuring ambient sounds in Foggy Island Bay and picking up marine mammal sounds.” Q: EN asked, “How far will you deploy?” A: BS replied, “500 feet from the island and then again at 5,000 feet from the island.” A: KK replied, “Summer sonar surveys will last 5-10 days. We will be scanning the sea floor, mapping potential archeological sites and listening for bioacoustics.”
12.	Q: EN asked, “How many vessels?” A: WC replied, “Just one 40 footer to get in the shallow areas.”
13.	Q: EN asked, “When you start how many vessels will you have?” A: WC replied, “Similar to Northstar, some hover craft and some barges.”

HILCORP – NUIQSUT WHALING CAPTAINS MEETING

January 13, 2015

14.	<p>Q: AA asked, “Once you start, the traffic will increase?”</p> <p>Statement by IN: “I think you’re thinking too fast. Your permits are not approved. You still have to meet with us half way. You own 50% of Northstar. Will you inherent the good neighbor policy and mitigation measures? Whaling has been our Cross Island. I want commitment to defray our whaling cost. I want commitments that they will take the lead on whaling costs. There needs to be mitigation.”</p>
15.	<p>Q: HI asked, “My voice was heard at AEWC. Will you sign the CAA?”</p> <p>Q: LN asked, “Where is the gap? What is the contribution from BP?”</p> <p>A: IN replied, “They have taken the lead, last year, \$179,000 just to Nuiqsut. We don’t share with the other communities or AEWC.”</p> <p>A: KK replied, “We are just starting.”</p> <p>C: by IN, “You can speculate.”</p> <p>Statement by EN: “This is our land, not Barrow, not Kaktovik.”</p> <p>Statement by AA: “We don’t like people coming in and telling us what they’re going to do.”</p> <p>C: by HI, “It’s good to talk to the whaling captains.”</p> <p>C: by LN, “We completely understand that you feed the community.”</p> <p>Statement by IN: “Lease Sale, discovery of Northstar. Nuiqsut made a statement. Based on how we work on mitigation. AES did not speak.”</p> <p>Statement by EN: “We didn’t see any whales out at Northstar after it was developed. Next season we moved to Cross Island. Narwhal is where I hunt. We weren’t told during whaling season. I had seen drilling mud and noise out there at Jones Island. When it happened, we moved away from industry. When we moved away, industry moved in. Shell Oil and Northstar. With all that noise it can affect the whales and marine mammals.”</p>
16.	<p>Statement by AA: “The further you go out with your little boat it will be unsafe.”</p> <p>A: LN replied, “Your safety is our concern. That is why we are meeting to discuss this one on one.”</p>
17.	<p>Statement by EN: “It started on the original agreement, between Nuiqsut Whalers and Northstar, called the CAA. The Liberty needs a separate agreement. This island needs to have studies and observations. We need Michael Galginaitis. His contracts up and needs to be renewed.”</p> <p>Statement by HI: “What we have done with Mike Galginaitis is history, Mike provided documents we expect more development in the next decade. You’ll grow stronger and we will grow stronger. We’ve been pushed and we are starting to push back.”</p> <p>Q: IN asked, “There is no way they can move us from Cross Island, it’s historical. We’ve seen whales within the barrier islands. When you start putting platforms, are the animals still going to be there? How far will we need to travel?”</p> <p>Statement by AA: “You are moving in when the whales move into the regular route. You are going to deflect them. It took ten years for us to get a whale after Northstar. You will need to help and mitigate with the Nuiqsut Whalers. We have a community and families to feed. We need to whale.”</p>
18.	<p>Q: WC asked, “How many whales can you get?”</p> <p>A: EN replied, “Four.”</p>
19.	<p>Statement by IN: “This is the first step. Hilcorp needs to take the lead for this project to move forward, you need to keep your promise. You need this body and this community. If we don’t work together, we will be an obstacle.”</p>
20.	<p>Q: Jimmy Oyagak (JO) asked, “How far can you go with a directional rig?”</p> <p>A: IN replied, “25,000 feet max.”</p>
21.	<p>Q: LN asked, “Hilcorp has taken over BP’s mitigation plan. We will be at AEWC and we will be signing the CAA. Are there any other opportunities to support? Lumber? I am the contact for support opportunities.”</p> <p>A: HI replied, “Yes we need lumber.”</p> <p>A: EN replied, “Our cabins are shrinking, our captains are expanding, and we need wood. In regards to Camden Bay, the whales are now feeling near Narwhal. Narwhal is becoming a common feeding ground.”</p>

HILCORP – NUIQSUT WHALING CAPTAINS MEETING

January 13, 2015

22.	<p>Q: LN asked, “How do you bring whales back to Nuiqsut?”</p> <p>A: IN replied, “We are 75 miles from Cross Island. That’s \$300-400 of gas per trip. So we section up the whale and industry helps. It’s called an emergency towing under the CAA. This helps us get done as fast as possible so industry can get back to work and it’s a safety issue for industry. If we leave parts of the whale, polar bears will come.”</p> <p>Q: WC asked, “Is it legal for a commercial vessel to pull a whale?”</p> <p>A: IN replied, “Yes, it is legal and in the CAA in case of an emergency.”</p> <p>Q: BS asked, “Was it an ACS boat?”</p> <p>A: EN replied, “Yes.”</p> <p>A: IN replied, “That’s why we established the 501(c) 3, this helps us whale quickly and get out of the way.”</p>
23.	<p>Q: LN asked, “Are you provided with communication devices?”</p> <p>A: IN replied, “Yes, through the CAA.”</p>
24.	<p>Statement by HI: “If you interfere with us, then we will take longer and go North where the bigger whales are.”</p>
25.	<p>Statement by IN: “Your prospect is right in the middle of the current. You will change the current and the species. Change the pattern and sediments. I am making my case known to the agencies, creating shorelines and barrier islands, 19 feet is shallow.”</p>
26.	<p>Statement by EN: “Point Brower is closest to Liberty.”</p> <p>A: WC replied: “It’s about 4-5 miles.”</p> <p>Q: EN asked, “Why not drill there?”</p> <p>A: WC replied, “Polar bears and Native Allotments.”</p>
27.	<p>Q: JO asked, “Man-made island? Why not make it bigger and directional drilling Point Brower?”</p> <p>A: LN replied, “Will provide reservoir over laid maps.”</p>
28.	<p>Q: EN asked, “How many wells?”</p> <p>A: KK replied, “5 wells, 4 to inject water.”</p>
29.	<p>Q: IN asked, “What is the size of the reservoir?”</p> <p>A: KK replied, “BP projected 80-100 million barrels per day; we’ve projected 60-70 million barrels per day.”</p>
30.	<p>Q: EN asked, “Once you have your approval, are there any other reservoirs you’re planning for?”</p> <p>A: LN replied, “No future plans.”</p> <p>Q: EN asked, “What is the life span?”</p> <p>A: WC replied, “30 years.”</p>
31.	<p>Q: EN asked, “Are there any other reservoirs? Narwhal might have one.”</p> <p>Q: IN asked, “Has Hilcorp purchased any more leases in the Beaufort?” A: LN replied, “No, and we haven’t committed to it.”</p>
32.	<p>Q: IN asked, “Kuukpik is a client in the Cook Inlet. Will there be an EIS?”</p> <p>A: KK replied, “Yes.”</p> <p>Q: IN asked, “Good, I’m glad, 18-24 months?”</p> <p>A: KK replied, “Yes, with BOEM.”</p>
33.	<p>Statement by EN: “Traditional knowledge is the key to your project.”</p> <p>C: by LN, “We will continue with research and mitigation.”</p> <p>C: by IN, “The current study benefits AEWC.”</p> <p>A: LN replied, “We don’t want to continue studies that are not beneficial.”</p>
34.	<p>Statement by KK: “We will be conducting sonar.”</p> <p>Q: IN asked, “What type of sonar and decibels? You’ll impact the fish.”</p> <p>A: WC replied, “I have the information and will send it to you.”</p>
35.	<p>Q: Beth Sharp (BS), “You mentioned seals and walrus, what about polar bears? Do you hunt polar bears?”</p> <p>A: EN replied, “We rarely harvest polar bears. We will harvest for safety reasons.”</p>
36.	<p>Statement by IN: “I am glad about the EIS. We will see the full effects.”</p> <p>C: by EN, “We are the only community affected.”</p>

37.	Q: IN asked, "3-5 years for production?" A: WC replied, "Winter 2019 at the earliest."
38.	Q: LN asked, "Best way to communicate through Isaac?" A: IN replied, "Yes."

Project Name:	Hilcorp Alaska, Inc. Plan of Cooperation Minutes		
Type of Meeting:	City of Kaktovik Meeting		
Meeting Location	Kaktovik, Alaska		
Meeting Facility	City of Kaktovik Community Center		
Date and Time of Meeting:	January 14, 2015 at 1:00 pm		
Hilcorp Alaska, Inc. (HILCORP) and ASRC Energy Services Alaska, Inc. (AES) staff:			
Hilcorp: Walton Crowell (WC)	Hilcorp: Kathryn Kaufman (KK)		
Hilcorp: Lori Nelson (LN)	Hilcorp: Elizabeth Sharp (BS)		
AES: Robin Demoski (RD)			
ATTENDED BY:	ORGANIZATION:	ATTENDED BY:	ORGANIZATION:
Nora Jane Burns, Mayor (NJB)	City of Kaktovik		

<u>Item</u>	<u>Agenda Item</u>		
1.	Introduction		
2.	Presentation		
3.	Questions or Comments		
<u>Item</u>	<u>Action Item</u>	<u>Action By</u>	<u>Follow up Deadline</u>
1.	Walton to look at the use of Endicott for Kaktovik Whaling Captains.	WC	
2.	Present to the City Council, 2 nd Tuesday of every month.	LN	
3.	Contact Leo Kayotuk, subsistence advisor for Kaktovik	KK	

KEY ISSUES:	
1.	Introduction and History of Hilcorp in Alaska <ul style="list-style-type: none"> - North Slope Properties Acquired from BP: Milne Point, Northstar and Endicott - North Slope Development Project Acquired from BP: Liberty
2.	Description of Upcoming Liberty Work <ul style="list-style-type: none"> - Geotechnical Surveys – March 2015 - Shallow Hazard Surveys – July 2015
3.	Questions or Concerns About Interference with Subsistence Activities in Relation to Upcoming Liberty Work? <ul style="list-style-type: none"> - Polar Bears - Whales and Seals
4.	Question or Concerns About Interference with Subsistence Activities in Relation to Existing North Slope Operations? <ul style="list-style-type: none"> - Polar Bears - Whales and Seals

DISCUSSION ITEMS:	
1.	Statement by Lori Nelson (LN): "Hilcorp purchased 15-20% of production of BP North Slope assets, including Northstar, Milne Point, Endicott and Liberty. We have inherited the subsistence and good neighbor policy. As for Liberty, we've submitted the development plan to BOEM in December; it's been a media circus because we are in federal waters. We've only committed to engagement and permitting. Beth will speak about existing projects."

HILCORP – CITY OF KAKTOVIK MEETING

January 14, 2015

2.	<p>Question (Q): Nora Jane Burns (NJB) asked, “You will take old BP operations? Liberty is on hold?”</p> <p>Answer (A): LN replied, “Yes and yes.”</p>
3.	<p>Q: NJB asked, “You’ve talked to Nuiqsut? They whale at Cross Island.”</p> <p>A: LN replied, “Yes.”</p>
4.	<p>Statement by NJB: “We whale nearby.”</p> <p>A: LN replied, “Yes, we’ve met with the Kaktovik whaling captains.”</p>
5.	<p>Q: NJB asked, “Will you have the correct Inupiaq names? People bring their new boats to West Dock.”</p> <p>A: LN replied, “Yes, we have an opportunity to let whalers use a closer location. Walton will work on that.”</p> <p>Comment (C): by NJB, “Yes, that will be good.”</p>
6.	<p>Q: NJB asked, “Along the coast will you be doing studies?”</p> <p>A: Beth Sharp (BS) replied, “Yes, fish migration, qaaqtaq, Northstar, bioacoustics monitoring.”</p> <p>C: by NJB, “We have beluga and bowhead.”</p> <p>A: BS replied, “And grey whale. We will continue studies and acoustic monitoring regardless to Liberty.”</p>
7.	<p>Q: NJB asked, “Will there be a road to Liberty or just an island?”</p> <p>A: Kate Kaufman (KK) replied: “No road, just an island. We’ve submitted a plan; will take 18-24 months of studies and engagement before any construction.”</p>
8.	<p>Q: NJB asked, “Will there be any barging?”</p> <p>A: Walton Crowell (WC) replied, “Yes, and we will consolidate the current barging operations. No big sea lifts, truck-able rigs, all part of mitigation.”</p>
9.	<p>Q: NJB asked, “In winter, will you have an ice road to Liberty?”</p> <p>A: WC replied, “It’s possible, an ice road to SDI then to Liberty which would be about five miles.”</p>
10.	<p>Q: NJB asked, “During summer, will you fly quite a bit?”</p> <p>A: WC replied, “We are reducing hover craft and crew boat traffic. Helicopter will be a last resort.”</p> <p>C: by NJB, “That’s good; we’ve requested Helicopters to fly higher around here. Many people depend on hunting, helicopter scare animals away.”</p> <p>C: by BS, “We will try not to use helicopters, too expensive.”</p>
11.	<p>Q: NJB asked, “Will you have local hire? Like polar bear watch?”</p> <p>A: KK replied, “Yes, we’ve been asking for points of contact for these positions.”</p> <p>Q: NJB asked, “Leo Kayutok, City of Kaktovik liaison, he reports to the City. The City meets every 2nd Tuesday of each month at 7pm. How many communities have you visited?”</p> <p>A: LN replied, “We are in the process of figuring things out as to when we are coming back. At this point we expect a full EIS. We certainly anticipate on communicating. We will be starting a website and we will be sending out mailers.”</p>
12.	<p>Q: NJB asked, “During operations, how big of a camp will you have?”</p> <p>A: WC replied, “25 man camp, bigger during the construction and drilling phase.”</p>
13.	<p>Q: NJB asked, “Will you be doing bird studies?”</p> <p>A: BS replied, “Spectacle Eiders and Stellar’s Eiders are on the endangered species list, we will be working with Fish and Wildlife to determine if we need studies. We will most likely be looking at mitigation measures to reduce the chance of bird strikes.”</p> <p>C: by NJB, “I know water studies are done, but not bird studies.”</p> <p>A: BS replied, “We will look at what deters birds away, so they don’t run into rig derricks.”</p>
14.	<p>Q: NJB asked, “Do you have polar bear problems?”</p> <p>A: BS replied, “Yes, a lot at Endicott. We have intentional hazing permits and LOA’s for incidental polar bear takes filed. On occasion, we have to haze. In Endicott, polar bears occasionally just rest.”</p> <p>C: by NJB, “Yes, polar bears head to Cross Island. I help with polar bear control in the fall.”</p> <p>C: by BS, “We work with Fish and Wildlife on FLIRing data to find out where the polar bear dens are.”</p>

HILCORP – CITY OF KAKTOVIK MEETING

January 14, 2015

15.	<p>Statement by WC: “For our winter plans, we will start in March. We are using the Badami Ice road to the shoreline. From there we will conduct geotechnical surveys out to the Liberty prospect. We will be looking for seal lairs. “</p> <p>C: by BS, “We will have subsistence advisors to look for seals.”</p>
16.	<p>Q: NJB asked, “How thick does the ice need to be?”</p> <p>A: WC replied, “6 feet.”</p>
17.	<p>Q: NJB asked, “How deep is the water nearby Liberty?”</p> <p>A: WC replied, “19 feet, we will start around March 1st.”</p>
18.	<p>Q: NJB asked, “How will you make the island, where will you get the gravel from? How long will it take you to finish your March work?”</p> <p>A: WC replied, “Our March work will be completed in 23 days. Depended on Exxon finishing their work on the ice road. Northstar is very thin this year. “</p> <p>C: by NJB, “We have open water on our North end. You need to be careful.”</p>
19.	<p>Statement by WC: “Other work we are proposing is our shallow hazard survey. We are proposing a 40 foot vessel, side scan sonar, and bathymetry. This work will be completed in 5 days. We will have microphones to pick up noises in the area.”</p> <p>Q: NJB asked, “We’ll see this in your permits?”</p> <p>A: KK replied, “Yes, I’ve submitted permits for winter, not for summer work yet.”</p> <p>Q: NJB asked, “Will you submit before summer? Everyone gets busy.”</p> <p>A: KK replied, “Yes.”</p>
20.	<p>Q: NJB asked, “Will you present to the community?”</p> <p>A: WC replied, “Depending if we take this to the next phase. Right now we are doing the leadership, then maybe the community.”</p> <p>A: LN replied, “We will be sending a mailer, down the line we will be doing a community meeting.”</p> <p>A: WC replied, “This is the team.”</p>
21.	<p>Statement by KK: “The shallow hazard will last 5-7 days, small scale in July.”</p> <p>Q: NJB asked, “Weather gets better in August, no choppers?”</p> <p>A: WC replied, “We will have one day of choppers, looking for strudel scours. We will have a subsistence advisor for this work.”</p> <p>Q: NJB asked, “Do you plan for more days in case of weather?”</p>
22.	<p>Q: BS asked, “Any further questions on the existing operations?”</p> <p>C: WC replied, “What we’re hearing is studies, haven’t been shared.”</p>
23.	<p>Q: NJB asked, “When Shell came they promised to show core samples and they haven’t. I know a lot of hunting on shore and seal and walrus hunting is in your area. Did you meet with the whalers?”</p> <p>A: LN replied, “Yes, and Charlotte’s office. Met in Nuiqsut, we will come back with different maps.”</p>
24.	<p>Q: NJB asked, “Did BP give you their studies? Ongoing or updating?”</p> <p>Q: BS asked, “Yes, is there anything in particular?”</p> <p>A: NJB replied, “No. When you start in March, there will be high winds, like 60 mph.”</p> <p>C: by WC, “We are 50/50 owners on Liberty; it is in their best interest that we are successful.”</p> <p>C: by NJB, “That’s good they will help you.”</p>
25.	<p>Q: LN asked, “How many people live here?”</p> <p>A: NJB replied, “260-300”</p> <p>Q: LN asked, “How many in the school?”</p> <p>A: NJB replied, “60-70, 4 are graduating this year.”</p> <p>Q: LN asked: “How long have you been mayor?”</p> <p>A: NJB replied, “This is my 3rd term, it is getting easier.”</p>
26.	<p>Q: BS asked, “What are your major issues?”</p> <p>A: NJB replied, “Impacts like meetings and tourism.”</p> <p>Statement by NJB: “We’ve requested impact funds from Shell, they are not allowed back in our community for the negative media and how they portrayed Kaktovik. Leo’s position is funded by impact funds. We’ve brought up concerns of yellow haze, will you be doing air quality permits.”</p> <p>A: by BS, “Yes, clean burning engines, for example. “</p>

HILCORP – CITY OF KAKTOVIK MEETING

January 14, 2015

27.	<p>Q: NJB asked, “Sometimes we get high winds and large waves. How will this affect you?” A: WC replied, “We’ve designed it for the 200 year storm event, up to 33 feet tall. It will be more equipped than Northstar. We’ve studied how far the ice will crust.”</p> <p>Q: NJB asked, “Have you factored in global warming and sinking?”</p> <p>A: WC replied, “Yes, we are planning on over building it by 3 feet. Liberty will have dry material and sheet pile to keep wells from warming the water. Hopefully not sinking like Northstar.”</p>
28.	<p>Q: NJB asked, “Will you be working with Nuiqsut?”</p> <p>A: LN replied, “Yes, we will be working with them.”</p>
29.	<p>Statement by WC: “There is a difference between Northstar and Liberty. We are seeing less ice and less multiyear ice.”</p> <p>C: by NJB, “Yes, that’s where the marine mammals stay; now the animals are coming on shore earlier. Leo’s email is impact@cityofkaktovik.org.”</p>

Project Name:	Hilcorp Alaska, Inc. Plan of Cooperation Minutes		
Type of Meeting:	Kaktovik Inupiat Corporation (KIC) Meeting		
Meeting Location	Kaktovik, Alaska		
Meeting Facility	Kaktovik Inupiaq Corporation Conference Room		
Date and Time of Meeting:	January 14, 2015 at 2:30 pm		
Hilcorp Alaska, Inc. (HILCORP) and ASRC Energy Services Alaska, Inc. (AES) staff:			
Hilcorp: Walton Crowell (WC)		Hilcorp: Kathryn Kaufman (KK)	
Hilcorp: Lori Nelson (LN)		Hilcorp: Elizabeth Sharp (BS)	
AES: Robin Demoski (RD)			
ATTENDED BY:	ORGANIZATION:	ATTENDED BY:	ORGANIZATION:
Nathan Gordon (NG)	KIC	Glen Solomon (GS)	KIC
Charlie Brower (CB)	KIC	Phillip Tikluk (PT)	KIC
Charles Lampe (CL)	KIC	Fannie Soplul (FS)	KIC

<u>Item</u>	<u>Agenda Item</u>		
1.	Introduction		
2.	Presentation		
3.	Questions or Comments		
<u>Item</u>	<u>Action Item</u>	<u>Action By</u>	<u>Follow up Deadline</u>
1.	Send training and job opportunities	WC	

KEY ISSUES:

1.	Introduction and History of Hilcorp in Alaska <ul style="list-style-type: none"> North Slope Properties Acquired from BP: Milne Point, Northstar and Endicott North Slope Development Project Acquired from BP: Liberty
2.	Description of Upcoming Liberty Work <ul style="list-style-type: none"> Geotechnical Surveys – March 2015 Shallow Hazard Surveys – July 2015
3.	Questions or Concerns About Interference with Subsistence Activities in Relation to Upcoming Liberty Work? <ul style="list-style-type: none"> Polar Bears Whales and Seals
4.	Question or Concerns About Interference with Subsistence Activities in Relation to Existing North Slope Operations? <ul style="list-style-type: none"> Polar Bears Whales and Seals

DISCUSSION ITEMS:

1.	Statement by Lori Nelson (LN): Lori gave introductions and history of Hilcorp. "Hilcorp buys existing assets and ups the production with a lower cost."
2.	Question (Q): Glen Solomon (GS) asked, "Are there any training opportunities?" Answer (A): LN replied, "Yes, we are looking for community interest. We need contacts." Q: GS asked, "Do you need NSTC Cards or Hazwoper training?" A: Walton Crowell (WC) replied, "Training for more consistent jobs?" Q: GS asked, "Like roustabout positions?" A: WC replied, "It is our intention to use local hire."

