

United States Department of the Interior BUREAU OF OCEAN ENERGY MANAGEMENT

Alaska OCS Region 3801 Centerpoint Drive, Suite 500 Anchorage, Alaska 99503-5823

Memorandum

To:

Memo to File

From:

David Johnston, Regional Supervisor, Office of Leasing and Plans

Subject:

Review and Closeout of Operational and Post-Operational Conditionally

Approved Items for Shell's March 2015 Chukchi Sea Exploration Plan Revision 2

Date:

March 24, 2016

<u>Purpose</u>: Review and document the status of operational and post-operational conditional approval items from the Bureau of Ocean Energy Management Alaska Region (BOEM) conditional approval of 2015 Chukchi Sea Outer Continental Shelf (OCS) operations conducted by Shell Gulf of Mexico, Inc. (Shell).

Background: On March 31, 2015, Shell submitted a Revised Chukchi Sea Exploration Plan (EP Rev 2) to BOEM. BOEM reviewed the Shell EP Rev 2 and deemed it submitted on April 10, 2015. On May 11, 2015, BOEM conditionally approved Shell's EP Rev 2 with eighteen (18) enumerated conditions. On August 25, 2015, BOEM sent a letter to Shell conveying that BOEM had reviewed Shell's submittals and determined that Shell had fulfilled all pre-operational requirements necessary to begin operations as specified in Conditions No. 1, 3, 4, 6, 7, 8, 11, 12, 13, 14, 15, and 16 – copy of document enclosed. On September 28, 2015, Shell announced a decision to cease further exploration activity in offshore Alaska for the foreseeable future. On January 7, 2016, Shell informed BOEM that no further exploration activities will be conducted under EP Rev 2 (as well as under the Revised Camden Bay, Beaufort Sea Exploration Plan (May 4, 2011)). On January 13, 2016, BOEM accepted Shell's notice to withdraw the current Exploration Plans for the purposes of future exploration.

<u>Operational and Post-Operational Conditions Review</u>: BOEM's conditional approval of Shell's EP Rev 2 permitting exploration operations in the Chukchi Sea during 2015 included both preoperational, operational, and post-operational conditions. The operational and post-operational requirements subject to final review are:

Condition No. 2 of the EP Rev 2 approval requires that Shell must not conduct exploratory drilling operations below the casing shoe of the last string of casing set after September 28, 2015 if the drill rigs are in close proximity to each other or September 24, 2015 if one drill rig is in Dutch Harbor. In all other aspects, Shell can continue to operate as conditions permit up to October 31, 2015.

On August 6, 2015, Shell requested a deviation from Condition No. 2 because only one of the two drilling units will be actively drilling with the other rig standing by and thus able to commence relief well drilling operations more quickly if needed.

On August 12, 2015, BOEM sent a letter to Shell denying Shell's request for a deviation to Condition No. 2.

On September 26, 2015, Shell began permanent abandonment of Burger J (only well drilled in 2015) by placing a cement plug from 6,797 feet to 4,860 feet and testing it on September 27, 2015 as reported in a Bureau of Safety and Environmental Enforcement (BSEE) End of Operations Report (EOR) for Burger J dated October 26, 2015.

On September 28, 2015, Shell announced it would cease further exploration activity in offshore Alaska for the foreseeable future.

BOEM determined that Shell terminated exploratory drilling operations below the lowest casing shoe before September 28, 2015, fulfilling requirements of Condition No. 2.

Condition No. 5 of EP Rev 2 approval requires for any activity (e.g., setting anchors) occurring on an adjacent lease block or unleased lands on the Outer Continental Shelf (OCS), Shell must apply for and be granted by BOEM a right-of-use and easement as provided by 30 CFR 550.160 prior to commencing exploratory drilling operations at a well location requiring associated activity on an adjacent lease or unleased lands.

The Burger S well was the only potential target well in EP Rev 2 that might have required activities on an adjacent lease block or unleased lands. Shell did not attempt to drill the Burger S well in 2015 and no right-of-use easement was required. BOEM determined that Shell complied with Condition No. 5.

