

MAILING ADDRESS: P.O. Box 440 RAPID CITY, SD 57709-0440 PH. 605-342-7224
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RECEIVED
FEB 13 2024
MINERALS & MINING PROGRAM

& Sons, Inc.

February 12, 2024

SD DANR
Minerals and Mining Program
523 East Capitol, Joe Foss Building
Pierre, SD 57501-3182

RE: Pete lien & Sons, Inc., Notice of Intent to Conduct Mineral Exploration, Nemo Claims and Nemo Mine Site

Please find the amended application to conduct mineral exploration within South Dakota.

The following changes were made to the application submitted in August 2023:

1. The Certification of Applicant has been signed and notarized.
2. Maps have been revised to show 32 drill sites within the mining claims.
3. No activity is proposed for Section 4, T2N, R5E so that section was removed from the legal description.
4. The proposed plugging plan now includes a procedure to plug the remainder of the hole.
5. Three maps are now included. One general location map and two drill hole location maps.
6. A copy of the approved USFS Plan of Operations for the drilling within the claims is now included.
7. The USFS revised their bond calculation to \$28,800. Two bonds are included with this submittal. One surety bond in the amount of \$20,000 for the SD Board of Minerals and Development and another in the amount of \$8,800 for the Black Hills National forest.

If there are any questions regarding this submittal or if additional information is required, please contact me at (605) 939-2719 or by email at mgolliher@petelien.com.

Respectfully,

Michael Golliher
Technical Directory of Mine Planning
Pete Lien & Sons, Inc.

Enclosures: EXNI NOI application (amended), (3) maps, BHNF Approved Plan of Operations, (2) Surety Bonds

Department of Agriculture and Natural Resources
Minerals and Mining Program
523 East Capitol Avenue
Pierre, South Dakota 57501-3182
605 773-4201; Fax: 605 773-5286

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MINERALS & MINING PROGRAM

**NOTICE OF INTENT TO CONDUCT
MINERAL EXPLORATION OPERATION
(Excluding Uranium)**

Pursuant to SDCL 45-6C

Operator's name: Pete Lien & Sons, Inc

Mailing Address: PO Box 440, Rapid City, SD 57709-0440

Telephone: (605) 342-7224

Resident agent (if out-of-state corporation):

Resident agent address:

Telephone:

Legal description of area to be explored by Section, Township, and Range:

Section 33, T3N, R5E
Section 34, T3N, R5E

County: Lawrence County

Give a brief description of the type of exploration to be conducted. Include a list of all minerals to be explored and a description of methods (e.g. drill rig type, number of holes to be drilled, number of drill pads to be constructed, proposed depth for each test hole, length of existing access roads and/or new access road construction).

Up to 32 exploratory drill sites are proposed to search for magnetite, hematite and other iron-bearing minerals within mining claims. This portion of the project, (Nemo South Exploration Drilling Project, BHNF, Northern Hills Ranger District) has received US Forest Service Permit final approval.

These holes will be approximately three (3) inches in diameter, 200 feet in length and drilled at a 45-degree angle. Each drill site would measure approximately 30x50 feet for a combined area of disturbance of approximately 1.10 acres.

Five (5) additional drill holes are proposed within the Pete Lien & Sons, Inc., Nemo Mine, (Mine License 83-100, Site 100001, Permit No. 167)

They will also be approximately three inches in diameter and will be drilled to varying depths between 270 and 540 feet deep at a 45-degree angle.

Each drill site at this site is located within Pete Lien & Sons, Inc. property within Section 34, T3N, R5E and would measure approximately 30x50 feet for a combined area of disturbance of approximately 0.17 acres.

The drill will be a small, over the road transportable, core or top-hammer percussion rig mounted on a truck chassis, tracks or trailer, capable of drilling a three (3) inch diameter hole.

Primary access to the drill sites in the mining claims would be along NFS roads and trails, primarily FSR 152 and motorized trails 8254, 8256 and 8257. Cross-county travel between those drill sites will total approximately 0.75 miles. Access to the drill sites within the Nemo Mine will be along two (2) constructed trails approximately 0.15 miles long.