HILCORP – KAKTOVIK INUPIAT CORPORATION MEETING
January 14, 2015

3.	Statement by LN: “We’ve inherited BP’s deadline, we’ve submitted our plan end of December to BOEM. At this point the only thing we are committed to is stakeholder engagement and permitting. We will assess and make sure it’s beneficial to us.”
4.	Q: GS asked, “Is this the pipeline to Point Thomson? Where is the pipeline hooking up to straight down?” A: WC replied, “Yes, straight down. In order to access this prospect we will go on the Badami Road.” Q: GS asked, “How are the pressure ridges at this point?” A: WC replied, “I will look into this, this summer is very flat. We will send a rolligon ahead to do an ice assessment. That’s why we are using the tuckers as well. We will be conducting geotechnical surveys. We want to study the strudel scour.” A: Kate Kaufman (KK) replied, “That will start in March and last 20-25 days. We will have an IHA for incidental takes of whales and seals and an LOA for incidental takes of polar bears. We are in the early stages of our permits. More community involvement on the project.”
5.	Statement by WC: “This summer we will gather shallow hazard survey data. Using side scan sonar and bathymetry. We will use a smaller boat to get in shallow areas. We will be based at SDI. During break up we will have one of the choppers looking for strudel scours.”
6.	Q: GS asked, “What is the depth?” A: BS replied, “19 feet. We will be doing acoustic monitoring, bio acoustic, listening to marine mammals. We will plan for mitigation.”
7.	Q: GS asked, “Do you know whose native allotment that is?” A: BS replied, “Yes, we are in contact with the planning department.”
8.	Q: GS asked, “Where will you get the gravel?” A: WC replied, “We are proposing a gravel pit. Our gravel footprint has been reduced.”
9.	Q: GS asked, “How big will the island be?” A: WC replied, “19 acres, same concrete armament and sheet protection as Northstar. We are in less deep of water; we won’t see the multi-year ice. There are a lot of issues we’ve learned from Northstar.”
10.	Statement by LN: “If you have any questions, please contact me. We think a full EIS will happen and it will take up to 2 years.”
11.	Statement by KK: “Parallel to BOEM, we will be submitting permits and reaching out to stakeholders. Coming out to the communities.”
12.	Q: GS asked, “Will you have the equipment to grind and inject?” A: KK replied, “Yes, it will have a production facility on the island. We will have a vertical well, straight down. The reservoir will flow really well and is porous.”
13.	Statement by LN: “We’ve inherited this project from BP and a lot of research has been done. We are going through and we want to do this responsibly.”
14.	Q: Beth Sharp (BS) asked, “Are there concerns on this project or Endicott, Milne Point, or Northstar? Any subsistence impacts? Do you have any concerns about the current operations?” (No questions regarding impacts.)
15.	Q: GS asked, “Will you work with ASRC?” A: LN replied, “Yes, helping with permitting.” A: KK replied, “Yes, later we will have community meetings. Right now we are looking for points of contacts.”
16.	Q: GS asked, “We are looking for training and local hire opportunities. What are the royalties?” A: LN replied, “We are looking into it, earliest production 2019.” C: by KK, “It’s on our list to do to find out.”
17.	Q: LN asked, “As a corporation, any concerns?” Answer by a Kaktovik Inupiat Corporation (KIC) Representative: “Fuel.” Comment by a KIC Representative: “Our Marsh Creek hires MMOs.”

Project Name:	Hilcorp Alaska, Inc. Plan of Cooperation Minutes		
Type of Meeting:	Kaktovik Whaling Captain's Meeting		
Meeting Location	Kaktovik, Alaska		
Meeting Facility	Marsh Creek Hotel		
Date and Time of Meeting:	January 14, 2015 at 11:00 am		
Hilcorp Alaska, Inc. (HILCORP) and ASRC Energy Services Alaska, Inc. (AES) staff:			
Hilcorp: Walton Crowell (WC)		Hilcorp: Kathryn Kaufman (KK)	
Hilcorp: Lori Nelson (LN)		Hilcorp: Elizabeth Sharp (BS)	
AES: Robin Demoski (RD)			
ATTENDED BY:	ORGANIZATION:	ATTENDED BY:	ORGANIZATION:
Chris Gordon, President (CG)	Kaktovik Whaling Captain	James Lampe (JL)	Kaktovik Whaling Captain
George Kaleak (GK)	Kaktovik Whaling Captain	John Henry-Akpik (JHA)	Kaktovik Whaling Captain
Charlie Brower (CB)	Kaktovik Whaling Captain	Stephanie Ashiana (SA)	Wife of Kaktovik Whaling Captain

<u>Item</u>	<u>Agenda Item</u>		
1.	Introduction		
2.	Presentation		
3.	Questions or Comments		
<u>Item</u>	<u>Action Item</u>	<u>Action By</u>	<u>Follow up Deadline</u>
1.	Look into options for Whalers to off ramp at Endicott	WC	

KEY ISSUES:	
1.	Introduction and History of Hilcorp in Alaska <ul style="list-style-type: none"> - North Slope Properties Acquired from BP: Milne Point, Northstar and Endicott - North Slope Development Project Acquired from BP: Liberty
2.	Description of Upcoming Liberty Work <ul style="list-style-type: none"> - Geotechnical Surveys – March 2015 - Shallow Hazard Surveys – July 2015
3.	Questions or Concerns About Interference with Subsistence Activities in Relation to Upcoming Liberty Work? <ul style="list-style-type: none"> - Polar Bears - Whales and Seals
4.	Question or Concerns About Interference with Subsistence Activities in Relation to Existing North Slope Operations? <ul style="list-style-type: none"> - Polar Bears - Whales and Seals

DISCUSSION ITEMS:	
1.	Statement by Lori Nelson (LN): "We've purchased 50% of BP's holdings. 100% of Northstar, 50% of Milne Point, 100% of Endicott and 50% of Liberty. We are the operator for Liberty. Right now, we are getting input for decision making. We are going through the regulatory and stakeholder process. Walton will talk about our primary research for the Liberty Development this year and our timeline. Beth will talk about our existing assets (Milne, Northstar, and Endicott) and whether you have any subsistence concerns with those locations."

HILCORP – KAKTOVIK WHALING CAPTAIN’S MEETING

January 14, 2015

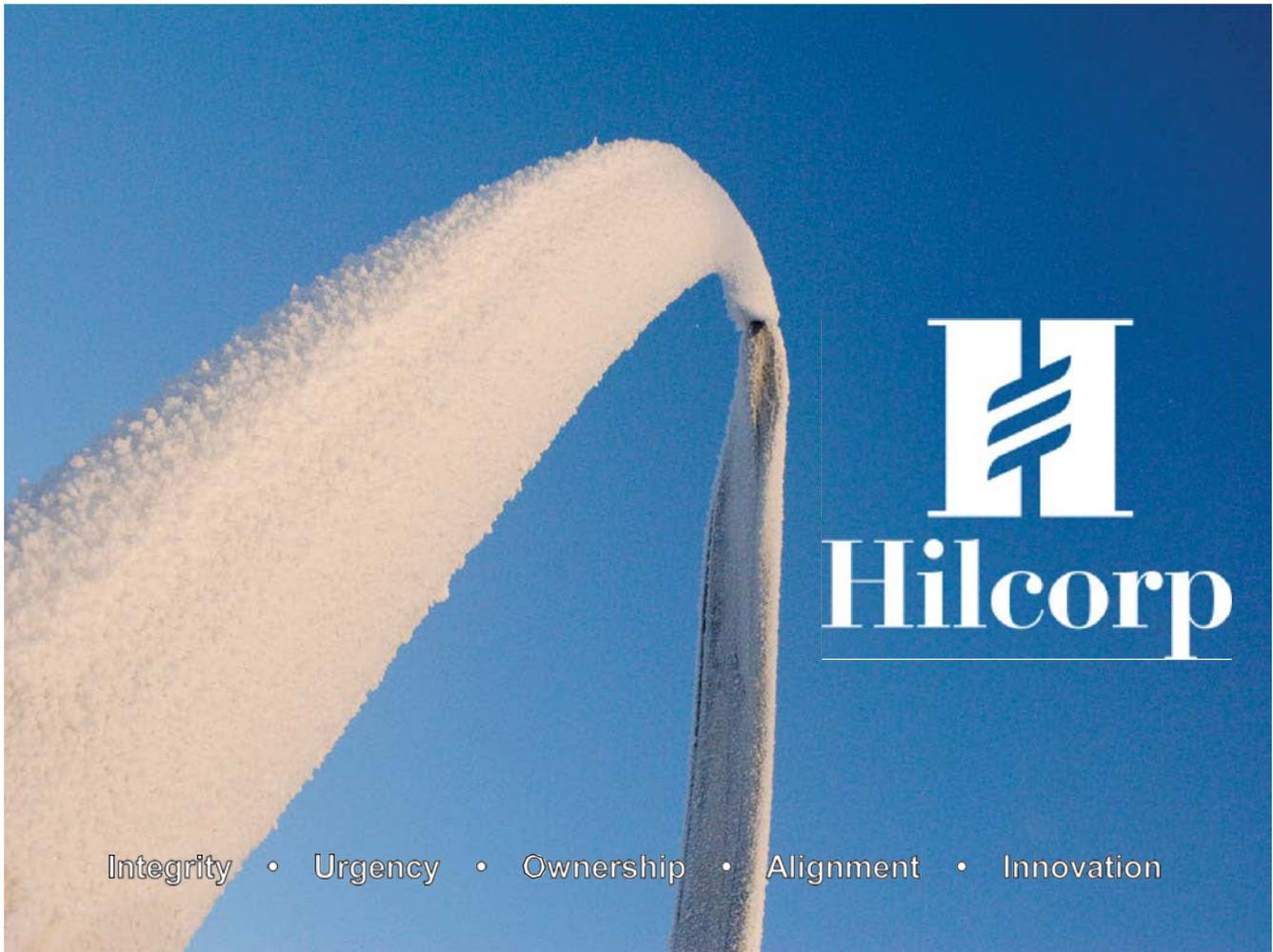
2.	<p>Question (Q): George Kaleak (GK), “You’ve purchased 100% of Endicott? In regards to boats, we off ramp at West Dock. We would like to off ramp at Endicott.”</p> <p>Answer (A): Walton Crowell (WC) replied, “We can talk to ACS about the boat dock.”</p> <p>Comment (C): by LN, “This is the team to talk to, Walton is the contact for Endicott. “</p> <p>Statement by GK: “This happens at least once or twice a year. When people purchase new boats, it would be easier to launch at Endicott. Main reasons for security, is to make sure alcohol and drugs are not coming into our dry community.”</p>
3.	<p>Statement by Kate Kaufman (KK): “We expect permitting to last 18 to 24 months. There will most likely be an EIS for this project. The project is in its early phases.”</p>
4.	<p>Statement by WC: “The activity we are planning will start in March, for geotechnical surveys, two on tundra, and transition area along the corridor and some at the island location itself. This will have a pipe in pipe configuration, buried 13 feet, risks are much less, and does not interfere with ice gouging.”</p> <p>Q: GK asked, “Has the pipe been tested in the arctic?”</p> <p>A: WC replied, “Yes.”</p>
5.	<p>Statement by KK: “We are permitting with the NSB and State. We are filing an IHA and we plan on hiring subsistence advisors.”</p>
6.	<p>Statement by WC: “The duration of our winter work is 22-25 days. A lot of data has been collected and studies have been done in the past by BP. We do have access to BP’s information.”</p>
7.	<p>Q: GK asked, “Where is Kavik River? We go fishing at Shaviovik River for grayling and char. We travel through Camden Bay. Will you have an ice road this year?”</p> <p>A: KK replied, “No”</p> <p>Q: Chris Gordon (CG) asked, “Will it even freeze? We had open water last month.” A: WC replied, “We’ve heard, we will use the ice road from Badami and head North.” A: KK replied, “The proposed island is in 19 feet of water.”</p>
8.	<p>Statement by WC: “As for our summer work, a small 42 foot boat will go into the shallows. We will be out for about 5 days. We are looking at the sea profile of the sea floor. We will use acoustic monitoring.”</p> <p>Q: GK asked, “Where?” Kate shows George Kaleak where on the map. “Why will you put the monitors outside the islands?”</p> <p>A: WC replied, “The source will be inside and monitoring devices will be inside the barrier islands.”</p> <p>A: BS replied, “We can monitor bioacoustics, ambient sounds.”</p>
9.	<p>Q: GK asked, “How many decibels?”</p> <p>A: WC replied, “We will be collecting geohazard data for five days. We will be collecting sound data throughout the open water season. The sound monitors will reveal the decibels of our equipment”</p>
10.	<p>Q: GK asked, “Is this seismic? “</p> <p>A: WC replied, “No, this is not seismic.”</p> <p>C: by GK, “I’ve requested the effects on seismic and I have not received the data.”</p> <p>A: WC replied, “The seismic has already been done by BP.”</p> <p>C: by GK, “We know the whales feel it, we have to go 30 miles out to go whaling.”</p> <p>C: by CG: “The meat spoils further out.”</p> <p>Q: KK asked, “Were the whales closer this year?”</p> <p>A: GK replied, “Yes, close.”</p>
11.	<p>Statement by KK: “NMFS will pay attention to our operations and they have strict guidelines.”</p>
12.	<p>Q: CG asked, “How big will the pipeline be?”</p> <p>A: WC replied, “12 inches inside and 16 inches outside. That helps us monitor for air pressure and temperature. How we’ve chosen this option is it was approved in 2000, number one best for the environment. Avoids the boulder patch, avoids strudel scour.”</p>
13.	<p>Q: GK asked, “We’ve boated through the boulder patch, it’s dangerous. What was the summer timeframe?”</p> <p>A: KK replied, “In July for five days.”</p>

14.	<p>Statement by GK: "We have a CAA through AEWC." A: WC replied, "We will be signing the CAA." C: by LN, "We will be at the mini-convention."</p>
15.	<p>Statement by CG: "Best way to contact me is by email, gordonchristopher@hotmail.com and my number is (907) 640-2808."</p>
16.	<p>Q: BS asked, "Do you have any questions about our existing facilities? I know polar bears are a big issue." A: GK replied, "We are trying to control tourism here in Kaktovik." Q: BS asked, "Are the way that we are handling polar bears okay with you?" *Head nod, "Yes," from the Whaling Captains.</p>
17.	<p>Q: GK asked, "Will you have summer time barges?" A: WC replied, "Yes, there will be services at SDI. Northstar had 3-4 barges per year. We will probably just have 1-2 barges this year." C: by GK, "We know that Nuiqsut have seen barges near Cross Island. That is why we have the comm centers, when we see them, we report them."</p>
18.	<p>Q: GK asked, "Which oil company did you learn from?" A: BS replied, "All of them." C: by LN, "I'm sure you'll see us in the media."</p>

Attachment B

Meeting Materials and Presentations

**NORTH SLOPE BOROUGH PLANNING MEETING MATERIALS
OCTOBER 30, 2014**



Integrity • Urgency • Ownership • Alignment • Innovation



Who is Hilcorp?



Established in 1989

Privately Owned

100% U.S. Based Operations

1,100 Employees

Our success is a direct result of hard work and dedication to doing the right thing. Protecting the environment and ensuring a safe, healthy workplace are priority one for Hilcorp.



What are we buying?

ENDICOTT

100% of BP's interest
Hilcorp operated

NORTHSTAR

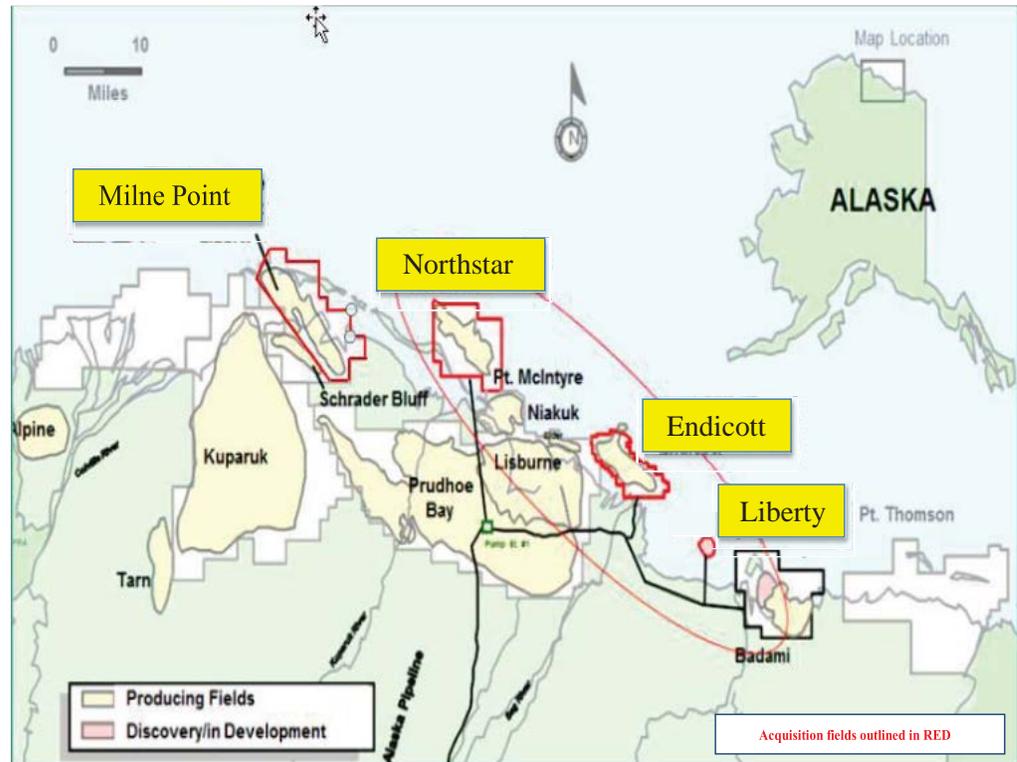
100% of BP's interest
Hilcorp operated

MILNE POINT

50% of BP's interest
Hilcorp operated

LIBERTY DEVELOPMENT

Option for 50% of BP's interest. Advancement of Liberty development subject to regulatory approval



North Slope Team



Retained 90%+ of existing field



personnel

Experienced Alaskan Support

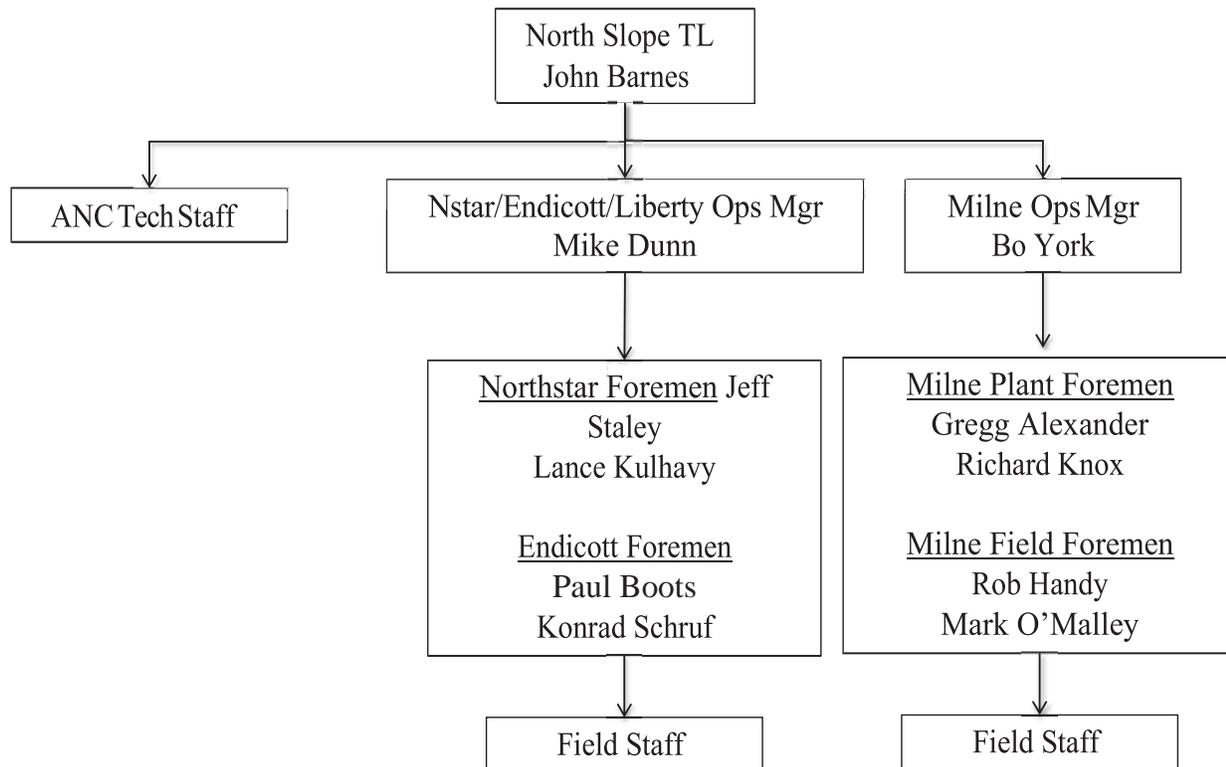
- Environmental
- Drilling
- Engineering
- Logistics
- Contractors

Transparent and responsible

Hilcorp is a company built on energy and will continue to earn success by challenging ourselves, rewarding our employees, being good corporate citizens and doing the right thing.



Alaska North Slope Team's Organization Structure



Environmental Team

William Britt, Environmental Manager

Kelley Nixon, Environmental Coordinator – Permitting

Wally Evans, Environmental Coordinator – Air

Jessica Morehouse, Environmental Coordinator - Water **Drew**

Anderson, Environmental Coordinator – Remediation **Gretchen**

Stoddard, Environmental Coordinator – Waste

Diane Dunham, Environmental Coordinator – Emergency Management

Kate Kaufman, Environmental Coordinator – Drilling

TBA, Environmental Coordinator - Fish and Wildlife (mid-November) TBA,

Environmental Coordinator – North Slope (coming from BP team) TBA,

Environmental Coordinator – North Slope (coming from BP team)



Looking Ahead

MILNE POINT

Well workover program starting January 2015
Drilling program under evaluation

NORTHSTAR

Evaluating workover options

ENDICOTT

Evaluating workover options

LIBERTY PROJECT

Submit Development & Production Plan
Continue to evaluate project



Hilcorp creates value within the communities in which we operate, provides local jobs, extends the life of legacy assets and efficiently captures needed energy resources that would otherwise be lost.



Questions?

Taikuu!

For More Information Contact: Lori Nelson, External Affairs Manager lnelson@hilcorp.com 907-777-8392

**Bill Britt, Environmental Manager
wbritt@hilcorp.com 907-777-8310**

**NUIQSUT OUTREACH MEETING MATERIALS
DECEMBER**



Who is Hilcorp?



