Department of Natural Resources





DIVISION OF OIL & GAS

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April 17, 2017

CERTIFIED MAIL RETURN SERVICE REQUESTED

David W. Duffy Hilcorp Alaska, LLC 3800 Centerpoint Drive, Suite 1400 Anchorage, AK 99503

Re: 2017 Plan of Development and Delay of Contraction for the Deep Creek Unit - Approved

Dear Mr. Duffy:

On March 1, 2017, the Department of Natural Resources (DNR), Division of Oil and Gas (Division) received the proposed 2017 Plan of Development and Operations (POD) for the Deep Creek Unit (DCU) from Hilcorp Alaska, LLC (Hilcorp). The Division notified Hilcorp by email on March 8, 2017, that the Division had deemed the 2017 POD complete. The Division had previously met with Hilcorp on February 27, 2017 for a technical meeting of the DCU POD.

The DCU was formed in 2001 as a jointly-managed unit between the Division and Cook Inlet Regional, Inc. (CIRI). Sustained production began from the Happy Valley PA in November 2004. The DCU was acquired by Hilcorp from Union Oil Company of California on January 1, 2012. Gas production from the Happy Valley Participating Area (Tyonek/Beluga Pool) and the undefined Sterling formation declined in 2016 with average daily gas production of approximately 6.17 million cubic feet per day during the calendar year 2016. Total cumulative gas production from the DCU is approximately 32.4 billion cubic feet of gas as of December 2016.

Plans of Development

During the 2016 POD period, Hilcorp planned to drill one exploratory well at its Middle Happy Valley location; however, Hilcorp later decided it was not needed at this time. Perforations were added to the HVB-17 and production began in May of 2016. Compressor overhauls were performed at Happy Valley A and B pads.

During the 2017 POD period, Hilcorp plans to drill four to six stratigraphic test wells in the unit area. Based on the results Hilcorp will set forth new exploratory drilling plans in 2018 and 2019 targeting the Sterling and Beluga formations.

When considering a POD, the Division must consider whether the POD is necessary or advisable to protect the public interest. 11 AAC 83.303(a). The Division will approve a POD upon a finding that it will (1) promote conservation of all natural resources, including all or part of an oil or gas pool, field, or like area; (2) promote the prevention of economic and physical waste; and (3) provide for the protection of all parties of interest including the state. Id. In evaluating

conservation, prevention of waste, and the parties' interest, the Division will consider (1) the environmental costs and benefits of unitized exploration or development; (2) the geological and engineering characteristics of the potential hydrocarbon accumulation or reservoir proposed for unitization; (3) prior exploration activities in the proposed unit area; (4) the applicant's plans for exploration or development of the unit area; (5) the economic costs and benefits to the state; and (6) any other relevant factors, including measures to mitigate impacts identified above, the commissioner determines necessary or advisable to protect the public interest. 11 AAC 83.303(b).

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

The 2017 POD will continue production from the Happy Valley DCU and promote future production with completion of the stratigraphic test wells. The public has an interest in diligent exploration and evaluation of the state's resources. The plans set forth in the 2017 POD protect this public interest in continuing hydrocarbon production and delineation unit area. Proposing work to continue production from the existing PA benefits the state economically by maximizing revenues and promotes the prevention of waste. Thus, the 2017 POD is necessary and advisable to protect the public interest.

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. The 2017 POD for the Deep Creek Unit is approved for the period June 1, 2017 through May 31, 2018, subject to concurrent approval by CIRI.

This approval is only for a general plan of development. Specific field operations require separate approval under 11 AAC 83.346, Unit Plan of Operations. Pursuant to 11 AAC 83.343 (c), the 2017 POD for the Deep Creek Unit is due to the Division ninety (90) days prior to the expiration of the 2016 POD, which is on or before March 2, 2018.

Mandatory Unit Contraction - Delayed

Under 11 AAC 83.356(b), ten years after commencement of sustained production, the unit area must be contracted to include only those lands then included in approved participating area and lands that facilitate production including the adjacent lands necessary for secondary or tertiary recovery, pressure maintenance, reinjection, or cycling operations. However, the Commissioner may delay contraction if circumstances so warrant. The Deep Creek Unit's ten year mandatory contraction date was November 14, 2014. Hilcorp has requested a series of delays of the ten year mandatory contraction, the most resent delayed the mandatory contraction until May 31, 2017. Based on Hilcorp's exploration and field development work, Hilcorp requests the Division defer contraction to May 31, 2018. Under the current circumstances, it would be impractical to contract the unit at this time.

Through this POD decision, the Division approves the delay of the mandatory contraction of the DCU until May 31, 2018.

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 T. 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.

Sincerely,

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Chantal Walsh, Director

cc: Colleen Miller, Cook Inlet Region, Inc.