Condition No. 9 of EP Rev 2 approval requires Shell to adhere to all mitigation measures included in Appendix C of the BOEM Environmental Assessment.

BOEM's Office of Environment authored the Appendix C Environmental Assessment attachment included in BOEM's conditional approval of Shell's EP Rev 2. On March 10, 2016, the Office of Environment issued a Memorandum to the Decision File stating that: "The Bureau of Ocean Energy Management (BOEM) Office of Environment (OE) has determined that Shell has adhered to all mitigation measures included in Appendix C of the May 11, 2015, BOEM conditional approval of Shell's March 2015 Exploration Plan (EP) Revision 2 (EP Revision 2)".

BOEM and BSEE monitored Shell exploration activities and reviewed Protected Species Observer (PSO) reports during the open-water season. BOEM's Office of Leasing and Plans also reviewed the OE Memorandum to the Decision File and concurs that Shell adhered to the mitigation measures included in Appendix C in compliance with Condition No. 9.

Condition No. 10 of EP Rev 2 approval requires Shell to reduce disturbance to Pacific walrus by maintaining a minimum distance of at least 7 km (4.3 mi) from any observed walruses that are hauled out on ice and any support vessels preparing to allow a helicopter to land or takeoff from its flight deck.

BOEM and BSEE monitored Shell exploration activities and Protected Species Observer (PSO) reports during the open-water season and determined that Shell complied with the requirements of Condition No. 10.

Condition No. 11 of EP Rev 2 approval requires Shell to adhere to all the provisions, terms, and conditions of both the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS) biological opinions (BO) and authorizations under the Endangered Species Act (ESA) and Marine Mammal Protection Act (MMPA) for activities described in the EP.

On July 24, 2015, USFWS sent a letter to Shell enumerating additional mitigation and monitoring stipulations that amended LOA 15-CS-02 regarding a variance needed to deploy an acoustic receiver, as part of the sound source verification requirement, within the Hanna Shoal Walrus Use Area (HSWUA) July 50% Utilization Distribution (UD) area.

On August 25, 2016, BOEM sent a letter to Shell clarifying the requirements of Condition No. 11.

On January 12, 2016, in a BOEM Office of Environment Memorandum to the Decision File regarding PSO Reports for transit to/from Dutch Harbor, OE stated that: "Throughout the exploration season, BOEM periodically accessed the Environmental Response Management Application (ERMA) portal which mapped, in real time, vessel traffic as well as speed of vessels associated with Shell activities. During these spotchecks, BOEM found that Shell[']s vessels did comply with the 10 knot speed limit. Greg Horner of Shell also conveyed verbally that no takes of right whale occurred during transits."

BOEM and BSEE monitored Shell exploration activities and reviewed Protected Species Observer (PSO) reports during the open-water season and determined that Shell complied with NMFS and USFWS biological opinions, authorizations, and variances under the ESA and MMPA.

On February 1, 2016, Shell informed BSEE and BOEM that it had submitted the Draft 90 Day Report for 2015 Exploration Drilling Activities to NMFS in compliance with conditions 11(b) and (c) of Shell's IHA and to USFWS in compliance with condition 8(b) of Shell's LOA.

BOEM determined that Shell complied with the operational and post-operational requirements of Condition No. 11.

Condition No. 17 of EP Rev 2 approval in accordance with commitments Shell made under its Integrated Operations Plan (IOP), requires Shell to submit a copy of the SEMS Stage II third party audit report to the RSLP within 60 days of the audit completion date.

On November 19, 2015, Shell submitted the proprietary SEMS third-party audit report to BSEE, which in turn provided BOEM with access to the report. BOEM reviewed the SEMS third-party audit report for conformance with American Petroleum Institute's (API) Recommended Practice 75 Workplace Safety Rule, and compliance with BSEE SEMS Final Rule (SEMS II) and 30 CFR part 250, subpart S regulations.

BOEM reviewed the SEMS third-party audit report and determined that Condition No. 17 is satisfied.