Established in 1989

Privately Owned

100% U.S. Based Operations

1,300 Employees

508 Alaska Based, 452 Alaska Residents

Our success is a direct result of hard work and dedication to doing the right thing. Protecting the environment and ensuring a safe, healthy workplace are priority one for Hilcorp.



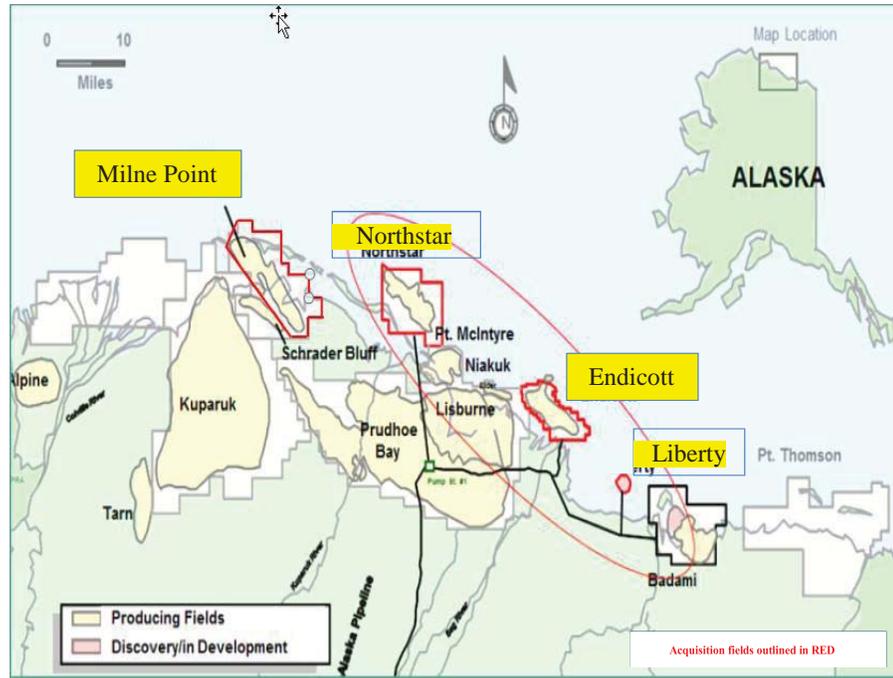
What are we buying?

ENDICOTT
100% of BP's interest
Hilcorp operated

NORTHSTAR
100% of BP's interest
Hilcorp operated

MILNE POINT
50% of BP's interest
Hilcorp operated

LIBERTY DEVELOPMENT
Operator and 50% partner with BP.
Advancement of Liberty development subject to regulatory and internal approvals.



North Slope Team



Retained 90%+ of existing field personnel

Experienced Alaskan Support

- Environmental
- Drilling
- Engineering
- Logistics
- Land
- Contractors

Transparent and responsible



What are we buying?

Hilcorp is a company built on energy and will continue to earn success by challenging ourselves, rewarding our employees, being good corporate citizens and doing the right thing.



Environmental Team

William Britt, Environmental Manager

Kelley Nixon, Environmental Specialist – Permitting

Wally Evans, Environmental Specialist – Air

Jessica Morehouse, Environmental Specialist - Water **Drew**

Anderson, Environmental Specialist – Remediation **Gretchen**

Stoddard, Environmental Specialist – Waste

Diane Dunham, Environmental Specialist – Emergency Management

Kate Kaufman, Environmental Specialist – Drilling

Beth Sharp, Environmental Specialist - Fish and Wildlife **Stefan**

Gogosha, Environmental Specialist – North Slope **Deborah Heebner**
, Environmental Specialist – North Slope



Responsible development

Member of Alaska Clean Seas AEWC

Conflict Avoidance Agreement

Good Neighbor Policy Comprehensive

Spill Response Plan Plans of

Cooperation

Continued Monitoring and Mitigation



Looking Ahead

MILNE POINT

Well workover program starting January
2015 Drilling program under evaluation

NORTHSTAR

Evaluating workover options

ENDICOTT

Evaluating workover options

LIBERTY PROJECT

Submit Development & Production
Plan Continue to evaluate project



Hilcorp creates value within the communities in which we operate, provides local jobs, extends the life of legacy assets and efficiently captures needed energy resources that would otherwise be lost.

For More Information
Contact: Lori Nelson,
External Affairs Manager
lnelson@hilcorp.com
907-777-8392

Bill Britt, Environmental
Manager wbritt@hilcorp.com
907-777-8310

**INUPIAT COMMUNITY OF THE ARCTIC MEETING
MATERIALS**



Who is Hilcorp?



Established in 1989

Privately Owned

100% U.S. Based Operations

1,480 Employees

508 Alaska Based, 452 Alaska Residents



Our success is a direct result of hard work and dedication to doing the right thing. Protecting the environment and ensuring a safe, healthy workplace are priority one for Hilcorp.



How we Operate

ADD VALUE

We focus on production; every task must add value



EXECUTION FOCUSED

We make decisions; move forward with purpose

ACCOUNTABILITY

Ethical and engaged workforce; individuals held accountable

DIRECT & CANDID COMMUNICATION

Clear expectations; transparency enforced



FLAT STRUCTURE

No organizational complexities.

We operate as one team; limited middle management. Contractors are accountable to a staff person.



What was Acquired on North Slope

MILNE POINT

Purchased 50% of BP's interest. Hilcorp operated

NORTHSTAR

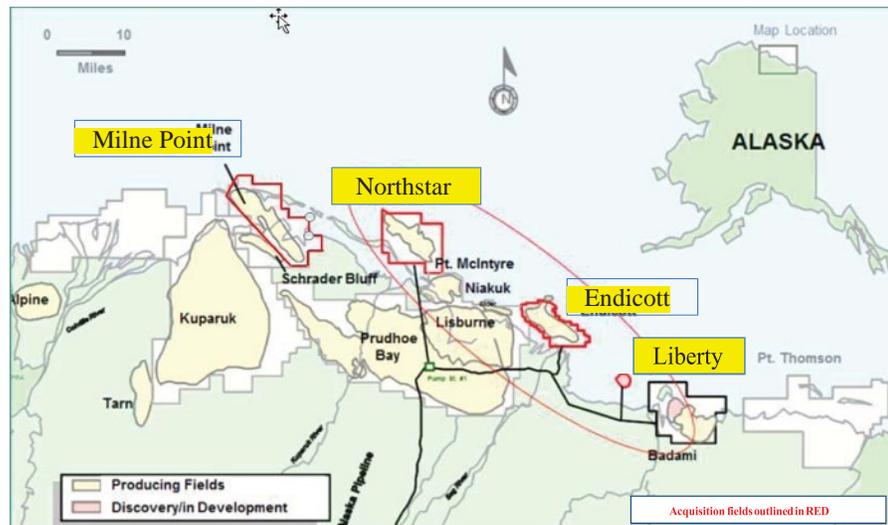
Purchased 100% of BP's interest. Hilcorp operated

ENDICOTT

Purchase 100% of BP's interest. Hilcorp operated with Exxon and Chevron as partners.

LIBERTY DEVELOPMENT

Operator and 50% partner with BP. Eventual development subject to regulatory and internal approvals.





North Slope Team



Retained 90%+ of existing field personnel

Experienced Alaskan Support

- Operations
- Environmental
- Drilling
- Engineering
- Logistics
- Land & Regulatory
- Contractors

Transparency & Communication is key to running a lean organization

Hilcorp is a company built on energy and continues to earn success by challenging ourselves, rewarding our employees, being good

corporate citizens, and doing the right thing.



Northstar Production Facility



Greg Syverson Photography



Milne Pt. Production Facilities





Liberty Locator Map



3D Rendering of Proposed Liberty Island





Development Responsibilities

Member of Alaska Clean Seas

AEWC Conflict Avoidance Agreement

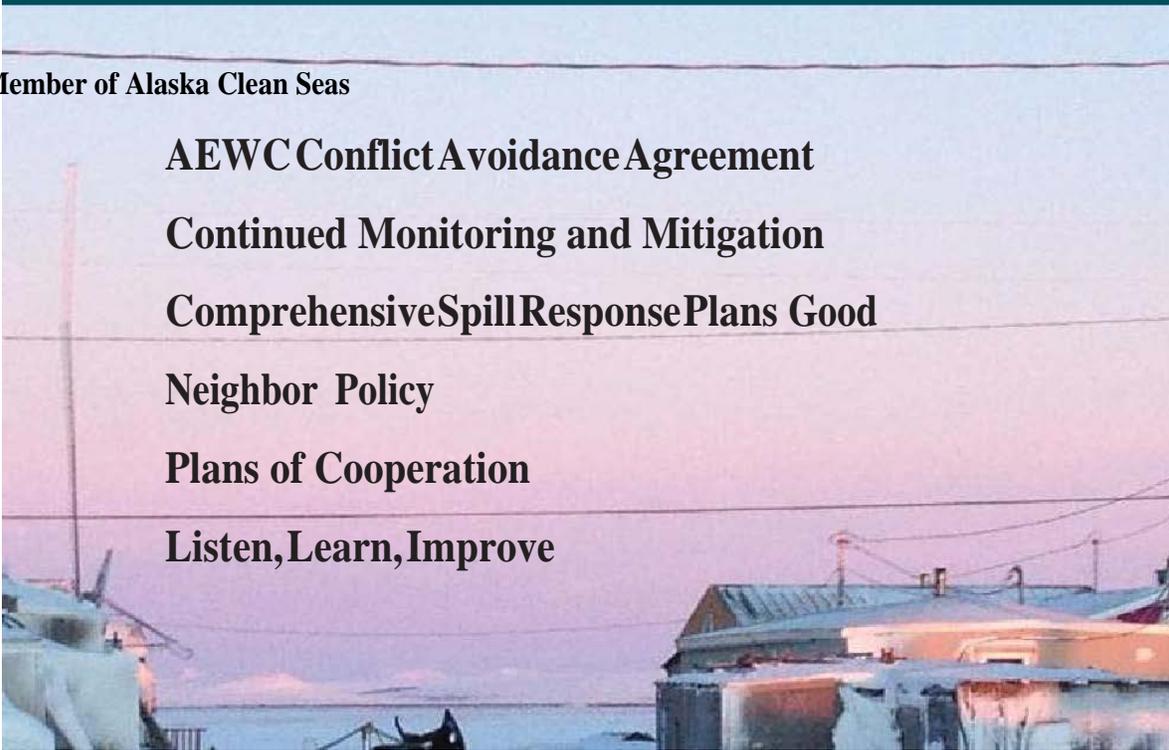
Continued Monitoring and Mitigation

Comprehensive Spill Response Plans Good

Neighbor Policy

Plans of Cooperation

Listen, Learn, Improve





Questions?

Quyanaq!

For More Information Contact:

Lori Nelson, External Affairs Manager
lnelson@hilcorp.com 907-777-8392

Beth Sharp, Environmental Specialist
esharp@hilcorp.com 907-777-8436

Kate Kaufman, Liberty Lead
kkaufman@hilcorp.com 907-777-8329

Mike Dunn, North Slope Operations Manager
mdunn@hilcorp.com 907-777-8382

Attachment C

Distribution List

Borough Government Representatives

Harry Brower
North Slope Borough
P.O. Box 69
Barrow, AK 99723
Harry.Brower@north-slope.org

Taquilik Hepa
NSB Wildlife Director
P.O. Box 69
Barrow, AK 99723
taquilik.hepa@north-slope.org

Gordon Brower
Director, North Slope Planning & Community
Services
P.O. Box 69
Barrow, AK 99723
Gordon.Brower@north-slope.org

Native Village Representatives

Doreen Leavitt
Native Village of Barrow
P.O. Box 1130
Barrow, AK 99723
dleavitt@nvbarrow.net

Joe Nukapigak
Kuukpik Corporation
P.O. Box 187
Nuiqsut, AK 99789
jnukapigak@kuukpik.com

Matthew Rexford
Kaktovik Inupiat Corporation
P.O. Box 73
Kaktovik, AK 99747
nvkaktovik@starband.net

Vernon Bennett
City of Nuiqsut
P.O. Box 148
Nuiqsut, AK 99789
cityofnuiqsut@gmail.com

Marie Itta
Assistant to Mayor
North Slope Borough
P.O. Box 69
Barrow, AK 99723
marie.itta@north-slope.org

Mayor Fannie Suvlu
City of Barrow
P.O. Box 629
Barrow, AK 99723

Margaret Pardue
Native Village of Nuiqsut
P.O. Box 169
Nuiqsut, AK 99789
Native.village@astacalaska.net

Matthew Rexford
Native Village of Kaktovik
P.O. Box 8
Kaktovik, AK 99747
nvkaktovik@starband.net

Amanda Kaleak
City of Kaktovik
P.O. Box 27
Kaktovik, AK 99747
Office@cityofkaktovik.org

Marine Mammal Co-Management Groups

Harry Brower, Chairman
Alaska Eskimo Whaling Commission
P.O. Box 570
Barrow, AK 99723
harry.brower@north-slope.org

Arnold Brower Jr., Executive Director
Alaska Eskimo Whaling Commission
P.O. Box 570
Barrow, AK 99723
Aewc1@gci.net

Willie Goodwin
Alaska Beluga Whale Committee
P.O. Box 334
Kotzebue, AK 99752
argagiag@gmail.com

Federal Agencies

Christopher Putnam
U.S. Fish and Wildlife Service
1011 E. Tudor Road
Anchorage, AK 99503
Christopher_Putnam@fws.gov

Lauren Boldrick
Bureau of Ocean Energy Management
3801 Centerpoint Drive
Suite 500
Anchorage, AK 99503
Lauren.Boldrick@boem.gov

Doreen Lampe, Executive Director
Inupiat Community of the Arctic Slope
P.O. Box 1121
Barrow, AK 99723
icas.executive@barrow.com

Jack Omelak, Executive Director
Nanuuq Commission
P.O. Box 946
Nome, AK 99762
Jo.aknanuuq@gci.net

John Goodwin
Alaska Ice Seal Committee
P.O. Box 413
Kotzebue, AK 99752
jgoodwin@otz.net

Jolie Harrison
National Marine Fisheries Service
1315 East West Highway
Silver Spring, MD 20910
Jolie.harrison@noaa.gov

Shane Guan
National Marine Fisheries Service
1315 East West Highway
Silver Spring, MD 20910
Shane.guan@noaa.gov

Patricia LaFramboise
Bureau of Ocean Energy Management
3801 Centerpoint Drive
Suite 500
Anchorage, AK 99503
patricia.laframboise@boem.gov

Attachment D

Liberty Stakeholder Engagement Log

**Shaded dates indicated
BP led discussions as
Liberty Operator.

Date	Location	Audience	Topic	Hilcorp Attendees
2013				
10/17/13	Anchorage	AEWC and Nanuq Commission	Liberty Briefing. Talking points included the following: -Discuss development plan (island, gravel mine, pipeline route) -Ancillary activities -Timing for DPP submittal	Bailey
12/13/13	Anchorage	AEWC and Walrus Commission	Liberty Briefing (Same as previous)	Bailey
2014				
January 2014	Utqiagvik	Utqiagvik Mayor	No notes available	
February 10-14, 2014	Anchorage	AEWC	Liberty Briefing Talking points included the following: -Discuss development plan (island, gravel mine, pipeline route) -Ancillary activities -Timing for DPP submittal -Fish monitoring study	Bailey and Streever

2/27/14	Utqiagvik	NSB Planning Commission	<p>Liberty Update (Presentation attached)</p> <p>Talking points included the following:</p> <ul style="list-style-type: none"> -Discuss development plan (island, gravel mine, pipeline route) -Ancillary activities -Timing for DPP submittal and NEPA process 	Bailey and Streever
3/28/14	Nuiqsut	Kuukpik President	Liberty Update (Same as previous)	
6/27/14	Nuiqsut	NWCA	<p>Liberty Development update (Roster and map attached)</p> <p>Talking points included the following:</p> <ul style="list-style-type: none"> -Liberty development overview -DPP Submittal and NEPA timeline -Whaling 	Ruddy, Streever, Galginaitis
7/17/14	Fairbanks	AEWC	<p>Liberty Development update (Roster attached)</p> <p>Talking points included the following:</p> <ul style="list-style-type: none"> -Northstar and bowhead monitoring program -Fish monitoring program -Liberty 	Bailey, McKenzie, Streever, Kitigawa, Britt, Barnes

			development overview -DPP submittal -Ancillary Activities	
7/31/14	Utqiagvik	NSB Planning Commission	Liberty Development update (Agenda and presentation attached)	
11/18/14	Hilcorp Acquisition of BP Assets - Closing Date			
12/2/14	Nuiqsut	Community meeting	Hilcorp Introduction	Barnes, Sharp, Nelson, Britt, Demoski
12/2/14	Nuiqsut	KSOP Leadership	Hilcorp Introduction	Barnes, Sharp, Nelson, Britt, Demoski
12/12/14	Anchorage	AEWC Meeting	Hilcorp Introduction/CAA	Britt
2015				
1/8/15	Utqiagvik	ICAS	Hilcorp Introduction and Liberty Overview	Dunn, Sharp, Kaufman, Nelson
1/12/15	Utqiagvik	Native Village of Barrow	Liberty Ancillary Activities & Overall Operational Impacts	Crowell, Sharp, Nelson, Kaufman
		NSB Mayor's Office		
		NSB Planning Department		
		AEWC		
1/13/15	Nuiqsut	Native Village of Nuiqsut		Crowell, Sharp, Nelson, Kaufman

		Nuiqsut Whaling Captains Kuukpik Corporation	Liberty Ancillary Activities & Overall Operational Impacts	
1/14/15	Kaktovik	City of Kaktovik Kaktovik Whaling Captains Kaktovik Inupiat Corporation (KIC)	Liberty Ancillary Activities & Overall Operational Impacts	Crowell, Sharp, Nelson, Kaufman
1/29/15	Utqiagvik	NSB Planning Commission	Liberty Overview	Dunn and Kaufman
2/5/15	Utqiagvik	AEWC	Liberty Ancillary Activities	Crowell and Kaufman
9/24/15	Utqiagvik	NSB Planning Commission	Liberty Permitting Update	Kaufman and Nelson
10/19/15	Anchorage	AEWC Meeting	Liberty Status update, summary of Ancillary Activities	Kaufman and Nelson
11/2/2015 - 11/5/2015	Fairbanks, Kaktovik, Nuiqsut, Utqiagvik, Anchorage	Public and Stakeholders	Attended BOEM scoping meetings	Turner, Kaufman, Sharp, Nelson
12/2/15	Anchorage	NSB Department of Wildlife Management & BP	BP Meeting to review studies, preliminary discussion on HAK Studies & Liberty	Kaufman, Britt, Sharp
12/8/15	Anchorage	AWEC Meeting	Barnes Presentation on Liberty	Kaufman, Barnes, Nelson
12/22/15	Utqiagvik	NSB Department of Wildlife Management (Suydam Heppa, Brower)	Review of Hilcorp NS Studies program, introduction to Liberty	Kaufman, Britt, Sharp

2016				
2/3/2016 - 2/5/2016	Utqiagvik	AEWC Mini Convention	Dinner w/whaling captains, Technical workshop on Liberty DPP	Crowell, Dunn, Gardner, Kaufman, Keller, Sharp, Winegarner
3/2/16	Kaktovik	Tri-lateral Government	"Listening Sessions" on Liberty DPP	Kaufman, Sharp, Winegarner, Gardner
3/2/16	Kaktovik	Community of Kaktovik	"Listening Sessions" on Liberty DPP	Kaufman, Sharp, Winegarner, Gardner
3/3/16	Kaktovik	Kaktovik Whaling Captains	"Listening Sessions" on Liberty DPP	Kaufman, Sharp, Winegarner, Gardner
3/30/16	Utqiagvik	North Slope Borough Planning Department	Liberty Project Update, Rezone and Master Plan Discussion	Kaufman, Winegarner
3/31/16	Utqiagvik	North Slope Borough Planning Commission	Liberty Project Update	Kaufman, Winegarner
3/31/16	Utqiagvik	ICAS	Liberty Project Update and Native Allotment	Kaufman, Winegarner
5/3/16	Utqiagvik	North Slope Borough Assembly Workshop	Liberty Project Update	Gardner, Barnes, Winegarner
5/16/16	Nuiqsut	Nuiqsut Whaling Captains Association	"Listening Sessions" on Liberty DPP	Dunn, Kaufman, Sharp, Winegarner, Crowell
6/12/16	Nuiqsut	Nalukataq	Whaling Captain Festival and Blanket Toss	Winegarner and Kaufman
6/23/16	Nuiqsut	Nalukataq	Whaling Captain Festival and Blanket Toss	Barnes, Winegarner
7/18/2016-7/20/2016	Anchorage	AEWC	Quarterly Meeting	Winegarner and Kaufman
8/11/16	Nuiqsut			Barnes, Kaufman, Gardner via phone, Winegarner in NUI

		Nuiqsut Tri-lateral Group: Kuukpik Corporation, City of Nuiqsut, and Native Village of Nuqisut	"Listening Sessions" on Liberty DPP	
8/11/16	Nuiqsut	Nuiqsut Community Meeting	"Listening Sessions" on Liberty DPP	Barnes, Kaufman, Gardner via phone, Winegarner in NUI
8/12/16	Nuiqsut	Nuiqsut Whaling Captains Association	"Listening Sessions" on Liberty DPP	Winegarner
8/12/16	Nuiqsut	Kuukpik Subsistence Oversight Panel	"Listening Sessions" on Liberty DPP	Winegarner
12/8/16	Anchorage	AEWC	Quarterly Meeting	Winegarner and Sharp
2017				
2/8/17	Utqiagvik	AEWC 2017 Annual Waling Captains' Mini Convention	Liberty Permitting and Studies Update	Hilcorp
3/20/17	Trapper School, Nuiqsut	Debbie Lancaster, Trapper School Principal	Discussed plans for an 'Oil' Field Trip to Milne Pt. for Sr. High Students	Winegarner
3/21/17	Kuukpik Hotel, Nuiqsut	Carl Brower, President of Nuiqsut Whaling Captain's Association	Discussing Liberty Project and the needs of the Nuiqsut Whaling Captains	Winegarner
3/21/2017	Edward Nukapigak's house	Edward Nukapigak, Nuiqsut Whaling Captain	Discussed Liberty Project and interpretive services for community meeting	Winegarner

