



Plan of Cooperation Addendum Chukchi Sea Exploration Plan, Revision 2 Chukchi Sea, Alaska

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Table of Contents

INTRODUCTION	1
1.0 POC LEASE STIPULATION AND REGULATORY REQUIREMENTS	2
2.0 MEASURES IN PLACE.....	4
2.1 EP Revision 2 Mitigation Measures	4
2.1.1 Subsistence Mitigation Measures.....	4
2.1.2 Marine Mammal Mitigation Measures.....	7
2.1.3 Mitigation Measures for Activities and Oil Spill Prevention and Response	8
2.2 Exploration Drilling Marine Mammal Monitoring And Mitigation Program	8
2.3 Interaction And Avoidance Plan For Polar Bear And Pacific Walrus.....	9
3.0 AFFECTED SUBSISTENCE COMMUNITY MEETINGS	10
3.1 Consultation with Community Leaders.....	10
3.2 Community Meeting Summaries.....	10
3.3 Project Information and Presentation Materials	11
3.4 Meeting Process	11
4.0 CONCLUSION	12

List of Tables

Table 3.2-1 Meeting Dates and Locations for this POC Addendum	10
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List of Figures

Figure 1-1 Location Map: Plan of Cooperation Chukchi Sea EP Revision 2	3
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List of Attachments

- Attachment A Communication and Consultation with North Slope Subsistence Stakeholders
- Attachment B Chukchi Sea Communication Plan

ACRONYMS & ABBREVIATIONS

4MP	Marine Mammal Monitoring and Mitigation Plan
AEWC	Alaska Eskimo Whaling Commission
BOEM	Bureau of Ocean Energy Management
CDPF	Catalytic Diesel Particulate Filters
CFR	Code of Federal Regulations
CLO	Community Liaison Officer(s)
COCOP	Critical Operations and Curtailment Plan
Com Centers	Communication and Call Centers
dB	decibel(s)
DIMP	Drilling Ice Management Plan
DP	dynamic positioning
EP	Exploration Plan
EP Revision 1	Chukchi Sea Exploration Plan Revision 1 (Shell 2011)
EP Revision 2	Chukchi Sea Exploration Plan Revision 2 (Shell 2015)
ft.	foot/feet
Initial EP	Shell's initial Chukchi Sea Exploration Plan (Shell 2009)
km	kilometers
LBCHU	Ledyard Bay Critical Habitat Unit
m	meter/meters
MAWP	Maximum Anticipated Wellhead Pressure
mi	mile(s)
min	minute(s)
MMPA	Marine Mammal Protection Act
NMFS	National Marine Fisheries Service
NSB	North Slope Borough
NWAB	Northwest Arctic Borough
OSR	Oil Spill Response
OSRV	Oil Spill Response Vessel
OSRP	Oil Spill Response Plan
POC	Plan of Cooperation
PSO	Protected Species Observer(s)
SA	Subsistence Advisor(s)
SCR	Selective Catalytic Reduction
Shell	Shell Gulf of Mexico Inc.
SIWAC	Shell Ice and Weather Advisory Center
USFWS	United States Fish and Wildlife Service
WCD	Worst Case discharge

INTRODUCTION

Shell Gulf of Mexico Inc. (Shell) has an approved Chukchi Sea Exploration Plan (initial EP and subsequent EP Revision 1) to drill six wells on six outer continental shelf lease blocks in the Chukchi Sea (Figure 1-1). The EP Revision 1, titled *Revised Outer Continental Shelf Lease Exploration Plan, Chukchi Sea, Alaska. Burger Prospect: Posey Area Blocks 6714, 6762, 6764, 6812, 6912, and 6915. Chukchi Sea Lease Sale 193* was approved by Bureau of Ocean Energy Management (BOEM) on December 16, 2011. During the 2012 drilling season, Shell partially drilled the Burger A well. In subsequent years, Shell plans to continue drilling with all six wells drilled to their proposed total depth.

BOEM Lease Sale Stipulation No. 5 requires that all exploration activities be conducted in a manner that prevents unreasonable conflicts between oil and gas exploration activities and subsistence resources and activities. This stipulation also requires adherence to United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) regulations, which require an operator to implement a Plan of Cooperation (POC) to mitigate the potential for conflicts between the proposed activity and traditional subsistence activities (50 Code of Federal Regulations [CFR] §18.124(c)(4) and 50 CFR §216.104(a)(12)). A POC was prepared and was submitted with the initial Chukchi Sea EP, updated with EP Revision 1 and again with EP Revision 2. This POC Addendum provides updates regarding changes in the proposed exploration drilling program, and documentation of meetings undertaken to inform stakeholders of proposed plans for exploration drilling activities.

