

Objective Criteria Review Memo – SRC Energy Ridge State 33-17 Pad, Form 2A #402001325

This summary explains how COGCC staff conducted its technical review of the proposed SRC Energy Ridge State 33-17 Pad location, Form 2A Doc #402001325 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 1) Oil and Gas Locations within 1,500 feet of a Building Unit or High Occupancy Building, which includes Urban Mitigation Area (UMA) and Large UMA Facility (LUMAF) locations (the closest Building Unit is 685 feet from a well and 969 feet from a production facility)
2. (Criteria 2) Oil and Gas Locations within a municipality (City of Greeley)
3. (Criteria 3) Oil and Gas Locations within 1,500 feet of a municipal boundary, platted subdivision, or county boundary (Owl Ridge subdivision approximately 800 feet northeast)
4. (Criteria 5c) Location within a Sensitive Area for water resources (concrete lined stormwater ditch leading to larger Boomerang Ditch and possible shallow groundwater)

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 Best Management Practices (BMPs) and applied Conditions of Approval (COAs) on the approved Form 2A. The following section provides details regarding the evaluation of each criterion.

Criteria 1: Oil and Gas Locations within 1,500 feet of a Building Unit or High Occupancy Building, which includes Urban Mitigation Area (UMA) and Large UMA Facility (LUMAF) locations.

Site Specific Description of Applicability of Criteria 1: SRC Energy has identified 37 Building Units within 1,500 feet of the Oil & Gas Location. There are three Building Units within the Buffer Zone (1,000 feet from a well or production facility), with the nearest Building Unit being 685 feet from a well and 969 feet from a production facility. There are only five Building Units within 1,000 of the edge of the Oil and Gas Location. Therefore, this Oil & Gas Location is not within an UMA. The remaining Building Units are between 1,000 feet and 1,500 feet from the Oil & Gas Location.

Site Specific Measures to Address Criteria 1: SRC Energy submitted all required notices required as part of the City of Greeley Use by Special Review (USR), and included mitigation BMPs to address noise, dust, lights, and odors on the Form 2A. In particular, the Noise mitigation BMP indicates that 32 foot sound walls will be used on all sides of the proposed location. The Lighting mitigation BMP indicates all lights will be pointed downwards, shielded, and be below the top of the sound walls. The Odor mitigation BMP details odor controls for oil based mud, planning for prevailing wind direction to keep the drilling rig downwind from residential units, use of FLIR camera inspections to inspect for leaks, and use of sealed thief hatches on the tanks. Additionally, a COA requiring the operator to submit and obtain an approved air monitoring plan prior to drilling any wells was also added to the Form 2A. These nuisance mitigation BMPs serve to protect the Building Unit Owners within 1,500 feet of the Oil and Gas Location.

SRC Energy held a neighborhood meeting on December 12, 2018 as part of the required City of Greeley USR process. SRC Energy indicated attendance to the neighborhood meeting was minimal with no negative feedback from the community regarding the proposed location.

SRC Energy provided an Alternate Location Analysis that concluded that the proposed Oil & Gas Location is the only location from which to produce all of the minerals in the Drilling & Spacing Unit without being located closer to Building Units, interfering with the various other surface owner's future plans for their land, or negatively impacting the City of Greeley's future development plans.

In February 2020, follow-up notices were sent to all Building Unit owners and occupants within 2,000 feet of the location that included the COGCC fact sheet about the recent CDPHE Health Study. No responses were received from any of the recipients of the follow-up notices.

Summary: There are 37 Building Units within 1,500 feet of this proposed oil and gas location, with the nearest Building Unit being 685 feet from a well and 969 feet from a production facility. SRC Energy has obtained an approved USR from the City of Greeley for this oil and gas location. As part of the USR process, SRC Energy also held a neighborhood meeting; however, attendance was minimal. SRC Energy provided nuisance mitigation BMPs to address noise, dust, lights, odors, and emissions on the Form 2A. At the request of the COGCC, SRC Energy provided an Alternate Location Analysis. Follow-up notices concerning the CDPHE Health Study were also sent out to all Building Unit owners and occupants within 2,000 feet of the location.