3/22/17	Trapper School, Nuiqsut	Trapper School, Sr. High Students	Liberty Project Review	Winegarner
3/22/17	Kuukpik Corp. Headquarters Nuiqsut	Joe Nukapigak, President of Kuukpik Corp.	Liberty Project – timeline of draft EIS	Winegarner
3/23/17	Milne Pt. Unit Development Facilities	Trapper School, Sr. High Students	‘Oil’ Field Trip to see resource development near Nuiqsut	Winegarner
6/12/17	Nuiqsut	Thomas Napageak, Jr., Nuiqsut’s Mayor and AEWC Commission	Nalukataq	Winegarner
6/19/17	Nuiqsut	Carl Brower, President of Nuiqsut Whaling Captains Association	Nalukataq	Winegarner
7/14/17	Anchorage	Lanston Chinn, CEO of Kuukpik Corp., and Mark Major, Permitting Consultant for Kuukpik Corp	Liberty Project Permitting	Kaufman and Winegarner
7/18/17	Endicott Camp, North Slope	Eric Leavitt - Whaling Captain, Simeon Kittick - Whaler, & Justin Gatten - Whaling Captain and	Mutual Aid Deployment (MAD) Drill	Winegarner, Barnes

		North Slope Borough Risk		
7/20/17	Fairbanks	AEWC 2 nd Q Meeting	Liberty Project Acoustic Model Study	Croft, Kaufman, Sharp, Winegarner
8/23/17	Kuukpik Hotel, Nuiqsut	Justin Gatten - Whaling Captain and North Slope Borough	Dinner Meeting – Update on Liberty Project timeline	Winegarner
8/24/17	Kuukpik Hotel, Nuiqsut	Carl Brower, President of Nuiqsut Whaling Captains Association, Herbert Ipolok, Whaling Captain	Lunch Meeting – Update on Liberty Project timeline	Winegarner
8/24/17	Trapper School, Nuiqsut	All grades	Organize and participate in the Fun Run	Winegarner
8/24/17	Kuukpik Hotel, Nuiqsut	James Talaak, Nuiqsut City admin	Lunch Meeting – Update on Liberty Project timeline	Winegarner
8/25/17	Kuukpik Hotel, Nuiqsut	George Sielak – ASRC, Marth Itta – Native Village of Nuqisut, Eric & Dora Leavitt - Whalers	Lunch Meeting – Update on Liberty Project timeline	Winegarner

8/25/17	Kuukpik Offices, Nuiqsut	Joe Nukapigak, Kuukpik Corp. President	Update on Liberty Project timeline	Winegarner
8/26/17	Nuiqsut	Nellie Kaigelak, Kuukpik Corp.	Update on Liberty Project timeline	Winegarner
9/5/17	Cross Island	Thomas Napageak, Jr., Nuiqsut's Mayor and AEWC Commission, Carl Brower, President of Nuiqsut Whaling Captains Association, Herbert Ipolok, Eric Leavitt, Jimmy Arey, Edward Nukapigak, Whaling Captain	Observe Nuiqsut's Cross Island Whale hunt operation	Dunn and Winegarner
9/14/17	Kaktovik	Community of Kaktovik, AK	Community Meeting – review of Liberty Project draft EIS and alternatives	Dunn, Kaufman, and Winegarner
9/15/17	Kaktovik	Kaktovik Whaling Captains Association	review of Liberty Project activities and draft EIS timeline	Dunn, Kaufman, and Winegarner
9/18/17	Nuiqsut	Nuiqsut Whaling Captains Association	Agreement Proposal – Support for Nuiqsut's Cross Island Subsistence Activities	Dunn and Winegarner

9/19/17	Nuiqsut	Martha Itta, Native Village of Nuiqsut Administrator and Eunice Nukapigak	review of Liberty Project activities and draft EIS timeline	Dunn and Winegarner
10/16/17	Utqiagvik	Gordon Brower, Deputy Director, Land Management Regulations, Land Services and Community Planning	Liberty Project rezone and draft EIS timeline	Kaufman, Sjostrom
10/19/17	Anchorage	Mark Major, Permitting Consultant for Kuukpik Corporation, and Brain Boyd, Kuukpik Corporation's Legal Counsel	Liberty Project Acoustic Modeling Study	Winegarner
10/30/17	Nuiqsut	Nuiqsut Whaling Captains Association	MOU review and execution of DES comment letter.	Dunn, Kaufman, Winegarner
10/30/17	Nuiqsut	Community of Nuiqsut	Community Meeting – review of Liberty Project draft EIS and alternatives	Dunn, Kaufman, Winegarner
11/2/17	Anchorage	Carl Brower, President of the Nuiqsut Whaling Captains Association	Execution of the MOU Regarding Support for Nuiqsut's Cross	Winegarner

			Island Subsistence Activities	
11/2/17	Anchorage	Lanston Chinn, CEO of Kuukpik Corp., Brain Boyd, Kuukpik Corporation's Legal Counsel, and via phone Mark Major, Permitting Consultant for Kuukpik Corp	Liberty Project	Dunn and Winegarner
11/3/17	Anchorage	Edie Green, Native Allotment Owner	Liberty project overview, discussion of impacts to allotment.	Winegarner, Kaufman
12/6/17	Anchorage	Alaska Eskimo Whaling Commission	Review of Hilcorp outreach activities and Liberty Project DEIS alternatives	Kaufman, Winegarner
12/8/17	Anchorage	Thomas Napageak, Commissioner to AEWC, and Jessica Lafevre, AEWC legal counsel	Review of terms and conditions of the MOU Regarding Support for Nuiqsut's Cross Island Subsistence Activities	Winegarner

12/13/17	Utqiagvik	North Slope Borough Planning Department and Department of Wildlife Management	Liberty Project rezone	Dunn, Kaufman, Sharp
2/7/18	Utqiagvik	AEWC 2017 Annual Waling Captains' Mini Convention	Liberty Permitting and Studies Update	Hilcorp
3/9/18	Trapper School, Nuiqsut	Debbie Lancaster, Trapper School Principal	Discussed plans for an 'Oil' Field Trip to Milne Pt. for Sr. High Students	Winegarner
6/15/18	Nuiqsut	Thomas Napageak, Jr. - Nuiqsut Whaling Captain	Nalukataq	Barnes, Vetter, Hall, Hall, Jones, Jones, Greene, Greene, Winegarner
6/16/18	Nuiqsut	Jimmy Arey Oyagak - Nuiqsut Whaling Captain	Nalukataq	Winegarner
6/21/18	Nuiqsut	Herbert Ipalook - Nuiqsut Whaling Captain	Nalukataq	Winegarner
6/22/18	Nuiqsut	Eric Leavitt - Nuiqsut Whaling Captain	Nalukataq	Green, Green, Rothbarth, Rothbarth, Moore, Moore, Vallely Valley, Schulpen, Shine, Terrell, Winegarner

7/24/17	Fairbanks	AEWC 2 nd Q Meeting	Liberty Project Update	Kaufman, Shine, Winegarner
7/31/18	Nuiqsut	Nuiqsut Whaling Captains Association	MOU meeting to discuss 2018 Cross Islandf Hunt final prepsartion details	Dunn, Winegarner
7/31/18	Nuiqsut	Community Meeting	Liberty Project Update	Dunn, Winegarner
10/16/18	Anchorage	AEWC 3rd Quarterly Meeting	Liberty Permitting and Regulatory Update	Kaufman, Winegarner
12/11/18	Anchorage	North Slope Borough Planning Department	Regulatory Update	Kaufman
12/17/18	Utqiagvik	North Slope Borough Planning Department and Department of Wildlife Management	Master Plan and Rezoning Application Review	Kaufman
2019				
1/16/19	Anchorage	1st Triennial AEWC Meeting	Liberty Project Update, Cross Isalnd Study, CAA	Kaufman, Winegarner
2/26/19	Anchorage	Native Allotment Owners Meeting	Liberty Project Review	Kaufman, Winegarner
2/27/19	Anchorage	North Slope Borough Department of Wildlife Management	Studies Discussion for Rezoning	Kaufman & Sharp
3/4/19	Utqiagvik	North Slope Borough Planning Department and Department of Wildlife Management	Pipeline Technical Review, Spill Response, Planning Next	Kaufman, Sharp, Gardner, Green

			Steps for Rezone Application	
3/18/19	Nuiqsut	Nuiqsut Whaling Captain's Meeting	Lessons Learned from 2018 Whale Hunt and Review of the 2019 Cache List	Winegarner
3/19/19	Nuiqsut	Nuiqsut Trapper High School Students	3rd Annual 'Oil' Field Trip to Milne Pt. production facilities and drilling rig	Winegarner
3/20/19	Nuiqsut	Allotment Owner Meeting	Review of the Liberty Project with Lydia Sovalik Native Allotment Owner of AKFF011943B located east of Liberty Project	Winegarner
3/20/19	Utqiagvik	Allotment Owner Meeting	Review of the Liberty Project with Vera Nungasak and Ray David Aguvluk (heirs of Oenga) Native Allotment Owner of AKFF014632A	Winegarner

			located west of Liberty Project	
5/31/19	Utqiagvik	NSB Planning Department	Rezone Pre-Application meeting.	Kaufman, Sjostrom
6/7/19	Anchorage	Allotment Owner Meeting	Meet with Kitty Greene re: Liberty project status, allotment visit.	Winegarner, Kaufman, Shine

Attachment E

Bear Interaction Plan



Hilcorp Alaska, LLC



**HARVEST
PIPELINE**

Bear Interaction, Mitigation, and monitoring Plan for Hilcorp Alaska, LLC. areas of operation

North Slope, ALASKA
and
Kenai and Cook Inlet facilities

REVISED November 2018



This page intentionally left blank.



Table of Contents

1.0 PURPOSE 1

2.0 SUMMARY POINTS 1

3.0 HILCORP AREAS OF OPERATION AND ACTIVITIES..... 2

 3.1 MILNE POINT 3

 3.2 ENDICOTT 3

 3.3 NORTHSTAR 3

 3.4 KENAI AND COOK INLET FACILITIES 3

4.0 HILCORP’S GENERAL BEAR POLICIES FOR OILFIELD WORKERS..... 4

 4.1 GENERAL AVOIDANCE AND ENCOUNTER PROCEDURES 4

 4.2 SECURITY AND TRAINED HAZER RESPONSE PROCEDURES 5

 4.2.1 Cook Inlet Assets 5

 4.2.2 North Slope Assets 5

 4.3 SITE AT-RISK LOCATIONS AND SITUATIONS 5

 4.3.1 Material Storage 6

 4.4 REMOTE SITE WORK CONSIDERATIONS 6

 4.5 FOOD AND WASTE MANAGEMENT PLAN 6

5.0 POLAR BEAR SPECIFIC PROCEDURES 7

 5.1 BIOLOGY 7

 5.2 REGULATORY DRIVERS 8

 5.3 INTERFERING WITH, PHOTOGRAPHING, OR VIDEOTAPING POLAR BEARS..... 8

 5.4 MATERNAL POLAR BEAR DEN MITIGATION AND RESPONSE 9

 5.4.1 Snow Management of North Slope Facilities..... 11

 5.5 ICE ROAD CLOSURE PROTOCOLS IN RESPONSE TO MATERNAL DEN IDENTIFICATION 11

 5.6 INJURED OR DEAD POLAR BEAR 11

 5.7 OPERATIONAL SUPPORT VESSELS..... 11

 5.8 OPERATING CONDITIONS FOR AIRCRAFT 11

6.0 GRIZZLY/BROWN BEAR SPECIFIC PROCEDURES 12

 6.1 GRIZZLY/BROWN BEAR BIOLOGY 12

 6.2 GRIZZLY/BROWN BEAR REGULATORY DRIVERS 13

 6.3 DENNING GRIZZLY/BROWN BEAR..... 14

 6.4 INJURED OR DEAD GRIZZLY/BROWN 14

 6.5 TRAPPED GRIZZLY/BROWN/BLACK BEAR 15

 6.6 GRIZZLY BEAR LINGERING NEAR FACILITIES, OR BECOMING AGGRESSIVE 15

7.0 BLACK BEAR SPECIFIC PROCEDURES 15

 7.1 BIOLOGY 15

 7.2 REGULATORY DRIVERS 16

 7.3 DENNING BLACK BEAR 17



Revision Date: 11/1/2018

Bear Interaction, Mitigation, and Monitoring Plan

Revision Number: 00

Hilcorp Alaska, LLC Areas of Operation

7.4 INJURED OR DEAD BLACK BEAR 17

7.5 TRAPPED BLACK BEAR..... 17

7.6 BLACK BEAR LINGERING NEAR FACILITIES, OR BECOMING AGGRESSIVE 18

8.0 PERSONNEL TRAINING AND PROCEDURES 18

9.0 LESS-THAN-LETHAL (HAZING) AND LETHAL DETERRENCE 19

10.0 RECORD KEEPING AND REPORTING PROCEDURES..... 20

11.0 REFERENCE DOCUMENTS / APPENDICES 21

List of APPENDICES

Appendix A: FileTrail Instructions

Appendix B: Hilcorp Polar Bear Hazing and Deterrence Policies and Procedures

REview and revision log

Revision No.	Revision Date	Annual Review Y/N	Approval	Revision Description	AMOC No.
0	November 2018	Initial Issue	Beth Sharp	Initial Revision	12426



Revision Date: 11/1/2018

Bear Interaction, Mitigation, and Monitoring Plan

Revision Number: 00

Hilcorp Alaska, LLC Areas of Operation



Acronyms and Abbreviations

ACS	Alaska Clean Seas
ADF&G	Alaska Department of Fish and Game
Bear Interaction Plan	Bear Interaction, Mitigation, and Monitoring Plan for Hilcorp Alaska, LLC Areas of Operation
CFR	Code of Federal Regulations
ESA	Endangered Species Act
FLIR	forward looking infrared
ft	feet
Hilcorp	Hilcorp Alaska, LLC
km	kilometers
KNWR	Kenai National Wildlife Refuge
lbs	pounds
LOA	Letter of Authorization
mi	miles
MMPA	Marine Mammal Protection Act
NMFS	National Marine Fisheries Service
POC	point of contact
SBS	Southern Beaufort Sea
sq mi	square mile(s)
USFWS	United States Fish and Wildlife Service



Revision Date: 11/1/2018

Bear Interaction, Mitigation, and Monitoring Plan

Revision Number: 00

Hilcorp Alaska, LLC Areas of Operation

This page intentionally left blank.



1.0 PURPOSE

The purpose of this Bear Interaction, Mitigation, and Monitoring Plan for Hilcorp Alaska, LLC Areas of Operation (Bear Interaction Plan) is to establish processes for managing human-bear interactions within Hilcorp Alaska, LLC (Hilcorp) statewide operating fields and facilities. The primary objectives of this plan are to ensure impacts to humans and bears are minimized during oil field activities. Methods for prompt communication of bear presence (polar, grizzly/brown, and black bears) in the field are included so appropriate avoidance or active deterrence measures by appropriate personnel may be taken. The following summary points provide a quick reference for employees and contractors to ensure they are in compliance with the basic directives of this Bear Interaction Plan.

2.0 SUMMARY POINTS

- Be aware of bear activity in your work area. At North Slope facilities, when Security becomes aware of a bear, they will notify workers of the presence of the bear and its location. Workers may be notified of the bear by direct communication or via radio transmission.
- Before conducting work outside in an area with potential for bears, discuss with the individual issuing work permits how the presence of bears will be communicated to you and your crew.
- Check the work area before leaving the safety of a vehicle or building. If a bear was recently sighted in or around the work area or operating unit, take additional precautions (*e.g.*, posting a bear guard) to look for bears while working.
- Handle food and dispose of food waste properly so bears or other wildlife are not intentionally or unintentionally fed. Do not leave food or food waste outside. Never leave food or food waste in the bed of a truck. Never leave food or food waste inside an unattended vehicle for extended periods of time. Dispose of food and food waste in wildlife resistant dumpsters.
- In general, dens are not visible to the naked eye, so proactive monitoring procedures to locate dens in project areas are conducted each year in collaboration with United States Fish and Wildlife Service (USFWS). Projects involving work that will be conducted off pads or roads and are scheduled to occur between November 15 and April 15 are mapped.
- Do not approach or move toward any species of bear or bear dens. Photographing or videotaping a maternal polar bear within 1 mile (mi) of the den site is, in general, authorized only for those persons needing to document bear condition, behavior, and/or location for regulatory or scientific purposes. Unless authorized, anyone who deliberately stops within 1 mi of a polar bear den site to observe or photograph, or approaches the polar bear den puts themselves and others in danger and will be subject to disciplinary actions. Unless trained and authorized by the USFWS, disturbing a polar bear is illegal.



- Non-authorized personnel may photograph a polar bear but **only** if a photograph can be obtained without disturbing the bear or changing the bear's behavior. In almost all cases, this means the only approved scenario for non-authorized personnel to legally take a photograph or video is from inside a building, through a closed window. Unless trained and authorized by USFWS, disturbing a polar bear or doing anything that causes it to change behavior is illegal.
- If any species of bear or bear den is sighted, move to a safe location and immediately notify the appropriate Reporting Point of Contact (POC). The Reporting POC is defined as: Purcell Security for North Slope operations, including Milne Point, Endicott, and Liberty; Alaska Clean Seas (ACS) for Northstar Island activities; the Lead Operator at Kenai/Cook Inlet facilities; and the Hilcorp Project Lead for Kenai/Cook Inlet projects. Hereafter, these individuals will collectively be referred to as the Reporting POC. The Reporting POC is responsible for notifying other personnel on site.
- If necessary, assist the Reporting POC in completing a Bear Reporting Form – North Slope ([AK-13187](#)) (not for polar bear), Bear Reporting form – Kenai/Cook Inlet ([AK-13186](#)), or Polar Bear Reporting Form ([AK-13188](#)).
- Projects involving work that will be conducted off North Slope pads or roads and are scheduled to occur between November 15 and April 15 are mapped; and in areas where potential denning habitat is located, a forward looking infrared (FLIR) survey may be required to search for active dens.
- Supervisors shall notify other workers and work groups (including other contractors) of the presence of recently sighted bears as necessary via radio, alarms, and other methods or via Security personnel.
- Unless trained to do so, do not take any action to deter a bear's activities; only designated and trained personnel are authorized to take action to influence bear activities (*i.e.*, haze). All workers are required to report sightings and interactions with bears to the Reporting POC as soon as practicable, but not later than the end of their shift. All workers are required to report suspected den sites immediately.

3.0 HILCORP AREAS OF OPERATION AND ACTIVITIES

Hilcorp operates Alaska state-wide facilities year-round. These units are made up of several oilfields and facilities in which personnel are actively producing and processing oil and gas, while maintaining infrastructure and transportation systems to accommodate such activities. Hilcorp routinely operates hovercraft, boats, and helicopters for access to these facilities.

Other routine activities include maintenance of existing oil and gas production infrastructure including wells, pipelines, processing facilities, roads, pads, and other support equipment. As new opportunities for oil recovery are developed, additional similar infrastructure may be required to more fully develop the reservoir(s).

	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan
	Revision Number: 00	Hilcorp Alaska, LLC Areas of Operation

Construction and maintenance projects may also occur within producing fields, and additional pad development may be undertaken to enhance oil recovery within the units. These processes could involve such activities as winter construction of ice pads and ice roads, construction of gravel roads and pads, seismic acquisition, and remediation and rehabilitation work or research that could require off-pad work.

General location maps are presented in Figure 1 – Cook Inlet Overview Map and Figure 2 – North Slope Assets.

3.1 Milne Point

Located approximately 56 kilometers (km) (35 mi) northwest of Prudhoe Bay, the Milne Point oilfield consists of more than 220 wells drilled from 12 gravel pads. The total area of Milne Point and its satellites is 94.4 hectares (236 acres) of tundra, including 31 km (19 mi) of gravel roads, 64 km (40 mi) of pipelines, and one gravel mine site. The Milne Point Operations Center has accommodations for up to 300 people.

3.2 Endicott

The Endicott oilfield is located approximately 16 km (10 mi) northeast of Prudhoe Bay. The Endicott oilfield was developed from two man-made gravel islands connected to the mainland by a gravel causeway. The operations center and processing facilities are located on the 18-hectare (45-acre) Main Production Island. Approximately 80 wells have been drilled to develop the field. Two satellite fields drilled from Endicott's Main Production Island access oil from the Ivishak formation. The total Endicott development area is 156.8 hectares (392 acres) of land with 25 km (15 mi) of roads, 47 km (29 mi) of pipelines, and one gravel mine site. Approximately 100 people are housed at the Endicott Operations Center.

3.3 Northstar

The Northstar oilfield is located 6 km (4 mi) northwest of the Point McIntyre field and 10 km (6 mi) from Prudhoe Bay in approximately 39 feet (ft) of water. The reservoir has been developed from a 2-hectare (5-acre) artificial island. The island will eventually contain 19 producing wells, six gas injector wells, and one solids injection well. A subsea pipeline connects facilities to the Prudhoe Bay oilfield. Access to Northstar is via helicopter, hovercraft, and boat in the summer; hovercraft and helicopter during freeze-up and break-up; and ice road during the winter.

3.4 Kenai and Cook Inlet Facilities

Kenai and Cook Inlet Facilities Fields/areas covered in this plan include the Kenai Gas Field, Cannery Loop, Deep Creek Unit, Kasilof Pad, Nikolaevsk Unit, Ninilchik Unit, West Side Gas Field (Ivan River, Stump Lake, Lewis River, and Pretty Creek units), Beluga River Unit, Trading Bay Production Facility, Granite Point Tank Farm, Drift River Terminal, Swanson River Field, Middle Ground Shoal Facility, and Cook Inlet offshore platforms. Access to these facilities is via vehicle, boat, or helicopter.

	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan
	Revision Number: 00	Hilcorp Alaska, LLC Areas of Operation

4.0 HILCORP'S GENERAL BEAR POLICIES FOR OILFIELD WORKERS

The following actions are to be taken to lessen the chance of a bear interaction. They present a common sense approach to keep all oilfield workers safe when working at Hilcorp facilities and on Hilcorp projects.

4.1 General Avoidance and Encounter Procedures

The primary strategy for avoiding bear-human interactions is to minimize the attractiveness of work sites. The continual presence of active machinery and vehicles tends to discourage bears from approaching work sites, and vehicle operators performing their normal duties are generally able to detect bears nearby. If a bear should remain on site for an extended period or if personnel are at risk, active deterrence may be necessary. Active deterrence for polar bears is authorized under Hilcorp's Letter of Authorization (LOA) for intentional take from USFWS. Incidental take for polar bears is authorized under a separate LOA. Hilcorp has two Public Safety Permits from the Alaska Department of Fish and Game (ADF&G) for active deterrence by trained personnel for black bears and grizzly/brown bears within Kenai/Cook Inlet facilities and separately for North Slope facilities. Only Security personnel or other properly trained and authorized individuals are permitted to engage in active deterrence (*i.e.*, hazing) of bears.

Hilcorp's Public Safety Permits and LOAs are updated regularly (annually or every 5 years per agency requirements). Copies of current permits/authorizations can be found in FileTrail. See Appendix A for guidance on navigating FileTrail.

