



Wildlife Interaction Plan / Procedure

Purpose: The purpose of this document is to standardize wildlife interaction and avoidance protocol during seismic activities. Also provide guidelines for assuring the prompt reporting, investigation, and documentation of Pacific walrus polar bears and Stellar Eiders, sightings or incidents involving animals that are protected by the Marine Mammal Protection Act of 1972. This plan also covers reporting of Brown Bears, Black Bears, Moose or any other wildlife that seismic crews may come in contact with during operations. This plan is intended to meet the requirement of a site specific polar bear awareness and interaction plan as required by 50 Code of Federal Regulations (CFR) 18.124(c)(3) and to meet the requirements for a Letter of Authorization (LOA) for the non-lethal, incidental and intentional take of polar bear and Pacific walrus. Any permit stipulations that may be requested by permitting agencies will be added to this document as necessary.

Polar Bears: The United States Fish and Wildlife Service estimates that approximately 1,500 polar bears occur in the southern Beaufort Sea (SBS). Worldwide there are approximately 20,000 to 25,000 polar bears. During the summer months polar bears typically remain on the southern edge of the sea ice. However, they are also known to swim long distances, haul out onto ice flows and barrier islands and can occasionally be found on the coast. It is expected that polar bears will be encountered on ice, in the water, on barrier islands,

Pacific Walrus: The Pacific walrus occurs in the Chukchi and Bering Seas. Typically the eastern range ends at Point Barrow although there have been occasional (every few years) sightings of walrus in the southern Beaufort Sea. Walrus are dependent on sea ice and typically migrate northward as the sea ice retreats. It is unlikely that survey crews will encounter a Pacific walrus during the survey. If one is observed SAE will follow the interaction plan to reduce potential harassment of the animal.

Responsibility: The Project Manager and PSO's have overall responsibility. They are responsible for coordination and implementation of all surveillance or monitoring personnel who deal with wildlife/human encounters, sightings and reporting on the North Slope.

Procedure:



Crews will be trained to maintain a constant level of awareness for the potential conflict with polar bears. In areas where high potential of conflict exists, SAE will evaluate and if required, place a dedicated watch for polar bears in the area of operations. This is not to

say that a continuous watch is not always in effect but rather that the crew will have a dedicated person or persons for oversight in areas of known activity. A polar bear education program will be given to all workers at a pre-job conference or on-site prior to the start of operations or at commencement of employment on the North Slope. Polar bear awareness refresher briefings will be held as part of regular safety briefings. A dedicated Health, Safety and Environmental (HSE) Advisor will be based with the survey crew for the duration of the seismic program, and workers will be instructed to notify the Project Manager, PSO or HSE Advisor immediately whenever a bear is detected. All personnel will be aware of the restrictions regarding "taking" of polar bears as described by the Marine Mammals Protection Act. When a bear is in the immediate area of the crew location, workers will stay inside vehicles or aircraft and away from the bear. Approaching a bear for taking pictures or any other reason is strictly forbidden. USFWS will be called immediately.

Land based activities:

1. When a polar bear is detected near any part of the operation, any employee (permanent, temporary, or contract) or visitor shall immediately notify the Project Manager, PSO or HSE Advisor.
2. The first priority is the protection of human life. The second priority is to avoid any situation in which a bear will be harmed.
3. In a camp situation, the lead person with crew shall radio Project Manager/Administrative Office. The Administrative Office will sound the "air horn" with 5 short blasts and make a radio announcement on all crew channels of the sighting. At the sound of the air horn, EVERYONE is to go to the nearest vessel, helicopter, or vehicle and remain inside with doors and windows secured until the ALL CLEAR is given over the radio. The all clear signal is a long blast on the "air horn".
4. In the field, drivers of each vehicle will advise the personnel they are responsible for and have them get inside the vehicles and wait until further notice.
5. If the bear takes refuge near or in a vehicle and does not appear likely to move, crew HSE will be notified depending on the location of operation. No action will be taken unless authorized by the USFWS or their designated agents. The District Manager and North Slope Security must be contacted at this time.



