

Objective Criteria Review Memo – Bison Oil & Gas II LLC Ross 8-60 18, Form 2A #402405742

This summary explains how COGCC staff conducted its technical review of the Bison Oil & Gas II LLC Ross 8-60 18, Form 2A #402405742 within the context of SB 19-181 and for the required Objective Criteria. This proposed Location is for 12 wells, 15 oil tanks, 12 separators, 9 water tanks, and meets the following Objective Criteria:

1. (Criteria 5c) Oil and Gas Locations within: a Sensitive Area for water resources.
2. (Criteria 8) Oil and Gas Locations with storage of hydrocarbon or produced liquid in more than 18 tanks or in excess of 5,200 barrels.

COGCC staff met with the Director to discuss whether the Objective Criteria were sufficiently addressed and whether the Form 2A could be approved with the proposed Best Management Practices (BMPs) and applied Conditions of Approval (COAs). 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: Based on the technical review and desktop evaluation, the location is 212 feet from a mapped freshwater emergent wetland area.

Site Specific Measures to Address Criteria 5c: The Operator provided the following BMPs to mitigate being located in an area for sensitive water resources:

- **Stormwater Controls:** Storm water controls will be constructed around the perimeter of the site prior to construction. Typically a ditch and berm system. Storm water controls will remain in place until the pad is stabilized or reaches final reclamation.
- **Lined Containment:** Tank berms shall be constructed of steel walls with an engineered synthetic liner and designed to contain 100% of the capacity of the largest tank with the addition of rain water. All berms will be visually checked weekly to ensure proper working condition.
- **Rig Liner:** Operator shall install a 30mil reinforced polyethylene liner, or liner of comparable material, under the drilling rig and associated equipment for use during drilling operations.
- **Remote Monitoring:** Operator shall use a Supervisory Control and Data Acquisition (SCADA) system in conjunction with tank level indicators which have the ability to automatically shut in wells during an upset condition.
- **Site Inspections:** AVO inspections will occur weekly, and LDAR inspections are performed quarterly or at the required frequency of County or State regulations. All records will be kept readily available.

Summary: Bison O&G II provided BMPs that address possible impacts to nearby surface water features. The BMPs include stormwater controls, lined containment, rig liner, remote monitoring, and weekly site inspections.

Criteria 8: Oil and Gas Locations with storage of hydrocarbon or produced liquid in more than 18 tanks or in excess of 5,200 barrels.

Site Specific Description of Applicability of Criteria 8: Based on the technical review and desktop evaluation, the location is planned for 15 oil tanks and 9 water tanks.

Site Specific Measures to Address Criteria 8: In addition to the previously mentioned BMPs, the Operator provided the following information regarding an Emergency Response Plan for the location:

- An Emergency Response Plan has been submitted and approved by both the local emergency responders and Weld County's Director of Emergency Management. The Emergency Response Plan includes general field wide, and site specific safety protocol, and a tactical response plan. For this location, the Emergency Response Plan was approved by both Briggsdale Fire Protection District & Weld County's Director of Emergency Management.

Summary: Bison O&G II provided BMPs that address possible impacts to having more than 18 tanks planned for the location. The BMPs include stormwater controls, lined containment, rig liner, remote monitoring, weekly site inspections, and an Emergency Response Plan approved by local emergency responders.

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.