



DENR
SOUTH DAKOTA

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

February 23, 2021

Kenan Sarratt
Wharf Resources (USA), Inc
10928 Wharf Road
Lead, SD 57754-97104

**Re: EXNI 438 for Wharf Resources Exploration Drilling in Sections 2 and 3; T4N-R2E,
Lawrence County**

Dear Mr. Sarratt:

The department is in receipt of the Exploration Notice of Intent (EXNI) that you filed with our office on December 22, 2020, with supplemental information submitted on December 29, 2020, January 15, 19, and 20, 2021. 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. Any water will be maintained in tanks or sumps. No discharge to any creek, drainage or dry draw is allowed. In the event it is necessary to discharge into a creek, drainage or dry draw, a South Dakota Surface Water Discharge permit must be obtained.
2. To ensure optimal soil erosion protection Wharf Resources shall employ adequate sedimentation and erosion control measures at all affected areas pursuant to SDCL 45-6C-32. These measures shall be in the form of waterbar construction on access roads where appropriate; revegetation of roads; road embankment slopes; the installation of straw bale or silt fence sediment filters wherever necessary; or other accepted best management practices in sedimentation and erosion control.
3. All topsoil must be salvaged and stockpiled whenever possible for use in reclamation.
4. Wharf shall consult with the South Dakota Department of Game, Fish and Parks prior to drilling near any mine adits or shafts to maintain safe distances from underground workings that may be potential bat habitat
5. If a nesting raptor is noted within the exploration area, Wharf shall cease operations and consult with the South Dakota Department of Game, Fish and Parks to determine proper operational distances and season to prevent harm to the nest.

6. Wharf shall control all noxious weeds on areas impacted by exploration activities throughout operations and reclamation.
7. Wharf shall abide by the restrictions provided in the letter from Lisa Nesselbeck, Senior Archaeologist, Archaeological Research Center, dated February 19, 2021.
8. If any bones, artifacts, foundation remains, or other evidence of previously unrecorded past human use are discovered during exploration activities, the activities must be temporarily halted, and the state archaeologist notified at once.
9. When drilling fluids are used and/or when 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.
10. When utilizing mud pits, Wharf should line mud pits in areas where terrain is steep or where outcrops are highly fractured to prevent seepage and uncontrolled flow away from a drill pad. In steep terrain, mud pits should be constructed on the upgradient side of the drill pad.
11. During periods of active exploration drilling, Wharf Resources 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.
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 requirements 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; and
 - c) The remainder of the hole will be plugged in accordance with ARSD 74:11:08.
14. Wharf Resources 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. The following seed mix shall be used for reclamation of the affected areas:

Western Wheatgrass	8 PLS/acre
Slender Wheatgrass	7 PLS/acre
Thickspike Wheatgrass	7 PLS/acre
Russian Wildrye	3 PLS/acre
Pubescent Wheatgrass	2.5 PLS/acre

Hard Fescue	1.5 PLS/acre
Timothy	1 PLS/acre
Alfalfa	0.5 PLS/acre
White Dutch Clover	0.5 PLS/acre
Canada Bluegrass	0.5 PLS/acre
Blanket Flower	0.3 PLS/acre
Black-eyed Susan	0.1 PLS/acre

Please note that we have assigned your Notice of Intent the following number: **EXNI-438**. This Notice allows you to conduct only the type and amount of work described in the Exploration Notice of Intent. Any additional work must be covered by the submission of a new Notice to our office. Wharf Resources (USA), Inc. 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 Nesselbeck, Archaeological Research Center
Mark Keenihan, Rapid City Office