The POC Addendum identifies the measures that Shell has developed in consultation with North Slope communities and subsistence user groups. The POC measures will be implemented during the planned Chukchi Sea exploration drilling program to minimize any adverse effects on the availability of marine mammals for subsistence uses. In addition, the POC details Shell's communications and consultations with local communities concerning its exploration drilling program, potential conflicts with subsistence activities, and means of resolving any such conflicts (50 CFR § 18.128(d) and 50 CFR § 216.104(a) (12) (i), (ii), (iv)). Shell has documented its contacts with the North Slope communities, as well as the substance of its communications with subsistence stakeholder groups. Tables summarizing Shell's communications and responses are included in Attachment A. As appropriate, this POC Addendum may be supplemented to reflect additional engagements with local subsistence users and any additional or revised mitigation measures that are adopted as a result of those engagements.

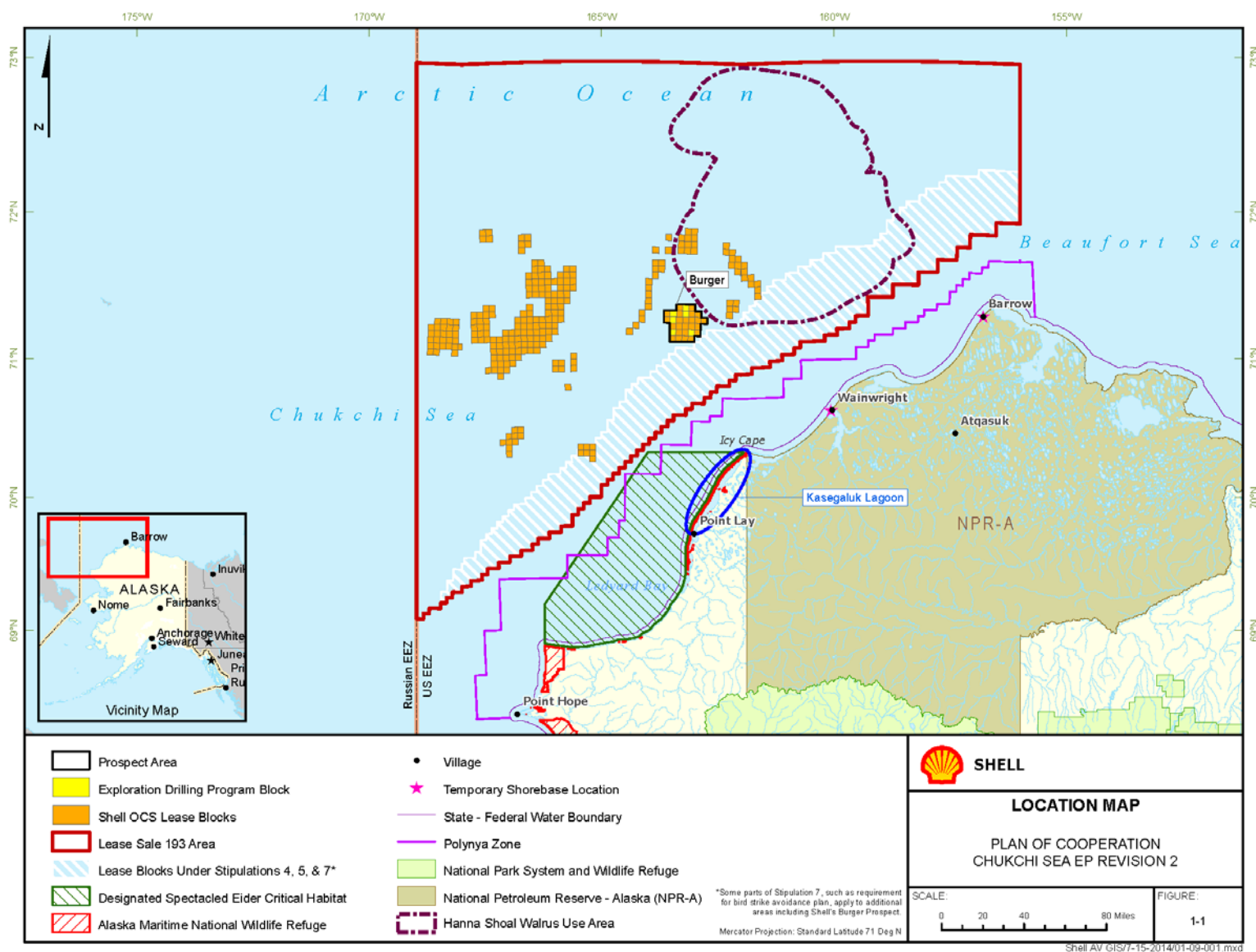
Shell will implement the POC and the associated mitigation measures set-forth herein for its Chukchi Sea exploration drilling program.

