

**Objective Criteria Review Memo ADDENDUM - Mallard Exploration LLC  
Goldeneye Fed 21-1HC -- Form 2 Application for Permit to Drill (APD) Doc# 402180891**

**Approved Form 2A Oil & Gas Location Assessment (Goldeneye East Pad Doc# 401631824, approved 10/05/2019)**

**Location ID# 468699**

The Form 2A for this Oil & Gas Location was reviewed for all 13 wells proposed for this Location. COGCC's technical review of the 2A included review within the context of SB 19-181 and the required Objective Criteria. Objective Criteria Review Memo, Doc# 2479165, is in the Location's file in COGCC's database. This Addendum provides additional information regarding the delayed approvals of the eight refile APDs for this Location.

**Delayed Approval of APDS:**

Eight APDs were approved on 10/05/2019 with the form 2A. The Operator has submitted these eight refile APD's to better align the wellbore orientations on the Multi-Well Plan on the approved form 2A.

The Form 2A was approved with the following COA, which was sited in the original memo as adding protection to surface water features:

- The location is in a sensitive area because of the presence of shallow groundwater, therefore, the operator shall line the secondary containment areas for the tanks and separators with an impervious material to prevent the downward migration of produced liquids.

I reached out to the Operator to confirm they are complying with this COA and they confirmed they were via the following:

- Operator will install an engineered containment system around the tank battery. The containment system is constructed of a perimeter of metal walls that are post driven into the ground around a flexible geotextile base. All components are then sprayed with a polyurea liner technology. This liner technology maintains impermeability and is puncture resistance under exposure to UV rays, weather extremes, and chemicals commonly encountered in oil and natural gas production, and provides seamless protection. The liner is then topped with pea gravel. Secondary containment will be installed around separators and treaters consisting of metal berm walls. The separators and treaters will be set on top of compacted road base.

Based on this analysis, the Operator is complying with the existing BMP's and COA's on the approved Form 2A to address the Objective Criteria that were met during the original review of the Form 2A and no further Sundry or Memo is necessary at this time. The APD's IN PROCESS should be passed and sent to Final Approval with the following comment:

COGCC conducted the technical review for the related Oil and Gas Location Assessment permit, Form 2A document #401631824 under the statutory authority provided through SB 19-181, including the

Objective Criteria. The Director approved the Form 2A on 10/05/2019, establishing Location ID #468699 subject to conditions included in the permit. The well proposed by this related Form 2 was contemplated during COGCC's review of the Form 2A. This APD met Objective Criteria #5c & #8. The Objective Criteria Review Memo (Doc# 2479165) can be found in the document file for this Location.