Site preparation and clearing of vegetation will be completed with compact track/skid steer loader (CTL) after site-specific pre-approval from a USFS representative.

Well Completion Records within 0.5 miles of the proposed drill sites were reviewed.

Two (2) were found:

- 000494475; Drilled by Flack, 83 ft deep, 18 Apr 1985, Domestic use. This well is within Pete Lien & Sons, Inc. property, located in the Box Elder Creek floodplain.
- 00010138; Drilled by Schleining, 21 ft deep, 13 May 1997, Monitoring well. This well was drilled by the USFS to evaluate the extent of pollution and aid in locating the point source of EDB pollution. Also located in the Box Elder Creek floodplain.

Date exploration will commence: June 2024, weather permitting. To be completed within one (1) year .

What legal authority does the operator have to conduct exploration on the above-described land? Include a copy if available.

Deed Lease US Forest Service Permit Pending US Forest Service Permit Other

Will the operator conduct uranium exploration? Yes No If yes, a permit pursuant to SDCL 45-6D must be obtained.

INSTRUCTIONS:

Please reference SDCL 45-6C. This Notice of Intent must be accompanied by:

1. A plan of reclamation pursuant to Section 8.
2. A topographic map pursuant to Section 9.
3. A fee of \$250 payable to the Department of Agriculture and Natural Resources pursuant to Section 17.
4. A surety in an amount to be determined by the department pursuant to Section 19.
5. Any written landowner consultations giving alternative preferences for the reclamation of the affected land pursuant to Section 16.

Applicant affirms that the surface owner has been notified of the proposed mineral development and that said surface owner is aware of his rights to compensation for damages to property pursuant to SDCL 45-5A. Applicant hereby affirms that the mineral exploration will be conducted pursuant and subject to the provisions of SDCL 45-6C, and all regulations promulgated thereunder, that he will grant access to the SD Board of Minerals and Environment or its agents to the area under notice from the date of the notice and thereafter to assure compliance with the provisions of SDCL 45-6C.

I declare and affirm under the penalties of perjury that this claim (petition, application, information) has been examined by me, and to the best of my knowledge and belief, is in all things true and correct.

Michael Gol
 Signature
 Title: VP. / TECHNICAL DIRECTOR

Date: 2/9/2024

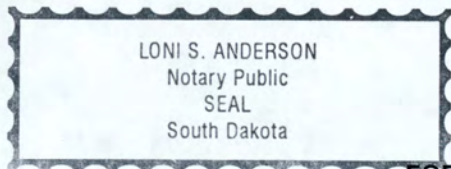
STATE OF South Dakota
 COUNTY OF Pennington

On this 9th day of February, 2024, before me personally appeared Michael Golliher, who acknowledged himself to be the Technical Director (Title) for Mine Planning (Operator) and that he is authorized to execute the Notice of Intent for the purposes contained therein.

Loni S Anderson
 Notary Public

My Commission Expires: 5-10-2026

SEAL



FOR DEPARTMENT USE ONLY

DATE APPROVED: BOND AMOUNT: EXNI NUMBER:

Chairman, SD Board of Minerals & Environment

In preparing this reclamation plan, please address each item in detail, referencing SDCL 45-6C-8 and 45-6D-9. Please refer to the reclamation standards outlined in SDCL 45-6C-27 through 45-6C-34, SDCL 45-6D-33 through 45-6D-39, and the state's hole plugging regulations as detailed in ARSD 74:11.

1. Describe the type of reclamation the operator proposes to achieve in the reclamation of the affected land.

Based on the Plan of Operations submitted to the USFS, drill cuttings, core and other non-toxic lubricants will be removed from the site and taken to an approved solid waste facility, disposed of down the hole, or buried using the following methods, in order of preference. Final determination of the method used will be based on an on-site review and pre-approval by a USFS representative:

- Constructed infiltration gallery/sump – Allow the water to infiltrate and then cover with mineral soil followed by the stockpiled organic soil.
- Natural depression or pre-existing sump – Allow the water to infiltrate and then cover with mineral soil if available and then with organic material. The topsoil or organic material if present will be removed first and stockpiled for use in reclamation. Once the drilling is completed on the site, the sump or depression will be leveled and covered with the organic material so that the drill cuttings are not visible.
- Disperse the cutting in voids between boulders or rocks.