1.0 POC LEASE STIPULATION AND REGULATORY REQUIREMENTS

BOEM Lease Sale Stipulation No. 5 requires that all exploration activities be conducted in a manner that prevents unreasonable conflicts between oil and gas activities, and subsistence resources and activities of the residents of the North Slope. Specifically, Stipulation No. 5 requires the operator to consult directly with potentially affected North Slope subsistence communities such as the North Slope Borough (NSB), the Alaska Eskimo Whaling Commission (AEWC), and co-management groups including the Alaska Beluga Whale Committee, Eskimo Walrus Commission, Ice Seal Commission, and Nanuuq Commission.

Consultation is needed “to discuss potential conflicts with the siting, timing, and methods of proposed activities and safeguards or mitigating measures which could be implemented by the operator to prevent unreasonable conflicts.” Stipulation No. 5 also requires the operator to document its contact with and the substance of the communications with subsistence stakeholder groups during the operator’s consultation process.

The requirements of Stipulation No. 5 parallel requirements for receipt of a USFWS and NMFS Marine Mammal Protection Act (MMPA) authorization. The MMPA authorizations provide for the non-lethal, incidental harassment of species protected by the MMPA. Both the USFWS and NMFS require an applicant to implement a POC to mitigate the potential for conflicts between the proposed activity and traditional subsistence activities (50 CFR §18.124(c)(4) and 50 CFR §216.104(a)(12)). The POC must identify the measures that will be taken to minimize any adverse effects on the availability of marine mammals for subsistence uses. In addition, both USFWS and NMFS require an applicant to communicate and consult with local subsistence communities concerning proposed activity, potential conflicts with subsistence activities, and means of resolving any such conflicts (50 CFR §18.128(d) and 50 CFR §216.104(a) (12) (i), (ii), (iv)).

Figure 1-1 Location Map: Plan of Cooperation Chukchi Sea EP Revision 2

2.0 MEASURES IN PLACE

The following mitigation measures, plans, and programs are integral to this POC Addendum and were developed through consultation with potentially affected subsistence groups, communities, and the NSB. These measures, plans, and programs will be implemented by Shell during its exploration drilling activities in the Chukchi Sea. The mitigation measures described below allow Shell the ability to monitor and mitigate potential impacts to subsistence users and resources.

2.1 EP Revision 2 Mitigation Measures

The mitigation measures Shell has adopted, and will implement during its exploration drilling activities are listed and discussed below. These mitigation measures reflect Shell's experience conducting exploration activities in Alaska since 2006, and its ongoing consultations with local subsistence communities to better understand their concerns and develop appropriate and effective mitigation measures to address those concerns. Shell's planned mitigation measures have been presented to community leaders and subsistence user groups starting in 2009, and have evolved over time in response to the comments and concerns expressed during the consultation process. Some mitigation measures appear under more than one sub-heading since they pertain to more than one "category" within the mitigation measures.

2.1.1 Subsistence Mitigation Measures

To minimize any cultural or resource impacts to subsistence beluga whaling or walrus hunting, exploration drilling activities are not anticipated to begin in the Chukchi Sea until on or about 1 July.¹ Shell will implement the following measures to ensure coordination of its activities with local subsistence users, in addition to minimizing the risk of impact to marine mammals and interfering with subsistence hunting.

Communications

- Shell has developed a Communication Plan and will implement this plan before initiating exploration drilling operations to coordinate activities with local subsistence users, as well as Village Whaling Captains' Associations, to minimize the risk of interfering with subsistence hunting activities, and keep current as to the timing and status of the bowhead whale hunt and other subsistence hunts. The Communication Plan includes procedures for coordination with Com Centers to be located in coastal villages along the Chukchi Sea during Shell's proposed exploration drilling activities.
- Shell will employ local Subsistence Advisors (SAs) from the Chukchi Sea villages that are potentially impacted by Shell's exploration drilling activities. The SAs will provide consultation and guidance regarding the whale migration and subsistence activities. There will be one per village, working approximately 8-hr per day and 40-hr weeks during the drilling seasons. The SA will use local knowledge (Traditional Knowledge) to gather data on subsistence lifestyle within the community and provide advice on ways to minimize and mitigate potential negative impacts to subsistence resources during the drilling season. Responsibilities include reporting any subsistence concerns or conflicts; coordinating with subsistence users; reporting subsistence-related comments, concerns, and information; coordinating with the Com and Call Center personnel; and, advising how to avoid subsistence conflicts.

¹ As noted in the EP Revision 2, Shell may request permission in the future to transit through the Bering Strait prior to 1 July.

Aircraft Travel

- Aircraft over land or sea shall not operate below 1,500 ft. (457 m) altitude unless engaged in marine mammal monitoring; approaching, landing, or taking off; in poor weather (fog or low ceilings); or in an emergency situation.
- Aircraft engaged in marine mammal monitoring shall not operate below 1,500 ft. (457 m) in areas of active whaling; such areas to be identified through communications with the Com Centers.
- Except in an emergency, aircraft will not operate at an altitude lower than 1,500 ft. (457 m) within 0.5 mi. (0.8 km) of polar bears when observed on land or ice.
- Helicopters will not operate at an altitude lower than 3,000 ft. (914 m) within 1 mi. (1.6 km) of walrus groups observed on land, and fixed-wing aircraft will not, except in an emergency, operate at an altitude lower than 1,500 ft. (457 m) within 0.5 mi. (805 m) of walrus groups observed on ice, or within 1 mile (1,610 m) of walrus groups observed on land.
- If aircraft must be operated below 1,500 ft. (457 m) because of weather, the operator will avoid areas of known walrus and polar bear concentrations and will take precautions to avoid flying directly over or within flying within 0.5 mi. (805 m) of these areas..

Vessel Travel

- The drilling units and support vessels anticipate they will enter the Chukchi Sea through the Bering Strait on or about 1 July,² minimizing effects on marine mammals and birds that frequent open leads and minimizing effects on spring and early summer bowhead whale hunting.
- The transit route for the drilling units and drilling support vessels will avoid known fragile ecosystems and the Ledyard Bay Critical Habitat Unit (LBCHU), and will include coordination through Com Centers.
- PSOs will be aboard the drilling unit(s) and all transiting support vessels.
- Except in an emergency, vessels will not approach within 0.5 mi. (0.8 km) of walruses or polar bears when observed on ice.
- Except in an emergency, vessels will not approach within 1.0 mi. (1.6 km) of groups of walruses or 0.5 mi. (0.8 km) of polar bears when observed on land.
- When within 900 ft. (274 m) of whales, vessels will reduce speed, avoid separating members from a group and avoid multiple changes of direction.
- Vessels should take all reasonable precautions (i.e., reduce speed, change course heading) to maintain a minimum operational exclusion zone of 0.5 mi (805 m) around groups of 12 or more walruses in the water.
- Vessel speed will be reduced during inclement weather conditions in order to avoid collisions with marine mammals.
- Shell will communicate and coordinate with the Com Centers regarding all vessel transit.
- Use of some lighting on the drilling units and support vessels will be minimized and shaded to reduce potential disorientation and attraction of birds and to reduce the possibility of a bird collision (Bird Strike Avoidance and Lighting Plan, Appendix E, EP Revision 2).

² See *supra* note 1.

ZVSP

- Airgun arrays will be ramped up slowly during ZVSPs to warn cetaceans and pinnipeds in the vicinity of the airguns and provide time for them to leave the area and avoid potential injury or impairment of their hearing abilities. Ramp ups from a cold start when no airguns have been firing will begin by firing a single airgun in the array. A ramp up to the required airgun array volume will not begin until there has been a minimum of 30 min of observation of the safety zone by PSOs to assure that no marine mammals are present. The safety zone is the extent of the 180 dB radius for cetaceans and 190 dB for pinnipeds. The entire safety zone must be visible during the 30 min lead-in to an array ramp up. If a marine mammal(s) is sighted within the safety zone during the 30 min watch prior to ramp up, ramp up will be delayed until the marine mammal(s) is sighted outside of the safety zone or the animal(s) is not sighted for at least 15-30 min: 15 min for small odontocetes and pinnipeds, or 30 min for baleen whales and large odontocetes.

Ice Management

- Shell has developed and will implement an Adaptive Approach to Ice Management in Areas Occupied by Pacific Walruses.
- Real time ice and weather forecasting from the Shell Ice and Weather Advisory Center (SIWAC).

