

Sensitive Area Determination Checklist

| TEP Rocky Mountain, LLC | | |
|--|---|-------|
| Person(s) Conducting Field Inspection | None Conducted | |
| Site Information | | |
| Location: | RG 23-7-297 Drill Pad | Time: |
| Type of Facility: | Existing Well Pad w/ Proposed Expansion | |
| Environmental Conditions | | |
| | | |
| Temperature (°F) | | |

A sensitive area is an area vulnerable to potential significant adverse groundwater impacts, due to factors such as the presence of shallow groundwater or pathways for communication with deeper groundwater; proximity to surface water, including lakes, rivers, perennial or intermittent streams, creeks, irrigation canals, and wetlands. Additionally, areas classified for domestic use by the Water Quality Control Commission, local (water supply) wellhead protection areas, areas within 1/8 mile of a domestic water well, areas within 1/4 mile of a public water supply well, ground water basins designated by the Colorado Ground Water Commission, and surface water supply areas are sensitive areas.

Has the proposed, new or existing location been designated as a sensitive area?

Yes No

SURFACE WATER

- Are there any intermittent surface water features or SWSAs adjacent to or within ¼ mile of the proposed/new or existing facility?

Yes No

If yes, list type of surface water feature(s), i.e. rivers, creeks, streams, seeps, springs, wetlands:

If yes, describe location relative to facility:

- Could a potential release from the facility reach surface water features?

Yes No

If yes, describe the pathway a release from the facility would likely follow to determine if the potential to impact surface water is high or low

- Is the potential to impact surface water from a facility release high or low?

High Low

GROUNDWATER

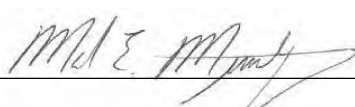
1. Will the proposed/new or existing facility have any pits which will contain hydrocarbons and chlorides or other E&P wastes?
 Yes No
If yes, List the pit type(s): Drilling pit on the southeastern corner of the existing facility.
2. Is the site of the proposed facility underlain by an unconfined aquifer or recharge zone?
 Yes No
3. Is the hydraulic conductivity of the underlying soil or geologic material $\leq 1.0 \times 10^{-7}$ cm/sec?
 Yes No
4. Is the proposed facility located within 1/8 mile of a domestic water well or 1/4 mile of a public water supply well which would use the same aquifer?
 Yes No
5. Is the proposed facility located within a 100-year floodplain?
 Yes (*Sensitive Area*) No (*If no, proceed to question #6.*)
6. Is the depth to groundwater known?
 Yes (*If yes, follow instructions provided in 6(a) of this section.*)
 No (*If no, follow instructions provided in 6(b) of this section.*)
 - (a) If yes, could a potential release from the proposed facility reach groundwater?
 Yes No
If yes, explain:
 - (b) If no:
 - (i) Evaluate surrounding soils, topography, and vegetation which may suggest the presence of shallow groundwater.
 - (ii) Gather information from surrounding well data in order to determine a depth to groundwater, i.e. State Engineers Office.
7. Is the potential to impact ground water from the facility in the event of a release high or low?
 High Low

Additional Comments:

As stated in the surface water portion of this sensitive area determination, there are no intermittent drainage features located within a ¼ mile of the existing facility. The facility as it is currently proposed to be expanded, limits the direction of a potential release to the northern side. If a potential release were to migrate off the facility on the northern side, flow would be to the north following the natural terrain of the surrounding area. During facility expansion, Best Management Practices (BMP's) should be installed in the form of an earthen perimeter berm along the graded edge of the fill slope sides. If feasible diversion ditches and sediment traps should be constructed along the toe of all fill slope sides. Installation of these BMP's will greatly aid in mitigating any fluid migration off the facility. All installed BMP's should be monitored and maintained to ensure site containment in the event of a potential release.

The State Engineer's Office and USGS records were reviewed and no records were revealed which would provide any additional information pertaining to the depth to groundwater within a ¼ mile of the proposed facility. The closest permitted water well (permit #68235-F) is located 5,148 feet to the northeast and does provide limited information as to the depth to groundwater in the immediate vicinity of the existing facility. Even though the well to the north is some distance away it is permitted in a similar topographic/geologic setting and has targeted groundwater at depths of greater than 500 feet. Therefore, it could be assumed that groundwater, if present, in the immediate vicinity of the existing facility would be in excess of 500 feet. The vegetative cover in the immediate vicinity of the existing facility is dominated by sage, juniper, and bunch grasses typical of the upland xeric environment. No seeps or springs were identified during the desk top review which would suggest the presence of shallow groundwater. In addition, the existing facility is located on top of a ridgeline and is constructed in bedrock which is most likely devoid of any groundwater.

Based on the information collected during the desktop review, the potential for impacts to any intermittent drainages and groundwater would be deemed to be low. Therefore, the facility should be designated as being in a non-sensitive area.

Inspector Signature(s):  Date: 3/20/2020

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