



## FLOODPLAIN PERMIT DEPARTMENT OF PLANNING SERVICES

**Request:** Floodplain Development Permit - FHDP15-0017 – Drill, operate and maintain proposed wells and associated production facilities.

As a participant in FEMA's National Flood Insurance Program (NFIP), Weld County is required by FEMA to ensure that all development (as defined by FEMA) in a designated 100-year floodplain or floodway is compliant with FEMA, Colorado Water Conservation Board, and Weld County floodplain regulations (Chapter 23, Article XI). The intent of the Weld County floodplain regulations is to promote public health, safety and general welfare and to minimize public and private losses due to flood conditions. Failure to comply with the General and Specific Standards listed in Article XI of the Weld County Code and conditions listed in this FHDP may result in a violation case being brought before the Weld County Board of County Commissioners and potential fines.

Based application materials and the review of the current effective data this Floodplain permit (FHDP15-0017) is **approved** with the following conditions:

1. The applicant shall ensure that the site remains in compliance with FEMA, Colorado Water Conservation Board, and Weld County floodplain regulations (Chapter 23, Article XI) at all times.
2. All oil and gas production facilities including tank batteries shall be anchored to resist flotation, collapse or lateral movement. Oil and gas production facilities shall be elevated, flood proofed, or flood vented as appropriate.
3. If fill material is to be used in the floodplain, a registered Colorado Professional Engineer shall certify that the fill material is designed to withstand the erosional forces associated with the base flood.
4. Outside storage of floatable materials associated with non-agricultural uses shall not be allowed. Materials that are not floatable can be stored outside provided that a floodplain development permit is obtained.
5. The applicant shall ensure that all proposed or existing structures will or do meet the minimum setback and offset requirements for the zone district in which the property is located.
6. The tank battery and associated production facilities shall be oriented parallel to flood flows within the floodplain to minimize the obstruction of the water flows
7. Fencing around the tank battery shall be of an open rail design to prevent the accumulation of debris during a flood event. The fence must allow flood water to rise and recede without being impeded.
8. Any future placement of fill within the FEMA defined 100-year floodplain shall obtain a Flood Hazard Development Permit prior to the placement of fill.

9. Any development on this parcel within the FEMA defined floodplain shall not cause a rise in the BFE on adjacent or upstream properties or structures.
10. Photographic evidence of the tank anchoring shall be provided to the Weld County Department of Planning Services.
11. All tanks in the battery must be anchored. Typical anchoring systems include, but are not limited to, cables over the tanks that are tied to an anchor rod, bolting to a concrete pad, and/or pouring concrete into a tank to provide enough weight to prevent flotation.
12. If there are pipes entering and/or exiting the meter shed or separator additional anchoring may not be required if the equipment is located in the flood fringe. If the equipment is located in a floodway, it will need to be anchored.
13. The VOC burner is required to be bolted to the pad or anchored in another manner.
14. Storage structures and other buildings at a tank battery are required to be flood proofed.
15. All electrical equipment should be elevated a minimum of 1 foot above the BFE or be flood proofed. The BFE shall be identified on site by a clear visible marking and shall be available at the time of electrical inspection.
16. A Building Permit for oil and gas equipment and electrical shall be submitted to the Weld County Building Inspection Department prior to setting equipment.

Case Summary:

The submitted application materials are in compliance with the application requirements of Section 23-11-350 of the Weld County Code.

Owner: Bernhardt David Lee Consolidated Trust c/o David Lee Bernhardt Trustee  
Applicant: PDC Energy Inc c/o Kelsi Welch  
Engineer: David Huwa, P.E. #40727

Location:

Legal Description: Part of the SW4 of Section 6, T4N, R66W of the 6th P.M., Weld County, CO

Location: 12281 HWY 60, Milliken, CO

Parcel #: 1057-06-0-00-004      Size: +/- 111.45 acres      Zoning: Agricultural (A)

Current Effective Data:

FIRM Community

Panel Map #: 080266-0750C, dated September 28, 1982

Flood Zone: A4 – BFEs determined

Best Available Data:

LOMR/PMR: N/A

Preliminary Map #: 08123C-1704E

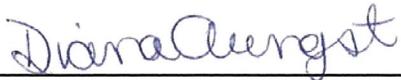
Flood Zone: AE – BFEs determined

Waterway: Big Thompson River

Project Description

This permit is being requested to install an oil and gas tank battery that includes 12 oil tanks, 4 water tanks, 2 buried produced water vaults, 6 MLVTs, 4 Separators, 1 VRU, 3 VOC combustors, and 1 meter. All electrical in the 100-year floodplain shall be elevated a minimum of 1 foot above the base flood elevation. The permanent production facilities and wells will be located outside of the 100-year floodplain. The temporary frack-water tanks are in the flood fringe.

This project appears to be consistent with Weld County Code Floodplain Regulations Article XI.

By   
Diana Aungst, Planner II, AICP, CFM

Date: March 10, 2015