



THE STATE  
of **ALASKA**  
GOVERNOR BILL WALKER

Department of Natural Resources

DIVISION OF OIL & GAS

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August 16, 2017

CERTIFIED MAIL

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 GPMA

Dear Ms. Garner:

BP Exploration (Alaska) Inc. (BPXA) submitted a proposed 2017 Plan of Development (POD) for the Prudhoe Bay Unit (PBU) Greater Point McIntyre Area (GPMA) to the Department of Natural Resources, Division of Oil and Gas (Division) on June 19, 2017. This decision approves the 2017 POD.

BPXA's proposed POD provides information about development and operational activities, as prescribed by 11 AAC 83.343. Accordingly, the Division notified BPXA by email on June 26, 2017 that the Division had deemed the POD submittal complete. BPXA provided a technical presentation prior to submitting the POD, on June 14, 2017.

The GPMA consists of six participating areas (PA): Combined Niakuk, Lisburne, North Prudhoe Bay, Point McIntyre, Raven, and West Beach PAs. Initial production in the GPMA began with the Lisburne PA on December 15, 1986, which produces currently from the Wahoo and Alapah Formations. The Combined Niakuk, West Beach, North Prudhoe Bay, and Point McIntyre PAs all began sustained production between 1993 and 1994 with the North Prudhoe Bay and West Beach PAs having production shut-in since 2000 and 2001, respectively. The Point McIntyre PA (PMPA) and the Combined Niakuk PA continue to produce from the Cretaceous Kuparuk River Formation. Raven, the most recently formed PA in the GPMA, produces from the Ivishak and Sag River formations and commenced sustained production in October 2005. Cumulatively, the PAs in the GPMA have produced approximately 763 million barrels of hydrocarbon liquids. From April 1, 2015 through March 31, 2016, the GPMA average daily oil production rate was approximately 22,450 BOPD—an increase of approximately 500 barrels per day from the same period the previous year.

### **Lisburne PA**

BPXA planned to drill two new wells during the 2016 POD period. BPXA drilled and completed both wells, along with eighteen well interventions during the POD period. These interventions included perforations, stimulations, gas-lift work, and tubing and casing repairs. BPXA also continued its monitoring of the Lisburne gas cap water injection pilot project.

For the 2017 POD period, BPXA plans to drill one new well. BPXA will continue to evaluate the viability of additional drilling targets. Plans are underway to repair well L5-29 so that the gas cap water injection project may continue. The L4 pad export line has been shut-in since 2014 which shuts in 11 wells at the L4 pad. BPXA is evaluating line repair options and opportunities as a future project.

### **Combined Niakuk PA**

For the 2016 POD period, BPXA planned to maintain production through reservoir management and continued evaluation of technical work to assess potential new drilling locations. Production was maintained and several non-rig interventions were performed to repair wells.

BPXA has no plans for new wells or projects during the 2017 POD period.

### **Pt. McIntyre PA**

For the 2016 POD period, BPXA maintained production through reservoir management, non-rig wellwork, and scale inhibition programs. The STP 36-inch pipeline had been taken out of service in November 2011 because of concerns about external corrosion. The line was restored and returned to service in October 2016. The 2014/2015 North Prudhoe Seismic survey processing was completed September of 2016. Technical assessment of the subsurface is ongoing.

For the 2017 POD period, BPXA plans to continue its active non-rig wellwork and scale inhibitor programs. BPXA is also evaluating and considering well optimization, additional rate adding projects in association with the STP-36 project, and a project to expand the volume of miscible injectant to PM-1 pad.

### **Raven PA**

BPXA had not planned drilling during the 2016 POD period, but March 2017 it sidetracked well NK-38A and spud well NK-14B. Technical evaluations of drilling options in Raven are ongoing using the 2014/2015 North Prudhoe Seismic survey.

For the 2017 POD period, BPXA is interpreting the 2014/2015 North Prudhoe Seismic survey. BPXA also plans to drill NK-15A well for injection in the South Fault Block. BPXA would then convert the NK-65A to a Sag River producer.

### **North Prudhoe Bay PA**

The North Prudhoe Bay PA continues to be shut-in because of safety and environmental concerns. BPXA is interpreting results of a 2014/2015 North Prudhoe Seismic survey to improve structure mapping over the field and better understand the Kuparuk, Sag, Ivishak, Lisburne, and Alapah intervals in this part of the unit.

### **West Beach PA**

The West Beach PA has been shut-in since 2009 due to complications with the production line from the WB-04 and WB-05B wells. BPXA has ordered equipment for a “smart pig” run to

assess the integrity of the 12" production line and 6" test line in preparation for possible restart of production at the WBPA. No projects or well work is planned in the 2017 POD period.

### **Consideration of the 2017 POD**

When reviewing a POD, the Division must consider the criteria in 11 AAC 83.303(a) and (b). Accordingly, the Division considered the public interest, conservation of natural resources, prevention of economic and physical waste, protection of all interested parties including the state, environmental costs and benefits, geological and engineering characteristics of the 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).

In approving prior PODs for the PBU GPMA, the Division considered 11 AAC 83.303 and found the POD(s) promoted conservation of natural resources, promoted prevention of waste, and protected the parties' interests. The Division incorporates by reference those findings.

Continued production from the GPMA protects the State's interests in developing its oil and gas resources. BPXA further plans to drill two wells, one in Lisburne and one in Raven. Much of BPXA's plans for the 2017 POD period involve interpreting the 2014/2015 North Prudhoe Seismic survey. These survey results could help identify additional drilling opportunities throughout the GPMA, as well opportunities for reactivating the shut-in West Beach and North Prudhoe Bay PAs. The seismic program was thus an investment to further assess state resources and eventually maximize the recovery from mature reservoirs. BPXA's plans to address Lisburne reservoir issues should also increase recovery and extend the life of the field. Finally, BPXA has continued efforts to repair pipelines in the GPMA. The STP-36 production line was restored and further work is under evaluation. This action should increase oil production in the Point McIntyre PA and revenues for the State.

Having considered the 11 AAC 83.303 (a) and (b) criteria, the Division finds that the 2017 POD complies with the provisions of 11 AAC 83.303. Accordingly, the 2017 POD is approved for the period October 1, 2017 through September 30, 2018.

This approval is only for a general plan of development. Specific field operations will require an approved Plan of Operations. Under 11 AAC 83.343, the 2018 POD is due on July 2, 2018, ninety (90) days before the 2017 POD expires.

An eligible 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 West 7th Avenue, Suite 1400, Anchorage, Alaska 99501; faxed to 1-907-269-8918; or sent by electronic mail to [dnr.appeals@alaska.gov](mailto: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](mailto:Becky.Kruse@Alaska.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Chantal Walsh". The signature is fluid and cursive, with the first name "Chantal" written in a larger, more prominent script than the last name "Walsh".

Chantal Walsh  
Director