

Sensitive Area Determination Checklist

Williams Production RMT Company		
Person(s) Conducting Field Inspection	Ashlee Lane	01/31/11
	Biologist	
Site Information		
Location:	RMV 15-35	Time: 1300
Type of Facility:	Existing Well Pad	
Environmental Conditions	Cloudy; snow flurries; ground saturated due to melting conditions.	
Temperature (°F)	36°	

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: Porcupine Creek, a USGS identified perennial stream and one unnamed USGS identified intermittent drainage tributary to Porcupine Creek.

If yes, describe location relative to facility: Porcupine Creek is located 1,304 feet east of the location, the USGS identified intermittent stream is located 1,001 feet to the east and the ditch is located 50 feet from the southwest corner of the well pad.

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.

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

☐ High ☒ Low

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, Porcupine Creek, a USGS identified perennial stream, and the USGS identified unnamed intermittent stream are both located 1,304 and 1,001 feet to the east of the existing facility. The facility, as it is currently constructed, limits flow directions of a potential release to the northern and western sides. If a potential release were to migrate off the facility on the northern and western sides, it would tend to flow to the north northwest following the natural contours of the area and into a dry non-irrigated field. Flow would also be parallel to both drainage features to the east. Therefore the potential to impact the unnamed intermittent drainage and Porcupine Creek would be deemed very low. When the existing facility is expanded, Best Management Practices (BMPs) in the form of a perimeter berm and diversion should be installed around the northern, eastern, and western, edges and fill slopes of the facility. These BMPs should be monitored and maintained to ensure site containment in the event of a release.

The Colorado State Engineer's Office and USGS records were reviewed and it was revealed that there is one permitted water well just inside the quarter mile buffer zone. Depth to water in this well and several others just outside the quarter mile buffer zone vary from 160 to 172 feet. Therefore it is not anticipated that a potential release would impact groundwater.

Based on the information collected during the site investigation and desktop review the potential to impact both surface and groundwater has been deemed to be low. With the low potential to impact surface and groundwater the facility should be classified as being in a non-sensitive area.

Inspector Signature(s):  Date: 2/1/2011

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 Date: 1/31/2011

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