Condition No. 18 of EP Rev 2 approval requires Shell to within 60 days following the conclusion of each drilling season provide the RSLP with information related to actual air emissions, pursuant to 30 CFR 550.303(k), from the project

On November 30, 2015, Shell provided BOEM with a Seasonal Operating Report in compliance with Condition No. 18.

Enclosure: 2015_0825_EP006_Shell_EP_PreOperationalRequirements

cc: David Johnston: RSLP Leasing & Plans

William Ingersoll: Chief Plans Section

Albert Csaszar: Project Manager

Lee Plans: Leasing & Plans File Management System



United States Department of the Interior

BUREAU OF OCEAN ENERGY MANAGEMENT

Alaska Outer Continental Shelf Region 3801 Centerpoint Drive, Suite 500 Anchorage, Alaska 99503-5823

AUG 2 5 2015

Shell Gulf of Mexico Inc. Attn: Susan Childs – Alaska Venture Support Integrator, Manager 3601 C Street, Suite 1000 Anchorage, Alaska 99503

Dear Ms. Childs:

The Bureau of Ocean Energy Management (BOEM) confirms that Shell Gulf of Mexico Inc. (Shell) has fulfilled the following pre-operational conditions stipulated in BOEM's May 11, 2015 approval of Shell's Revised Outer Continental Shelf Lease Exploration Plan Revision 2 (March 2015) Chukchi Sea, Alaska, herein referred to as EP Rev 2.

Condition No. 1 of the EP Rev 2 approval requires Shell to inform the Regional Supervisor, Office of Leasing and Plans (RSLP) before deviating from activities specified and procedures described under the EP Rev 2.

Shell has provided the BOEM RSLP with the following updates and clarifications to EP Rev 2.

On July 23, 2015, Shell identified the name of Oil Storage Tankers *Marika* and the *Minerva Antarctica*; identified the Mudline Cellar Remotely Operated Vehicle vessel will be used as an additional resupply vessel during 2015; and that three (3) OSVs will be used for resupply from Dutch Harbor, Alaska rather than the two as described in EP Rev 2, but stated the total number of resupply trips are not projected to be increased during 2015. Shell also provided BOEM with a copy of the Title 9 conditional use permit from the Northwest Arctic Borough (NWAB) for the vessels and barges that will be anchored in Goodhope Bay; and changes to Appendix C that was attached to the EP Rev 2 conditional approval (these changes reflect the final language contained in the issuance of the Incidental Harassment Authorization by the National Marine Fisheries Service (NMFS)).

On July 17, 2015, Shell provided BOEM and the Bureau of Safety Environment and Enforcement (BSEE) clarification of Shell's execution of the Drilling Ice Management Plan (DIMP). Clarifications were requested in light of the U.S. Fish & Wildlife Service's (USFWS) conditional Letter of Authorization (LOA) limiting incidental take coverage to areas outside of the Hanna Shoal Walrus Use Area (HSWUA) and the changes to ice management strategy resulting from the delay of the MSV *Fennica* entering the Burger Prospect. BOEM determined that Shell has submitted all pre-operational information required under Condition No. 1 for drilling operations during the open water season in 2015.

Condition No. 3 of the EP Rev 2 approval requires Shell to submit a copy of the Bureau of Safety and Environmental Enforcement (BSEE) approval advising that the Oil Spill Response Plan (OSRP) is in compliance with 30 CFR Part 254.

-

On June 4, 2015, Shell provided the BOEM RSLP a copy of the BSEE confirmation that Shell's Chukchi Sea OSRP is compliant with 30 CFR 254.

Condition No. 4 of the EP Rev 2 approval requires Shell to submit to the RSLP prior to commencement of exploratory drilling operations a copy of BSEE's approval of Shell's subsea well capping stack and a separate containment system; and the procedures for deployment, installation, and operation of all available equipment, technologies, and practices addressing intervention and recovery specified in the OSRP under anticipated environmental conditions are capable of handling the projected worst case discharge conditions.

On June 14, 2015, Shell provided the BOEM RSLP with a copy of the BSEE correspondence confirming the capping stack and containment system approved for use in association with exploration drilling operations on the Alaska Outer Continental Shelf during 2015.

Condition No. 6 of the EP Rev 2 approval requires Shell to post a supplemental bond in an amount acceptable to the BOEM Regional Director to ensure compliance with any decommissioning obligations incurred as a result of exploration activities conducted under the EP Rev 2 on Shell's leases or obtain BOEM's concurrence that no Supplemental Bond is required based upon Shell's financial strength as specified under 30 CFR 556.53.

On May 7, 2015, Shell Oil Company submitted to BOEM all requested financial information on behalf of both Shell Offshore Inc. and Shell Gulf of Mexico Inc. for determination of financial strength and reliability for all decommissioning liabilities within the BOEM, Alaska OCS Region.

On June 18, 2015, BOEM Alaska Regional Director Dr. James J. Kendall sent a letter of determination to Ms. Sola Olarewaju (cc: Ms. Susan Childs) stating that Shell qualifies for a supplemental bond waiver, effective as of the date of the letter and conditionally valid for up to one year.

Condition No. 7 of the EP Rev 2 approval requires Shell to submit to the RSLP a copy of the BSEE approval of each Application for Permit to Drill (APD) or Application for Permit to Modify (APM).

On July 24, 2015, Shell provided BOEM with a copy of the BSEE conditionally approved APD Well Number 001, Burger J, on lease OCS-Y-2321, Block 6912, API number 55-352-00004-00; and for Well Number 001, Burger V, on lease OCS-Y-2324, Block 6915, API number 55-352-00007-00. On August 17, 2015, BSEE approved Shell's Application for Permit to Modify (APM) its conditional permit to drill the Burger J well in the Chukchi Sea off the north coast of Alaska.

Condition No. 8 of the EP Rev 2 approval requires Shell to confirm to the RSLP the final staging location and the schedule for mobilizing the designated relief well drilling rig to the drill site and the response times for commencement and completion of a relief well. Shell must demonstrate that the relief well drilling rig meets the requirements of 30 CFR 250.417 and confirm that BSEE has approved the relief well drilling rig for use in the Chukchi Sea. Shell must present a copy of BSEE's approval to the RSLP prior to commencing exploratory drilling.

The BSEE APDs confirm in accordance with 30 CFR 250.417, both the Transocean *Polar Pioneer* and *Noble Discoverer* for use on the Alaska Outer Continental Shelf either as a primary drilling unit or relief well drilling unit. BSEE APDs confirm the *Polar Pioneer* will be located on Burger J and the *Noble Discoverer* on Burger V.

On July 23, 2015, Shell confirmed its receipt of a Title 9 conditional use permit from the Northwest Arctic Borough (NWAB) for the vessels and barges that will be anchored in Goodhope Bay.

Condition No. 11 of the EP Rev 2 approval requires no exploratory drilling operations may be conducted until BOEM completes its ongoing Endangered Species Act (ESA) Section 7 consultation with U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS).

.

BOEM has completed the Lease Sale 193 Endangered Species Act (ESA) Section 7 consultation with USFWS and NMFS. The NMFS issued its biological opinion and conference report on the effects of Lease Sale 193 oil and gas exploration activities to BOEM/BSEE on June 4, 2015 (NMFS Consultation Number: AKR-2015-9422). The USFWS issued a Biological Opinion on effects to polar bears, spectacled eiders, spectacled eider critical habitat, and Alaska-breeding Steller's eiders for activities that may result from Lease Sale 193 in the Chukchi Sea to BOEM and BSEE on March 30, 2015. The USFWS also issued a concurrence opinion on BOEM's ESA Section 7 determination of not likely to adversely affect northern sea otters and their critical habitat for vessel movements related to Shell Gulf of Mexico, Inc.'s 2015 exploration program on May 11, 2015. On July 30, 2015, Mr. Ingersoll, Chief, Plans Section, informed Shell that BOEM has completed ESA Section 7 consultation with USFWS and NMFS per Condition No. 11.

