

Sensitive Area Determination Checklist

SG Interests I, Ltd.

Person(s) conducting inspection	Catherine Dickert	10/07/2010
Site Information		
Location:	McIntyre Flowback Pits #1 and #2	Time: 11:00 am
Type of Facility:	Flowback pit with pad	
Environmental Conditions	Partly sunny, ground dry	
Temperature	≈55°F	

Has the proposed, new or existing location been designated as a sensitive area?

Yes X

No _____

SURFACE WATER

- 1) Are there any surface water features or SWSAs adjacent to or within ¼ mile of the proposed/new facility?

Yes X

No _____

If yes, list type of surface water feature(s), i.e. rivers, creeks, streams, seeps, springs, wetlands: There is an unnamed stream to the west and a wetland to the north. Both are within 1,000' of the proposed pit (as detected using LIDAR imagery).

- 2) Could a potential release from the facility reach surface water features?

Yes X

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 elevation of the proposed pit is higher than the elevation of the wetland area to the north. It is possible that a release from the pit could travel downslope to the wetland (see hydrology map).

- 3) Is the potential to impact surface waters from a facility release high or low?

High _____

Low X

GROUNDWATER

- 1) Will the proposed/new or existing facility have any pits that will contain hydrocarbons and chlorides or other E&P wastes?

Yes X

No _____

If yes, list the pit types(s): Lined multi-well frac water and flowback water storage pit.

- 2) Is the site of the proposed facility underlain by an unconfined aquifer or recharge zone?
 Yes X No _____
- 3) Is the hydraulic conductivity of the underlying soil or geologic material $\leq 1.0 \times 10^{-7}$ cm/sec?
 Yes _____ No X (Fughes loam Ksat value is moderately low or moderately high.)
- 4) Is the proposed facility located within 1/8 mile of domestic water well or 1/4 mile of a public water supply well which would use the same aquifer?
 Yes _____ No X (Nearest domestic water well is 5271' away from Pit #1 and 5,462' from Pit #2.)
- 5) Is the proposed facility located within a 100-year floodplain?
 Yes _____ No X (See floodplain map.)
- 6) Is the depth to groundwater known?
 Yes X (If yes, follow instructions provided in 6(a) of this section.) Geotech shows it at 29'.
 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 X If yes, explain: The potential for a release to contact groundwater exists, but is low because the pit is lined with a double liner laying on geomat. The interstitial space between the liners is separated by geonet. A leak in the upper liner would be detected with the leak detection system and contained by the lower liner. The pit is located entirely in cut soil, so there is very little probability of pit failure.
 No _____
- (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 Engineer's Office.
- 7) Is the potential to impact groundwater from the facility in the event of a release high or low?
 High _____ Low X

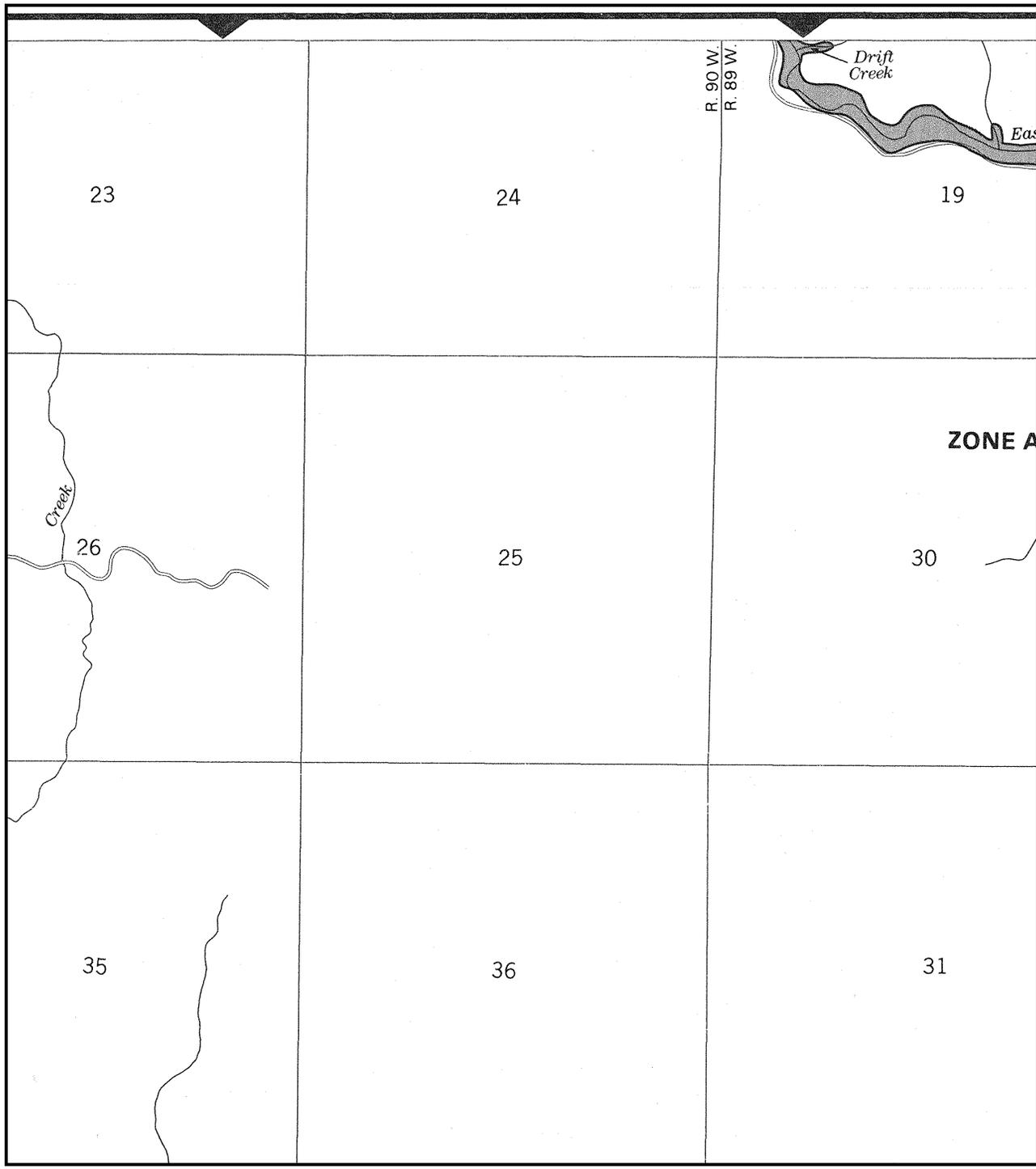
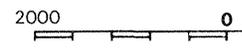
Additional Comments: Site design, liner design, leak detection system, and secondary containment as described in attached application reduce possibility of ground or surface water contamination as a result of this project.

Signature Catherine Dechert Date 11/24/10

858-8620.



APPROXIMATE SCALE IN FEET



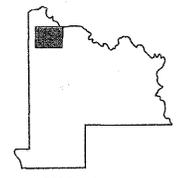
T. 12 S.
T. 13 S.

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

GUNNISON
COUNTY,
COLORADO
(UNINCORPORATED AREAS)

PANEL 125 OF 975
(SEE MAP INDEX FOR PANELS NOT PRINTED)



PANEL LOCATION
COMMUNITY-PANEL NUMBER

080078 0125 B

EFFECTIVE DATE:
SEPTEMBER 29, 1989



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov