

CHECKLIST ENVIRONMENTAL ASSESMENT

Proposed Action: Approve Drilling Permit (Form 22)

Project/Well Name: KeeSun #2-23 Finheim State

Operator: KeeSun Corporation

Location: NW NE Sec. 23, T36N, R1W

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

Proposed Project Date: January 2017

I. DESCRIPTION OF ACTION

KeeSun Corporation plans to drill an oil well on state land with objective formations being the Dakota, Sunburst, and Madison. The proposed total depth is 2,700' TVD/MD in the Madison formation. The surface hole will be drilled to 250' with a freshwater mud system, Rule 36.22.1001.

II. AGENCIES REFERENCED

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, Toole County

Montana Natural Heritage Program Website (FWP)
Heritage State Rank= S1, S2, S3, T36N R1W

Montana Cadastral Website
Surface Ownership and surface use Section 23 T36N R1W

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

1. AIR QUALITY

Long drilling time: No

Unusually deep drilling (high horsepower rig): No

Possible H₂S gas production: Yes possible H₂S gas, slight chance from Mississippian Formations.

In/near Class I air quality area: No Class I air quality area in the area of review

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

Comments: No special concerns – using small rig to drill to 2,700' TD. If there isn't any gas gathering systems nearby, associated gas can be flared under Board Rule 36.22.1220.

2. WATER QUALITY

Salt/oil based mud:

High water table: No, high water table at this well location.

Surface drainage leads to live water: No, an unnamed ephemeral drainage is located about ½ mile to the south of this location. This drainage leads to Willow Creek which is located about 4 miles to the southeast. A stock pond exists ½ mile to the south and ½ mile to the southwest.

Water well contamination: The nearest water well according the GWIC map is 3/10 of a mile to the south and is 96' deep. This is a domestic/stockwater water well. On satellite imagery there is no evidence of a water well. It may be in a different location than what is being showed on GWIC. Water right was filed in 1920.

Porous/permeable soils: Slightly, sandy loam.

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 will be run and cemented to surface to protect ground water. (Rule 36.22.1001).

3. SOILS/VEGETATION/LAND USE

Steam crossings: None anticipated

High erosion potential: No, small cut of 2.4' and small fill of 9.0' required.

Loss of soil productivity: No, location will be restored after drilling if nonproductive. If productive, unused portion of drill site will be reclaimed.

Unusually large wellsite (Describe dimensions): No, 200' X 200' location.

Damage to improvements: Slight, surface use is grassland.

Conflict with existing land use/values:

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: A new access road of about 690' will be built off of Stoltz road.

Drilling fluids/solids: Pit will not be lined. Cuttings and liquids will be dried in the pit where it will be buried.

4. HEALTH HAZARDS/NOISE

Proximity to public facilities/residences: Closest residence is 4/5 of a mile to the southwest.

Possibility of H2S: Yes possible H2S gas, slight chance from Mississippian Formations.

Size of rig/length of drilling time: Single derrick drilling rig, 5 days drilling time.

Mitigation:

Proper BOP equipment

Topographic sound barriers

H2S contingency and/or evacuation plan

Special equipment/procedures requirements

Other:

5. WILDLIFE/RECREATION

Sage Grouse: NA. Not in Sage Grouse Program.

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

Proximity to recreation sites: None identified

Creation of new access to wildlife habitat: No

Conflict with game range/refuge management: No

Threatened or endangered Species: The only species listed as threatened in Toole County is the Red Knot. The Montana Natural Heritage Program (MTNHP) lists four (4) species of concern: Baird's Sparrow, Sprague's Pipit, Loggerhead Shrike, Long-billed Curlew.

Mitigation:

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

Comments: State of Montana leased grazing surface lands. There may be possible historical/cultural/paleontological sites that maybe impacted by this wellsite. We ask the operator to consult with the surface owner as to his desires to preserve these sites or not, if they are found during construction of the wellsite. State of Montana "Trust Lands" minerals and surface. Trust Lands will do surface EA.

6. HISTORICAL/CULTURAL/PALEONTOLOGICAL

Proximity to known sites:

Mitigation

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

Other:

7. 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.

Prepared by (BOGC): /s/ John Gizicki
(title): Compliance Specialist
Date: 01/04/2017