BOEM has determined that the <u>pre-operational</u> conditions specified in Condition No. 11 are fulfilled.

Note: <u>During operations</u>, Shell must adhere to all the provisions, terms, and conditions of both the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS) biological opinions (BO) and authorizations under the Endangered Species Act (ESA) and Marine Mammal Protection Act (MMPA) for activities described in the EP.

Condition No. 12 of the EP Rev 2 approval requires Shell to submit a copy of the approved IHA or LOA to the RSLP prior to commencing operations.

On July 23, 2015, Shell provided the RSLP a copy of the approved National Marine Fisheries Service Level B harassment Incidental Harassment Authorization (IHA; valid from July 1, 2015 through October 31, 2015) and a copy of the USFWS Letter of Authorization (LOA) 15-CS-02 (effective July 1, 2015 – November 1, 2015).

Note: A current IHA and/or LOA must be submitted to the RSLP prior to the start of operations each year.

Condition No. 13 of the EP Rev 2 approval requires Shell to document, to the satisfaction of the RSLP that the monitoring and mitigating measures detailed in the Plan of Cooperation (POC) to prevent unreasonable conflicts with subsistence activities for the Chukchi Sea program are in place and operational.

On May 29, 2015, Shell notified BOEM of upcoming POC meetings in Point Hope, Barrow, Wainwright, Kotzebue, Buckland, Deering and Kivalina as part of Shell's commitment to engage and communicate with communities nearest to Shell's proposed offshore activities.

On June 4, 2015, Shell provided BOEM with a requested copy of the 2015 Subsistence Advisor Handbook that details the duties and responsibilities of Shell's field subsistence advisors.

Beginning June 6, 2015, Shell began providing BOEM with daily vessel and facility observation, operation, and other reports as required.

Condition No. 14 of the EP Rev 2 approval requires RSLP approval of the Lease Stipulation No. 2 (Orientation Program) Shell orientation program.

BOEM has reviewed Shell's Orientation Program and believes it contains sufficient detail to inform individuals working on the project of specific types of environmental, social, and cultural concerns that relate to the project and adjacent areas. Accordingly, BOEM approves the Orientation Program for the 2015 drilling season.

Condition No. 15 of the EP Rev 2 approval requires Shell to submit a copy of Shell's National Pollutant Discharge Elimination System (NPDES) General Permit for Oil and Gas Exploration Facilities, General Permit (GP) AKG-28-8100

On June 10, 2015, Shell provided BOEM with a copy of the EPA NPDES approval letters for *Noble Discoverer* (AKG-28-8101 through AKG-28-8104) and *Polar Pioneer* (AKG-28-8105 through AKG-28-8108).

Condition No. 16 of the EP Rev 2 approval requires Shell to provide the RSLP with evidence of BSEE's concurrence with Shell's classification of the Burger Prospect as "H2S absent" per 30 CFR 250.490; or reference to an approved H2S contingency plan that covers the proposed exploration activities before commencing exploratory drilling operations.

In accordance with 30 CFR 250.490(c), BSEE approved Shell's classification of the Burger Prospect as H2S absent the Application for Permit to Drill (APD), issued July 22, 2015, for Burger J (API 55-352-00004-00) and Burger V (API 55-352-00007-00).

BOEM has reviewed Shell's submittals and determined that it has fulfilled all pre-operational requirements in Condition No. 1, 3, 4, 6, 7, 8, 11, 12, 13, 14, 15, and 16 specified in BOEM's approval of Shell's EP Rev 2, dated May 11, 2015.

If you have any questions, please contact Bill Ingersoll, Chief of Plans Section at 907-334-5224 or by email at william.ingersoll@boem.gov.

Sincerely,

David W. Johnston, Regional Supervisor

Office of Leasing & Plans

cc: Mark Fesmire, Bureau of Safety and Environmental Enforcement Kevin Pendergast, Bureau of Safety and Environmental Enforcement