6. When a sighting is made by a stand alone vehicle, such as the survey crew, they must not approach the bear further. The crew will notify the Project Manager, HSE Advisor or PSO via radio to alert them. The crew must avoid the bear and if necessary cease operations until the bear has left the area. The bear's distance from the crew will determine whether intentional harassment is required.
7. Personnel must remain at least a one half mile distance in all directions from any known bear. The radio announcement must indicate whether this will be necessary or not. An all-clear signal will be sounded when the area is determined to be safe.
8. After any individual sighting or interaction with polar bears during operations on the North Slope, a Polar Bear Sighting Report shall be completed by the HSE Advisor or the PSO. The SAE Permits Manager will forward this report to the Office of Marine Mammals Management, Craig Perham, 786-3810 by phone, 786-3816 fax, within 24 hours.

Best Practices:

- Employees will be prohibited from emptying food and beverages onto ground
- Employees will be prohibited from leaving food in unoccupied vehicles or other unsecured areas. Food, trash, and associated wastes will not be placed in the equipment.
- Food and beverage waste should be disposed of in indoor receptacles or outside bear proof dumpsters and should not be available to wildlife.
- Trash will be collected and separated. Food waste (including empty cups, plates, napkins, and other paper waste) and sanitary waste (from bathrooms and sleeping rooms) will be separated as burnable waste and kept in closed bear-proof areas or secure vehicles in order to eliminate food odor, until incinerated or shipped offsite.
- Kitchen-associated waste and trash, sanitary waste, garbage, and nonmetallic trash will be incinerated on a regular basis.

Marine based activities:

1. Vessels will have a Protective Species Observer (PPO) onboard who will be responsible for locating marine mammals and warning the crew of their location.
2. Vessels will not operate within one half mile (0.8 km) of walruses or polar bears.
3. When a marine mammal appears within the 0.5 mile exclusion zone, the vessel



will reduce speed, change course, and avoid separating members from a group.

4. Vessels will avoid ice flows to protect equipment and attempt to reduce harassment of the marine mammal.
5. During inclement weather with reduced visibility, vessels will reduce speed to avoid collisions with marine mammals.

Aircraft:

1. Aircraft will not operate within 0.5 miles of walruses or polar bears.
2. Aircraft will avoid flying over ideal polar bear habitat including but not limited to sea ice and barrier islands.
3. When marine mammals are encountered aircraft will not operate below 1,500ft unless the aircraft is engaged in marine mammal monitoring, approaching, landing, taking off, or as conditions allow.

Subsistence Hunting:

1. SAExploration will employ a subsistence advisor to reduce impacts on polar bear subsistence hunting.
2. Vessels and aircraft will avoid areas in which subsistence hunting is being conducted.

Reporting:

Polar Bears: When a polar bear is observed the PSO or crew member they shall immediately notify the HSE who will be responsible for filling out the polar bear report form. Reports of sightings will be sent to the USFWS on a regular basis through the Permits Manager.

Reports will be sent to:

Craig Perham
USFWS-Marine Mammals Section
1011 East Tudor Road



Anchorage, AK 99503
Telephone: 907-786-3800
Fax: 907-786-3816

Walrus: The PSO will be responsible for recording information about the encounter on the walrus report form. The reports will be sent by the Permits Manager to the USFWS in accordance with the requirements stated in the LOA.

Reports will be sent to:

Joel Garlich-Miller
USFWS- Marine Mammals Section
1011 East Tudor Road
Anchorage, AK 99503
Telephone: 907-786-3800
Fax: 907-786-3816

Black bears / Brown Bears : (*Ursus americanus*) are the most abundant and widely distributed of the three species of North American bears. An estimated 100,000 black bears inhabit Alaska.

Black bears are most easily distinguished from brown bears by their straight facial profile and their claws, which rarely grow more than 1 ½ inches in length. Black bears have adequate sense of sight and hearing, but have an outstanding sense of smell.

Responsibility: The Project Manager and wilderness guides have overall responsibility. They are responsible for coordination and implementation of all surveillance who deal with wildlife/human encounters, sightings and reporting.

Procedure:

Crews will be trained to maintain a constant level of awareness for the potential conflict with bears. In areas where high potential of conflict exists, SAE will evaluate and if required, place a dedicated wilderness guides in the area of operations. This is not to say that a continuous watch is not always in effect but rather that the crew will have a dedicated wildlife guide for oversight in areas of known activity. Bear education program will be given to all workers at a pre-job conference or on-site prior to the start of operations or at commencement of employment. Bear awareness refresher briefings will be held as part of regular safety briefings. A dedicated Health, Safety and Environmental (HSE) Advisor will be based with the survey crew for the duration of the seismic program, and workers/wilderness guides will be instructed to notify the Project Manager or HSE Advisor whenever a bear is sighted by use of a hazard card. When a bear is in the immediate area of the crew location, workers will stay inside vehicles or aircraft and away



from the bear. Approaching a bear for taking pictures or any other reason is strictly forbidden.

