

Objective Criteria Review Summary - TEP Rocky Mountain LLC (TEP), Federal RWF 12-12 Pad, Location ID #324362; Form 2A #402063034.

This summary explains how COGCC and CPW staff conducted its technical review of the TEP, Federal RWF 12-12 Pad, Location ID #324362; Form 2A #402063034 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) This existing Federal Surface and Federal Minerals oil and gas location (built prior to the requirement for a Form 2A) is in a sensitive area for water resources due to its proximity to two (2) unnamed USGS identified intermittent drainages located along the eastern edge of the proposed disturbance area and approximately 150 feet to the southwest. There are also several ephemeral/intermittent tributary drainages located to the east of the proposed disturbance area that feed into the unnamed intermittent drainage. The estimated depth to groundwater, if present, would be approximately 150 feet below ground surface (bgs) as extrapolated from a water well located 6120 feet to the south-southwest.*
2. *(Criteria 6) This existing oil and gas location falls within CPW mapped 'sensitive wildlife habitat' (SWH) area for mule deer critical winter range; a CPW wildlife consultation was required.*
3. *(Criteria 12) The existing access road (the road constructed from Colorado Highway 6 to the oil and gas location) falls within CPW mapped 'sensitive wildlife habitat' (SWH) area for mule deer critical winter range; a CPW wildlife consultation was required.*

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: c) a Sensitive Area for water resources.

Site Specific Description of Applicability of Criteria 5.c: Based on the technical review and desktop evaluation, staff determined that the existing oil and gas location has two (2) unnamed USGS identified intermittent drainages located along the eastern edge of the proposed disturbance area and approximately 150 feet to the west-southwest. There are also several ephemeral/intermittent tributary drainages located to the east of the proposed disturbance area that feed into the unnamed intermittent drainage.

Site Specific Measures to Address Criteria 5.c: COGCC staff's review of this existing oil and gas location indicates that the well pad has one (1) producing gas well that was permitted in January 2006 under Form 2 #1526852. The well pad was constructed in May 2006, the well was drilled and completed in June to July 2006, and has been producing since September 2006. TEP is planning to drill an additional eighteen (18) gas wells and install twenty-four (24) separators, five (5) condensate tanks, and one (1) 300 bbl blowdown tank.

To protect the nearby surface water resources, the TEP will implement both engineering and administrative BMPs under a field-wide Stormwater Management Plan (CDPHE Certification COR404624), along with a site-specific storm water and erosion control plan. TEP has submitted, with this Form 2A permit application, detailed site-specific

best management practices (BMPs) for Storm Water/Erosion Control Measures along with several attachments (Construction Layout Drawings, Location Drawing, Facility Layout Drawing, Proposed Storm Water and Erosion Control Drawing, and Plan of Development Drawing) that show all planned storm water/erosion control systems for this well pad location.

The access road has numerous culverts for crossings at perennial streams, intermittent streams, and ephemeral/intermittent drainages and ditches. The access road and rock check dam borrow ditches will be maintained as to not allow sediment to migrate from the access road to nearby surface water or any drainages leading to surface water.

The proposed expansion of the existing well pad, basically in all directions as shown on the Construction Layout Drawings, limits the direction of a potential release to primarily the southeastern side of the well pad and northwestern and southwestern side of the drilling pit; towards and directly into the unnamed intermittent drainage along the eastern and western sides of the well pad.

During location expansion, TEP will construct diversion ditches within earthen perimeter berms around the entire working surface area of the well pad using excess cut material. The berms will be approximately 18 to 24 inches in height. A combination of surface roughening and seeding/mulching of slopes on the outside of the perimeter earthen berms and placement of wattles along the outside of the berms will be used to prevent erosion and non-source pollution. Interior surface water run-off and exterior surface water run-on diversion ditches will be placed around the entire well pad disturbance. The interior diversion ditches will be directed to a sediment control basin located near the access road entrance of the well pad. The exterior diversion ditches will be rock/boulder armoured at several locations, rock check dams will be placed along the western diversion ditch, and potential surface water run-on will be directed to two additional sediment control basins. These items will control water run-off and run-on in a manner that minimizes erosion, transport of sediment offsite, and site degradation. Any existing or newly installed BMPs will be monitored and maintained to ensure site containment in the event of a potential release.