Oil Spill Response (OSR)

- The primary oil spill response vessels (OSRV) will be on standby at all times when drilling into zones capable of flowing liquid hydrocarbons in measurable quantities to ensure that oil spill response capability is available within one hour, if needed.
- Shell will deploy OSR support vessels that are capable of collecting oil on the water in excess of the calculated worst case discharge (WCD) flow rate of a blowout in the unlikely event that one should occur. The remainder of the OSR support vessels will be fully engaged within 72 hours.
- In addition to the OSR support vessels, oil spill containment equipment will be available for use in the unlikely event of a blowout. The containment system tug and barge will be located in or near Goodhope Bay, Kotzebue Sound. This equipment is designed for maximum reliability, ease of operation, flexibility and robustness so it could be used for a variety of blowout situations. It is anticipated that the containment system could arrive at the scene of a blowout and be capable of receiving hydrocarbons in eight days, depending on weather and the characteristics of the blowout.
- Capping stack equipment will be stored aboard one of the ice management vessels and will be available for deployment within 24 hours, depending on ice, weather and location, in the unlikely event of a blowout. Capping stack equipment consist of SS devices assembled to provide direct surface intervention capability with the following priorities:
 - Attaching a device or series of devices (i.e. the capping stack) to the well to affect a seal capable of withstanding the Maximum Anticipated Wellhead Pressure (MAWP) and closing the assembly to completely seal the well against further flows (this intervention process is commonly called “Cap and Contain”), and
 - Attaching a device or series of devices (i.e. the capping stack) to the well and diverting flow to surface vessel(s) (i.e. the containment system on the *Arctic Challenger* barge) equipped for separation and disposal of hydrocarbons (this intervention process is commonly called “Cap and Flow”).

A polar bear culvert trap has been constructed in anticipation of OSR needs and will be available prior to exploration drilling.

- Pre-booming is required for all fuel transfers between vessels.

Air Emissions

- Procuring ULSD fuel or a fuel with equal or lower sulfur content to reduce SO₂ emissions for each of the drilling units and all vessels operating as part of the exploration drilling program; and
- Establishing fuel restrictions on most of the propulsion and generators engines for the support vessels.

Appendix K provides a summary of the emission reduction measures and the resulting emissions reductions, as applied in the AQRP analysis.

Shell has elected to present maximum projected emissions in the AQRP emissions inventory for the 30 CFR 550.303(d) exemption formula analyses without consideration of existing emission controls as reduction measures on the *Discoverer's* primary generation units or any of the support vessels. These emission controls include the following:

- selective catalytic reduction (SCR) emission controls to reduce NO_x emissions on *Discoverer's* primary generation units and certain units on support vessels;
- catalytic diesel particulate filters (CDPF) emission controls to reduce CO, particulate matter (PM), and VOC emissions on the *Discoverer's* primary generation units and certain units on support vessels; and
- oxidation catalysts (OxyCat) emission controls to reduce CO, PM, and VOC emissions on certain units on support vessels.

The 30 CFR 550.303(d) exemption analyses in Section 7(e) conservatively assume the emission controls are not employed as emission reduction measures. As a result, Shell is not required to operate these controls, but is voluntarily committing to do so. Therefore, emissions reductions resulting from the voluntary commitment to operate the controls are not quantified in the AQRP emission inventories presented in Appendix K and thus no corresponding monitoring is proposed for these emission controls.

2.1.2 Marine Mammal Mitigation Measures

Marine mammal mitigation measures will focus on the utilization of PSOs to ensure that exploration drilling and support vessel activities do not disturb marine mammal resources and avoid unreasonable interference with the subsistence hunt of those resources. PSOs will be stationed, at a minimum, on the drilling units, ice management and anchor handler vessels to monitor the exclusion zone (areas within isopleths of certain sound levels for different species) for marine mammals. For vessels in transit, if a marine mammal is sighted from a vessel within its respective safety radius, the vessel will reduce activity (e.g., reduce speed and/or change course) and noise level to ensure that the animal is not exposed to sound above their respective safety levels. Full activity will not be resumed until all marine mammals are outside of the exclusion zone and there are no other marine mammals likely to enter the exclusion zone. Regular overflight surveys and support vessel surveys for marine mammals will be conducted to further monitor prospect areas. As noted above, Shell will also implement flight restrictions to further reduce the likelihood of impacts.

Anchored vessels, or vessels on dynamic positioning (DP), will remain at anchor or on DP and continue ongoing activities if approached by a marine mammal. An approaching animal that is not exhibiting avoidance behavior, is likely curious and not regarded as harassed. The anchored vessel, or vessel on DP, will remain in place and continue ongoing activities to avoid possibly causing avoidance behavior by suddenly changing noise conditions.

