

## Sensitive Area Determination Checklist

Williams Production RMT Company – Valley		
<b>Person(s) conducting field inspection</b>	Jennifer Belcastro <i>Environmental Scientist</i>	Date: 5/18/12
<b>Site Information</b>		
Location:	GM 442-20	Time: 12:30
Type of Facility:	Existing Well Pad	
<b>Environmental Conditions</b>	Sunny; dry ground conditions.	
Temperature (°F)	82°	

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: Parachute Creek, a perennial stream and Low Cost Ditch a seasonal irrigation ditch

If yes, describe location relative to facility: Low cost Ditch is located 474 feet to the west and Parachute Creek is located 765 feet to the west 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.

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): Cuttings Will be managed on the surface

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.

7. Is the potential to impact ground water from the facility in the event of a release high or low?

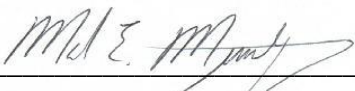
☐ High      ☒ Low

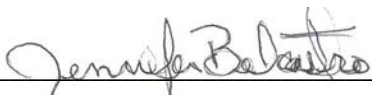
### **Additional Comments:**

As stated in the surface water section of this sensitive area determination, two surface water features have been identified. The closest, Low Cost Ditch, is located 474 feet to the west of the existing facility. By COGCC decision this would classify the facility as being in a sensitive area. However, the facility, as it is currently constructed and proposed to be expanded, would limit the direction of a potential release to the western and a portion of the southern side of the facility. If a potential release were to migrate of the above mentioned sides of the facility, it would tend to congregate in the bar ditch adjacent to the western side of the facility and the east side of County Road 215. There is a very slight potential a release, if very large, could migrate to the culvert which passes under County Road 215 to the south of the facility. If this were to occur, the release would tend to congregate in the bar ditch along the west side of County road 215 or infiltrate into the existing pipeline right-of-way adjacent to the bar ditch. Therefore the potential to impact Low Cost Ditch is very low. Based on its location relative to the facility, Parachute Creek would not be impacted by a potential release form the facility. When the existing facility is expanded it would be recommended Best Management Practices (BMPs) be installed along the western and a portion of the southern sides. The BMPs should be in the form of an earthen perimeter berm along the graded edge of the fealty on the western and a portion of the southern side, and a diversion ditch along the toe of the fill slopes on the same sides mentioned above. These should be monitored and maintained to ensure site containment in the event of a potential release.

The State Engineer's office and USGS records were reviewed and it was determined that there are no permitted water wells within 1/8 mile of the existing facility. The vegetative cover in the immediate vicinity of the facility (rabbit brush, greasewood, and sagebrush) does not suggest the presence of shallow groundwater.

The potential to impact surface water features, surface water, and groundwater has been deemed low due to topographical setting of the existing facility and manmade stormwater controls adjacent to and in close proximity to the facility. Therefore the facility can be designated as being in a non-sensitive area.

Inspector Signature(s):  Date: 10/10/2012  
Mark E. Mumby, *Project Manager/Geologist*  
HRL Compliance Solutions, Inc.

 Date: 5/21/2012  
Jennifer R. Belcastro, *Environmental Scientist*  
HRL Compliance Solutions, Inc.