

Sensitive Area Determination Checklist

TEP Rocky Mountain, LLC		
Person(s) Conducting Field Inspection	None Conducted	
Site Information		
Location:	PA 34-24	Time:
Type of Facility:	Proposed Well Pad	
Environmental Conditions		
Temperature (°F)		

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: Balzac Gulch, a USGS identified intermittent drainage.

If yes, describe location relative to facility: Balzac Gulch is located approximately 181 feet to the east southeast of the Proposed 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 flow would be to the east southeast directly towards and into Balzac Gulch.

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

High during periods of intermittent flow Moderate during periods of non-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): Cuttings trench on the northern side

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 is one (1) USGS identified intermittent drainage (Balzac Gulch) located within a ¼ mile of the proposed facility. The facility, as it is currently proposed, limits the direction of a potential release to primarily the eastern and southeastern sides. If a potential release were to migrate off the facility on these sides, flow would be to the east southeast directly towards and into Balzac Gulch. Therefore, during facility construction, Best Management Practices (BMP's) 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 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 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 1,905 feet to the south and would not provide accurate information on the depth to groundwater. Based on aerial photography review, the vegetation in the immediate vicinity of the proposed facility is dominated by juniper, sage, and bunch grasses and does not suggest the presence of shallow groundwater. There was also no visual evidence of any springs or seeps. In addition, the proposed facility is located on a hillside where the depth to bedrock (Wasatch Fm.) is most likely quite shallow. Based on the topographic setting of the proposed facility it could be assumed that the depth to groundwater, if present, would be in excess of 100 feet if not greater.

Based on the information collected during this desktop review, the potential to impact groundwater has been deemed as low. The greatest potential for impacts would be to the Balzac Gulch during periods of intermittent flow. If a potential release were to impact Balzac gulch, flow would be unimpeded to the Colorado River. As noted above; with the high potential for impacts to Balzac Gulch, special attention should be given to the BMP's installed on the fill slope sides especially on the southeastern side.

With the high potential to impact Balzac Gulch and potentially the Colorado River during periods of intermittent flow; the proposed facility should be designated as being in a sensitive area.

Inspector Signature(s):  Date: 11/29/2017

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