

## **Objective Criteria Review Summary - Great Western Operating Company, Reeman DE Pad, Form 2A 402127285**

This summary explains how COGCC staff conducted its technical review of the Great Western Operating Company (Great Western), Reeman DE Pad, Form 2A, doc no 402127285 within the context of SB19-181 and for the required Objective Criteria. This proposed Location is a new build for 28 wells, 38 separators, 18 oil tanks, and 3 water tanks. The Form 2A permit application met the following Objective Criteria

1. (Criteria #5.c) The proposed Location lies within a Sensitive Area for water resources (within an area of potential shallow groundwater and proximity to surface water); and
2. (Criteria #8) Oil and Gas Location with storage of hydrocarbon or produced liquid in more than 18 tanks or an excess of 5,200 barrels.

COGCC staff met with the Director to discuss whether the Objective Criteria for the Form 2A 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 5.c:** Oil and Gas Locations within a Sensitive Area for water resources.

**Site Specific Description of Applicability of Criteria 5.c:** The Location is in a sensitive area due to the proximity of shallow groundwater and proximity to surface water. Estimated depth to groundwater is at 20 feet based on Operator experience in the area. A mapped stream and floodplain is approximately 354 feet east of the proposed Location. The Location is not in a Floodplain.

**Site Specific Measures to Address Criteria 5.c:** There is a mapped stream and floodplain approximately 354 feet to the northeast of the Location. The stream is not clearly visible on aerial photos from the agricultural activities in the area. The closest water well to the proposed Location is a domestic well with a depth of 300 feet below ground surface. A monitoring water, approximately 3,000 feet east of the location, was drilled to 26 feet below ground surface and did not encounter groundwater.

Great Western has placed BMPs on the Form 2A regarding the protection of the proximate surface water features and shallow groundwater. Proposed production equipment will be within lined, secondary containment with 110 percent capacity of the largest tank. Stormwater controls, such as ditch and berm with sediment traps, will be around the location to minimize runoff and erosion. A retention pond will be constructed on the northeast corner of the proposed Location for stormwater control. The proposed Location will be inspected daily for spills or leaks.

**Summary:** During the technical review, COGCC staff requested additional information regarding stormwater controls and timing of inspections. Great Western provided the information which was added to the BMP section of the Form 2A. The BMPs meet the standard for protection of the sensitive environment and water resources.

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

**Site Specific Description of Applicability of Criteria 8:** The proposed Location is for 28 wells, 18 oil tanks, and 3 water tanks, and 38 separators.

**Site Specific Measures to Address Criteria 8:** Great Western plans to have 18 oil tanks and 3 produced water tanks. An emergency response plan has been submitted with the WOGLA which includes an address for the Location for emergency responders. Great Western will use an auto-gauging system for the tanks for truck loading to minimize emission sources. Remote shut-in capabilities will be used at this Location.

**Summary:** During the technical review of the Form 2A application, COGCC staff requested additional information regarding emergency response plans, emissions controls and shut-in capabilities at the Location. Great Western provided information regarding the third party oil pipeline, the auto-gauging system, and the remote shut-in capabilities for the Location. The information was added to the appropriate sections of the Form 2A application.

**Determination:** Based on the information provided, the Best Management Practices committed to by the operator, and the Conditions of Approval proposed, The Director has determined that this application and variance request are protective of public health, safety, welfare, the environment and wildlife resources and can be approved.