In addition to the use of PSOs, Shell will implement the measures detailed in 2.1.1 to avoid disturbances to marine mammals that potentially could rise to the level of incidental take, and ensure coordination of its activities with local subsistence users to minimize further the risk of impacting marine mammals and interfering with the subsistence hunt. Complete PSO protocol is located in the Marine Mammal Monitoring and Mitigation Plan (4MP) (EP Revision 2, Appendix B).

2.1.3 Mitigation Measures for Activities and Oil Spill Prevention and Response

BOEM has concluded that the probability of a large oil spill occurring during an exploration drilling project is extremely remote. Nevertheless, as required by both federal and state regulations, Shell has developed and will implement a comprehensive Oil Spill Response Plan (OSRP) during its exploration drilling activities, in addition to other plans including the Drilling Ice Management Plan (DIMP) and the Critical Operations and Curtailment Plan (COCP). The OSRP has been reviewed and approved by federal regulators to ensure that Shell has the spill response resources necessary to respond to any spill that might occur. While the probability of a spill is very remote, Shell will dedicate all necessary resources to respond to any spill that may occur. In addition to the maintenance and implementation of its OSRP, Shell will implement the OSR measures detailed in section 2.1.1 to further minimize any risk of a spill that could impact marine mammals and interfere with subsistence hunting.

2.2 Exploration Drilling Marine Mammal Monitoring And Mitigation Program

Under 50 CFR 216.108, NMFS requires any holder of a MMPA authorization for non-lethal, incidental take of whales or seals in Arctic waters to complete monitoring and reporting requirements established in the MMPA authorization. Additionally, the USFWS requires all applicants for MMPA authorizations for non-lethal, incidental take of polar bears and Pacific walrus to conduct monitoring under 50 CFR 18.128 and BOEM's Chukchi Sea Lease Sale 193 Stipulation #4 requires a site-specific bowhead whale monitoring program. To meet these requirements, a 4MP was developed for the Chukchi Sea exploration drilling program. The 4MP is designed to avoid, minimize, and mitigate potential adverse impacts to marine mammal subsistence resources that may result from offshore activities. The 4MP is included as Attachment B to the Chukchi Sea EP Revision 2. The 4MP for the exploration drilling program includes the following provisions:

- PSOs will support, at a minimum, the transit of the drilling units, ice management vessels, and anchor handlers and other activities in the Chukchi Sea. The shipboard PSO program is designed to provide real time observations of marine mammals by trained observers from individual vessels to document exposure to industrial activities. PSOs, at a minimum, will be present on the drilling units, ice management vessels, and anchor handlers (i.e., all vessels in transit) to monitor for the presence of marine mammals, assist maintenance of marine mammal safety radii around vessels, monitor and record avoidance or exposure behaviors, and communicate with the Com Centers and local subsistence hunters by marine radio. The experience and abilities of the NSB residents in sighting and identifying marine mammals during Shell's exploration programs contributed significantly to the success of Shell's previous monitoring and mitigation program.
- Aerial Survey Program will collect information in the Chukchi Sea regarding distribution and abundance of bowhead whales and other marine mammals.
- Acoustic Recorders that include a combination of recorder technology, such as pop-up or Directional Autonomous Seafloor Acoustic Recorder buoys, to monitor wide area distribution of marine mammals, specifically bowhead whales, in relation to Shell's proposed activities.
- Sound Modeling of vessels utilized for seismic and exploration drilling activities.
- Sound Source Verification intended for field measurement sound propagation profiles for support vessels that were not already recorded in 2012 or 2013 and will be utilized by Shell in the exploration drilling program in the Chukchi Sea.

2.3 Interaction And Avoidance Plan For Polar Bear And Pacific Walrus

Shell has prepared an interaction and avoidance plan for polar bear and Pacific walrus to meet the requirements of 50 CFR 18.128 for holders of MMPA authorizations issued by the USFWS. The plan outlines procedures for mitigating potential impacts to polar bear and Pacific walrus, as well as monitoring program requirements. A copy of the plan for Shell's exploration drilling activities outlined in the EP Revision 1 was sent to the USFWS for the 2012 exploration drilling program and this plan was updated and submitted to USFWS in 2014. Measures in the plan which cover all Shell activities associated with exploration drilling are summarized below.

