

## Sensitive Area Determination Checklist

Williams Production RMT Company – Valley		
<b>Person(s) conducting inspection</b>	Ashlee Lane	6/23/10
	<i>Biologist</i>	
<b>Site Information</b>		
Location:	RMV 28-27	Time: 0100
Type of Facility:	Existing Well Pad	
<b>Environmental Conditions</b>	Clear and breezy; soil conditions are dry.	
Temperature (°F)	95°	

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: The Colorado River, one unnamed ephemeral drainage, two irrigation ditches.

If yes, describe location relative to facility: The Colorado River is 1,178 feet northwest of the location, the unnamed ephemeral drainage did not exist, and the irrigation ditches are located to the north east and south.

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. The facility resides in a dry field that gently slopes to the northwest. Any potential flow from a release would be to the northwest.

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 (Cuttings Trench) Emergency Flare 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 5(a) of this section.*)

☐ No (*If no, follow instructions provided in 5(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.
- (iii) Drill a soil boring to determine depth to groundwater or
- (iv) Model hydro geologic conditions to determine if the potential to impact groundwater is high or low.

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, the potential to impact surface water or surface water features is low. The site investigation confirmed that the unnamed ephemeral drainage identified on the USGS topographical map does not exist in the immediate vicinity of the existing facility due to land improvements (i.e. grading) which have taken place over time. The irrigation ditches identified during the site visit indicated that they have not had flowing water in them for some time. Vegetation in the immediate vicinity of the facility also confirmed this observation.


The topography of the area slopes exceptionally gently to the northwest. The potential for a potential release to reach the Colorado River is low due to the almost flat topography of the area. The sage brush north of the well pad would act as a vegetative filter as well. However adequate Best Management Practices (BMPs) in the form of containment berms, diversion ditches, and straw bales should be considered prior to pad improvements to further ensure site containment.

It would also be recommended that the Williams Land Department communicate with the landowners in the area to ensure that the irrigation ditches north east and south of the well pad are no longer active. As long as the irrigation ditches are not utilized, the potential for any impacts to the Colorado River are greatly reduced.

The Colorado State Engineer's Office indicates that the nearest water well is located 1,071 feet south of the well pad and has a depth to water of 110-119 feet. Other water wells in the area range from 44-171 feet. All the wells in the immediate vicinity of the existing facility are upgradient and would not be affected by a potential release even if it were to reach groundwater which is still unlikely due to the depth to water. It is not anticipated that shallow groundwater is present within the immediate vicinity of the facility due to the lack of irrigation taking place up gradient of the facility.

Based on the above explanations for surface and groundwater, this facility can be classified as being in a non-sensitive area.

Inspector Signature(s):  Date: 6/30/2010

 Date: 6/28/2010