

CHECKLIST ENVIRONMENTAL ASSESMENT

Proposed Action: Approve Drilling Permit (Form 22)

Project/Well Name: Tortuga #26-1 SWD

Operator: Hydra MT, LLC

Location: NW SW Section 26 T27N-R57E

County: Roosevelt **MT; Field (or Wildcat):** Wildcat

Proposed Project Date: 5/15/2018

I. DESCRIPTION OF ACTION

Hydra MT LLC plans to drill a class II injection well in the Dakota Formation with a TD / TVD of 5,500'. Surface casing will set to 1,735'. This well is planned to be a salt water disposal well.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED

Montana Bureau of Mines and Geology, GWIC website (Roosevelt County Wells).

US Fish and Wildlife, Region 6 website
ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES MONTANA
COUNTIES, Roosevelt County

Montana Natural Heritage Program Website (FWP)
Heritage State Rank= S1, S2, S3, T27N R57E

Montana Cadastral Website
Surface Ownership and surface use Section 5 T27N R57E

Montana Department of Natural Resources MEPA Submittal

2. ALTERNATIVES CONSIDERED

No Action Alternative: The proposed well would not be drilled for use as a class II injection well.

Action Alternative: Hydra MT LLC would have permission to drill the well for use as a class II injection well.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

3. AIR QUALITY

Long drilling time: No, 5-7 days.
Unusually deep drilling (high horsepower rig): No.

Possible H₂S gas production: None anticipated.
In/near Class I air quality area: No
Air quality permit for flaring/venting: No, this is a disposal well.

Comments: No special concerns – using rig to drill to 5,500' TD / TVD for use as a class II injection well.

4. WATER QUALITY

Salt/oil based mud: Brine will be used to drill main hole.
High water table: No.
Surface drainage leads to live water: No, the nearest drainage is an unnamed ephemeral drainage 3/10 of a mile to the west.

Water well contamination: GWIC reports that there are three water wells within 1/2 of a mile of the proposed location. One stockwater well is about 1/10th of a mile to the east and is 130' deep. Another stockwater well is about 1/2 of a mile to the east and is 210' deep. Another stock water well is 2/5 of a mile to the northwest and is 68' deep. (Surface casing will be cemented to 1,735').

Porous/permeable soils: No, sandy clay.
Class I stream drainage: No.
Groundwater vulnerability area: No.

Mitigation:

- Lined reserve pit
- Adequate surface casing
- Berms/dykes, re-routed drainage
- Closed mud system
- Off-site disposal of solids/liquids (in approved facility)

Comments: Steel surface will be set to 1,735' to protect ground water. (Rule 36.22.1001).

5. SOILS/VEGETATION/LAND USE

Vegetation: Cultivated land.

Steam crossings: None anticipated.

High erosion potential: No, small cut of 7.5' and small fill of 2.1' required.

Loss of soil productivity: No, location to be restored after drilling, if plugged. If productive, then the site may be downsized to accommodate only the production equipment, rest of the area will be returned to original contour, re-sloped and re-seeded.

Unusually large wellsite (Describe dimensions): No, 250' X 250'.

Damage to improvements: None.

Conflict with existing land use/values: Slight.

Mitigation

Avoid improvements (topographic tolerance)

Exception location requested

Stockpile topsoil

Stream Crossing Permit (other agency review)

Reclaim unused part of wellsite if productive

Special construction methods to enhance reclamation

Access Road: Access will be off road 1012 and a new access of 74' will be built into location.

Drilling fluids/solids: Cuttings will be collected, dried, and hauled to a commercial disposal site. The liquids will be hauled to a commercial disposal site.

6. HEALTH HAZARDS/NOISE

Proximity to public facilities/residences: No residences within a ½ mile radius. Nearest town is Bainville, MT and is about 12.8 miles to the north east.

Possibility of H2S: None anticipated.

Size of rig/length of drilling time: Workover rig, 5-7 days drilling time.

Mitigation:

Proper BOP equipment

Topographic sound barriers

H2S contingency and/or evacuation plan

Special equipment/procedures requirements

Other:

7. WILDLIFE/RECREATION

Sage Grouse: No.

Proximity to sensitive wildlife areas (DFWP identified): None identified.

Proximity to recreation sites: None.

Creation of new access to wildlife habitat: None.

Conflict with game range/refuge management: None.

Threatened or endangered Species: Species listed as threatened or endangered in Roosevelt County, MT are the Pallid Sturgeon, Piping Plover, Interior Least Tern, Whooping Crane, Red Knot, and Northern Long-eared Bat. The Montana Natural Heritage Program lists eighteen (18) species of concern, Hoary Bat, Little Brown Myotis, Sprague's Pipit, Golden Eagle, Piping Plover, Whooping Crane, Red-headed Woodpecker, Least Tern, Greater Short-horned Lizard, Northern Redbelly Dace, Blue Sucker, Iowa Darter, Shortnose Gar, Sturgeon Chub, Sicklefin Chub, Paddlefish, Sauger, and Pallid Sturgeon.

Mitigation:

- Avoidance (topographic tolerance/exception)
- Other agency review (DFWP, federal agencies, DNRC Trust Lands)
- Screening/fencing of pits, drillsite
- Other:

Comments: Private cultivated surface lands. There may be species of concern that maybe impacted by this wellsite. We ask the operator to consult with the surface owner as to what he would like done, if a species of concern is discovered at this location. The Board of Oil & Gas has no jurisdiction over private surface lands. No concerns.

IV. IMPACTS ON THE HUMAN POPULATION

8. HISTORICAL/CULTURAL/PALEONTOLOGICAL

Proximity to known sites:

Mitigation

- avoidance (topographic tolerance, location exception)
- other agency review (SHPO, DNRC Trust Lands, federal agencies)

Other:

9. SOCIAL/ECONOMIC

Substantial effect on tax base

- Create demand for new governmental services
- Population increase or relocation

Comments: No concerns.

IV. SUMMARY

No long term impacts expected. Some short term impacts will occur, but can be mitigated. I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

EA Checklist Prepared By:	Name: John Gizicki	Date: 05/14/18
	Title: Compliance Specialist	