- New polar bear dens, identified by industry, local residents, and regulatory agencies are reported annually and will be incorporated into project plans to ensure both bear and worker safety. Bear dens discovered during exploration drilling activities will be reported to the designated USFWS representatives.
- Trash will be collected and separated so that all food-associated waste is placed in an appropriate bear-resistant dumpster.
- Hazardous wastes, if generated, would be transported off-site for disposal at an approved facility.
- Employees will be prohibited from directly feeding animals or deliberately leaving food for polar bears and other animals.
- If a polar bear is observed, all on-site personnel will be alerted so that work activities can be altered or stopped to avoid interactions. Personnel will contact the designated USFWS representative whenever a polar bear is sighted. Depending on the distance between the polar bear and the activities this may mean retreating to the safety of vehicles, emergency shelter, temporary buildings, or other safe haven.
- When a polar bear is observed, a designated bear watcher will be assigned to ensure continuous monitoring of the bear's movements. The On-Scene Shell Supervisor will be contacted before any bear hazing activities. Trained polar bear hazers and bear guards will support field activities.
- Exploration drilling and support vessels will observe a 0.5 mi (0.8 km) exclusion zone around any polar bear or walrus observed on water or ice during transit, except in an emergency.
- Aircraft will maintain 1,500 ft. (457 m) minimum altitude within, 0.5 mi (0.8 km) of polar bear or Pacific walrus when observed on water or ice, or a polar bear on land except in an emergency. Due to their importance as polar bear summer resting habitat, flight paths for aircraft will be offset from the coastlines of Chukchi Sea barrier islands by at least 0.5 mile (0.8 km) and 1,500 ft. (457 m) above ground level.
- In addition to above, except in an emergency, helicopters will not operate at an altitude lower than 3,000 ft. (914 m) and fixed wing aircraft will not operate at an altitude lower than 1,500 ft. (457 m) within 1 mi (1.6 km) of walrus observed on land.
- Except in an emergency, vessels will not operate within 1 mi (1.6 km) of walrus or 0.5 mi (0.8 km) of polar bears when observed on land.
- Ice management mitigation measures, such as "ice scouting," will use radar, satellite imagery, observations by trained Ice Advisors from support vessels, and possibly reconnaissance flights to monitor ice movement in areas near the prospect prior to and during exploration drilling activities. These measures will provide an early warning of bears in the vicinity so appropriate measures can be taken to limit polar bear/human interaction.
- Polar bear monitoring, reporting, and survey activities will be conducted in accordance with those outlined in 78 Federal Register 35364-35427.

3.0 AFFECTED SUBSISTENCE COMMUNITY MEETINGS

Affected subsistence communities that are consulted regarding Shell's approved EP and EP Revision 2 include: Barrow, Wainwright, Point Lay, Point Hope, Kotzebue and Deering.

Table 3.2-1 outlines POC meetings held in several villages between 2012-2015. In 2012, Shell met with villagers and discussed the next exploration drilling program in the Chukchi Sea. In July 2013, Shell personnel travelled to Kotzebue and met with representatives of the borough, city, village corporation and the native village government. In 2013-2015, Shell traveled to Barrow, Wainwright, Point Lay, Point Hope, Deering, Kotzebue and Buckland for POC meetings to update the communities on potential exploration drilling activities in the Chukchi Sea. Revisions to the exploration drilling program that are outlined in the Chukchi Sea EP Revision 2 have been presented during the POC meetings as recently as the winter of 2015.

Additionally, Shell met with subsistence groups including the AEWC, the Nanuuq Commission, the Eskimo Walrus Committee, the Beluga Commission, the Ice Seal Commission, and the Native Village of Barrow, and presented information regarding proposed activities to the NSB and Northwest Arctic Borough (NWAB) Assemblies, and NSB and NWAB Planning Commissions. Several one-on-one meetings were also held throughout the villages.

3.1 Consultation with Community Leaders

Shell holds one-on-one meetings with representatives from the NSB and NWAB, subsistence-user group leadership, the Inupiat Community of the Arctic Slope and Village Whaling Captain Association representatives. These meetings take place at the convenience of the community leaders and in various venues. Meetings began in January 2009 and have continued to date. Shell's primary purpose in holding individual meetings is to inform key leaders, prior to the public meetings, so that they are prepared to give appropriate feedback on planned activities.

3.2 Community Meeting Summaries

Table 3.2-1 provides a list of public meetings attended by Shell while developing this POC Addendum. Comment analysis tables for numerous meetings held between 2012 and 2015 summarize feedback from the communities regarding Shell's planned ongoing exploration drilling activities. Comment analysis tables from 2014 and 2015 meetings, with responses from Shell and corresponding mitigation measures pertinent to the comments are included in Attachment A. Presentation materials are also included in Attachment A.

