

Sensitive Area Determination Checklist

TEP Rocky Mountain, LLC		
Person(s) Conducting Field Inspection	None conducted	
Site Information		
Location:	PA 23-26	Time:
Type of Facility:	Existing Well Pad w/ Limited Proposed Expansion	
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: Two (2) unnamed USGS Identified Intermittent drainages.

If yes, describe location relative to facility: One unnamed intermittent drainage is located 525 feet to the west and the second unnamed intermittent drainage is located 179 feet to the southeast 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. A potential release, if it were to migrate off the facility, would tend to migrate south southeast and enter the unnamed intermittent drainage.

3. 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 Cuttings will be managed on the north side of the facility.
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 $\leq 1.0 \times 10^{-7}$ 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 approximately 179 feet to the east and 525 feet to the west of the existing facility. The facility, as it proposed to be expanded, limits the direction of a potential release to a portion of the southern side. If potential release were to migrate off the facility on the above mentioned side, flow would migrate to the south southeast and would enter the unnamed drainage feature. It is not anticipated that the unnamed intermittent drainage feature to the west would be impacted by a potential release due to the natural topography of the area (small ridgeline) which separates the facility from the drainage feature. During facility expansion, it is recommended that Best Management Practices (BMPs) be installed in the form of an earthen perimeter berm along the graded edge of any fill slope sides (most notably the southern side). If feasible, a diversion ditch should be constructed along the toe of any fill slope sides. In addition; it should be noted that the pad expansion will cover a portion of the unnamed intermittent drainage. The upper most reaches of the unnamed intermittent drainage may have to be diverted around or culverted under the southeastern corner if it presents a potential risk to the facility. All current or newly installed or modified BMPs should be monitored and maintained to ensure site containment in the event of a release.

The State Engineer's Office and USGS records were reviewed and no records were revealed which would provide additional information pertaining to the depth to groundwater. There are no indications of shallow groundwater in the immediate vicinity of the facility. The vegetative cover is typical of upland settings in this area, being dominated by Piñon pine, juniper, and sage, with an understory of rabbit brush and native bunch grasses. In addition, based on the topographic setting of the facility bedrock (Wasatch Fm.) is relatively shallow. The Wasatch Fm. in the immediate vicinity is most likely devoid of any groundwater as the vegetative cover would suggest. There are no springs or seeps present as well. Therefore it could be assumed that the depth to groundwater, if present, 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 the original site investigation and desk top review, the greatest potential for impacts is to the unnamed USGS identified intermittent drainage located to the east southeast of the existing facility. However, the drainage in the immediate vicinity of the facility exhibits ephemeral characteristics; most notable a vegetated bottom in areas and an abundance of wood and plant debris indicating the drainage does not flow a majority of the time. In addition, the drainage becomes nonexistent approximately 3,700 feet to the south of the facility due to man-made modifications to the land surface. Thus there is no hydraulic connection to any flowing surface water (i.e. the Colorado River). Although the potential for impacts to surface water features has been deemed as high, the potential for impacts to actual flowing surface water and groundwater would be deemed as low. Therefore, the facility can be designated as being in a non-sensitive area.

Inspector Signature(s): Mark E. Mumby Date: 6/30/2017

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