



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

May 20, 2022

Gerald Aberle
DTRC, LLC
106 Glendale Drive
Suite A
Lead, SD 57754

Re: **EXNI 441 for DTRC, LLC Exploration Drilling in Portions of Sections 9, 16, and 17; T5N-R3E,
Lawrence County**

Dear Mr. Aberle:

The department is in receipt of the Exploration Notice of Intent (EXNI) that you filed with our office on April 21, 2022. The department has determined the Notice of Intent to be procedurally complete. Based on our review of your Notice, we determined the following restrictions are required:

1. This project shall be conducted and reclaimed in such a manner as to prevent any violation of the beneficial uses of specified water quality criteria of any water resources in the area. In accordance with Chapter 74:51, all surface waters of the state have been assigned the following beneficial uses:
 - 9) Wildlife propagation, recreation, and stock watering waters; and
 - 10) Irrigation waters.
2. Any discharge from the site will shall be directed to a settling pond or flat vegetated area to allow suspended solids to settle out. For any discharge into a dry draw or gulch, a South Dakota Surface Water Discharge permit may be required prior to discharge.
3. For any creek or dry drainage crossings, DTRC shall construct the crossings to protect the creek from erosion, sedimentation and other damage that may be caused by exploration drill rigs, vehicles, or other equipment. Plans and specifications for each creek crossing area shall be provided to the department prior to construction. If necessary, DTRC shall obtain a Surface Water Discharge Permit or 404 permit as necessary before beginning construction in the creek.
4. To ensure optimal soil erosion protection, all affected lands shall have adequate sedimentation and erosion control measures applied pursuant to SDCL 45-6C-32 and in accordance with Best Mineral Management Practices. These measures shall be in the form of waterbar construction on access roads where appropriate; revegetation of roads; road embankment slopes; and the installation of straw bale or silt fence type sediment filters wherever necessary. DTRC shall inspect, clean out, repair, or upgrade the sediment controls as necessary to prevent degradation of surface waters of the state.

5. All topsoil shall be salvaged and stockpiled whenever possible for use in reclamation.
6. When drilling fluids are used and/or ground water is encountered during drilling, the drilling fluids shall be sufficiently contained to prevent overland flow or discharge to any waters of the state. If water tanks are used in lieu of mud pits, they shall also be sufficiently contained.
7. Any mud pits utilized during the drilling of an exploration hole shall be constructed on the uphill side of the drill pad where possible.
8. Drill pad construction may occur no closer than 50 feet to any stream or dry drainage during the course of exploration.
9. DTRC shall spray weeds in all disturbed areas and in surrounding areas up to 50 feet from the disturbed areas, including along access roads within the exploration permit boundary. Weed control on all disturbed or reclaimed areas is required until DTRC is released of reclamation liability under this EXNI by the Board of Minerals and Environment.
10. During periods of active exploration drilling, DTRC shall provide, via email, a weekly schedule outlining when and where holes will be drilled so the department can plan inspections and witness plugging activities.
11. In the instance sulfate minerals are encountered during drilling activities, DTRC shall perform paste pH analyses on mud pits and report the findings to DANR prior to reclamation. If deemed necessary by DANR, DTRC shall amend the pit with lime or other buffer material and provide a report outlining reclamation performed at the drill site.
12. All test holes shall be capped, sealed and plugged according to ARSD 74:11:08 (Plugging Standards) immediately following drilling and probing.
13. If surface casing is used in exploration holes, the following requirement shall be met:
 - a) Prior to removal of surface casing, the hole shall be plugged in accordance with ARSD 74:11:08 to a level just below the bottom of the surface casing.
 - b) Following step a), the casing will be removed (when possible) or cut off at least one foot below the ground surface.
 - c) The remainder of the hole will be plugged in accordance with ARSD 74:11:08.
14. DTRC shall notify the department, in writing, when exploration drilling penetrates an aquifer. Notification shall be provided as soon as possible, but not more than 90 days after penetration of the aquifer. Notification shall include the location of the test hole penetrating the aquifer.
15. Where affected roads and drill pad areas are no longer necessary for further exploration purposes, reclamation must be completed on these disturbed areas within 12 months. If DTRC plans to continue exploration in disturbed areas, but must temporarily cease exploration activities, reclamation must be completed within 24 months. DTRC may submit a request to extend these deadlines as necessary to the department.
16. Reclamation must be completed on all affected acreages within 12 months following completion of all exploration activities allowed under this Notice.

17. The following seed mix shall be used for reclamation of the affected areas:

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|-----------------------|---------------|
| Western wheatgrass | 8.02 PLS/acre |
| Big bluestem | 1.67 PLS/acre |
| Sideoats grama | 0.54 PLS/acre |
| Slender wheatgrass | 2.11 PLS/acre |
| Green needlegrass | 0.54 PLS/acre |
| Little bluestem | 0.21 PLS/acre |
| Western yarrow | 0.01 PLS/acre |
| Purple prairie clover | 0.06 PLS/acre |

18. DTRC shall contact the Department of Game, Fish, and Parks prior to any road construction activities between March 1 and June 30 in any year after 2022 for additional raptor nest surveys as follow-up to those completed in 2022.
19. DTRC shall conduct an additional cultural resource survey for any drill pads, new roads, or improved road area that were not covered under the QSI survey completed on October 13, 2021. These results shall be sent to the SD Archaeological Research Center for review prior to commencement of activities in these areas.
20. During exploration activities, DTRC shall avoid bones, artifacts, foundation remains, or other evidence of previously unrecorded past human use. For specific direction regarding avoidance of these sites, please contact the SD Archaeological Research Center.
21. If any artifacts or other archaeological or cultural resources are discovered during exploration activities, the activities shall be halted and the state archaeologist notified at once.

Please note that we have assigned your Notice of Intent the following number: **EXNI-441**. This Notice allows you to conduct only the type and amount of work which is hereby being approved. Any additional work must be covered by the submission of a new Notice to our office. DTRC may commence with the operation contingent upon compliance with the above restrictions.

Thank you for your interest in and consideration for the natural resources of South Dakota.

Sincerely,

\s/

Roberta Hudson
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Minerals and Mining Program
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cc: Stan Michals, Department of Game, Fish and Parks
Lisa Liang, Archaeological Research Center
Mark Keenihan, Rapid City Office