

**Objective Criteria Review Memo, *Grand Mesa Operating Company, Dado 1-21, Form 2A 401826108***

This summary explains how COGCC staff conducted its technical review of the Dado 1-21, Form 2A 401826108 within the context of SB 19-181 and for the required Objective Criteria. This Form 2A permit application met the following Objective Criteria -

1. (Criteria 5.c) The proposed Location lies within a Sensitive Area for water resources (Location lies within the Arikaree Designated Groundwater Management Area and the Northern High Plains Basin, within an area of potential shallow groundwater and within proximity to a tributary of the Arikaree River).
2. (Criteria 8) The proposed Location 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). 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 proposed location is in a sensitive area due to lying within the Arikaree Designated Groundwater Management Area and the Northern High Plains Basin, in an area of potential shallow groundwater and within proximity to surface water. The estimated depth to groundwater entered on the Form 2A is 18 feet below ground surface (bgs). Well logs from nearby monitoring wells also indicate that groundwater may be less than 20 feet bgs. In addition, the Location lies approximately 307 feet from a tributary of the Arikaree River.

**Site Specific Measures to Address Criteria 5.c:** The DADO 1-21 is a proposed Oil and Gas Location with one vertical well, one drilling pit, five gas or diesel motors, 15 oil tanks, five water tanks and five separators. The production facilities proposed for this Location will serve this Location as well as four additional Related Remote Locations. Staff reviewed the proposed Form 2A. To protect shallow groundwater resources, Grand Mesa Operating has committed to construct all production facilities within secondary containment consisting of steel ring berms tied into a synthetic liner and will conduct daily inspections of the facilities. In addition, staff applied a Condition of Approval requiring the operator to use an aboveground tank in lieu of a drilling pit in the event groundwater is encountered during construction. To protect surface water resources, Grand Mesa Operating has committed to constructing stormwater controls along the cross- and down-gradient perimeters of the Location consistent with good engineering practices and sufficient to prevent offsite migration of sediment/contaminant into the nearby tributary.

**Criteria 8:** The proposed Location 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 proposed Location is being permitted for a total of 20 tanks including 15 oil tanks and 5 water tanks.

**Site Specific Measures to Address Criteria 8:** The DADO 1-21 is a proposed Oil and Gas Location with production facilities that will serve multiple well Locations. The proposed total tank count for the location is 15 oil tanks and 5 water tanks. To minimize surface disturbance, Grand Mesa Operating constructs centralized production facilities to serve multiple locations where this configuration is available. Based on the BMPs committed to by Grand Mesa, the BMPs for the large tank battery are protective of groundwater and surface water resources. The location lies within a rural area of unincorporated Lincoln County and greater than 4,000 feet from a building or Building Unit.

**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.