

Objective Criteria Review Memo - NGL Water Solutions DJ LLC

NGL C10B -- Form 2 Application for Permit to Drill (APD) Doc# 402063981

NGL C10B -- Form 4 Sundry to update Location BMPs Doc# 402366174

Approved Form 2A Oil & Gas Location Assessment (Doc# 401203008, approved 5/15/2017)

Location ID# 450612

This memo summarizes COGCC's technical review of the subject well within the context of SB 19-181 and the required Objective Criteria. The original APD for this well was approved 5/15/2017 and expired on 5/14/2019. NGL Water Solutions DJ LLC has since submitted this subject refile APD for a UIC (injection) well on this approved 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 is one building unit approximately 1335' from the location.
2. (Criteria 5c) Oil and Gas Locations within: a Sensitive Area for water resources. The nearest downgradient surface water feature (irrigation ditch) is 290' from the location.

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 is one building unit approximately 1335' south from the location. There is an additional building unit approximately 1795' north of the location.

Site Specific Measures to Address Criteria 1: The Operator provided the following BMPs to mitigate against possible effects to the nearby building units:

- Sound walls (32' high) will be installed completely on the south side and for 200 feet on the west side starting in the SW corner going north.
- Light sources during all phases of operations will be directed downwards and away from occupied structures. Once the drilling and completion rigs leave the site, there will be no permanently installed lighting on site.
- Access road maintained for Emergency vehicles and with dust control measures.
- The original Form 2A stated water based drilling fluids would be used onsite.

While there are ongoing conversations regarding subsurface water injection rights and payments with the BU owner to the south west, there have been no concerns raised by either of the two building unit owners within 2000' regarding surface operations at this location.

Summary: NGL Water provided BMPs that address possible impacts to nearby building units. The BMPs include sound walls along the southern edge of the location, lights directed down and away, dust controls for the access road, and using water based mud on location..

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

Site Specific Description of Applicability of Criteria 5c: The nearest downgradient surface water feature (irrigation ditch) is 290' from the location.

Site Specific Measures to Address Criteria 5c: The Operator provided the following BMPs to mitigate potential impacts to the nearby irrigation ditch:

- Operator will install a 30mil Liner, set under the main rig fuel tank and mud storage tanks for containment of any possible spills. These will be inspected daily while rig is onsite.
- Operator will conduct daily leak and spill inspections during drilling activities. After site interim reclamation is completed, there will be routine site inspection done per CDPHE schedule as required due to any storm events and monthly at a minimum.
- A diversion ditch will be constructed around the perimeter, with sediment traps in each corner of the pad. Outside of the ditch, a well compacted berm will also be constructed. Outlet protection will be provided by straw wattles installed around sediment trap discharge points. Surface roughing of the topsoil pile will be performed perpendicular to slope, and the topsoil pile will be seeded. Vehicle trackout control measures will be installed along the access road to CR 45. Silt fence will be installed between the south side of the access road and the north of the adjacent ditch, starting at CR 45 and extending ~450' east.

Summary: NGL Water provided BMPs that address possible impacts to nearby irrigation ditch. The BMPs include liners under the drilling rig and mud storage, leak inspections, and site specific stormwater management controls.

Additional Information:

- This refile APD is for a single UIC (injection) well. There will be no hydrocarbons produced from this well. There will be no hydrocarbons stored onsite. The Underground Injection Control, Geology Advisor has reviewed and passed their task on this APD.

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.