1. When a bear is detected near any part of the operation, any employee (permanent, temporary, or contract) or visitor shall immediately notify the Project Manager or HSE Advisor.
2. The first priority is the protection of human life. The second priority is to avoid any situation in which a bear will be harmed.
3. In a camp situation, the lead person with crew shall radio Project Manager/Administrative Office. The Administrative Office will sound the "air horn" with 5 short blasts and make a radio announcement on all crew channels of the sighting. At the sound of the air horn, EVERYONE is to go to the nearest vessel, helicopter, or vehicle and remain inside with doors and windows secured until the ALL CLEAR is given over the radio. The all clear signal is a long blast on the "air horn".
4. In the field, drivers of each vehicle will advise the personnel they are responsible for and have them get inside the vehicles and wait until further notice. If no vehicles are near, the wilderness guide shall lead crew away from bear.
5. If the bear takes refuge near or in a vehicle and does not appear likely to move, crew HSE will be notified depending on the location of operation. No action will be taken unless authorized by the AKFG or their designated agents.
6. The crew must avoid the bear and if necessary cease operations until the bear has left the area. The bear's safe distance from the crew will determine by the wilderness guide. The distance should be far enough as not to affect the bears behavior. The radio announcement must indicate whether this will be necessary or not. An all-clear signal will be sounded when the area is determined to be safe.
7. Personnel must report any active bear dens. These dens will be mapped and sent to AKFG. After any individual interaction with bears during operations, the Bear Sighting Report shall be completed by the HSE Advisor or the wilderness guide. The SAE Permits Manager will forward this report to the agencies which are listed in the permit stipulations of all permits within 24 hours.



8. For North Slope Operations please fill out Grizzly Bear Observation form.

Spectacle and Steller's Eiders: (*Polysticta stelleri*) is a smallish sea duck that breeds along the Arctic coasts of eastern Siberia and Alaska. The lined nest is built on tundra close to the sea, and 6-10 eggs are laid. Eiders are protected under the endangered species act of 1993. Any take of these species is prohibited under the migratory bird treaty act.

It winters somewhat farther south in the Bering Sea, northern Scandinavia and the Baltic Sea. It can form large flocks, up to 200,000 birds on suitable coastal waters. It is scarce south of its wintering range.

If the proposed project area is within Spectacle eider and Steller eider habitat range the following protocol will be adhered to:

North Slope:

Land based activities:

Spectacled eiders nest and brood-rear in the area from mid-May to early June until late August to early September. Similarly Steller's eiders nesting areas are present in the Colville River, from mid-May through September. Marine surveys would take place along eiders migration routes to and from their winter habitat. Migration from nesting and breeding grounds to molting areas occurs late summer and fall. There is potential for impacts on eiders when survey personnel travel by foot off the road systems and through tidelands and small drainages on the Colville River delta. To avoid and minimize impacts on nesting eiders or eider's broods, crews would implement the following:

1. Adhere to eiders' nesting windows established by USFWS.
2. If working within the established windows, the field crew may scout the survey area before installing node.
3. Scouting must occur before selecting survey point (node location); areas with potential for nesting and/or breeding habitat (tundra areas adjacent to small ponds or within drained lake basins and wetlands) must be scouted in more detail.
4. If during selection of on-land survey points, the field crew discovers a nesting eider female close enough to cause her to abandon her nest, the survey point must be relocated.
5. Crews must not place on-land survey points within 200 meters from eider's nesting females.



Marine based activities:

1. No SA Exploration operations may take place in the Ledyard Bay Critical Habitat Unit (LBCHU), an area important to spectacled eiders. The only exception for SAE vessels to enter the LBCHU is for reportable marine casualties as defined in 46 CFR 4.05-1 or hazardous conditions as defined by 33 CFR 160.204. Entries into the LBCHU due to marine casualties or hazardous conditions must be reported to BOEM-RE within 24 hours.
2. SA Exploration will minimize the use of high-intensity work lights on their vessels, especially within the 20-m bathymetric contour. Exterior lights will only be used as necessary to illuminate active, on-deck work areas during periods of darkness or inclement weather; otherwise they will be turned off. Interior and navigation lights should remain on as needed for safety.