Based on the information collected during this desktop review, the closest downgradient surface water feature that could be impacted would be the unnamed intermittent drainage located along the eastern edge of the planned expanded location. As previously discussed, if a potential release were to migrate off location, flow would be to the southeast (from the well pad), and the northwest and southwest (from the drilling pit/cuttings management area) towards and directly into the unnamed intermittent drainage along the eastern and western sides of the well pad. It is not anticipated that the unnamed intermittent drainages could be impacted by a potential release due to the proposed re-construction of the location and storm water/erosion control measures detailed in the BMPs and Form 2A submitted drawings.

Determination: During the technical review process for the amended Form 2A, COGCC staff received additional information and clarification regarding the operator's planned activities, fluid containment, and storm water/erosion control measures as well as details concerning the re-construction and maintenance of the location. Given that the additional detailed technical information and submittal of BMPs (that address the protection of surface water resources) have met the standard for protection of the

sensitive environment and water resources; the Director determined Criteria 5.c. was sufficiently analyzed.

Criteria 6: Oil and Gas Locations within a Colorado Parks and Wildlife (“CPW”) mapped Restricted Surface Occupancy Area (“RSO”) or Sensitive Wildlife Habitat (“SWH”), or locations receiving site- or species-specific CPW comments.

Criteria 12: Oil and Gas Locations with an access road (the road constructed from the public road to the Oil and Gas Location) within a RSO, SWH, 317B buffer zone, or within 200’ feet of a Building Unit on lands not subject to a Surface Use Agreement.

Site Specific Description of Applicability of Criteria 6 and 12: Based on the technical review and desktop evaluation, staff determined that this existing oil and gas location and access road from Colorado Highway 6 to this oil and gas location falls within a CPW-mapped 'sensitive wildlife habitat' (SWH) area for mule deer critical winter range; a CPW wildlife consultation was required.

Site Specific Measures to Address Criteria 6 and 12: This existing access road and location falls within CPW mapped 'sensitive wildlife habitat' (SWH) area for mule deer critical winter range habitat. COGCC contacted TEP to determine the timeframe and duration of the planned activities (well pad re-construction, well drilling, and well completion). The activities will start in September 2019 and are planned for a single continuous occupation, lasting approximately eight (8) to ten (10) months. Interim reclamation will start as soon as possible after the wells have been placed into production.

The typical avoidance period for construction, drilling, and completions for mule deer critical winter range habitat runs from December 1 to April 30, which is a BLM lease stipulation for this oil and gas location (per the BLM Colorado River Valley Field Office). CPW is aware that construction, drilling, and completions cannot always be conducted outside of this time frame. CPW staff have been working with TEP and the BLM over the last several years to develop compensatory mitigation projects to benefit big game and offset potential impacts from oil and gas operations during the winter season. CPW believes that this mitigation system, along with the previously completed and proposed habitat enhancement projects (on both fee and federal lands), will be satisfactory compensatory mitigation to offset any potential residual impacts from TEP conducting operations at this location during the 2019 to 2020 winter season. COGCC has deferred to CPW and BLM the exact types and locations of compensatory mitigation measures that will be done by TEP to offset potential residual impacts.

Since these wells will be drilled from an existing pad with existing access road and pipelines, along with the compensatory mitigation work that has and will be done, CPW does not object to the timing of these proposed operations. Additionally, TEP's Form 2A BMPs to address wildlife conflicts, erosion and storm water control, interim reclamation, certified weed-free native and wildlife friendly seed mixes, offsite produced water management, and remote facilities monitoring, are adequate to minimize any other wildlife impacts from the proposed activities.

Determination: During the technical review process for the Form 2A, COGCC staff requested additional information and clarification regarding the applicant's proposed well pad re-construction, well drilling, and well completion activities. Given that this is a built location that has scheduled the activities to be completed in one continuous occupation

between September 2019 and June 2020; that TEP, CPW, and BLM have develop compensatory mitigation projects to benefit big game and offset potential impacts from these oil and gas operations during the winter season; and the operator proposed wildlife related BMPs; the standard for protection of wildlife and wildlife habitat resources has been met. The Director determined Criteria 6 and 12 were sufficiently analyzed.

Staff met with the Director to discuss Objective Criteria that are met by this Oil and Gas Location. 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.