

**Director Criteria Review Summary – Mallard Exploration Pintail Pad, Form 2A #401386705
(Location ID #454414)**

This summary explains how COGCC conducted its technical review of the existing Mallard Exploration Pintail Pad location within the context of SB 19-181 and for the required Director's Objective Criteria. The COGCC approved the Form 2A for Mallard Exploration's Pintail Pad in March 2018. This Oil & Gas Location was approved for 16 wells. At the time the Form 2A was approved, Mallard Exploration submitted all 16 Form 2 Applications for a Permit to Drill (APDs) and they were approved concurrently with the Form 2A. Mallard Exploration has since decided to adjust the surface hole location of these wells within the permitted location boundary and have submitted Refile Form 2 APDs for the wells. These Form 2 APDs met the following Director's Objective Criteria -

1. (Criteria 5c) Location within a Sensitive Area for water resources (proximate mapped wetland)
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 (32 oil tanks and 16 water tanks)

COGCC staff met with the Director to discuss whether the Objective Criteria were sufficiently addressed and whether the Refile Form 2 APDs could be approved with the Best Management Practices (BMPs) and applied Conditions of Approval (COAs) on the approved Form 2A. The following section 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 its proximity to a mapped wetlands. The mapped wetlands is approximately 340 feet southeast of the location and across Weld County Road 98

Site Specific Measures to Address Criteria 5.c: Mallard Exploration included a Storm Water/Erosion Control BMP on the approved Form 2A that addressed additional protections to prevent or minimize impacts to the mapped wetlands. Additionally, the mapped wetlands is across Weld County Road 98 which acts as a berm minimizing impacts from a surface spill/release.

Determination: The Director determined that Criteria 5.c was sufficiently analyzed based on the application of the BMP that address the protection of the mapped wetlands, and were sufficient to meet the standard for protection of the sensitive environment and water resources.

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

Site Specific Description of Applicability of Criteria 5.c: The Form 2A for this Oil & Gas Location was approved for 32 oil tanks and 16 water tanks.

Site Specific Measures to Address Criteria 8: Mallard Exploration has indicated that they have an approved WOGLA from Weld County. WOGLAs require operators coordinate with local emergency responders in case of a fire or explosion at the location. Groundwater is estimated to be 52 feet below ground surface and the soil is predominantly a clay loam; therefore, impacts to groundwater from a release from the tanks is assessed to be a low probability.

Determination: The Director determined that Criteria 8 was sufficiently analyzed based on the requirements of the approved WOGLA, deep groundwater, and predominantly clay loam soils.

Staff met with the Director to discuss the BMP that were approved on the Form 2A by COGCC. The Director determined that following the application of the additional analysis from the Objective Criteria, the permit application meets the standard for protection of public health, safety, welfare, the environment and wildlife resources set by SB 19-181.