Sensitive Area Determination Checklist

TEP Rocky Mountain, LLC		
Person(s) Conducting Field Inspection	None conducted	
Site Information		
Location:	RWF 311-15 Frac Pad	Time: N/A
Type of Facility:	Existing Well Pad w/ Limited Expansion	
Environmental Conditions		
Temperature (°F)	N/A	

Has the proposed, new or existing location been designated as a sensitive area?
☒ Yes ☐ No

SURFACE WATER

1. 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 ephemeral drainages.

   If yes, describe location relative to facility: One of the unnamed ephemeral drainages is located 30 feet to the south, and the other is located approximately 195 feet to the northwest of the existing facility

2. 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 flow would be to the southeast towards the ephemeral drainage located to the south.

   Is the potential to impact surface water from a facility release high or low?
   ☒ High to actual surface water features ☒ Low to actual flowing surface water

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):

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 ≤ $1.0x10^{-7}$ 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.

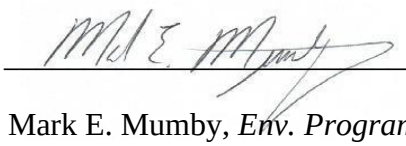
7. Is the potential to impact ground water from the facility in the event of a release high or low?
   ☐ High ☒ Low

Additional Comments:

As stated in the surface water section of this sensitive area determination, there are two (2) unnamed ephemeral 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 the northeastern and southeastern sides. If potential release were to migrate off the facility on the northeastern side, flow would tend to migrate to the east out onto open rangeland. If a potential release were to migrate off the southeastern side flow would be to the south towards and into the unnamed ephemeral drainage to the south. During the limited facility expansion, Best Management Practices (BMPs) are slated to be constructed in the form of an earthen perimeter berm along the graded edge of the fill slope sides along with a raised pad entrance and diversion ditches long the toe of the fill slope sides. All newly constructed BMPs should be closely 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 existing facility. The closest permitted water well (permit #289477) is located 6,580 feet (1.25 miles) to the southwest 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 existing facility appears to be 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, and the limited information on the depth to groundwater, it could be assumed that the depth to groundwater is most likely greater than 100 feet. Thus, the potential to impact groundwater would be deemed to be low.

Based on the information collected during this desk top review, it is not anticipated that the ephemeral drainage to the northwest would be impacted due to the current and planned expansion construction and the fact the northern side of the facility is the cut slope side. The greatest potential for impacts would be to the unnamed ephemeral drainage located to the south. If a potential release were to migrate off the facility on the southeastern side, flow would be to the southeast directly towards and into the unnamed ephemeral drainage. It is not anticipated a release would migrate any great distance as the drainage is poorly defined and contains abundant vegetative growth including woody species. With the hindered flow, any released fluids would tend to infiltrate into the underlying channel bottom soils. In addition, the ephemeral drainage is not hydraulically connected to any flowing surface water body (i.e. the Colorado River). Plus the drainage feature becomes non-existent approximately 1.4 miles to the southeast of the existing facility. It has been determined through this desk top review that the potential to impact groundwater and actual flowing surface water has been deemed to be low. However, the close proximity of ephemeral drainage to the south would classify the facility as being in a sensitive area.

Inspector Signature(s):  Date: 4/2/2020

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