Hilcorp field camps and personnel can limit encounters of bears by being observant of approaching animals (*i.e.*, the use of bear guards or notification for equipment operators) and, if practicable, by allowing the animals to continue their travel. All personnel will check their work area before leaving the safety of a vehicle or building. If a bear was recently sighted in or around the work area or operating unit, personnel shall take additional precautions (*e.g.*, posting a bear guard) to look for bears while working. All sightings of polar bears must be reported to Security immediately.

To further reduce the risk of an encounter, all personnel shall monitor radio transmissions and/or maintain open lines of communications with area operators to enable quick notification of the presence of bears in a work vicinity.

All operations conducted during hours of darkness will be appropriately and adequately lit to see areas surrounding the work location (*e.g.*, use of light towers). Other on-going operations, such as aerial photography and pipeline inspections, will note the presence of any bears in the area and will forward that information to the Reporting POC.



When initiating new projects in new locations or outside existing infrastructure, employees or contractors should contact ADF&G to acquire information regarding locations of black and grizzly/brown bear dens before construction activities occur to ensure worker safety. Refer to the “Wildlife Reporting Matrix” (“Appendix C” to the *Hilcorp Alaska Master Wildlife Compliance Procedure* [[AK-13252](#)]) for appropriate contacts for specific areas.

Reporting POC
<u>Milne Point, Endicott, and Liberty fields:</u>
Security
<u>Northstar:</u>
ACS
<u>Kenai/Cook Inlet Facilities:</u>
Lead Operator
<u>Kenai/Cook Inlet Projects:</u>
Hilcorp Project Lead

4.2 Security and Trained Hazer Response Procedures

4.2.1 Cook Inlet Assets

At Hilcorp’s Cook Inlet assets, the Hilcorp Facility Lead Operator or Project Lead is responsible for alerting personnel to the presence of a bear, monitoring the bear, and filling out the Bear Reporting Form – Kenai/Cook Inlet ([AK-13186](#)). The Hilcorp Asset Team Environmental Specialist or Wildlife and Habitat Specialist will make notifications to ADF&G when required.

4.2.2 North Slope Assets

At the Milne Point, Endicott, and Liberty fields, Security is responsible for alerting personnel to the presence of a bear. When Purcell Security is notified of a bear sighting, an officer or other trained bear hazer will conduct a reconnaissance of the area where the bear was sighted. If there is no immediate threat to workers and the bear is not in close proximity to working and living areas, the officer or trained hazer will fill out the Bear Reporting Form – North Slope ([AK-13187](#)) or Polar Bear Reporting Form ([AK-13188](#)), make notifications to required agencies and Hilcorp environmental personnel, and notify workers to stay away from the location. Depending on the situation, Security may choose to watch the bear’s activity for a period of time or make periodic checks of the bear’s location to assess the on-going situation. Under certain circumstances, USFWS may request 24-hour surveillance of a polar bear(s).

At the Northstar oilfield, the Field Foreman and on-site Environmental Technician are responsible for alerting ACS and personnel to the presence of a bear. The Environmental Technician will monitor the bear in the vicinity of Northstar Island and fill out the Bear Reporting Form – North Slope ([AK-13187](#)) or Polar Bear Reporting Form ([AK-13188](#)) and make notifications to required agencies and Hilcorp environmental personnel.

4.3 Site At-risk Locations and Situations

All personnel shall be aware of the layout of their work site, including the location of buildings (especially all doors), roads, dumpsters, and storage areas. For the vast majority of personnel, the most heavily traveled areas are between the airports and living quarters, and from the living quarters to the facilities. All personnel are instructed to look for bears before leaving buildings. Entrances to the camps, production facilities, and shops are to be well lit at all times.

When practicable, all personnel should have access to “safe areas” such as buildings, warm-up shacks, or vehicles. If not practicable, a bear guard authorized to haze should be present with the

	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan
	Revision Number: 00	Hilcorp Alaska, LLC Areas of Operation

work crew. Personnel should be adequately briefed on bear activity before conducting work outside. Safety briefings detailing the routes to a safe location, site-specific at-risk locations, and other appropriate bear safety topics should be conducted during shift change and/or tailgate safety meetings.

4.3.1 Material Storage

Pipe, oil, hydraulic fluid, glycol, and many other materials are stockpiled in oilfields. Liquids are typically stored together in 55-gallon drums, Department of Transportation-approved chemical totes or tanks, in warehouses, or on storage pads. These containers are bear-proof when intact and should be kept closed when not in use. Dry materials are typically stored in packs on pallets. Where possible, snow will be regularly removed from around the stacks of materials to minimize potential bear hiding places. In addition, exterior-stored pallets and drums will either be placed very close together or will be separated widely enough in an attempt to eliminate potential hiding places. Also, to prevent the creation of access ramps for polar bears into protected areas (e.g., area within the sheet piling wall on Northstar Island) materials shall not be stacked next to the protected area barrier. Mobile light towers should be used to light project-specific storage areas. All personnel will be instructed to drive around to inspect storage areas before leaving their vehicles. Wherever possible, personnel should avoid working alone in areas without a clear line-of-sight to a vehicle or other safe area. Personnel should notify the Reporting POC of any damage to property that appears to be wildlife-related.

4.4 Remote Site Work Considerations

On the North Slope, if workers are required to be in a remote area (or off-pad), Security should be notified. Security or other assigned personnel may accompany personnel if the bear risk is believed to be high. A bear guard or pepper spray may be required, if deemed necessary based on the pre-job risk assessment. Requests for a bear guard should be directed to Security as early as possible, preferably 2 weeks prior to initiation of the activity. At Northstar, similar procedures should be taken with ACS. If pepper spray is required, contact the Hilcorp Wildlife and Habitat Specialist for guidance.

Remote work in Kenai/Cook Inlet areas of operation may also require use of a bear guard. If a bear guard is determined to be necessary based on the pre-job risk assessment, the Lead Operator or Hilcorp Project Lead should work with the Hilcorp Wildlife and Habitat Specialist for guidance. Security or the assigned bear guard will be contacted if a bear is sighted at a remote work site, and respond accordingly. The Reporting POC will report sightings and interactions to ADF&G for grizzly/brown bears and black bears, USFWS for polar bears, and the Hilcorp Wildlife and Habitat Specialist in Anchorage.

4.5 Food and Waste Management Plan

The only dumpsters approved for food waste disposal in the North Slope oilfields and near Hilcorp facilities are bear-proof. All garbage that contains food should be bagged before being deposited into animal-proof dumpsters. The dumpsters are generally in high-visibility and high-traffic areas. Bear activity near the dumpsters should be reported to the Reporting POC and the



Hilcorp Asset Team Environmental Specialist or Wildlife and Habitat Specialist so corrective measures can be taken before problems arise (e.g., replacing existing dumpster with a bear/animal-proof dumpster). Notify the Reporting POC and the Hilcorp Asset Team Environmental Specialist or Wildlife and Habitat Specialist of dumpsters with food waste that are deformed or cannot be closed. Garbage and other food-related waste should not be left in vehicles (neither in the bed nor inside the cab).

5.0 POLAR BEAR SPECIFIC PROCEDURES

5.1 Biology

Polar bears (*Ursus maritimus*) can be found anywhere on the North Slope; however, they are concentrated near the coast and are most frequently sighted near facilities, roads, and pads along the shoreline (particularly at Endicott, Liberty Satellite Drilling Island, West Dock, Northstar, and Milne Point). Both single animals and females with cubs may be sighted. Although polar bears are encountered throughout the year, they are most often seen during summer, autumn, and winter.

Polar bears can weigh more than 1,500 pounds (lbs) and measure 5 ft tall at the shoulder or 12 ft when standing on their hind legs. They are excellent swimmers and can run 25 mi per hour. Because of their size, speed, and curious nature, any encounter with these large carnivores is potentially dangerous.

Polar bears are dependent on snow drifts for denning. Pregnant females excavate dens in snow and ice in early winter, usually mid-November. Successful denning by polar bears requires sufficient accumulation of snow in the autumn and early winter for den construction. Topographic features likely to accumulate snow suitable for denning habitat include the coast, riverbanks, and lakeshores with abrupt changes in elevation. Historically, nearly half the Southern Beaufort Sea (SBS) stock of polar bear dens were located on multi-year pack ice. Recent evidence has shown an increasing trend toward use of terrestrial habitat for maternal denning, with fewer dens on shore-fast ice. Polar bears of the SBS population exhibit fidelity to denning areas but not specific den sites. Polar bears show an affinity for core areas for denning. The core denning areas for terrestrial dens are where 95% of known den locations have occurred. This area includes lands within 32 km (20 mi) of the northern coast of Alaska from the United States-Canada border west to the Kavik River and within 8 km (5 mi) of the coast from the Kavik River to Barrow. In other areas, denning is less concentrated.

Hilcorp employees, contractors, and others working in the Hilcorp oilfields are required to avoid known dens by 1 mi. In general, dens are not visible to the naked eye, so proactive monitoring procedures to locate dens in project areas are conducted each year in collaboration with USFWS. Projects involving work that will be conducted off pads or roads and are scheduled to occur between November 15 and April 15 are mapped; and in areas where potential denning habitat is located, researchers use FLIR to search for active dens.

	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan
	Revision Number: 00	Hilcorp Alaska, LLC Areas of Operation

5.2 Regulatory Drivers

This Bear Interaction Plan satisfies requirements of North Slope Borough Title 19 mitigation measures and development permits, Hilcorp’s USFWS LOAs for incidental and intentional take, and ADNOR – Division of Oil and Gas mitigation measures. Polar bears are protected under the Marine Mammal Protection Act (MMPA) of 1972 and are listed as threatened under the Endangered Species Act (ESA) of 1973 as amended in 2008. In accordance with the MMPA and ESA, it is illegal to “take” polar bears. To take a polar bear is to:

- “Harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal” according to the MMPA; or to
- “Harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct” according to the ESA.

The MMPA further defines harassment as:

Any act of pursuit, torment, or annoyance which (i) has the potential to injure a marine mammal or marine mammal stock in the wild [Level A harassment]; or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing a disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering but which does not have the potential to injure a marine mammal or marine mammal stock in the wild [Level B harassment].

On the North Slope, USFWS is the regulatory authority tasked with oversight, management, and conservation of polar bears. The United States Geological Service Biological Resource Division also has staff involved with polar bear management and research.

USFWS can authorize incidental take of marine mammals under Sections 101(a)(5)(A) and (D) of the MMPA and can authorize intentional take of marine mammals under Sections 101(a)(4)(A), 109(h), and 112(c) of the MMPA through issuance of the LOA.

Section 101(c) of the MMPA allows, without specific authorization, the take (including lethal take) of a polar bear if such a taking is imminently necessary in self-defense or to save the life of a person in immediate danger, and such taking must be reported to USFWS within 24 hours.

5.3 Interfering with, Photographing, or Videotaping Polar Bears

Polar bears are top predators, and any encounter with them is potentially dangerous and could be life-threatening. Company policy prohibits interfering with polar bears in Hilcorp-operated fields, except for approved scientific research, regulatory, or security reasons. Interfering with polar bears is defined as any activity that may cause a change in the bear’s behavior. This policy is strictly enforced.



Photographing or videotaping a polar bear or maternal polar bear den is authorized only for those persons needing to document bear condition, behavior, and/or location for regulatory or scientific purposes. Other persons may photograph or video a polar bear **only if** the photography can be obtained without disturbing the bear (*e.g.*, photo taken from inside a building, through a closed window). Disturbance is defined as any activity which causes the bear to alter its behavior. Vehicles shall not be stopped in the roadway for the purposes of viewing, photographing, or videotaping polar bears. Unless trained and authorized by the USFWS, disturbing a polar bear is illegal.

5.4 Maternal Polar Bear Den Mitigation and Response

Pregnant female polar bears overwinter in dens dug in snow. Denning occurs on land and ice. Hilcorp employees, contractors, and others working in the Hilcorp oilfields are required to avoid known dens by 1 mi. In general, dens are not visible to the naked eye, so proactive monitoring procedures to locate dens in project areas are conducted each year in collaboration with USFWS. Projects involving work that will be conducted off pads or roads and are scheduled to occur between November 15 and April 15 are mapped; and in areas where potential denning habitat is located, researchers use FLIR to search for active dens. If a den is later discovered that was not detected using FLIR (for example, if a bear emerges from a den within 1 mi of a work site), all work must stop immediately and Security (or ACS for Northstar) personnel contacted. Purcell Security/ACS personnel must report all known or suspected dens to USFWS and the Hilcorp Wildlife and Habitat Specialist immediately (not more than 12 hours after discovery). Work may not recommence without written clearance from USFWS, the Asset Team Environmental Specialist, and the Hilcorp Wildlife and Habitat Specialist.

The following protocols outline the initial response to discovery of an active or suspected maternal polar bear den when working on ice roads/pads **operated by Hilcorp** or via cross country off-road travel away from existing infrastructure (*e.g.*, facilities, causeways, roads, or pads).

- 1) All workers must be vigilant for signs of undetected dens in their vicinity. This includes sightings of polar bears, suspected dens, or tracks. If a bear, suspected den, or tracks are seen within a 1-mi buffer around the work or travel area (*e.g.*, seismic activity, ice roads) or if an active polar bear den is discovered, site personnel shall contact Security/ACS, the Asset Team Environmental Specialist, and the Hilcorp Wildlife and Habitat Specialist.



- 2) For work in Hilcorp-operated fields, the Hilcorp Asset Team Environmental Specialist or Wildlife and Habitat Specialist will be the single point of contact between USFWS and operations staff and will keep USFWS informed about the situation via phone and email contact. If the site, project, or ice road is not operated or controlled by Hilcorp, all Hilcorp staff and contractors will comply with directions given by the oilfield operating company who is associated with the site or road (e.g., ConocoPhillips, Caelus, BP Exploration Alaska, etc.).
- 3) Upon an initial report of a bear, tracks, or a suspected den, the Hilcorp Asset Team Environmental Specialist or Habitat and Wildlife Specialist will dispatch Security/ACS to try to determine if the bear is associated with an active den. Once dispatched, Security/ACS personnel should try to determine if the site is greater or less than 1 mi from the area of activity.
- 4) If a bear is observed near an off-road work site or ice road between March 1 and April 15, even if a den entrance is not seen, it will be assumed to be associated with a den until it is determined that the bear is not associated with a den. If the bear is determined to be associated with a den, the Hilcorp Asset Team Environmental Specialist or Wildlife and Habitat Specialist will immediately contact USFWS and assign someone from Security/ACS to monitor the bear and immediate area.
- 5) The Hilcorp Asset Team Environmental Specialist or Wildlife and Habitat Specialist will communicate with other user groups, company staff, and contractors about the situation and keep them informed of any developments. If the site or ice road is not operated by Hilcorp, all Hilcorp staff and contractors will comply with directions given by the company in charge of the site or road.
- 6) If an active maternal den is confirmed to be more than 1 mi away from the ice road or other activity, the den and bears will be monitored by Security/ACS personnel only if directed by USFWS. A remote camera may be set up by USFWS personnel, or their representative, to record activity at the den site.
- 7) If an active maternal den is confirmed to be less than 1 mi away from the ice road or other activity, the Hilcorp Asset Team Environmental Specialist or Wildlife and Habitat Specialist will immediately call USFWS and determine the appropriate course of action. If needed, Hilcorp will initiate a stop work or road closure under the direction of USFWS.

<p style="text-align: center;">Reporting POC <u>Milne Point, Endicott, and</u> <u>Liberty fields:</u> Security <u>Northstar:</u> ACS <u>Kenai/Cook Inlet Facilities:</u> Lead Operator <u>Kenai/Cook Inlet Projects:</u> Hilcorp Project Lead</p>



5.4.1 Snow Management of North Slope Facilities

To reduce the availability of hiding places and denning locations for polar bears and to prevent the creation of access ramps for polar bears into protected areas (e.g., area within the sheet piling wall on Northstar Island), all drifting snow is to be cleared as needed or as soon as weather permits. Snow should be removed to the nearest available area adjacent to the location or to predetermined, permitted dump sites. Where practicable, large snow berms on working surfaces should be kept to a minimum as they become potential hiding locations for bears. Personnel responsible for snow removal should sweep the location with their headlights before exiting their vehicles. Any sign of bears must be reported to Security/ACS immediately.

5.5 Ice Road Closure Protocols in Response to Maternal Den Identification

Protocols will be negotiated with USFWS on a case-by-case basis for road closure in the event an active maternal den is confirmed to be less than 1 mi away from any road operated by Hilcorp.

5.6 Injured or Dead Polar Bear

Unauthorized collection, handling, possession, selling, transporting, or shipping of polar bears or their parts is **illegal** under the ESA [FWS-R7-ES-2008-0038, May 15, 2008]. Polar bear carcasses (including bones, fur, and partial carcasses) should be reported immediately following the protocol described for sightings of live bears. Carcasses **cannot be collected, handled, possessed, moved, or shipped** without written permission from USFWS. Contact the Hilcorp Asset Team Environmental Specialist or Wildlife and Habitat Specialist for further guidance.

Seal and whale carcasses are periodically found on the beaches near the oilfields. Seal are a primary food source for polar bears; therefore, these carcasses are also an attractant for polar bears. Seal and whale carcasses should be reported to the Hilcorp Asset Team Environmental Specialist or Wildlife and Habitat Specialist and Security/ACS so they can be addressed before they become polar bear attractants.

5.7 Operational Support Vessels

The captain or a designated crewmember of vessels used as part of regular oilfield operations shall maintain a watch for marine mammals during vessel operations and will alert the vessel crew of the presence of polar bears. Vessels will maintain the maximum distance possible from polar bears. Other than emergency or approved hazing situations, vessels will not approach within a 0.5-mi radius of polar bears observed on land or ice. Vessels will adjust speed according to weather conditions to avoid the likelihood of contact with marine mammals.

5.8 Operating Conditions for Aircraft

Operators of support aircraft shall, at all times, conduct their activities at the maximum distance possible from polar bears. Other than in an emergency, aircraft shall not be operated at an altitude lower than 1,500 ft within 0.5 mi of polar bears observed on ice or land. Helicopters may not hover or circle above such areas or within 0.5 mi of such areas. When weather conditions do not allow a 1,500-ft flying altitude, such as during storms or when cloud cover is low, aircraft

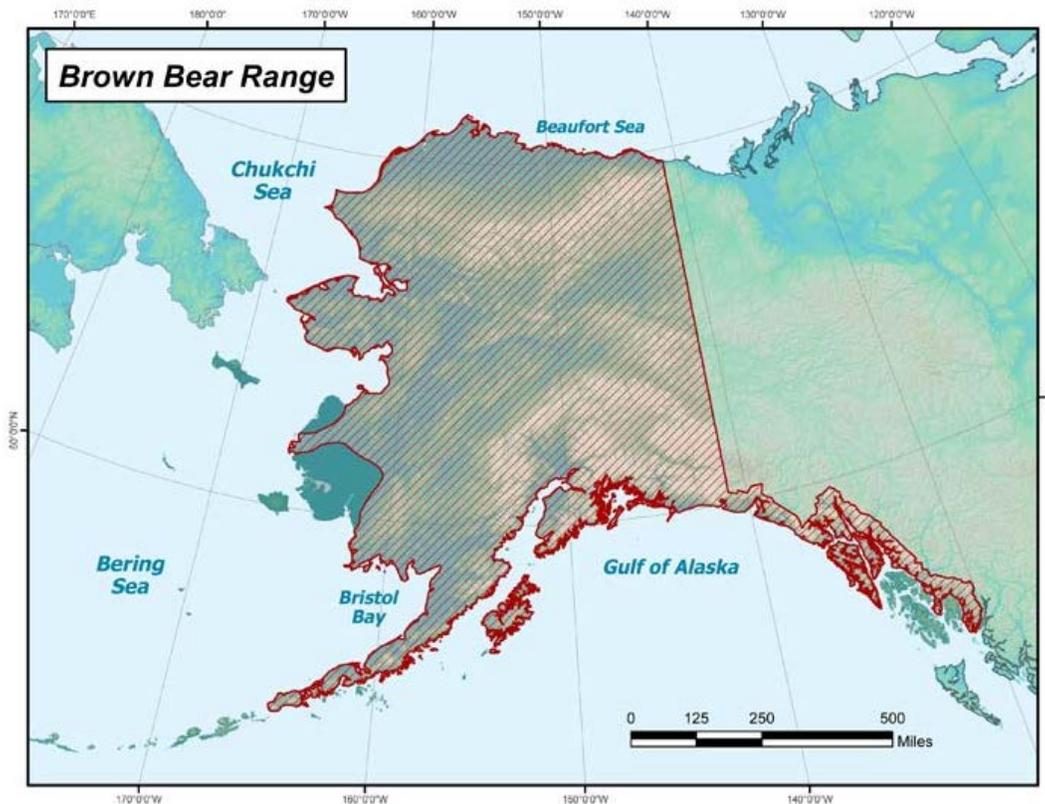
	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan
	Revision Number: 00	Hilcorp Alaska, LLC Areas of Operation

may be operated below the 1,500-ft altitude stipulated above. However, when aircraft are operated at altitudes below 1,500 ft due to weather conditions, the operator must avoid areas of known polar bears/dens and should take precautions to avoid flying directly over or within 0.5 mi of these areas.

6.0 GRIZZLY/BROWN BEAR SPECIFIC PROCEDURES

6.1 Grizzly/Brown Bear Biology

The term grizzly bear refers to the northern and interior population whereas the term brown bear refers to the southern coastal population; although they are recognized as the same species, *Ursus arctos*. Normal grizzly bear densities for the Arctic Coastal Plain are one to two bears per 100 square miles (sq mi). In the foothills of the Brooks Range, where there is a greater variety of food, densities reach seven bears per 100 sq mi. On the Kenai Peninsula, densities reach 11 grizzly bears per 100 sq mi. Bear density generally reflects food availability, suggesting that on the Arctic Coastal Plain, lack of an abundant and predictable food resource limits the population. This also underscores why anthropogenic food sources can become an attractive target for bears that have fewer alternative foods. Brown bears typically live along the southern coast of the state where they have access to seasonally abundant spawning salmon. The coastal areas also provide a milder climate and an array of vegetation as a food source. In central Alaska, both north and south of the Alaska Range, bear densities tend to be intermediate, about one bear per 15 to 25 sq mi. For the purpose of clarity, the term brown and grizzly bear are interchangeable in this document and refer to the same species *Ursus arctos*.



Source: <http://www.adfg.alaska.gov/index.cfm%3Fadfg%3Dbrownbear.rangemap>

To meet all their nutrition needs, including almost 7 months of hibernation, grizzly/brown bears select foods from a wide variety of sources. They feed seasonally on vegetation, such as succulent plants, roots, and berries, and also prey and scavenge on a variety of wildlife species, such as arctic ground squirrels and other rodents, bird eggs and nestlings, fox pups, musk ox, caribou, marine mammal carcasses, and other carrion. Grizzly/brown bears on the Arctic Coastal Plain prefer riparian habitats (areas along rivers and streams) because these areas provide the greatest diversity of foods. Brown bears have an exceptionally acute sense of smell, exceeding that of dogs.

