



THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

Department of Natural Resources

Division of Oil & Gas
Anchorage Office

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May 10, 2016

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

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

Re: 2016 Plan of Development and Operations for the Deep Creek Unit - Approved

Dear Mr. Duffy:

On March 3, 2016, the Department of Natural Resources (DNR), Division of Oil and Gas (Division) received the proposed 2016 Plan of Development and Operations (POD) for the Deep Creek Unit (DCU) from Hilcorp Alaska, LLC (Hilcorp). This is the 13th POD for the DCU. The Division notified Hilcorp by email on March 11, 2016, that the Division had deemed the 2016 POD complete. The Division had previously met with Hilcorp on February 11, 2016 for a technical meeting of the DCU POD. The 2016 POD also included a request to delay the mandatory unit contraction date to at least June 1, 2017. The Division will consider Hilcorp's request in a separate decision.

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 again in 2015 with average daily gas production at about 6.94 million cubic feet per day during the calendar year 2015. Total cumulative gas production from the DCU is approximately 30.7 billion cubic feet of gas as of March 2016.

Plans of Development

During the 12th POD, Hilcorp planned to drill one exploratory well at its Middle Happy Valley location; however, Hilcorp later decided to drill the HVB-17 well after permitting delays. Wellwork was conducted on the HVA-10 (added perforations in T-6 and T-7 sands) and HVA-07 (plugged back lower Tyonek and added two new Tyonek perforations) in 2015. The 12th POD proposed major facility projects involving design and construction of two new pads, C Pad and the Middle Happy Valley Pad, but both projects were deferred. Hilcorp was able to upgrade water injection at the NNA 1 site, install flowlines to support future production at the HVB-17 well, and complete piping work at the Happy Valley B pad.

During the 13th POD, Hilcorp plans to drill one exploratory well (HVB-18) while adding perforations to the HVB-17. Permitting and construction of the Middle Happy Valley pad infrastructure project during the 2016 POD period was also proposed. On the southern end of the unit, Hilcorp recently completed a 2D seismic shoot and plans to process the data to inform possible future exploration targets. Facility work during the 13th POD period will consist of adding compression at existing surface locations and increasing capacity for equipment associated with gas processing. Hilcorp also plans to expand drilling pads and other infrastructure as warranted.

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 13th POD will continue production from the Happy Valley PA with a new well drilled just outside the PA. Hilcorp also acquired 2D seismic data over the southern part of unit and may initiate construction of a new road and pad to facilitate exploration drilling. The public has an interest in diligent exploration and evaluation of the state's resources. The plans set forth in the 13th POD protect this public interest in continuing hydrocarbon production and delineation of the Happy Valley PA reservoir. Proposing work to continue production from the existing PA benefits the state economically by maximizing revenues and promotes the prevention of waste. Thus, the 13th 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 13th POD complies with the provisions of 11 AAC 83.303. The 13th POD for the Deep Creek Unit is approved for the period June 1, 2016 through May 31, 2017, 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 14th POD for the Deep Creek Unit is due to the Division ninety (90) days prior to the expiration of the 13th POD, which is on or before March 2, 2017.

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 Marty Rutherford, Acting 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, please contact Kyle Smith with the Division at 269-8807, or via email at kyle.smith@alaska.gov.

Sincerely,



Corri A. Feige
Director

cc: Ethan Schutt, Sr. Vice President Land and Energy, Cook Inlet Region, Inc.
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