Sensitive Area Determination Checklist

TEP Rocky Mountain, LLC		
Person(s) Conducting Field Inspection	None conducted	
Site Information		
Location:	GM 12-20 Drill Pad	Time: N/A
Type of Facility:	Existing Well Pad with 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

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: One (1) unnamed USGS Identified Intermittent drainage tributary to Parachute Creek.

   If yes, describe location relative to facility: The one unnamed intermittent drainage is located 28 feet to the north 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 facility on the northern side flow would be to the north directly towards and into the unnamed intermittent drainage.

   Is the potential to impact surface water from a facility release high or low?
   ☒ High during periods of intermittent flow ☒ Moderate 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):

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.

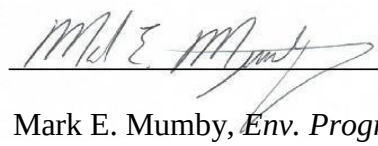
7. Is the potential to impact ground water from the facility in the event of a release high or low?
   ☐ High ☒ Low

Additional Comments:

As stated in the surface water section of this sensitive area determination, there is one (1) unnamed USGS identified intermittent drainage and the Jangles Ditch located within a ¼ mile of the existing facility. The facility, as it currently constructed and proposed to be expanded, limits the direction of a potential release the northern side. If potential release were to migrate off the facility on the above-mentioned side, flow would be to the north towards and into the unnamed intermittent drainage. During the proposed expansion, Best Management Practices (BMPs) should be installed in the form of an earthen perimeter berm on all fill slope sides. If feasible, a diversion ditch should be constructed along the toe of the fill slope sides as well to ensure total site containment in the event of a potential release. All BMPs should be monitored and maintained to ensure containment of a potential release on site.

The State Engineer's 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 is located 3076 feet to the southeast and would not provide accurate information on the depth to groundwater. Based on aerial photography review, the vegetation in the immediate vicinity of the existing facility is dominated by juniper, sage, and bunch grasses and does not suggest the presence of shallow groundwater. There was no visual evidence of any springs or seeps. In addition, the existing facility is located at the base of a fairly steep hillside where the depth to bedrock (Wasatch or L. Green River Formations) is most likely quite shallow. Based on the topographic setting of the existing facility it could be assumed that the depth to groundwater, if present, would be in excess of 100 feet if not greater. Thus the potential to impact groundwater would be deemed to be low.

Based on the information collected during this desk top review, the potential for impacts to groundwater has been deemed as low. The greatest potential for impacts would be to the unnamed USGS identified intermittent drainage located to the north of the existing facility. If a potential release were to impact the drainage during periods of intermittent flow, it could potentially reach and impact Parachute Creek as the distance to Parachute Creek is relatively short (approx. 1,700 feet). With the high potential for impacts to surface water during periods of intermittent flow, the facility should be designated as being in a sensitive area.

Inspector Signature(s):  Date: 1/8/2020

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