Grizzly/brown bear weight varies by age, gender, location, and time of year. They weigh about 1 pound at birth and attain adult size by age 6. Adult males tend to be 30 to 50% larger than females. A large male may weigh up to 1,500 lbs in coastal areas or up to 500 lbs in interior areas. They weigh the least when they emerge from their dens in the spring and can increase their weight by more than 50% during late summer and fall. The largest grizzly/brown bear ever killed had a skull that was 17.9 inches and 12.8 inches wide. Such a bear, when standing on its hind feet, would be more than 10 ft tall. They can run in short bursts up to 40 mi per hour and are excellent swimmers.

6.2 Grizzly/Brown Bear Regulatory Drivers

This Bear Interaction Plan satisfies requirements of North Slope Borough Title 19 mitigation measures and development permits and ADNR – Division of Oil and Gas mitigation measures.



In addition, this plan provides guidance for hazing grizzly/brown bears as authorized under Hilcorp’s ADF&G Public Safety Permits for both North Slope and Kenai/Cook Inlet assets.

6.3 Denning Grizzly/Brown Bear

Grizzly/brown bear dens provide bears with protection and security during the winter months. Grizzly/brown bears den in the oilfields beginning in late September and remain in dens until mid-May. Permafrost is a limiting factor for denning in the Arctic because grizzly/brown bear dens are dug into the ground. This generally restricts den sites to well-drained habitats such as pingos, stream banks, hillsides, and sand dunes where insulating snow cover tends to accumulate in the southwestern lee of prevailing winds. Dens are typically used only once. Hilcorp, contractors, and others are required to avoid known dens within a 0.5-mi radius.

To help avoid known den sites for project activities conducted off the existing road system between September and May, the Hilcorp Asset Team Environmental Specialist or Wildlife and Habitat Specialist will coordinate with project supervisors to share the latest known bear locations. Should additional bear den surveys be determined necessary (based on location of the project), project supervisors and the Hilcorp Asset Team Environmental Specialist or Wildlife and Habitat Specialist will coordinate the denning surveys.

Results of the survey will be shared with all project workers. The Hilcorp Asset Team Environmental Specialist and Wildlife and Habitat Specialist must be notified immediately (within 12 hours) if a den is found. For dens observed within the Kenai National Wildlife Refuge (KNWR), the Reporting POC shall contact KNWR management (USFWS) to report the location.

Reporting POC
<u>Milne Point, Endicott, and Liberty fields:</u>
Security
<u>Northstar:</u>
ACS
<u>Kenai/Cook Inlet Facilities:</u>
Lead Operator
<u>Kenai/Cook Inlet Projects:</u>
Hilcorp Project Lead

6.4 Injured or Dead Grizzly/Brown

Contact the Reporting POC for all grizzly/brown bear sightings (live, injured, or dead). The Reporting POC will use the Bear Reporting Form – North Slope ([AK-13187](#)) or Bear Reporting Form – Kenai/Cook Inlet ([AK-13186](#)) to report sightings of injured or dead grizzly bears and submit the form to agency and Hilcorp personnel listed on the form. Contact information can also be found in the “Wildlife Reporting Matrix” (“Appendix C” to the *Hilcorp Alaska Master Wildlife Compliance Procedure* [[AK-13252](#)]). Injured but mobile bears shall be left alone if they are not near living or working areas and do not present a threat to worker safety. Dead bears should be left alone if found in a remote location where scavengers would not present a threat to worker safety. If a carcass is found near or on a pad or on the road, the Reporting POC will consult the Hilcorp Asset Team Environmental Specialist or Wildlife and Habitat Specialist who will contact ADF&G to determine the best course of action to remove or relocate the carcass. Movement of the carcass may be required if it attracts other wildlife to an area that may pose a threat to personnel safety. A third party may provide assistance in relocation or removal of the carcass or with collecting and shipping the carcass if requested by ADF&G. Although rare, take precautions against rabies, and if suspected notify ADF&G and the Hilcorp Asset Team Environmental Specialist or Wildlife and Habitat Specialist immediately. Should ADF&G request shipment of the carcass, the Hilcorp Asset Team

	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan
	Revision Number: 00	Hilcorp Alaska, LLC Areas of Operation

Environmental Specialist or Wildlife and Habitat Specialist will coordinate with a third party to arrange for shipment.

6.5 Trapped Grizzly/Brown/Black Bear

Occasionally, grizzly/brown bears will wander into buildings or other oilfield infrastructure and become trapped. If a grizzly/brown bear is trapped (*e.g.*, inside a building or excavation, man-made structure such as reserve pits and well cellars, etc.) or entangled in oilfield equipment (fences, wire) contact the Hilcorp Asset Team Environmental Specialist or Wildlife and Habitat Specialist immediately. They will coordinate with the Reporting POC and ADF&G to determine a course of action if/when needed. ACS is responsible for trapping and physically handling the animals on the North Slope, and if necessary a third party will be contracted for Kenai/Cook Inlet areas of operation. Opening building doors and or evacuation may be options.

6.6 Grizzly Bear Lingering Near Facilities, or Becoming Aggressive

Sometimes a grizzly/brown bear will linger close to a facility or work site. This could be for a number of reasons, from looking for an easy meal to being sick or just needing to rest. If the bear lingers long enough to disrupt work or present a consistent safety problem, they may need to be moved from the area, such as through utilization of hazing techniques in accordance with permit stipulations and guidance in Appendix B. Should such a bear linger, notify the Reporting POC who will then notify the Hilcorp Asset Team Environmental Specialist or Wildlife and Habitat Specialist to determine the best course of action. They will coordinate with the Reporting POC and ADF&G. ACS may provide assistance with trapping and physically handling wildlife on the North Slope and is authorized under ADF&G permits to haze grizzly bear at applicable facilities. If necessary, a third party secured will be contacted for Kenai/Cook Inlet incidents.

An aggressive animal may be killed **ONLY** in defense of life or property by Security or a trained bear guard. Defense of life or property kills must be reported to the Hilcorp Wildlife and Habitat Specialist and ADF&G immediately. On the North Slope, ACS may provide assistance in collecting and, if requested, shipping the carcass. If rabies is suspected, notify ADF&G immediately for procedures and handling protocol. If necessary, a third party contractor will be secured for Kenai/Cook Inlet incidents.

7.0 Black Bear Specific Procedures

7.1 Biology

Black bears (*Ursus americanus*) are the most abundant and widely distributed of the three species of North American bears. In Alaska, black bears occur over most of the forested areas of the state and may be found from sea level to alpine regions. Black bears appear in greater densities along the southern outer coast. About 3,000 to 4,000 black bears are estimated in the Kenai Peninsula area, 500-1,000 black bears are estimated in the Upper Cook Inlet area, and 1,888 black bears are estimated in the West Side of Cook Inlet region. Black bears are not expected to be encountered at North Slope facilities.



The black bear is the smallest of the North American bears; with full grown adults measuring 29 inches at the shoulder and 60 inches from nose to tail. Males are larger than females, and weigh 180 to 200 pounds in the spring.



Source: <http://www.adfg.alaska.gov/index.cfm?adfg=blackbearhunting.main>

7.2 Regulatory Drivers

This Bear Interaction Plan satisfies the requirement of Hilcorp's Public Safety Permit issued by ADF&G and ADNR – Division of Oil and Gas mitigation measures. Notably, an ADF&G wildlife hazing permit must be obtained prior to hazing black bears from Kenai and Cook Inlet area facilities. The Public Safety Permit is renewed annually; current permits can be found in FileTrail. See Appendix A for guidance on using FileTrail. The Beluga River Unit is the only Hilcorp Kenai/Cook Inlet facility currently authorized for bear hazing activities. Hilcorp is granted permission to haze grizzly and black bears away from the road system and buildings of the Beluga River Unit. Unless a bear presents an imminent threat to human life (e.g., a bear is charging), Hilcorp personnel and contractors are not permitted to intentionally injure or kill bears. Hilcorp is required to keep records of all activities conducted under Hilcorp's Public Safety Permit and report these to ADF&G annually by the date specified in the permit. The Reporting POC will maintain a record of the situation and actions taken on the Bear Reporting Form – Kenai/Cook Inlet ([AK-13186](#)) and submit it to the agencies and Hilcorp personnel listed on the form.

	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan
	Revision Number: 00	Hilcorp Alaska, LLC Areas of Operation

7.3 Denning Black Bear

Black bear dens provide bears with protection and security during the winter months. Black bears den beginning in late September and may remain in dens until mid-May.

If a bear den is observed, personnel must leave the den area and notify the Reporting POC so the presence of bears at the den can be determined, agency notifications can be made if necessary, and den location can be communicated to other site personnel. No personnel will return to the area until the Reporting POC and Hilcorp Asset Team Environmental Specialist or Wildlife and Habitat Specialist give approval. The Reporting POC must contact the Hilcorp Asset Team Environmental Specialist and Wildlife and Habitat Specialist as soon as practicable, but within the same work shift, to coordinate agency reporting. For dens observed within the KNWR, the Reporting POC shall contact KNWR management (USFWS) to report the location.

Exploration and development activities that are planned to occur off of existing roads and pads cannot begin until consultation with ADF&G and/or USFWS to identify bear den locations has been completed. Know the timing and location restrictions that may be implemented for your project.

7.4 Injured or Dead Black Bear

Contact the Reporting POC for all black bear sightings (live, injured, or dead). The Reporting POC will use the Bear Reporting Form – Kenai/Cook Inlet ([AK-13186](#)) to report sightings of injured or dead black bears and submit it to the agencies and Hilcorp personnel listed on the form. Injured but mobile bears shall be left alone if they are not near living or working areas and do not present a threat to human safety. Dead bears should be left alone if found in a remote location where scavengers would not present a threat to worker safety. If a carcass is found near or on a pad or on the road, the Reporting POC will consult with the Hilcorp Asset Team Environmental Specialist or Wildlife and Habitat Specialist who will consult with ADF&G to determine the best course of action to remove or relocate the carcass. Movement of the carcass may be required if it attracts other wildlife to an area that may pose a threat to personnel safety. Although rare, take precautions against rabies, and if suspected notify ADF&G and the Hilcorp Wildlife and Habitat Specialist immediately. Should ADF&G request shipment of the carcass, the Hilcorp Asset Team Environmental Specialist or Wildlife and Habitat Specialist will coordinate personnel to arrange for shipment.

7.5 Trapped Black Bear

Occasionally, black bears will wonder into buildings or other oilfield infrastructure and become trapped. If a black bear is trapped (*e.g.*, inside a building or excavation, man-made structure such as reserve pits and well cellars, etc.) or entangled in oilfield equipment (fences, wire), contact the Hilcorp Asset Team Environmental Specialist or Wildlife and Habitat Specialist immediately. They will coordinate with ADF&G and the Reporting POC to determine a course of action if/when needed. Opening building doors and or evacuation may be options.



7.6 Black Bear Linger Near Facilities, or Becoming Aggressive

Sometimes a black bear will linger close to a facility or work site. If the bear lingers long enough to disrupt work or present a consistent safety problem, they may need to be moved from the area through utilization of hazing techniques in accordance with permit stipulations. Should such a bear be present, notify the Reporting POC who will then notify the Hilcorp Asset Team Environmental Specialist or Habitat and Wildlife Specialist to determine the best course of action.

An aggressive animal may be killed **ONLY** in defense of life or property by security. Defense of life or property kills must be reported to the Hilcorp Asset Team Environmental Specialist, Wildlife and Habitat Specialist, and ADF&G immediately.

8.0 PERSONNEL TRAINING AND PROCEDURES

Hilcorp will provide the following three levels of training for bear interaction.

Polar Bear Awareness Training is basic bear awareness training and is required for all unescorted personnel working at North Slope facilities. The training is available as a self-taught computer based course through Hilcorp's DEEP training system or as a stand-alone PowerPoint for contractors without access to DEEP. Contact your supervisor, the Hilcorp Asset Team Environmental Specialist or Wildlife and Habitat Specialist to arrange for training. Crews going to remote sites should request more in depth training.

Level Two Polar Bear Training is designed for personnel who have an increased likelihood of encountering a bear during the course of work. The frequency of polar bear encounters can increase in coastal areas, on barrier islands, and during offshore operations; therefore, workers in these areas may need Level Two Polar Bear Training. This will include basic bear biology, habitat, and behaviors. Individuals will be made aware of methods to reduce the chances of a polar/grizzly bear encounter. Training will also include sighting report procedures for the work site and emergency contact numbers within Hilcorp. Contact the Hilcorp Asset Team Environmental Specialist or Wildlife and Habitat Specialist to determine if your project or crew will need to have Level Two Training.

USFWS-sanctioned polar bear hazing training is designed for personnel involved in deliberate polar/grizzly/black bear hazing and deterrence. Typically only site security personnel, ACS personnel, Hilcorp EH&S personnel, a bear guard, or an area operations manager have Level Three Training. Seismic crews or remote exploration crews may have a polar bear hazer who is hired as a third-party contractor for the purpose of hazing wildlife. Similarly, Kenai/Cook Inlet or Kenai National Wildlife Refuge remote work may also require use of a third-party contractor to provide bear guard services. All personnel who engage in hazing must be authorized to carry firearms and must have hazing training that is consistent with current USFWS bear hazing training. There is no regulatory-specified frequency for Level Three Hazing Training but USFWS has requested hazers attend a USFWS-approved training at least every 3 years.

Additional training resources are available for those individuals who are interested in receiving site-specific bear training and/or firearms training. Only personnel with firearms and bear

	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan
	Revision Number: 00	Hilcorp Alaska, LLC Areas of Operation

interaction training are allowed to haze bears at any Hilcorp facility. Contact the Hilcorp Wildlife and Habitat Specialist or your local EH&S Specialist for more information on available training for your facility. Other available field training resources include:

- North Slope Environmental Field Handbook (available through NSTC Training, Hilcorp Asset Team Environmental Specialist or Habitat and Wildlife Specialist).
- Bear Awareness DVDs:
 - Working in Bear Country
 - Staying Safe in Bear Country
 - Polar Bears: A Guide to Safety
- The Bear Interaction Plan (this document), which will be available on site at all times to Hilcorp personnel, contractors, and crew members working on behalf of Hilcorp.
- Guest speakers/trainers from USFWS or ADF&G, which are typically arranged through the Hilcorp wildlife specialist.

9.0 LESS-THAN-LETHAL (HAZING) AND LETHAL DETERRENCE

If a bear is present on gravel pads/roads or near operating facilities and is preventing normal oilfield operations and/or is posing a risk to worker safety, active deterrence (*i.e.*, hazing) authorized under Sections 109(h)(1) and 112(c) of the MMPA for polar bear and Hilcorp’s ADF&G Public Safety Permits for grizzly/brown or black bears may be necessary. Only trained Security personnel or other authorized individuals are permitted to haze bears. USFWS-sanctioned polar bear hazing training is required of any Security officer who is to engage in polar bear deterrence activities (*i.e.*, hazing). Appendix B provides the policies and procedures for bear deterrence activities.

Bear hazing (*i.e.*, systematic harassment) is only allowed to be performed by properly trained individuals under an ADF&G Public Safety Permit (black and brown bears) or USFWS Letter of Authorization. Contact the Reporting POC to determine if bear hazing activities are needed. For instance, hazing may be needed if the same bear is repeatedly visiting a work area and does not leave the area when personnel arrive. Only properly trained individuals are authorized to haze bears. The Reporting POC should contact the Hilcorp Asset Team Environmental Specialist or Wildlife and Habitat Specialist.

The following is important guidance related to hazing:

- Selected project personnel can be trained in bear deterrence methods to protect human health and welfare, if necessary, although this is not a typical Hilcorp

Reporting POC

Milne Point, Endicott, and Liberty fields:
Security

Northstar:
ACS

Kenai/Cook Inlet Facilities:
Lead Operator

Kenai/Cook Inlet Projects:
Hilcorp Project Lead



practice. A third-party contractor with the requisite qualifications would likely be retained to provide bear protection and deterrence services.

- Employees and contractors are not allowed to bring firearms onsite unless approved to do so for a specific reason, such as to be a designated and trained bear guard. If a bear is shot and killed or wounded in order to protect life or property, the Reporting POC must file a report with the Alaska State Troopers and contact the Hilcorp Wildlife and Habitat Specialist immediately. The Troopers will provide a case number and [The Defense of Life or Property Game Animal Kill Report](#) form to complete. The completed form must be submitted to ADF&G within 15 days of the incident. In addition, a Hilcorp Incident Reporting Form must be completed and submitted to the contacts listed on the form.

Shooting a bear in defense of life or property is legal only if the shooter DID NOT provoke an attack or cause a problem by negligently leaving food or garbage in a manner that attracts bears and if the shooter has done everything else to protect his/her life and property. Hilcorp personnel **must** avoid instigating a human-bear interaction and follow proper procedures for food and waste storage and disposal at all Hilcorp facilities and operating areas.

10.0 Record Keeping and Reporting Procedures

Hilcorp shall report all observations, encounters, and takes of bears that occur in their North Slope and Kenai/Cook Inlet operating areas using the forms and contacts presented in the “Wildlife Reporting Matrix” (“Appendix C” to the *Hilcorp Alaska Master Wildlife Compliance Procedure* [\[AK-13252\]](#)). Reports of polar bear observations, encounters, and takes are required to be sent to the USFWS within 24 hours. Reports of suspected polar bear den sites are required to be sent to the USFWS within 12 hours. There is no specific time frame to report individual grizzly bear sightings to ADF&G; Hilcorp’s Public Safety Permit requires an annual report is submitted at the end of the year for which the permit was issued (varies by year). When a grizzly/brown bear is seen, a Bear Reporting Form – North Slope ([AK-13187](#)) or Bear Reporting Form – Kenai/Cook Inlet ([AK-13186](#)) should be filled out and sent to the contacts on the form, including the Hilcorp Asset Team Environmental Specialist and Wildlife and Habitat Specialist and maintained for annual reporting. After compiling information, the Wildlife and Habitat Specialist will distribute the annual report via email.

The Reporting POC will maintain fax or email confirmation receipts for verification that each completed Polar Bear Reporting Form ([AK-13188](#)) was distributed appropriately. Hilcorp maintains records of all polar bear sightings and compiles annual summary reports as specified in the LOAs for intentional and unintentional takes issued by USFWS.

Further action may be conducted by the Hilcorp Asset Team Environmental Specialist or Wildlife and Habitat Specialist as required by either Hilcorp or agency personnel. If questions or concerns arise about reporting procedures or specific human-bear interactions, the Reporting POS will contact the Hilcorp Asset Team Environmental Specialist or Wildlife and Habitat Specialist for further guidance. Contact information for wildlife questions and issues related to

	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan
	Revision Number: 00	Hilcorp Alaska, LLC Areas of Operation

Hilcorp operations can be found in the “Wildlife Reporting Matrix” (“Appendix C” to the *Hilcorp Alaska Master Wildlife Compliance Procedure* [[AK-13252](#)]).

11.0 REFERENCE DOCUMENTS / APPENDICES

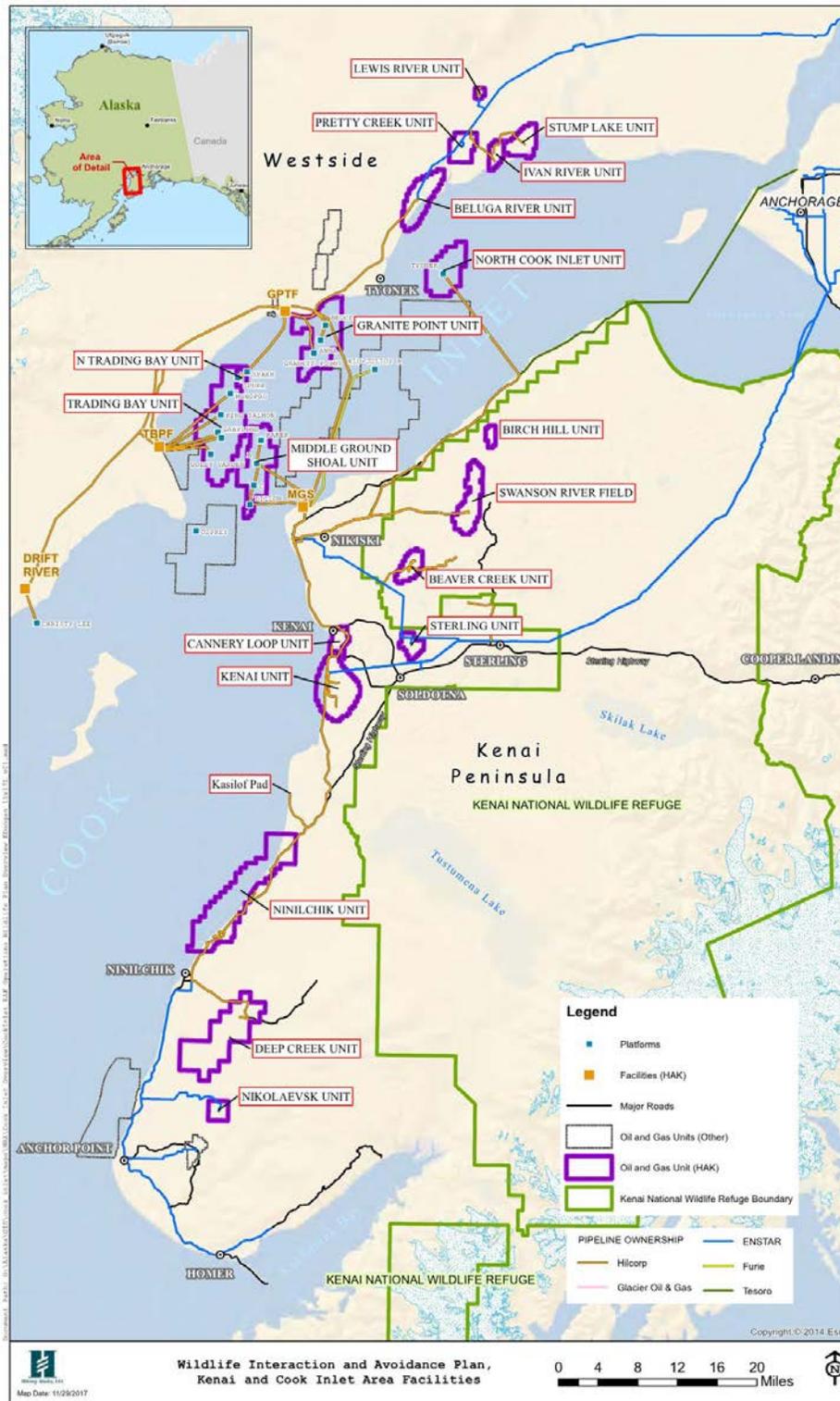
- Appendix A: FileTrail Instructions
- Appendix B: Hilcorp Polar Bear Hazing and Deterrence Policies and Procedures
- Bear Reporting Form – North Slope ([AK-13187](#))
- Bear Reporting Form – Kenai/Cook Inlet ([AK-13186](#))
- Polar Bear Reporting Form ([AK-13188](#))
- “Wildlife Reporting Matrix” (“Appendix C” to the *Hilcorp Alaska Master Wildlife Compliance Procedure* [[AK-13252](#)])

	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan
	Revision Number: 00	Hilcorp Alaska, LLC Areas of Operation

This page intentionally left blank.



