

Objective Criteria Review Memo – Grand Mesa Operating Company, Nana Unit 1-16, Form 2A 401806570

This summary 401806570 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 (proposed Location lies within an area of potential shallow groundwater and a Designated Basin).

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 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 lies within an area of potential shallow groundwater and within the Arikaree Designated Groundwater Management Area and the Northern High Plains Designated Basin and therefore, is considered a Sensitive Area for water resources. The estimated depth to groundwater entered on the Form 2A is 18 feet below ground surface (bgs).

Site Specific Measures to Address Criteria 5.c: The Nan Unit 1-16, Form is a proposed Location consisting of 1 vertical, 1 drilling pit, 1 separator, 1 gas or diesel motor, 3 oil tanks and 1 water tank. Staff required additional BMPs to protect groundwater: the operator proposed to construct all production facilities within lined secondary containment, dispose of drilling fluids offsite via the Grand Mesa Buzz's Boat UIC Injection Well, will use tertiary containment along the cross- and down-gradient perimeters to prevent sediment/contaminant migration into the nearby surface water and provided a daily inspection schedule to identify spills at the Location within a timely manner. In addition, Staff added a Condition of Approval to the Form 2A requiring a lined drilling pit or aboveground tank in the event that shallow groundwater is encountered.

Determination: The Director determined that Criteria 5.c was sufficiently analyzed and that the implementation of previously imposed permit conditions and inclusion of additional BMPs that address the protection of ground and surface water resources met the standard for protection of the sensitive environment and water resources.