

Department of Natural Resources

DIVISION OF OIL & GAS

550 W 7th Avenue, Suite 1100 Anchorage, AK 99501-3560 Main: 907.269.8800 Fax: 907.269.8939

May 25, 2017

CERTIFIED MAIL
RETURN SERVICE REQUESTED

Katrina Garner Fieldwide Manager BP Exploration (Alaska) Inc. PO Box 196612 Anchorage, AK 99519-6612

Re: 2017 Plan of Development for the Prudhoe Bay Unit IPA

Dear Ms. Garner:

BP Exploration (Alaska) Inc. (BP) submitted a proposed 2017 Plan of Development (POD) for the Prudhoe Bay Unit (PBU) Initial Participating Area (IPA) to the Department of Natural Resources, Division of Oil and Gas (Division) on March 30, 2017. This decision approves the 2017 POD.

BP's proposed POD provides information about development and operational activities, as prescribed by 11 AAC 83.343. The POD also provided a list of actions by BP and other working interest owners in support of a major gas sale, as requested in the Commissioner's approval of BP's 2016 POD. Accordingly, the Division notified BP by email on April 6, 2017 that the Division had deemed the POD submittal complete. BP provided a technical presentation prior to submitting the POD, on March 23, 2017.

For the 2016 POD period, BP anticipated drilling 32 wells. BP planned to conduct workover activities focused on wells that are shut-in because of wellbore integrity issues, continue its miscible gas injection project, continue upgrading its seawater treatment plant, replace the FS-3 compressor, and inspect and replace pipelines. BP also described its reservoir management efforts in different areas of the IPA.

For the 2016 POD period, BP reported drilling 37 wells, primarily sidetracks from underperforming wells. BP completed about a thousand wellwork jobs, including well diagnostics, surveillance, rig workovers, and added perforations, stimulations, and water shutoffs. BP continued waterflood, water alternating gas, gas cap water injection, and miscible gas injection projects to enhance recovery. BP also reported a number of facility and reservoir optimization activities, including maintenance and repairs at its seawater treatment plant and seawater injection plant, pipeline inspections, and ongoing work on fire and gas safety system projects. BP reported average production of 197.9 MB/D crude and condensate for calendar year 2016, which is slightly higher than BP predicted in its 2016 POD. This production, combined with production from the PBU satellite fields, reached full PBU processing capacity. BP also reported production of 6883 MMSCFD gas and 38 MB/D NGLs for calendar year 2016.

In its 2017 POD, BP provided detail on its ongoing reservoir management efforts throughout different areas of the IPA. Its planned activities for the 2017 POD period in particular include:

- Drilling 4-7 rotary drilling wells and 20-24 coil tubing drilling wells.
- Rig workovers on 2-4 wells.
- Implementing its Low Temperature Separator continuous methanol project at the Central Gas Facility.
- Replacing the FS-3 compressor.
- Gas quality projects, including installing new dew point analyzers at all facilities, upgrading mist eliminators and inlet devises, upgrading heat exchange bundles, system cleaning, and replacement of contractor distributors at GC-1.
- Completing the DS14 pipeline replacement project.

When considering a POD, the Division considers the public interest, conservation of natural resources, prevention of economic and physical waste, protection of all interested parties, including the state, environmental cost and benefits, geological and engineering characteristics or reservoirs or potential hydrocarbon accumulations, prior exploration activities, plans for exploration or development, economic costs and benefits to the state, and any other relevant factors, including mitigation measures. 11 AAC 83.303(a), (b). The Division considered these factors in approving earlier PODs for the IPA and incorporates those findings by reference.

BP generally completed or made progress on the development activities from its 2016 POD, and in some cases exceeded its anticipated level of activity. Its plans for the 2017 POD period include numerous activities to update and replace infrastructure, which should promote safety and minimize potential environmental risks from aging infrastructure. BP has committed to drill between 24 and 31 wells and to continue projects that enhance production from its wells, including gas injection to maximize oil recovery. These activities to both expand and enhance production should prevent waste and promote the State's economic interests in production. Although BP advised of some decrease in activity, its overall development activities, both short and long term, continue to support the State's interests in exploring and developing its natural resources.

Considering the 11 AAC 83.303 criteria, and the continued production, drilling, enhanced recovery measures, and infrastructure maintenance and replacement proposed with this POD, the Division finds that the 2017 POD is in the public interest. The Division therefore approves the POD for the period July 1, 2017 through June 30, 2018. BP will need to submit a proposed 2018 POD to the Division 90 days before the expiration of 2017 POD, which is on or before April 1, 2018. This approval is for a general plan of development; specific field operations will require an approved Plan of Operations.

As BP mentioned in the 2017 POD, approval of this POD updates Exhibit E to the PBU Unit Agreement. It appears that other Unit Agreement Exhibits may also be in need of updates to provide information specific to the IPA. BP is instructed to review its exhibits and provide any necessary revisions or new exhibits within 30 days of the date of this decision.

A person affected by this decision may appeal it, in accordance with 11 AAC 02. Any appeal must be received within 20 calendar days after the date of "issuance" of this decision, as defined in 11 AAC 02.040(c) and (d) and may be mailed or delivered to Andrew Mack, Commissioner, Department of Natural Resources, 550 W. 7th Avenue, Suite 1400, Anchorage, Alaska 99501; faxed to 1-907-269-8918, or sent by electronic mail to dnr.appeals@alaska.gov. This decision takes effect immediately. An eligible person must first appeal this decision in accordance with 11 AAC 02 before appealing this decision to Superior Court. A copy of 11 AAC 02 may be obtained from any regional information office of the Department of Natural Resources.

If you have questions regarding this decision, contact Becky Kruse with the Division at 907-269-8799 or via email at Becky.Kruse@Alaska.gov.

Sincerely,

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Director