Figure 1 – Cook Inlet Overview Map

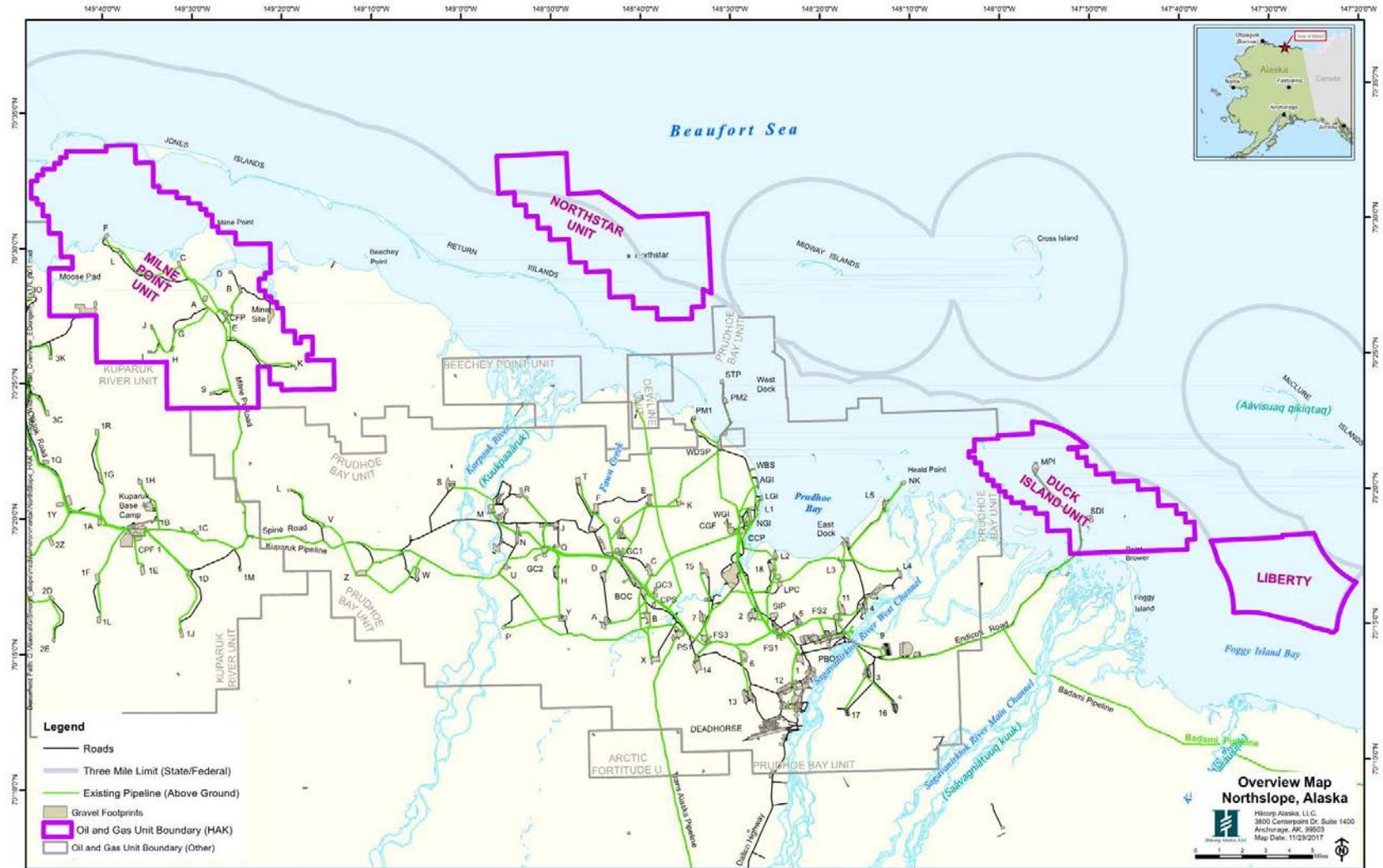


	Revision Date: 11/1/2018 Revision Number: 00	Bear Interaction, Mitigation, and Monitoring Plan Hilcorp Alaska, LLC Areas of Operation
--	---	---

This page intentionally left blank.



Figure 2 North Slope Overview Map





Revision Date: 11/1/2018

Bear Interaction, Mitigation, and Monitoring Plan

Revision Number: 00

Hilcorp Alaska, LLC Areas of Operation

This page intentionally left blank.

	Revision Date: 11/1/2018 Revision Number: 00	Bear Interaction, Mitigation, and Monitoring Plan Hilcorp Alaska, LLC Areas of Operation
--	---	---

APPENDIX A - FILETRAIL INSTRUCTIONS



NS App A.pdf

FileTrail Guidance
Hilcorp Alaska, LLC Areas of Operation



Searching for Records/Permits

- Log onto the Hilcorp SharePoint site at:
<http://webasp.hilcorp.com/default.aspx>.
- Click on **FileTrail** in the column along the left side of the page. This will take you to:
<http://filetrail.hilcorp.com/FileTrail>
- Click on **Search**  icon on the top left of the screen.
- Select the **Records/Permits (integrity/EH&S/Operations)** search definition on the top right of the screen.

Hilcorp Apps & Links

- HEC Phonebook
- GeoContext DataMap
- Employee Details Update
- Hilcorp Training
- OGSQ Reports
- Office Services- iOffice
- Password Vault
- Approved Vendors List
- Contract Checklist Form
- TDK Imaging
- Lifting Cost Presentations
- HEConomics
- Job Opportunities - Internal Candidates
- Job Opportunities - Contractors/External Candidates
- Enerba Capacity
- Vehicle Mileage Tracking
- Harvest PETS
- Commodity Prices
- HEC Company Store
- Personal On Board
- **FileTrail**
- HEC Company Contact List
- Sales and Use Taxability
- Spofire
- San Juan WellView Web
- EAH Enterprise
- EAH Express

Location Information:

- Location (Operations)* - select **AK – Alaska**
- Title:*
 - type ***intentional*** (with the asterisk) to search for only Intentional Letter of Authorization (LOA)
 - or*
 - type ***amendment*** (with the asterisk) to search for only Public Safety Permit Admendment.

Location Information

Location (Operations)

AK - Alaska

AK - Alaska

6. Title Batch Mode

1

31

Document Number: AK-13250

PAPER COPIES ARE UNCONTROLLED. THIS COPY ONLY VALID AT THE TIME OF PRINTING.

Print Date: 7/15/2019

The controlled version of this document can be found in <http://filetrail.hilcorp.com/FileTrail/DataManager/Item.aspx?ID=1795747>

	Revision Date: 11/1/2018 Revision Number: 00	Bear Interaction, Mitigation, and Monitoring Plan Hilcorp Alaska, LLC Areas of Operation
--	---	---

This page intentionally left blank.

	Revision Date: 11/1/2018 Revision Number: 00	Bear Interaction, Mitigation, and Monitoring Plan Hilcorp Alaska, LLC Areas of Operation
--	---	---

**APPENDIX B
HILCORP POLAR BEAR HAZING AND DETERRENCE POLICIES
AND PROCEDURES**

	Revision Date: 11/1/2018 Revision Number: 00	Bear Interaction, Mitigation, and Monitoring Plan Hilcorp Alaska, LLC Areas of Operation
--	---	---

This page intentionally left blank.

	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan
	Revision Number: 00	Hilcorp Alaska, LLC Areas of Operation

Hilcorp Bear Hazing and Deterrence Policies and Procedures

GOALS AND OBJECTIVES OF BEAR HAZING

GENERAL GOAL: to maintain human and bear safety and welfare in the oilfields.

Short-term goal: move bears away from immediate potential conflict with humans.

Long-term goal: “train” bears to avoid *locations or situations* where they may come into potential conflict with humans

OBJECTIVES

Polar Bears

1. Prevent bears from associating food with humans and facilities
2. “Train” bears to avoid closely approaching people on the ground.
3. Allow bears to use man-made and natural travel routes to move along coast
4. Prevent bears from extended use of habitats around the field, or from entering the developed part of the field.

Grizzly/Brown/Black Bears

1. Prevent bears from associating food with humans or facilities.
2. “Train” bears to avoid closely approaching people on the ground.
3. Allow bears to use natural travel routes within the oilfield, and roads and remote pads for travel only.
4. Allow bears to use natural habitats in developed portions of field as long as they remain away from concentrated human activity.

TRAINING REQUIREMENTS

All North Slope security officers and/or those officers assigned anywhere to perform polar bear guard duties will receive USFWS-approved training at least every 3 years. Only level 3 trained individuals are permitted to conduct polar bear hazing and deterrence activities. Personnel hazing grizzly/brown/black bears must receive Hilcorp’s [redacted] Designated hazers will be firearms qualified and familiar with the capabilities and limitations of the tools (*e.g.*, hazers will practice with actual deterrents during training classes).

Only USFWS Marine Mammals Management or individuals approved by USFWS (currently, this is the Purcell training department and Alaska Clean Seas) will provide the Level 3 training. All personnel assigned as trainers for any bear monitoring/hazing or bear guard program will meet regularly to review and revise the training curricula and standards to assure consistency among trainers. Any revisions or significant modifications of training will be reviewed and approved by

	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan
	Revision Number: 00	Hilcorp Alaska, LLC Areas of Operation

USFWS. Level 3 polar bear deterrence and hazing training will include, at a minimum, the following:

- Regulatory background (*e.g.*, review of Marine Mammals Protection Act, Endangered Species Act, critical habitat designations and associated definitions)
- Review of the polar bear interaction plan
- Biology and behavior of polar bears and preventing bear conflicts
- Hazing and deterrence principles, techniques and limitations
- Accountability and reporting requirements of hazers
- Identification of and field training with less lethal and lethal rounds

GENERAL GUIDELINES FOR HAZING ALL BEARS

Before Beginning Hazing:

1. If time permits, remove or cover attractants.
2. Secure site: notify site supervisor, restrict on-site personnel to safe areas away from path of deterrents or escaping bear, prevent additional personnel from entering site until “all clear”.
3. Ensure that bear has clear primary and alternate escape routes, preferably in a direction the bear would likely use (for example: toward river, coast, or route by which it entered site).
4. Ensure a primary and alternate escape route or safe location (*e.g.*, building or vehicle) for deterrent personnel.
5. Check for additional bears (*e.g.*, cubs, courtship partner) on or near site that the “target” bear may want to head towards.
6. If the site is too dark to follow the bear either during or after deterrence, have auxiliary lighting placed where necessary or have personnel stationed in a safe place where they report on the bear’s location and movements.
7. Ensure adequate communications with site supervisory personnel, and with any other assisting personnel.

Once Hazing Commences:

1. Yell at the bear to get its attention.
2. Choose the least intensive method to start (*e.g.*, positioning of vehicle), and plan to escalate the intensity only if the bear doesn't respond, or returns after the initial response.
3. Once the bear is moving in the right direction, continue with the minimal amount of deterrence required to keep it moving until it is safely away from the site.

Upon Completion of Hazing:

1. Watch the bear to ensure it doesn't return.
2. Notify site supervisor that deterrent action is completed so personnel can resume normal activity.
3. For Grizzlies, fill out the Oilfield Grizzly Observation Form and send to the Hilcorp Wildlife Specialist in Anchorage.

	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan
	Revision Number: 00	Hilcorp Alaska, LLC Areas of Operation

4. For Polar Bears, fill out the appropriate bear report form and send to the USFWS.

STEPS OF PROGRESSIVE DETERRENCE AND HAZING

Any type of deterrence or hazing should be conducted only as a last measure when needed to prevent escalation of an encounter and ensure the safety of workers. If a bear is present at a work site but all personnel are able to retreat indoors to safety or otherwise leave the work site the bear shall not be hazed, regardless of hindrance of the progression of work activities. If altering the bear's behavior is the only way in which to ensure the safety of workers, the following steps of progressive deterrence and hazing will be followed:

1. Intimidate with size and movement – position vehicle between bear and work area, shine headlights.
2. Startle with sound - yelling, clapping, followed by horn honking and sirens.
3. Use of less-lethal hazing techniques by trained personnel (pepperballs, cracker shells and bean bags). This should only be used as a technique with the prior agreement of the hazer and his/her supervisor. This can either be done in person or via the radio.
4. Lethal contact – fire lethal round at bear. This can only be used to protect the officers own life or the life of another. Examples scenarios include a charging bear with no avenue of escape for an officer or another or a bear that has already attacked an officer or another.

Hazing Deterrence Principles

1. Deterrence works best when other preventive strategies to keep bears from obtaining food and garbage rewards are successful.
2. The effectiveness of deterrents is a function of whether or not the bear has been rewarded for a behavior in the past, and how strong it's motivation. The most difficult animal to deal with is a very hungry, determined bear that has repeatedly gotten into food and garbage previously at a site. The easiest animal to deal with is a curious somewhat wary bear that has never been previously rewarded by food associated with human activity.
3. Another difficult bear is one that is exhausted from a long swim or trek into a work environment. This particular type of bear should be monitored periodically for at least 72 hours prior to any hazing, to determine if the bear will move on or stay in the area.
4. Deterrent efforts also benefit from good detection efforts. Early detection of a bear's approach or presence permits more preparation time and provides more options for deterrent actions.
5. The best scenario is to be prepared to use deterrents, but not have to use them, letting a bear move on by the facility or through the area on its own while being monitored.
6. Deterrents should only be used for very specific, approved objectives and should never be used unnecessarily or out of frustration.
7. Finesse is usually better than force – just making a curious bear think twice about approaching people or facilities by moving a vehicle toward it may be enough to discourage it.
8. Restraint and patience in resorting to deterrent rounds and more serious tools is important. The desired result can often be obtained by less intrusive methods.

	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan
	Revision Number: 00	Hilcorp Alaska, LLC Areas of Operation

9. Overuse of deterrents can decrease their effectiveness. Bears will get used to most deterrents if repeatedly exposed to them.

Hazing / Deterrence Tools and Techniques

1. Hazing and deterring a bear involves trying to prevent the bear from some activity or getting it to move away by intimidating or frightening it. In the context of this policy, it should be done either visually, with sound, or by startling a bear through the use of a deterrent. Details about the advantages and limitations of the various deterrents will be covered during training.
2. Visual deterrent with size and movement can often be an effective hazing tool. Generally a bear perceives large size and movement towards it as assertive/dominant. Moving towards a bear with a vehicle is often enough to haze it. Turning the vehicle so that it is sideways to a bear adds size and may aid in deterring the bear.
3. Noise is another way to intimidate or frighten a bear into moving away. Depending on the situation; horns, sirens, cracker shells, even yelling or clapping can haze a bear.
4. Less lethal ammunition such as a beanbag and pepperballs should startle a bear and is another way to dissuade a bear from approaching or frequenting facilities.
5. As a last resort lethal ammunition is available, but can only be used to protect the officers own life or the life of another.
6. Communication and patience are often overlooked tools that are available to the hazer. For example, if a bear is moving toward a work area, but all workers have been warned to remain inside, is it necessary to haze the bear? Is it possible for the hazer to move his vehicle between the bear's path and facilities entry and wait for the bear to pass through the area while maintaining a zone of safety for workers?

Bear Hazing with a Pepperball Launcher

The following steps shall be taken to prepare the pepperball launcher for use:

1. Before the launcher is deployed for hazing, the launcher's air tank pressure will be checked by the officer.
2. If the launcher's tank pressure is below 2,000 psi it will be filled to 3,000 psi
3. At Endicott the air tank is charged from the Mako air compressor located in the fire hall. At Milne point, after the correct fittings are acquired, the air tank can be charged onsite at the fire station. Until that time Milne can fill the air tank at Kuparuk. On Northstar Island the air tank is charged onsite with the breathing-air compressor.
4. If needed, ensure the proper adapter is attached to the fill tank so that the launcher's air tank will be properly connected.
5. If the fill tank's integrity is in question or launcher's tank won't properly attach to the fill tank, contact the safety department for help.
6. While filling the launcher's tank, ensure it is pointing away from you. i.e., be aware of line-of-fire if launcher's tank should disconnect during filling.
7. The tank should fill in 2 to 3 seconds.
8. Close the fill tank knob and open the bleeder valve.
9. Remove the launcher's air tank and check the gauge to insure you have a full tank.

	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan
	Revision Number: 00	Hilcorp Alaska, LLC Areas of Operation

The Pepper Ball Launcher will be carried in a case in the patrol vehicle. Hearing protection is not needed for the operation of the Pepper Ball Launcher; however, safety glasses are required.

When dispatched to any wildlife call, in particular a bear call, the safety of the officer, other workers and the animal are the officer's priorities. The officer will ensure that the impact area of the balls is clear of other workers and is not near any building air intakes, taking wind speed and direction into consideration.

If the Pepper Ball Launcher is deployed the officer will:

1. Remove the launcher from the case and attach the pressure tank. This is accomplished by screwing the pressure tank into the end of the launcher.
2. Check to make sure there is air in the tank.
3. Ensure at all times the launcher is pointed in a safe direction – the launcher is a firearm and should always be treated as such.
4. Identify the appropriate rounds for intended use - typically a 50-50% mixture of pepper balls and talc balls for bears. Each container is clearly labeled and the launcher's rounds are color coordinated based on their deterrent fill as indicated in the following table:

Projectile (ball) type	Projectile Color	Comments
Pepper	Red and White	These rounds have the active ingredient capsaicin that is intended to irritate the mucus membranes of the bear. Ensure these rounds do not discharged near any building air-intakes and ensure that the impact area of the balls is clear of other workers. Be mindful of wind direction.
Talc (inert)	Blue and White	The impact of the inert balls may provide pain stimuli to the animal; however, these rounds are best used in combination with the pepper balls (50-50 mixture) to act as markers to help sight in the target.
Paint	Green	Can be used to mark animal so we know that animal was hazed previously. Balls must not be frozen. Exercise caution in freezing conditions.
Water	Clear	Use only for target practice.

5. Load the ball hopper with appropriate rounds.
6. Pull back the air valve ring (located near the tank gauge) to activate the air tank.
7. Shoot outside of the cab of the vehicle but use the door as a shield and stay close to the vehicle.
8. The launcher should be aimed at the torso or legs, preferably in the back half of the body. The goal is to either break the balls close to the animal or hitting the animal on the rump area of the body.
9. The officer must keep in mind that a Pepper Ball Launcher fires the ball at 300 to 320 feet per second. Hitting an animal in the eye, face, head or neck could cause an injury.
10. The Pepper Ball Launcher will never be deployed on cubs of the year.
11. When deployed the goal is to startle, then cause pain and discomfort to the animal. The animal will then associate infrastructure or people with discomfort and will ideally avoid people or developed areas in the future. This reinforces overall safety of all concerned.
12. Experience has shown that the most effective method is to fire multiple rounds at the bear until you see a response. If the bear does not move away after approximately 10 rounds,

	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan
	Revision Number: 00	Hilcorp Alaska, LLC Areas of Operation

repeat another series of rounds until the bear goes in the opposite direction and/or leaves the area where it is presenting a safety concern. The number of balls shot at the animal will be determined by the reaction of the animal.

Once the hazing is complete the launcher will be returned to the hard case after following these steps:

1. Remove any balls left in the hopper and put them back in the appropriate container.
2. Close air valve ring located near the tank.
3. Unscrew the air tank from the launcher.
4. You still have a small amount of air pressure and one ball in the launcher. Point in a safe direction and shoot the ball out. Put the launcher on safe and return to hard case.
5. Fill out the correct hazing form and send it to the correct people.

Bear Hazing with a 12-Gauge Shotgun

1. Firearms Safety Briefing
2. PPE: ear plugs and safety glasses required
3. Ammunition identification
 - a. Cracker rounds
 - b. Bean bag / baton rounds
 - c. Rubber bullets
4. 12 gauge slug/ 00 buck comparisons
 - a. Note: Be sure of ammunition selection when loading the shotgun.
 - b. Note: Everything that you fire out of the shotgun is lethal. There is nothing that is non-lethal. Some rounds are considered less-lethal **but are not non-lethal.**
5. Hazing rounds can kill if used improperly.
 - a. An injured bear can be dangerous.
 - b. All bears react differently to hazing – some may charge.
 - c. Have a backup with lethal ammunition.
 - d. Never load hazing rounds into the magazine.
 - e. Load one round when needed directly into the chamber.
 - f. Pre-plan your escape if a hazing round is used and a bear charges.
 - g. Proper notifications should be made to surrounding work crews of you plan to haze a bear.
6. Aiming Weapon.
 - a. Never fire a cracker round from the shoulder.
 - b. Hold weapon away from you and point muzzle upwards at a 45 degree angle. Cracker rounds are known to detonate in the barrel and or a short distance away after being fired. If cracker rounds are fired incorrectly with the wrong muzzle angle, the rounds can land on the ground, detonate and cause a fire.
 - c. Bean bag rounds and rubber bullets can be aimed and shoulder fired.
7. Always use hazing rounds in a clean weapon and clean your weapon as soon as practical after use. Note: Hazing rounds are low velocity and can leave a lot of debris in the barrel.

	Revision Date: 11/1/2018 Revision Number: 00	Bear Interaction, Mitigation, and Monitoring Plan Hilcorp Alaska, LLC Areas of Operation
--	---	---

8. Read instruction labels on hazing rounds and use as instructed.
9. Use only good ammunition. Inspect hazing rounds for any signs of defect prior to loading into your shot-gun. Hazing rounds do not feed properly from a magazine or eject clearly from the chamber. Remember, load directly into the chamber as needed. Do not have any other ammunition in the magazine of your shotgun while using cracker rounds.

