

Sensitive Area Determination Checklist

TEP Rocky Mountain, LLC		
Person(s) Conducting Field Inspection	None conducted	
Site Information		
Location:	RWF 12-12 Well Pad	Time: N/A
Type of Facility:	Existing Well Pad w/ Proposed Expansion	
Environmental Conditions		
Temperature (°F)	N/A	

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

☒ Yes ☐ No

SURFACE WATER

- Are there any 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: Two (2) unnamed USGS identified intermittent drainages.

If yes, describe location relative to facility: One (1) unnamed USGS identified intermittent drainage is located between the southeastern edge of disturbance on the pad and the northeastern edge of disturbance on the drilling pit. The second USGS identified intermittent drainage is located approximately 50 feet southwest of the southwestern edge of disturbance.

- 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. If a potential release were to migrate off the southeastern side of the pad and the northwestern and southwestern sides of the drilling pit, flow would be directly towards and into the unnamed intermittent drainage. Or if a potential release were to migrate off the facility on the southwestern side west of the main access road flow would be towards the second unnamed intermittent drainage.

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

☒ High during periods of intermittent flow ☒ Low during periods of no flow

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
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

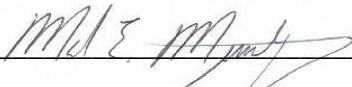
Additional Comments:

As stated in the surface water section of this sensitive area determination, there are two (2) unnamed USGS identified intermittent drainages located within a ¼ mile of the existing facility. The facility, as it currently proposed to be expanded, limits the direction of a potential release to primarily the southeastern side of the pad and northwestern and southwestern side of the drilling pit. If potential release were to migrate off the facility on the above mentioned sides, flow would be to the southeast, northwest, and southwest towards and directly into the unnamed intermittent drainage. During facility expansion, Best Management Practices (BMPs) should be constructed in the form of an earthen perimeter berm along all fill slope sides. All newly constructed BMPs should be monitored and maintained to ensure complete containment of a potential release on site.

The State Engineers Office and USGS records were reviewed and there are no permitted water wells in the immediate vicinity of the proposed facility. The closest permitted water well is located 6,722 feet (1.3 miles) to the east southeast and would not provide accurate information on the depth to groundwater. Based on aerial photography review, the vegetative cover in the immediate vicinity of the proposed facility appears to be somewhat sparse and consists of primarily bunch grasses and sage and does not indicate the presence of shallow groundwater. There was no visual evidence of any springs or seeps. Based on the topographic setting of the facility, it could be assumed that the depth to groundwater is most likely greater than 50 feet. Thus the potential to impact groundwater would be deemed to be low.

Based on the information collected during this desk top review, the greatest potential for impacts would be to the unnamed USGS identified intermittent drainage located between the pad and the drilling pit. Even though portions of this drainage will be culverted; if a potential release were to migrate off the pad on the southeastern side and the drilling pit on the northwestern or southwestern sides flow would be to the southeast, northwest, and southwest a short distance where it would enter the unnamed intermittent drainage. The drainage exhibits a very defined channel with little or no debris/vegetation indicating it does flow intermittently during the year most likely in the early spring and during heavier precipitation events. If a release were to enter the drainage during periods of intermittent flow, impacts could potentially reach the Colorado River as the drainage feature has direct hydraulic connection to the river. However, the severity of potential impacts to the Colorado River is not known but could be fairly low due to the distance to the river and the fact the drainage feature is fed by several smaller drainages further to the south prior to entering the Colorado River. If the second intermittent drainage located to the southwest were impacted it is not anticipated these would reach the river as the drainage

feature is diverted and collects into what appears to be a man-made stock pond just south of the existing facility. Due to the close proximity of the intermittent drainage features, the facility would be classified as being in a sensitive area.

Inspector Signature(s):  Date: 5/6/2019

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