

Sensitive Area Determination Checklist

Williams Production RMT Company		
Person(s) Conducting Field Inspection	Jennifer Belcastro	01/22/13
	<i>Environmental Scientist</i>	
Site Information		
Location:	RWF 43-25	Time: 11:49
Type of Facility:	Proposed Well Pad	
Environmental Conditions	Sunny, winter conditions, 2 feet of snow	
Temperature (°F)	27 °	

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 unnamed USGS identified intermittent stream; and Beaver Creek, a USGS identified perennial stream tributary to the Colorado River.

If yes, describe location relative to facility: The USGS identified unnamed intermittent drainage is located 712 feet to the west and Beaver Creek is located approximately 1,067 feet to the east 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.

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

☐ High ☒ Low

GROUNDWATER

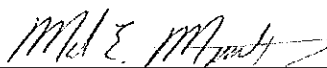
1. Will the proposed/new or existing facility have any pits which will contain hydrocarbons and chlorides or other E&P wastes?
☐ Yes ☒ No: Cuttings will be managed on the surface
If yes, List the pit type(s):
2. Is the site of the proposed facility underlain by an unconfined aquifer or recharge zone?
☒ 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:

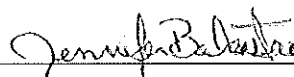
As stated in the surface water section of this sensitive area determination, there is one USGS identified unnamed drainage located to the west and Beaver Creek a USGS identified perennial drainage which is located to the east of the proposed facility. The facility, as it is currently proposed, limits the direction of a potential release to a portion of the northern side and the west side of the proposed facility. If a potential release were to migrate off the facility flow would be to the northwest following the natural contours of the area into gently sloping open rangeland with a fairly dense vegetative cover and moderate to high soil infiltration rates. It is not anticipated Beaver Creek would be impacted by a potential release due to the fact the cut slope sides of the facility on the eastern and a portion of the northern sides would prevent any flow from migrating to the east potentially impacting Beaver Creek. In addition, there is a slight rise in the topography just to the west of the proposed facility which would prevent flow from reaching the unnamed intermittent drainage to the west of the proposed facility. During facility construction, it is recommended that Best Management Practices (BMPs) be installed in the form of an earthen perimeter berm along the graded edge and diversion ditch along the toe of the fill slope sides of the facility. This would further lower any potential impact to the unnamed intermittent drainage located to the west of the proposed facility. These 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. The vegetative cover in the immediate vicinity of the facility, Piñon-juniper woodland and sage brush steppe, does not suggest the presence of shallow groundwater. Therefore, the potential to impact groundwater has been deemed low.

Based on the information collected during the site visit and desk top review, the potential to impact surface water features, actual flowing surface water, and groundwater has been deemed low based on the topographical location of the proposed facility. Therefore, the facility can be designated as being in a non-sensitive area.

Inspector Signature(s):  Date: 1/27/2013

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 Date: 1/22/2013

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