Table 3.2-1 Meeting Dates and Locations for this POC Addendum

2012	Meeting Location	Meeting Attendees – Position
23 October	Point Lay	Plan of Cooperation Community Meeting
24 October	Wainwright	Plan of Cooperation Community Meeting
29 October	Barrow	Plan of Cooperation Community Meeting
6 November	Barrow	NSB Assembly Workshop Meeting
2013	Meeting Location	Meeting Attendees – Position
5-7 March	Anchorage	Arctic Open Water Meeting
29 July	Kotzebue	NWAB, City of Kotzebue, Village Corporation and Native Village Government representatives
5 November	Wainwright	Plan of Cooperation Community Meeting
6 November	Point Lay	Plan of Cooperation Community Meeting
8 November	Barrow	Plan of Cooperation Community Meeting
12 November	Point Hope	Plan of Cooperation Community Meeting; Native Village of Point Hope; City of Point Hope
2014	Meeting Location	Meeting Attendees – Position
28 January	Kotzebue	Plan of Cooperation Community Meeting
30 June	Barrow	Plan of Cooperation Community Meeting

Table 3.2-1 Meeting Dates and Locations for this POC Addendum

1 July	Wainwright	Plan of Cooperation Community Meeting
7 July	Point Lay	Plan of Cooperation Community Meeting
8 July	Point Hope	Plan of Cooperation Community Meeting
9 July	Kotzebue	Plan of Cooperation Community Meeting
17 July	Deering	Plan of Cooperation Community Meeting
3 November	Barrow	Plan of Cooperation Community Meeting
6 November	Point Lay	Plan of Cooperation Community Meeting
2015	Meeting Location	Meeting Attendees – Position
12 January	Kotzebue	Plan of Cooperation Community Meeting
13 January	Wainwright	Plan of Cooperation Community Meeting
22 January	Buckland	Plan of Cooperation Community Meeting
22 January	Deering	Plan of Cooperation Community Meeting

3.3 Project Information and Presentation Materials

To present consistent and concise information regarding the planned exploration drilling program as detailed in EP Revision 2, Shell has prepared presentation materials (Attachment A) for meetings with stakeholders across the North Slope.

Attachment A includes POC presentations that were given to communities in 2014 and 2015. There are minor differences between the lengthy presentations given at each village since the presentations are slightly modified and tailored for each community. Rather than submit several very similar presentations, Shell is submitting one 2014 POC presentation and one 2015 POC presentation.

3.4 Meeting Process

Prior to Shell's public meetings, notices and flyers were sent to each of the communities via email and Shell's locally-based Community Liaison Officers (CLO). Announcements of upcoming Shell meetings were posted by CLO's around the villages and announcements were also transmitted by radio to all the communities.

Community meetings are designed to allow the public to voice their concerns and speak one-on-one with project experts. Subject matter experts were available in the communities to facilitate direct communications and comment cards were supplied to all meeting attendees upon arrival. The comment cards have Shell's return address printed on them to enable community members to send comments in at their leisure. A toll-free phone number and e-mail address were also provided in case questions arose after the meeting. Every effort was made to ensure the maximum amount of feedback was received and that all questions were addressed and answered to the fullest extent possible.

After each meeting, comments were gathered and compiled into a comment analysis table. A separate comment analysis table was completed for each POC meeting. These tables are included in Attachment A.

4.0 CONCLUSION

As discussed in Section 4, and detailed in the attached documents, stakeholders have been provided information relevant to the project and have been invited to offer input on potential environmental, social, and health impacts, as well as and proposed mitigation and conflict avoidance measures. Shell is seeking alignment with stakeholders and, where appropriate and feasible, will incorporate the recommendations of stakeholders into project planning.

As required by applicable lease sale stipulations, as well as anticipated MMPA authorization stipulations, Shell will continue to meet with the affected subsistence communities and users to resolve conflicts and to notify the communities of any changes in its planned activities. The POC Addendum may be supplemented, as appropriate, to reflect additional engagements with local subsistence users and any additional or revised mitigation measures that are adopted as a result of those engagements. Shell respectfully submits that this POC Addendum meets its obligations under Stipulation No. 5, as well as the POC requirements established by applicable USFWS and NMFS regulations (50 CFR 216.104, 50 CFR 18.124 and 128).

Attachment A
Communication and Consultation with North Slope Subsistence Stakeholders:
Community Meeting Comments, Responses and Presentations Given

Attachment B
Chukchi Sea Communication Plan