Criteria 2: Oil and Gas Locations within a municipality.

Site Specific Description of Applicability of Criteria 2: This Oil & Gas Location is located within the City of Greeley.

Site Specific Measures to Address Criteria 2: SRC Energy has indicated the City of Greeley regulates the siting of Oil & Gas Locations and that an approved Use by Special Review from

the City of Greeley (USR2018-0012) was issued on April 23, 2019. The City of Greeley was contacted by the operator in February 2020 and asked if they would want a neighborhood meeting held for the residents of the Owl Ridge subdivision that is within 2,000 feet of the location. Greeley indicated that they were satisfied with public outreach and meeting requirements that were conducted as part of the approved USR and that an additional neighborhood meeting was not necessary.

Summary: This proposed oil and gas location is within the City of Greeley and SRC Energy has obtained an approved USR from Greeley.

Criteria 3: Oil and Gas Locations within 1,500 feet of a municipal boundary, platted subdivision, or county boundary.

Site Specific Description of Applicability of Criteria 3: This Oil & Gas Location is located approximately 800 feet southwest and across US Highway 34 from the Owl Ridge platted subdivision.

Site Specific Measures to Address Criteria 3: The Owl Ridge platted subdivision is located approximately 800 feet northeast of the proposed location and across US Highway 34. SRC Energy held a neighborhood meeting on December 12, 2018 as part of the required City of Greeley USR process. SRC Energy indicated attendance to the neighborhood meeting was minimal with no negative feedback from the community regarding the proposed location and that none of the residents in the Owl Ridge platted subdivision attended the neighborhood meeting. SRC Energy has also indicated that no consultations were directly conducted with any Building Unit owners in the Owl Ridge platted subdivision that are within 1,500 feet of the location. SRC Energy did provide an Alternate Location Analysis that concluded that the proposed Oil & Gas Location is the only location from which to produce all of the minerals in the Drilling & Spacing Unit without being located closer to the Building Units within the Owl Ridge platted subdivision. In February 2020, follow-up notices were sent to all Building Unit owners and occupants within 2,000 feet of the location that included the COGCC fact sheet about the recent CDPHE Health Study. No responses were received from any of the recipients of the follow-up notices.

Summary: This proposed oil and gas location is approximately 800 feet from the Owl Ridge platted subdivision. SRC Energy held a neighborhood meeting as part of the City of Greeley USR process, but none of the residents of the Owl Ridge platted subdivision attended the neighborhood meeting. SRC Energy has indicated no consultations were directly conducted with any Building Unit owners from the Owl Ridge platted subdivision. In February 2020, follow-up notices were sent to all Building Unit owners and occupants within 2,000 feet of the location that included the COGCC fact sheet about the recent CDPHE Health Study.

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 concrete lined stormwater ditch that leads to the larger Boomerang Ditch and possible shallow groundwater.

Site Specific Measures to Address Criteria 5.c: A concrete lined stormwater ditch is approximately 218 feet northwest of the proposed Oil & Gas Location and across 83rd Avenue. An MLVT will be used on this location and will be the closest oil and gas facility to this stormwater ditch. Once well completions are finished and the MLVT is gone, this stormwater ditch will then be approximately 500 feet from the nearest edge of the location. SRC Energy included a BMP for Leak Detection Berm Construction on the Form 2A that addresses additional protections to prevent or minimize impacts to this stormwater ditch and possible shallow groundwater. The estimated depth to groundwater is 31 feet and the soil type is a sandy loam; therefore, COGCC staff placed a Condition of Approval (COA) on the Form 2A requiring SRC Energy to line the secondary containment area for the tanks and separators to mitigate potential impacts to possible shallow groundwater.

Summary: SRC Energy provided BMPs that address the protection of the stormwater ditch and possible shallow groundwater resources. COGCC staff applied a COA to line the secondary containment area for the tanks and separators.

Director Determination: Based on the Objective Criteria review. The Director has determined that this permit application meets the standard for protection of public health, safety, welfare, the environment and wildlife resources set by SB 19-181.