

CHECKLIST ENVIRONMENTAL ASSESSMENT

Proposed Action: Approve Drilling Permit (Form 22)

Project/Well Name: Goeddertz 13X

Operator: Brainstorm Energy, Inc.

Location: T35N R3W Section 23

County: Toole County, MT

Field (or Wildcat): Kevin-Sunburst

Proposed Project Date: 8/2024

I. DESCRIPTION OF ACTION

Single Derrick drilling rig, air drill to 1700’.

II. PROJECT DEVELOPMENT

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

Montana Bureau of Mines and Geology, GWIC website (Toole 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, T24 R59E

Montana Cadastral Website

Surface Ownership and surface use Section 23 T35N R3W

Montana Department of Natural Resources MEPA Submittal

USDA Web Soil Survey Map Website

2. ALTERNATIVES CONSIDERED

No Action Alternative: Permit to drill the well would not be issued by BOGC.

Action Alternative: Brainstorm Energy, Inc. permit to drill would be referred to the BOGC for further environmental review.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

3. AIR QUALITY

Long drilling time: No, 3-5 days.

Unusually deep drilling (high horsepower rig): No

Possible H₂S gas production: Yes, low concentrations

In/near Class I air quality area: No.

Air quality permit for flaring/venting (if productive): Yes, DEQ air quality permit required under 75-2-211. AQB review.

Comments: No special concerns – Single Derrick drilling rig, air drill to 1700’.

If there are no gas gathering systems nearby, associated gas can be flared under Board Rule 36.22.1220.

4. WATER QUALITY

Salt/oil based mud: Surface casing hole will be drilled with freshwater and freshwater mud system, Rule 36.22.1001

High water table: No.

Surface drainage leads to live water: No, closest drainage is an unnamed ephemeral drainage about 725ft to the northwest..

Water well contamination: No water well within ½ miles of location.

Porous/permeable soils: No, Benzonite Clay Loam.

Class I stream drainage: None.

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)

Other:

Comments: Steel surface casing will be run and cemented to surface to protect ground water. (Rule 36.22.1001).

Comments: Surface hole will be drilled with a freshwater mud system to 150’ cemented to surface. Steel surface casing will be run to 1700’ and cemented back to approximately 1500’. Eagle aquifer not expected to be encountered at surface. Adequate surface casing and BOP equipment to prevent problems, (3,000 BOP, Rule 36.22.1014.)

5. SOILS/VEGETATION/LAND USE

Vegetation: Grass land.

Soils: Benzonite Clay Loam

Stream crossings: None anticipated.

High erosion potential: No, largest fill is 3.2' with largest cut .7 of a foot.

Loss of soil productivity: No, location will be restored after drilling if unproductive.

Small wellsite (Describe dimensions): 50'x 50'.

Damage to improvements: Slight, surface use appears to be mix of cultivated and grass lands.

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 over Hwy 201. A new access of 603' will be built into location.

Drilling fluids/solids: Brainstorm Energy, Inc. will be utilizing a pit for cuttings. Drilling fluids and solids buried on location after drilling of the well is complete.

6. HEALTH HAZARDS/NOISE

Proximity to public facilities/residences: No occupied structures within a 1/4-mile radius. Location is approximately 1.6 miles north of Kevin, MT next Kevin N road.

Possibility of H2S: Possibility in Mississippian formations.

Size of rig/length of drilling time: 5-10 days.

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.

Proximity to recreation sites: None.

Creation of new access to wildlife habitat: No.

Conflict with game range/refuge management: No.

Threatened or endangered Species: Listed threatened or endangered species in Toole County are: Grizzly Bear.

Mitigation:

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

Comments: Private grass 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: The Board of Oil & Gas has no jurisdiction over private surface lands.

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: Ben Davis	Date: 7/24/2024
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