

CHECKLIST ENVIRONMENTAL ASSESSMENT

Proposed Action: Approve Drilling Permit (Form 22)

Project/Well Name: Leonardo 18-1H SWD

Operator: Hydra MT, LLC

Location: NW NE Section 18 T25N-R59E

County: Richland MT; **Field (or Wildcat):** Fairview

Proposed Project Date: 11/1/2022

I. DESCRIPTION OF ACTION

Hydra MT LLC plans to drill a well to use as a class II SWD injection well in the Dakota Formation. Surface casing to be set at 1,880'. Proposed TD is 5,703' TVD, 8,966' MD.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS, OR INDIVIDUALS CONTACTED

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

US Fish and Wildlife, Region 6 website

ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES MONTANA COUNTIES, Richland County

Montana Natural Heritage Program Website (FWP)

Heritage State Rank= S1, S2, S3, T25N R59E

Montana Cadastral Website

Surface Ownership and surface use Section 18 T25N R59E

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, 2-3 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 5,703' TVD, 8,966' MD for use as a class II injection well.

4. WATER QUALITY

Salt/oil based mud: freshwater to be used on surface hole. An oil-based mud will be used on main hole.
High water table: No.
Surface drainage leads to live water: No, the nearest drainage is Fourmile Creek 2/5 of a mile to the east.

Water well contamination: No. GWIC lists two stockwater wells about 1/4 of a mile to the east of surface location with depths of 50' and 200'. A 475' deep industrial water well is located about 1/4 of a mile to the southwest from the bottom hole location.

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 casing to be set at 1,880' to protect ground water. (Rule 36.22.1001).

5. SOILS/VEGETATION/LAND USE

Vegetation: Grassland.
Stream crossings: None anticipated.
High erosion potential: No, small cut of 4.1' and a small fill of 2.7' required.
Loss of soil productivity: No, location to be restored after drilling, if plugged.

Unusually large wellsite (Describe dimensions): No, 340' by 270'.

Damage to improvements: Slight.

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 CR 351, CR 140, and existing dirt road. A new access of 150' will be built into location.

Drilling fluids/solids: All drilling solids/liquids will be transported and disposed of by Wisco.

6. HEALTH HAZARDS/NOISE

Proximity to public facilities/residences: No residences within a ½ mile radius. Nearest residences are about ¾ of a mile to the southeast and 4/5 of a mile to the east.

Possibility of H2S: None anticipated.

Size of rig/length of drilling time: 2-3 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 Richland County, MT are the Pallid Sturgeon, Red Knot, Piping Plover, Whooping Crane, and Northern Long-eared Bat. The Monarch Butterfly is a candidate species. The Montana Natural Heritage Program lists three (3) species of concern, Whooping Crane, Northern Redbelly Dace, and Iowa Darter.

Mitigation:

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

Comments: Private 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 Title: Compliance Specialist	Date: 9/14/22
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