Moose / Foxes / Wolverines or Other wildlife:

Moose, the world's largest member of the deer family, are a common animal in Alaska. While not normally aggressive, moose can become dangerous to people when they are hungry, tired of walking in deep snow, or harassed by people, dogs and traffic. The most important safety precautions are to slow down while driving and to always give moose plenty of space; never approach a moose. It is also illegal – and dangerous – to feed moose. This is true for all wildlife; there is no feeding or harassment of any type of wildlife.

Responsibility: The Project Manager and wilderness guides have overall responsibility. They are responsible for coordination and implementation of all surveillance who deal with wildlife/human encounters, sightings and reporting.

Procedure:

- 1 Avoid any interaction with wildlife.
- 2 Do not take any actions that would cause the animals to change course or behavior unless approved by Alaska Fish and Game



- 3 After any individual interaction with Moose or other types of wildlife during operations, the Wildlife Sighting Report shall be completed by the HSE Advisor or the wilderness guide. The SAE Permits Manager will forward this report to the agencies which are listed in the permit stipulations of all permits.
- 4 If foxes or other wildlife take up shelter within camp area, notify the permits manager.
- 5 Feeding of animals is strictly prohibited.
- 6 There is no hunting or fishing allowed on project.



United States Fish and Wildlife Service
1011 East Tudor Road
Anchorage, AK 99503
Fax: 907-786-3816

Date: _____

Time: _____

Polar Bear Sighting Report

Location: _____

Observer name: _____

Weather conditions: Fog ___ Snow ___ Rain ___ Clear ___ Wind Speed ___
Wind Direction ___ Approx. Temp ___

Total number of bears: ___ Sow/cubs ___/___ Adult ___ Subadult ___

Estimated distance of bear from personnel/facility: ___/___

Possible attractants present: _____

Bear behavior: Curious ___ Aggressive ___ Predatory ___ Other ___

Description of encounter: _____

Injuries sustained: Personnel _____
Polar bear _____

Deterrents used/distance: Vehicle ___ Noise-maker ___ Firearms ___
Other ___

Duration of encounter: _____

Agency Contacts: USFWS _____ Time: _____ Date: _____

ADF&G _____ Time: _____ Date: _____

SAE _____ Time: _____ Date: _____

SAE Representative: _____ Date: _____



United States Fish and Wildlife Service
1011 East Tudor Road
Anchorage, AK 99503
Fax: 907-786-3816

Date: _____

Time: _____

Pacific Walrus Sighting Report

Location: _____

Observer name: _____

Weather conditions: Fog ___ Snow ___ Rain ___ Clear ___ Wind Speed ___
Wind Direction ___ Approx. Temp ___

Total number of walrus: Adult ___ Subadult ___ Unknown ___

Estimated distance of walrus from personnel/facility: ___/___

Possible attractants present: _____

Walrus behavior: Curious ___ Aggressive ___ Other ___

Description of encounter: _____

Injuries sustained: Personnel _____
Walrus _____

Deterrents used/distance: Vehicle ___ Noise-maker ___ Firearms ___ Other ___

Duration of encounter: _____

Agency Contacts:
USFWS _____ Time: _____ Date: _____
ADF&G _____ Time: _____ Date: _____

SAE Representative: _____ Date: _____



Jesse Coleman
Habitat Biologist
Alaska Department of Fish & Game
Division of Habitat
ph: (907) 267-2812

Date: _____
Time: _____

Bear Interaction Report

Location: _____

Observer name: _____

Weather conditions: Fog ___ Snow ___ Rain ___ Clear ___ Wind Speed ___
Wind Direction ___ Approx. Temp ___

Total number of bears: ___ Sow/cubs ___/___ Adult ___ Subadult ___

Estimated distance of bear from personnel/facility: ___/___

Possible attractants present: _____

Bear behavior: Curious ___ Aggressive ___ Predatory ___ Other ___

Description of encounter: _____

Injuries sustained: Personnel _____

Bear _____

Deterrents used/distance: Vehicle ___ Noise-maker ___ Firearms ___
Other ___

Duration of encounter: _____

Agency Contacts: _____ Time: _____ Date: _____

ADF&G _____ Time: _____ Date: _____

SAE _____ Time: _____ Date: _____

SAE Representative: _____ Date: _____



Jesse Coleman
Habitat Biologist
Alaska Department of Fish & Game
Division of Habitat
ph: (907) 267-2812

Date: _____

Time: _____

Wildlife Sighting Report

Location: _____

Observer name: _____

Weather conditions: Fog _____ Snow _____ Rain _____ Clear _____ Wind Speed _____
Wind Direction _____ Approx. Temp _____

Total number of animals: _____ Type _____ / Adult _____ Subadult _____

Estimated distance from personnel/facility: _____ / _____

Possible attractants present: _____

Animal behavior: Curious _____ Aggressive _____ Predatory _____ Other _____

Description of encounter: _____

Injuries sustained: Personnel _____

Animal _____

Deterrents used/distance: Vehicle _____ Noise-maker _____ Firearms _____
Other _____

Duration of encounter: _____

Agency Contacts: _____ Time: _____ Date: _____

ADF&G _____ Time: _____ Date: _____

SAE _____ Time: _____ Date: _____

SAE Representative: _____ Date: _____



United States Fish and Wildlife Service
1011 East Tudor Road
Anchorage, AK 99503
Fax: 907-786-3816

Date: _____

Time: _____

Stellar Eider Sighting Report

Location: _____

Observer name: _____

Weather conditions: Fog ___ Snow ___ Rain ___ Clear ___ Wind Speed ___
Wind Direction ___ Approx. Temp ___

Total number of Birds: Adult ___ Subadult ___ Unknown ___

Estimated distance from personnel/facility: ___ / ___

Reactions of Bird _____

Bird behavior: Curious ___ Aggressive ___ Other ___

Description of encounter: _____

Injuries sustained: Personnel _____
Bird / Eggs _____

Reporting map location number: _____

Duration of encounter: _____

Agency Contacts:

USFWS _____ Time: _____ Date: _____

ADF&G _____ Time: _____ Date: _____

SAE Representative: _____ Date: _____



Bear ID# (ADF&G use) _____

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OILFIELD GRIZZLY OBSERVATION FORM

OBSERVER _____ **COMPANY/AGENCY** _____

OBSERVATION DATE _____ **TIME:** Start _____ Stop _____

OBSERVATION FROM: Vehicle _____ Ground _____ Building _____ Other _____

OBSERVER DISTANCE FROM BEAR _____ meters

GENERAL LOCATION: Deadhorse _____ EOA _____ WOA _____ Kuparuk _____ Endicott _____

Milne _____ Badami _____ Alpine _____ Pt. Thomson _____ TAPS (MP #) _____

Other (latitude/longitude if known) _____

SPECIFIC LOCATION [Example: 500 meters N of DS 14]: _____ meters

_____ [direction] of _____ [facility name]

DUMPSTER PRESENT? Yes _____ No _____ Unknown _____

WEATHER: _____ °F Wind direction _____ at _____ mph

Clear/partly cloudy _____ rain _____ fog _____ snow _____

BEAR IDENTIFICATION: EAR FLAG COLOR [Note: right & left of bear, not observer]

_____ Color right _____ Color left **NATURAL MARKINGS** [scars, torn ears, ETC.] _____

OTHER BEARS PRESENT? None _____ No. of new cubs _____ No. of yearlings _____

No. of 2 year olds _____ Number of other adults _____ No. unknown _____

BEAR ACTIVITY WHEN FIRST SEEN: Resting _____ Feeding (natural food) _____

Feeding (garbage) _____ Traveling _____ Traveling/feeding _____

Other [describe]: _____

BEAR REACTION TO OBSERVER: Ignore _____ Approach _____ Avoid _____

Were other people in area (not with observer)? Yes _____ No _____ Unknown _____

BEAR REACTION TO OTHER PEOPLE: Ignore _____ Approach _____ Avoid _____

REACTION COMMENTS _____

DETERRENCE ACTION TAKEN? Yes _____ No _____

If yes, did you use: Horn _____ Siren _____ Rubber slug _____ Bean bag _____

Cracker shell _____ Other [describe] _____

BEAR'S REACTION TO DETERRENT: Ignore _____ Approach _____ Withdraw _____

ADDITIONAL REMARKS _____



Dick Shideler, Alaska Dept. Fish & Game; FAX 907-459-7332, or email dick.shideler@alaska.gov