Remember: “**Hazing Rounds should be used only as a last resort**”. Use the least aggressive hazing techniques necessary to move bears out of the area. Review reporting requirements for Polar Bears/ Grizzlies. Consult with your supervisor

	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan Hilcorp Alaska, LLC Areas of Operation
	Revision Number: 00	

Lethal Take

If necessary, shotguns may be used as a mechanism for lethal take under Section 101(c) of the Marine Mammal Protection Act (polar bears) and 5 AAC 92.410 (grizzly/brown bears). However, without specific agency authorization, the lethal take of a polar bear or grizzly/brown bear is only warranted if such taking is imminently necessary for self-defense or to save the life of a person in immediate danger. Such a taking must be reported to the USFWS (polar bears) or ADFG (grizzly/brown bears) as soon as practicable within 24 hours.

	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan
	Revision Number: 00	Hilcorp Alaska, LLC Areas of Operation

**USE OF PROJECTILES TO DETER BEARS
BY THE ALASKA DEPARTMENT OF FISH & GAME
OILFIELD GRIZZLY BEAR PROJECT**

Bear deterrent projectiles fired from a 12 gauge shotgun are potentially effective methods to haze bears. Projectiles, as used here, include **rubber bullets**, “**beanbags**” (also called “pillow rounds”), **cracker shells** (also called “teleshot”), and **screamers or whistlecrackers**. The first two are used to actually hit the bear. The cracker shell is a noisemaker designed to provide a loud bang coupled with a flash. The screamer is also a noisemaker that makes a siren-like sound and smoke trail as it flies through the air, and if it has an explosive bang at the end it’s called a whistlecracker.

RESPONSE OF BEARS TO DETERRENTS: The response of individual bears to various types of deterrents will vary. Some bears do not appear to react to sharp noises (*e.g.*, rifle shot), but may react to the screamers. Most respond to painful contact. The bear’s previous experience, especially with people and with garbage or other human-related food, may affect its response. Generally, the easiest bears to deter are those with no previous experience with people. Bears that have had many neutral encounters with people (called “habituated” bears) may be more difficult to deter at first, tending to ignore many noises and activity (such as vehicle movement) because they’ve had no negative experience with them. However, these bears can usually be “trained” to avoid people within one or two encounters. The most difficult bears to deter will be those that have obtained garbage or human food (called “food-conditioned” bears). They can endure considerable pain or disturbance to stay around such a nutritious food source, and may require numerous “lessons” to convince them to leave. There has been some concern that hitting a bear with a projectile may cause it to subsequently become aggressive toward people. In reported cases where projectiles have been used to “train” bears to avoid people, no bears have turned aggressive. In fact, the opposite is usually the case—bears become more wary and try to avoid people.

WHEN TO USE PROJECTILES: The decision to use a projectile to haze bears should be governed by several considerations.

1. **Safety: Projectiles are potentially dangerous--even lethal--to bears and humans!** Misplaced shots could put out an eye, or kill if they hit soft tissue such as the flank or stomach where peritonitis could cause a lingering death. A wounded bear could be a serious safety hazard for personnel in the area. Missed shots could injure bystanders. Cracker shells and screamers can injure bears or humans if they explode too close, and can also ignite fires or explosions. Projectiles should only be used when there is a clear line of sight with no potential for bystanders to wander into the line of fire, and no flammable materials or explosive atmosphere nearby. Therefore, other hazing methods that do not require projectiles should be tried first. These could include vehicle engine noise, sirens, boat horns, short chases with a vehicle (including 4-wheelers or snow machines in some cases), firecrackers, or banging on the side of a vehicle. If these are ineffective or unfeasible, projectiles should then be considered.
2. **Attractants: It is important to haze a bear BEFORE it obtains garbage or human food!** Once a bear has obtained human food or garbage hazing is less likely to be effective in the short

	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan
	Revision Number: 00	Hilcorp Alaska, LLC Areas of Operation

term and may decrease the bear’s response to hazing in the future. Some bears will endure considerable pain and noise to persist around a strong attractant with which they’ve had previous experience.

If there is no immediate threat to human safety, removal of the attractant--e.g., garbage -- should be the first priority. If the attractant cannot be removed immediately, hazing should commence as soon as possible if the bear is not already food-conditioned, but can be delayed if the bear has already had considerable experience obtaining garbage.

3. **Feasibility:** Projectiles have a limited range for accurate and effective use: less than 50 yards for rubber bullets and beanbags, and less than 100 yards for cracker shells and screamers. They are also easily deflected by brush, and highly susceptible to deflection by wind.

HOW TO USE PROJECTILES:

Target area: Only the beanbag and rubber bullet are used to directly hit the bear. The safest target areas are the large muscle masses, such as shoulder and rump or hip. Avoid shots at the bear’s head, ribs, or flank. Note that rubber bullets and beanbags are “accurate” only to within 12-18” of the point of aim (see **Range** below).

Range: The safe and effective range for projectiles varies with the type.

- **Beanbags** (e.g., MK Ballistics “Deerbuster,” All-Purpose “Slapjack,” or DefTech “Mod. 23BR”): 10-40 yards. Beanbags can be fired at the bear’s rump or shoulder at ranges as close as 10 yards, but accuracy drops off dramatically at 40 yards.
- **Rubber bullets** (Margo Supplies “Strike Two”): 20-50 yards. Closer than 20 yards risks penetrating the hide; farther than 50 yards and accuracy declines dramatically. At this time, we do not recommend other brands of “rubber” or plastic bullets due to several recent cases of bear injury or death caused by their use.
- **Cracker shells** (e.g., Stoneco “Shellcracker”) and **screamers** (e.g., Stoneco “Screamer”) or **shellwhistlecrackers**: 75-100 yards. The main concern is to keep the noise **between** you and the bear. These are light loads so shooting into the wind will decrease the range, and shooting with the wind will increase it. Occasionally these rounds explode in or shortly out of the barrel, so wear suitable ear and eye protection. These rounds are not designed for accuracy, so shouldering the gun to aim is unnecessary, and can result in blowback into the shooter’s face from the breech if a shell goes off in the barrel. Firing from the hip is safer and just as effective.

Shotgun selection: These rounds will not work in auto-loading shotguns, only pump or break actions. Use only cylinder bore or improved cylinder chokes so that the wads do not stick in the barrel.

Especially after shooting cracker shells or screamers, inspect the barrel to make sure the wad has been expelled. It is advisable to have two shotguns available—one a break-action for checking the barrel after a deterrent round, and one a conventional pump loaded with lethal rounds for emergencies. If only the pump action is available, load individual deterrent rounds directly into the chamber and keep lethal rounds as back-up in the magazine.

	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan
	Revision Number: 00	Hilcorp Alaska, LLC Areas of Operation

GET THE BEAR'S ATTENTION: Either shout yourself or have someone else shout just before you shoot so that the bear will learn to associate a common signal (person shouting) with a painful stimulus, and thereby learn to subsequently avoid people who shout at it.

NOTIFICATION

Please fill out the Oilfield Grizzly Observation Form, noting particularly the range at which the bear was shot and the bear's reaction to the shot.

If you have any questions please contact Dick Shideler at our grizzly project office at the North Slope Borough camp (659-0120), or call 459-7283 in Fairbanks.

	Revision Date: 11/1/2018 Revision Number: 00	Bear Interaction, Mitigation, and Monitoring Plan Hilcorp Alaska, LLC Areas of Operation
---	---	---

This page intentionally left blank.

	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan
	Revision Number: 00	Hilcorp Alaska, LLC Areas of Operation

Attachment F

Ice Road Operations BMPs

	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan
	Revision Number: 00	Hilcorp Alaska, LLC Areas of Operation

**Alaska North Slope
Ice Road and Ice Trail Best Management Practices**

Best Management Practices Introduction and Definitions

The following Best Management Practices (BMPs) and monitoring measures are applicable to operations on the Alaska North Slope. They are proposed for the construction and maintenance of sea ice roads and sea ice trails in areas where water depth is greater than 10 feet (ft) (the minimum depth required to establish ringed seal lairs) as well as any open leads in the sea ice requiring a temporary bridge during the ice road season. These BMPs do not apply to land-based ice roads/trails or ice roads/trails crossing lakes. These measures are intended to avoid and minimize interactions with ringed seals. For the purposes of these BMPs, sea ice roads and trails are generally defined¹ as follows:

- Sea Ice Road: a route across sea ice created by clearing and grading snow, then pumping seawater through drilled holes in the sea ice until the desired thickness is achieved. The top layer is typically strengthened by a fresh water cap of ice.
- Sea Ice Trail: a route across sea ice created, used and maintained by equipment such as Tuckers, PistenBullys, snow machines or similar tracked equipment. Sea ice trails do not require seawater flooding.

These BMPs and monitoring activities are organized into the following categories:

Section 1: Wildlife Training

Section 2: General BMPs Implemented Throughout the Ice Road/Trail Season

Section 3: BMPs Implemented Before March 1st

Section 4: BMPs Implemented After March 1st

Section 5: Reporting

Section 1: Wildlife Training

Prior to initiation of sea ice road- and ice trail-related activities, project personnel associated with ice road construction, maintenance, use or decommissioning (i.e., ice road construction workers, surveyors, security personnel, and the environmental team) will receive annual training² on these BMPs. Personnel are advised that interactions with, or approaching, any wildlife is prohibited. Annual training also includes reviewing the company’s Wildlife Management Plan³. In addition to the BMPs, other topics in the training will include:

¹ Specific construction techniques may vary depending on site-specific conditions. However, this description generally describes the process by which a sea ice road is constructed.

² Training rosters can be made available to audit if requested.

³ May also be referred to as a Wildlife Interaction Plan.

	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan
	Revision Number: 00	Hilcorp Alaska, LLC Areas of Operation

- Ringed Seal Identification and Brief Life History
- Physical Environment (habitat characteristics and how to potentially identify habitat)
- Ringed Seal Use in the Ice Road Region (timing, location, habitat use, birthing lairs, breathing holes, basking, etc.)
- Potential Effects of Disturbance
- Importance of Lairs, Breathing Holes and Basking to Ringed Seals

Brief Summary of Applicable Laws and Regulatory Requirements

- Marine Mammal Protection Act (MMPA)
- Endangered Species Act (ESA)

Section 2: General BMPs Implemented Throughout the Ice Road/Trail Season

General BMPS will be implemented through the entire ice road/trail season including during construction, maintenance, use and decommissioning.

1. Ice road/trail speed limits will be no greater than 45 miles per hour (mph); speed limits will be determined on a case-by-case basis based on environmental, road conditions and ice road/trail longevity considerations. Travel on ice roads and trails is restricted to industry staff.
2. Following existing safety measures, delineators will mark the roadway in a minimum of ¼-mile increments⁴ on both sides of the ice road to delineate the path of vehicle travel and areas of planned on-ice activities (e.g., emergency response exercises). Following existing safety measures currently used for ice trails, delineators will mark one side of an ice trail a minimum of every ¼ mile. Delineators will be color-coded⁵, following existing safety protocol, to indicate the direction of travel and location of the ice road or trail.
3. Corners of rig mats, steel plates, and other materials used to bridge sections of hazardous ice, will be clearly marked or mapped using GPS coordinates of the locations.
4. Project personnel will be instructed that approaching or interacting with ringed seals is prohibited.
5. Personnel will be instructed to remain in the vehicle and safely continue, if they encounter a ringed seal while driving on the road.
6. If a ringed seal is observed within 150 ft of the center of an ice road or trail, the operator's Environmental Specialist will be immediately notified with the information provided in the Reporting section below.

⁴ The interval between delineators is specific to existing ice road safety measures and relates to how drivers assess and report weather and roadway conditions.

⁵ For example, a specific color to the driver's right or left will indicate direction of travel as well as the route.

	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan
	Revision Number: 00	Hilcorp Alaska, LLC Areas of Operation

- a. The Environmental Specialist will relay the seal sighting location information to all ice road personnel and the company’s office personnel responsible for wildlife interaction, following notification protocols described in the company-specific Wildlife Management Plan. All other data will be recorded and logged.
- b. The Environmental Specialist or designated person will monitor the ringed seal to document the animal’s location relative to the road/trail. All work that is occurring when the ringed seal is observed and the behavior of the seal during those activities will be documented until the animal is at least 150 ft away from the center of the road/trail or is no longer observed.
- c. The Environmental Specialist or designated person will contact appropriate state and federal agencies as required⁶ (see company-specific Wildlife Plans for notification details).

Section 3: BMPs Implemented Prior to March 1st

Winter sea ice road/trail construction and use will begin as early as possible (typically December 1st through mid-February). It is anticipated that all ice road construction activities will be initiated prior to March 1st, before the time when female ringed seals establish birth lairs. Prior to establishing lairs, ringed seals are mobile and are expected to generally avoid the ice roads/trails and construction activities.

Other on-ice activities occurring prior to March 1st could also include spill training exercises, pipeline surveys, snow clearing, and work conducted by other snow vehicles such as a PistenBullys, snow machines, or rollagons. Prior to March 1st, these activities could occur outside of the delineated ice road/trail and shoulder areas. During this period, General BMPs (described in Section 2) will be implemented.

Section 4: BMPs Implemented After March 1st

After March 1st, and continuing until decommissioning of ice roads/trails in late May or early June, the on-ice activities mentioned above can occur anywhere on sea ice where water depth is less than 10 ft (i.e., habitat is not suitable for ringed seal lairs). However, if the water is greater than 10 ft in depth, these activities should only occur within the boundaries of the driving lane or shoulder area of the ice road/trail and other areas previously disturbed (e.g., spill and emergency response areas, snow push areas) when the safety of personnel is ensured.

In addition to the general BMPs, the following BMPs will also be implemented after March 1st:

7. Ice road/trail construction, maintenance and decommissioning will be performed within the boundaries of the road/trail and shoulders, with most work occurring within the driving lane. To the

⁶ As detailed in the Wildlife Management Plan.

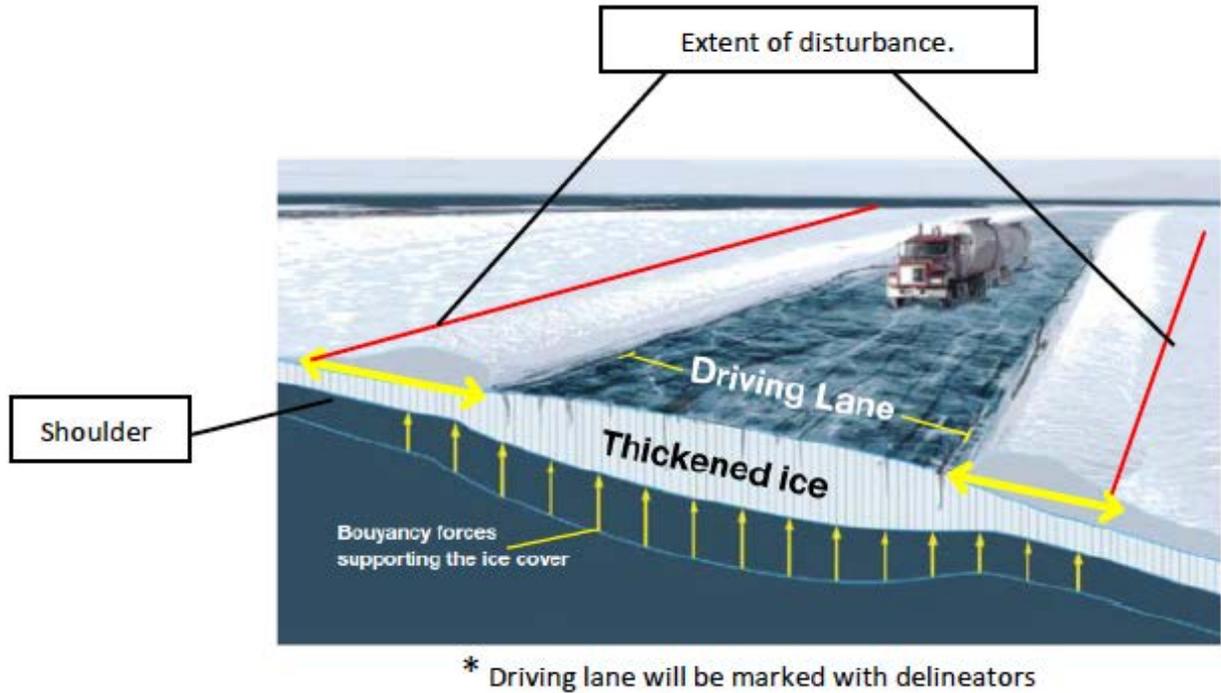
	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan Hilcorp Alaska, LLC Areas of Operation
	Revision Number: 00	

extent practicable and when safety of personnel is ensured, equipment will travel within the driving lane and shoulder areas (see Figure 1).

8. Blading and snow blowing of ice roads will be limited to the previously disturbed ice road/shoulder areas to the extent safe and practicable. Snow will be plowed or blown from the ice road surface.
9. In the event snow is accumulating on a road within a 150 ft. radius of an identified downwind seal or seal lair, operational measures will be used to avoid seal impacts, such as pushing snow further down the road before blowing it off the roadway. Vehicles will not stop within 150 ft of identified seals or within 500 ft of known seal lairs.
10. To the extent practicable and when safety of personnel is ensured, tracked vehicle operation will be limited to the previously disturbed ice trail areas. When safety requires a new ice trail to be constructed after March 1st, construction activities such as drilling holes in the ice to determine ice quality and thickness, will be conducted only during daylight hours with good visibility. Ringed seal structures will be avoided by a minimum of 500 ft (150 m) during ice testing and new trail construction. Any observed ringed seal structures will be reported following BMP #6. Once the new ice trail is established, tracked vehicle operation will be limited to the disturbed area to the extent practicable and when safety of personnel is ensured.

Figure 1. Graphic Representation of Ice Road

	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan
	Revision Number: 00	Hilcorp Alaska, LLC Areas of Operation



11. If an ice road or trail is being actively used⁷, under daylight conditions with good visibility, a dedicated observer (not the vehicle operator) will conduct a survey along the sea ice road/trail to observe if any ringed seals are within 500 ft of the roadway corridor. The following survey protocol will be implemented:
- a. Surveys will be conducted every other day during daylight hours.
 - b. Observers for ice road activities need not be trained Protected Species Observers (PSOs), but they must have received the training described in Section 1 and understand the applicable sections of the Wildlife Management Plan. In addition, they must be capable of detecting, observing and monitoring ringed seal presence and behaviors, and accurately and completely recording data.
 - c. Observers will have no other primary duty than to watch for and report observations related to ringed seals during this survey. If weather conditions become unsafe, the observer may be removed from the monitoring activity.

⁷ Any days when there is no traffic on an ice road, monitoring for ringed seals will not occur in order to minimize potential for interactions with seals.

	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan
	Revision Number: 00	Hilcorp Alaska, LLC Areas of Operation

12. If a seal is observed on ice within 150 feet of the centerline of the ice road/trail, BMP #6 shall be initiated and:

- a. Construction, maintenance or decommissioning activities associated with ice roads and trails will not occur within 150 ft of the observed ring seal, but may proceed as soon as the ringed seal, of its own accord, moves farther than 150 ft distance away from the activities or has not been observed within that area for at least 24 hours. Transport vehicles (i.e., vehicles not associated with construction, maintenance or decommissioning) may continue their route within the designated road/trail without stopping.

13. If a ringed seal structure (i.e., breathing hole or lair) is observed within 500 ft (150 m) of the ice road/trail, the location of the structure will be reported to the Environmental Specialist⁸ who will then carry out notification protocol identified in BMP #7 above and:

- a. The location of the seal will be physically marked with a visible marker while maintaining a distance of at least 50 ft (15 m) from the seal.
- b. a qualified observer (see BMP #11) will monitor the structure every six hours on the day of the initial sighting to determine whether a ringed seal is present. Monitoring for the seal will occur every other day the ice road is being used unless it is determined the structure is not actively being used (i.e., a seal is not sighted at that location during monitoring). A lair or breathing hole does not automatically imply that a ringed seal is present.
- c. Construction, maintenance or decommissioning work will proceed following all other BMPs to minimize impacts or disturbance in the area.

Section 5: Reporting (as needed)

A final end-of-season report compiling all ringed seal observations will be submitted to NMFS Alaska Region Protected Resources Division (greg.balogh@noaa.gov) and NMFS Office of Protected Resources Permits Division (jaclyn.daly@noaa.gov) within 90 days of decommissioning the ice road/trail. The report will include:

- a. Date, time, location of observation.
- b. Ringed seal characteristics (i.e., adult or pup, behavior [avoidance, resting, etc.]).
- c. Activities occurring during observation including equipment being used and its purpose, and approximate distance to ringed seal(s).
- d. Actions taken to mitigate effects of interaction emphasizing: 1) which BMPs were successful; 2) which BMPs may need to be improved to reduce interactions with ringed

⁸ Also referred to as an Environmental Advisor in Wildlife Management / Interaction Plans.

	Revision Date: 11/1/2018	Bear Interaction, Mitigation, and Monitoring Plan
	Revision Number: 00	Hilcorp Alaska, LLC Areas of Operation

- seals; 3) the effectiveness and practicality of implementing BMPs; 4) any issues or concerns regarding implementation of BMPs; and 5) potential effects of interactions based on observation data.
- e. Proposed updates (if any) to Wildlife Management Plan(s) or BMPs.
- f. Reports should be able to be queried for information.

NMFS, in consultation with the operator, may make modifications to these BMPs based on this information for the next ice road season.

In the unanticipated event a seal is killed or seriously injured by ice road/trail activities, NMFS will be notified immediately (see contact information above).

In the event ice road/trail personnel discover a dead or injured seal but the cause of injury or death is unknown or believed not to be related to ice road/trail activities, NMFS will be notified within 48 hours of discovery (see contact information above).

Citations

- Kim, K.H. and W.J. Richardson (eds.). 2016. Monitoring of industrial sounds, seals, and bowhead whales near Hilcorp' Northstar Oil Development, Alaskan Beaufort Sea, 2015: Summary Report. GSI Rep. 521-1. Rep. from Greeneridge Sciences Inc. (Santa Barbara, CA) and LGL Alaska Res. Assoc. Inc. (Anchorage, AK) for Hilcorp Alaska LLC, Anchorage, AK. 69 p
- Moulton, V.D., W.J. Richardson, T.L. McDonald, R.E. Elliott, M.T. Williams and C. Nations. 2005. Effects of an offshore oil development on local abundance and distribution of ringed seals (*Phoca hispida*) of the Alaskan Beaufort Sea. *Marine Mammal Science* 21(2): 217-242
- NMFS (National Marine Fisheries Service). 2000. Final Rule: Taking Marine mammals Incidental to Construction and Operations Of Offshore Oil and Gas Facilities in the Beaufort Sea. *Federal Register*, Vol. 65, No. 102, Thursday May 25, 2000
- Williams, M.T., V.D. Moulton, W.J. Richardson, and S.B. Blackwell. 2006. Summary of results of overwintering ringed seals in relation to Northstar sounds P. 3-1 to 3-37 In: W.J. Richardson (Ed., 2008, q.v.). LGL Rep. P1004.