

**Objective Criteria Review Memo ADDENDUM - PDC Energy Inc**  
**Grays Federal 3N -- Form 2 Application for Permit to Drill (APD) Doc# 402329609**

**Approved Form 2A Oil & Gas Location Assessment (Grays Federal 5N65W27 1-10 Doc# 402077978, approved 2/5/2020)**

**Location ID# 471109**

The Form 2A for this Oil & Gas Location was reviewed for all 10 wells proposed for this Location. COGCC's technical review of the 2A and all eight APDs submitted included review within the context of SB 19-181 and the required Objective Criteria. Objective Criteria Review Memo, Doc# 1347752, is in the Location's file in COGCC's database. This Addendum provides additional information regarding the delayed approvals of these eight APDs permitted at this Location.

**Delayed Approval of APDS:**

The Form 2A was approved on 2/5/2020, while the APD's did not pass Completeness until 3/9/2020.

The Objective Criteria Review Memo for this location (Doc# 1347752) identified that this location met Criteria #1 for being 1500' from three building units, Criteria #5c for estimated shallow groundwater and being 13' from the nearest surface water feature, & Criteria #8 for having more than 5200 bbls of storage planned for the location. The Objective Criteria Review Memo identified BMPs on the Form 2A that should successfully mitigate against the impacts identified by meeting Criteria #1, #5c, & #8, including:

Criteria 1

PDC provided the following BMPs to mitigate impacts against building units: odor neutralizers for OBM, signed building unit acknowledgement letters, oil takeaway via pipeline, sound walls or haybake on the north and south sides of the location, dust controls, lights turned down and away, and the use of an MLVT to reduce needs for water trucks.

Criteria 5c & 8

PDC provided the following BMPs to mitigate possible impacts to surface and groundwater: stormwater controls, closed loop drilling system with continuous removal of cuttings, lined containment for tank and separator areas, daily inspections, a Leak Detection Plan, and double-walled fiberglass water vaults to prevent water freezing.

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 #402077978 under the statutory authority provided through SB 19-181, including the Objective Criteria. The Director approved the Form 2A on 2/5/2020, establishing Location ID #471109

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. The Objective Criteria Review Memo (Doc# 1347752) can be found in the document file for this Location.