

Objective Criteria Review Memo - Bison Oil & Gas II LLC

Castor Fed 8-59 19-24-1 -- Form 2 Application for Permit to Drill (APD) Doc# 402016292

Castor 8-59 19 -- Form 4 Sundry to update Location BMPs Doc# 402185365

Approved Form 2A Oil & Gas Location Assessment (Doc# 401340464, approved 11/02/2017)

Location ID# 452871

This memo summarizes COGCC's technical review of the subject well within the context of SB 19-181 and the required Objective Criteria. Prior to the implementation of SB 19-181, the Form 2A and APDs for 16 wells proposed for this Oil & Gas Location were submitted and approved. Bison Oil & Gas II LLC has since built the location and drilled two of the 16 approved wells. Bison Oil & Gas II LLC has now submitted this subject refile APD for 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 8** - *Oil and Gas Locations with storage of hydrocarbon or produced liquid in more than 18 tanks or in excess of 5,200 barrels.* The approved Form 2A indicates there will be 32 oil tanks and 2 water tanks.

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

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: The approved Form 2A indicates there will be 32 oil tanks and 2 water tanks.

Site Specific Measures to Address Criteria 8: Operator confirmed that the location was originally permitted for 32 oil tanks and 2 water tanks, but would actually only have "a total of 4-750 bbl oil tanks, 4-400 bbl water tanks, 1-400 bbl test water tank, & 1-400 bbl test oil tank".

The Operator also submitted a Form 4 Sundry doc# 402185365 to add the following BMP's to the location:

- Operator shall use a Supervisory Control and Data Acquisition (SCADA) system that has the ability to automatically shut in the wells during an upset condition.
- 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 (or manifolded tanks) with the addition of rain water from a 25-year 24-hour storm event and 5% additional freeboard to account for any small piping or equipment that may be in containment. The engineered secondary containment system will be constructed of a perimeter of

walls that are post driven into the ground around a flexible geotextile base. All components will then be sprayed with a polyurea liner technology. This liner technology maintains impermeability and puncture resistance under exposure to UV rays, weather extremes, and chemicals commonly encountered in oil and natural gas production, and provides seamless protection. All berms will be visually checked weekly at a minimum to a maximum of daily to ensure proper working condition.

- AVO inspections will occur weekly, and LDAR inspections are performed quarterly. All records will be kept readily available.
- An Emergency Response Plan was previously submitted and approved from both the local emergency responders and Weld County's Director of Emergency Management prior to receiving the approved WOGLA. The Emergency Response Plan includes general field wide, site specific safety protocol, and a tactical response plan.

Additionally, this location is in a rural area, with the nearest Building Unit to the proposed location approximately 5,280 feet or greater away. Therefore, the risk to Public Safety from a fire or explosion is deemed to be low.

Determination: The Director determined that Criteria 8 was sufficiently analyzed based on the application of additional BMPs that address tank containment, leak detection inspection, and the ability to automatically shut-in wells remotely.

Additional Information:

- This APD is being refiled to update the wellbore configuration and Unit Spacing. Spacing Order 535-1211 was approved on 7/31/2019. This APD is one of 10 total refile APD's for this location.

Final Determination: COGCC staff met with the Director to discuss whether the Objective Criteria were sufficiently addressed and whether the subject APD could be approved with the proposed Best Management Practices (BMPs) and applied Conditions of Approval (COAs) on the APD and the already-approved Form 2A. Per staff request, the Operator submitted Sundry doc# 402185365 to add additional BMPs to the Location, ensuring maximum protection of any tank related spills or releases. The Director determined that following the application of the additional analysis from the Objective Criteria, the Sundry and the permit application meet the standard for protection of public health, safety, welfare, the environment and wildlife resources set by SB 19-181.