

## Sensitive Area Determination Checklist

Williams Production RMT Company – Valley		
<b>Person(s) conducting inspection</b>	Ashlee Lane	1/20/2010
<b>Site Information</b>		
Location:	KP 34-18	Time: 12:00
Type of Facility:	Existing Well Pad	
<b>Environmental Conditions</b>	Winter conditions with ~6-10" of snow cover and snowing. Site visit not conducive for inspecting surface features, i.e. vegetation and surface water features.	
Temperature (°F)	~32	

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: An unnamed ephemeral drainage.

If yes, describe location relative to facility: It is located approximately 249 feet to the east of the 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 could reach the unnamed ephemeral drainage if it was to migrate off the northeast side of the facility.

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 and possibly an 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:**

The KP 43-18 is located within the COGCC Rule 317B external buffer zone ruling for the City of Silt's surface water supply area. From a surface water perspective, a release from the facility does have the potential to enter the associated drainage within the 317B buffer zone.

However, during the 404 investigation conducted in the fall of 2009, the unnamed drainage exhibits ephemeral characteristics in the immediate vicinity of the facility and did not have evidence of surface flow even though it is declared an intermittent stream topographically. In addition there is one dam without a spillway that has been constructed in the unnamed drainage slightly downstream of the facility. It appears that this dam was constructed to capture runoff water from precipitation events in order to provide water to livestock. The dam has no spillway or outlet to let surface water flow further downstream. If a release were to occur off the eastern edge of the facility it appears that a majority of the release could be contained by this dam. Therefore it would be very unlikely that a potential release could impact the drainage to any great degree below this point and come in contact with any live surface water. A request has been submitted as well to construct an additional dam further downstream of the current one which will further aid in the mitigation of any potential release off the facility. In addition, the pad currently has excellent storm water BMP's in place which would aid in the prevention of any potential release migrating off the facility.

The closest water well is approximately 3,595 feet to the west in section 13 and has a known ground water depth of approximately 126 feet. The well would also be in a separate flow regime from that of the KP 34-18.

A field visit was conducted to evaluate surface water features and vegetation cover. However due to winter conditions, the area is still under a considerable amount of snow making onsite data collection impractical. Therefore the data collected for this sensitive area determination is based on the COGCC data base, State Engineers Office website, and the NRCS Web Soil Survey website via desktop review. The desktop review indicates that this location is not in a sensitive area.

When the weather permits, a field investigation will be conducted to confirm the desk top review.

Inspector Signature:  Date: 1/25/2020

 Date: 1/20/2010