

**Objective Criteria Review Memo - Noble Energy Inc.**

**Independence D18-759 -- Form 2 Application for Permit to Drill (APD) Doc# 402317870**

**Approved Form 2A Oil & Gas Location Assessment (Doc# 401557676, approved 8/16/2018)**

**Location ID# 456625**

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 seven APDs were approved in August 2018. Five of the seven APDs were drilled and are currently producing. Noble has since submitted this subject APD (and another refile APD) to adjust wellbore trajectories on this approved, built Oil & Gas Location.

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 1) Oil and Gas Locations within 1,500' of a Building Unit or High Occupancy Building, which include Urban Mitigation Area ("UMA") and Large UMA Facility ("LUMAF") locations. There are four building units within 1500' of the location (closest BU is approximately 290' N).

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

**Criteria 1:** Oil and Gas Locations within 1,500' of a Building Unit or High Occupancy Building, which include Urban Mitigation Area ("UMA") and Large UMA Facility ("LUMAF") locations.

**Site Specific Description of Applicability of Criteria 1:** There are four building units within 1500' of the location (closest BU is approximately 290' N from the edge of location); and four additional Building Units as you expand the buffer to 2,000 feet (8 total BUs 0'-2000').

**Site Specific Measures to Address Criteria 1:** The Operator provided the following information regarding communication with surrounding building units:

- The nearest building unit was heavily involved in the planning of the location. Per the Building Unit owner's request, accommodations were made to move the pad East to place the wells behind a row of trees in order to specifically block line of sight from the Building Unit owner's living room window.
- As part of the Noble Mustang CDP process, all building unit owners within 2,000 feet were invited to attend an Open House that Noble hosted for all members of the surrounding community on June 18, 2018 in Keenesburg, Colorado. In addition to invites sent to these Building Units via USPS, multiple phone calls were made to all surface owners within the CDP boundaries to encourage participation in the Open House or answer questions for people who were not able to attend.
- COGCC health study information sheet was sent on 4/23/2020 via UPS to building unit owners within 2000'.
- No complaints were received by Noble or COGCC from the adjacent Building Unit owners during the initial phase of drilling and completions development on this location.

The Operator provided the following BMPs on the original form 2A to mitigate against possible impacts to the nearby building units:

- Lighting mitigation: no permanent lighting will be installed on the location, temporary lighting will be directed downward, inward, and shielded towards location to avoid glare on public roads and Building Units.
- Traffic Plan: speed limits enforced and dust suppression within 1000' of occupied residences on Weld County Road 32 (road immediately north of the location).
- Silica dust controls when handling sand used in hydraulic fracturing operations.
- Access road constructed to accommodate local emergency vehicle access requirements.
- Noise mitigation: Engineered sound walls no less than 16' tall will be used along the northern, eastern and western sides for well pad D19-03 (30' sound walls were used in the initial drilling on location)
- Odor mitigation: Noble utilizes D822, which is a distillate that has lower BTEX, is less flammable, and, relative to off-road diesel has fewer aromatic hydrocarbons than other base oil options.

**Summary:** Noble provided BMPs that address possible impacts to nearby building units. The BMPs include: no permanent lighting onsite, dust mitigation for roads and completions operations, sound walls, lower BTEX oil-based mud, and COGCC Health Study fact sheets to building unit owners.

**Additional Information:**

- This location is part of the Noble Mustang Comprehensive Drilling Plan area (CDP# 11984).

**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.