

Objective Criteria Review Memo - Noble Energy Inc

Guttersen D09-721 -- Form 2 Application for Permit to Drill (APD) Doc# 402356672

C33-15 Multi -- Form 4 Sundry to update Location BMPs Doc# 402434261

Approved Form 2A Oil & Gas Location Assessment (Doc# 401795634, approved 12/4/2018)

Location ID# 459542

CDP ID# 11984

This memo summarizes COGCC's technical review of the subject well within the context of SB 19-181 and the required Objective Criteria.

The Form 2A and eight APDs were approved through the COGCC Comprehensive Development Plan (CDP) process (CDP ID# 11984). The Operator has since submitted these three refile APDs to adjust donwhole wellbore trajectories.

Noble also provided the following information regarding outreach that occurred for this and other locations within the CDP:

"Building unit owners received an invite to the Mustang CDP Open House that Noble hosted on June 20, 2018 at the SE Weld County Fairgrounds in Keenesburg, amongst other additional communication outside of the normal course of permitting at the time due to owning surface within the CDP boundaries. All of those that attended the CDP were able to see, ask questions, and provide feedback on proposed surface locations and haul routes of the development.

All building unit owners within 2000' of the proposed [C33-15 Multi] location received a NICO notice (Notice of Intent to Conduct Oil and Gas Operations) prior to permit submittal. "

For Oil & Gas Locations approved prior to SB 19-181, the Objective Criteria apply to any wells proposed on those approved or existing Oil & Gas Locations. This APD meets the following Objective Criteria:

1. (Criteria 5c) Oil and Gas Locations within: a Sensitive Area for water resources. The location is approximately 29' from the edge of the mapped floodplain of Box Elder Creek.

The following sections provide details regarding the evaluation of each criterion:

Criteria 5c: Oil and Gas Locations within: a Sensitive Area for water resources.

Site Specific Description of Applicability of Criteria 5c: The location is approximately 29' from the edge of the mapped floodplain of Box Elder Creek.

Site Specific Measures to Address Criteria 5c: The Operator provided the following BMPs on the approved Form 2A (doc# 401795634) to mitigate being located close to surface water features:

- Site Housekeeping: Housekeeping will consist of neat and orderly storage of materials and fluids. Wastes will be temporarily stored in sealed containers and regularly collected and disposed of at offsite, suitable facilities. If spills occur prompt cleanup is required to minimize any commingling of waste materials with stormwater runoff. Drip pans will be used during routine fueling and maintenance to contain spills or leaks. Any waste product from maintenance will be containerized and transported offsite for disposal or recycling.
- Stormwater Controls: Stormwater BMP's will be constructed around the perimeter of the site prior to, or at the beginning of construction. Specific BMP's used may include stockpile stabilization, grading, sediment traps, and perimeter barriers based on final construction design and will remain in place until the pad reaches final reclamation.
- Lined Containment: A contiguous spray liner will be installed and will underlay the entire tank battery. A 60 bbl cement water vault will be utilized to collect excess produced water from oil tanks. The cement water vault is one piece with no seams designed to minimize potential for leaks. All piping associated with the use of the water vault will be aboveground and visually inspected on a regular basis. The partially buried cement water vault will be installed above the spray in liner. A sized steel secondary containment ring will be installed surrounding the entire tank battery. Due to the proximity of the Box Elder Creek FEMA 100-year floodplain, all separation units on the Multi-Pad Facility will be enclosed by a steel-walled, secondary containment berm.
- Remote Monitoring: Automation technology is utilized to monitor any variations in pressures and fluid gauges which could indicate a leak at the facility, well head or flow lines to the production facility. In addition, automation provides immediate remote shut-in capabilities for the production facility and well heads in the event of an emergency.

Summary: Noble provided BMPs that address possible impacts to the nearby floodplain. The BMPs include materials storage and drip pan usage, stormwater management controls, lined containment for tank and separator areas, and remote monitoring/shut-in capabilities for the location.

Director Determination: Based on the Objective Criteria review, the Director has determined that this permit application meets the standard for protection of public health, safety, welfare, the environment and wildlife resources set by SB 19-181.