Standing water in sumps/infiltration galleries will be drained or allowed to percolate into the ground prior to backfilling. Excavations will be backfilled with excavated spoil material and topped with salvaged organic material.

Compacted surfaces created by exploration activities will be loosened. Disturbed areas will be re-contoured to their original condition to the extent possible by reapplying salvaged material over disturbance areas. This will include reapplication of mineral soil, topped with organic soil material, woody debris, and slash. Upon completion of reclamation, any excess salvaged material (rock, soils, slash, woody debris, etc.) will be scattered in the vicinity. Excess rock or soil will not be placed or scattered in streams or wetlands. If soil disturbance occurs, re-vegetation efforts will primarily rely on creation of micro-sites (roughened ground surfaces, placement of woody debris, etc.) for natural re-vegetation and redistribution of the salvaged on-site organic litter layer.

Because of the lack of anticipated soil disturbance (due to use of a self-leveling drill rig or timbers for leveling), additional seeding of disturbed areas may not be necessary. Any damage to USFS roads, ditches, trails, or associated drainage features (water bars, ditches, culverts, etc.) resulting from exploration activities and/or associated travel by PLS or contractor personnel will be repaired to a functional condition as specified by USFS personnel.

2. Provide a proposed timetable for seeding and replanting indicating when and how the reclamation plan will be implemented. Such timetable shall be developed in consultation with the County District Conservationist as to the nature of the soils and native vegetation in the area of the proposed operation. These recommendations shall be followed, if any are provided, and copies of all correspondence shall be provided to the Department.

Reseeding may be prescribed if, upon inspection, it is noted that adequate organic material containing seed is not available. The certified weed-free mix of seed, provided by Andrea Westlake (Rangeland Management Specialist, Belle Fourche Office) and accepted by USFS personnel (Chris Stores, National Resource Planner, BHNF, Northern Hills Ranger District) shown below will be used.

(5) Select Species	Reselect	Prepared Mixes	1/ Select Improved Variety (recommended) or select common seed (see note below)	Percent in Mixture	Pure Live Seeds (PLS) per square foot	Pure Live Seed (PLS) lbs/ac Needed	Acres to Seed	Pure Live Seed (PLS) lbs Required
Species * **				105	40.88			
Big bluestem				15.0	6.75	1.67	40.00	66.83
Sideoats grama				5.0	2.25	0.54	40.00	21.78
Western wheatgrass				55.0	20.63	8.02	40.00	320.87
Green needlegrass				3.0	1.35	0.33	40.00	13.07
Slender wheatgrass				18.0	6.75	1.90	40.00	75.88
Canada wildrye				5.0	1.50	0.57	40.00	22.73
Little bluestem				2.0	0.90	0.14	40.00	5.48
Purple prairie clover				1.0	0.38	0.06	40.00	2.25
Western yarrow				1.0	0.38	0.01	40.00	0.23
			annual rye can be added to the full seeding at 2 lbs/acre or less					

To meet SD NRCS Standards Please

1/ Improved varieties recommended above have no restrictions on their origin.
1/ Origin of Common grass seed must be ND, SD, NE, MT, WY, MN, or IA. Exception: Smooth Bromegrass any locale.
1/ Common Native forbs and legumes will originate or be grown in (USA): ND, SD, NE, MT, IA, WY, ID, WA, OR, MN, WI, and (CAN): AB, BC, MB, ON, SK.

- Seed test must be completed according to SD Seed laws (see link below) and no more than 9 months prior to the date planted.
- All legumes must be pre-inoculated. Producer will provide all seed tags to NRCS [Legume inoculants](#)
- Tetrazolium (TZ) tests may be used as a substitute for germination tests ONLY for Green Needlegrass
- For Alfalfa Salinity tolerance use F or G from the web site link ---> [Alfalfa Variety Ratings](#)

* Pubescent wheatgrass and Intermediate wheatgrass are the same species and can be substituted for one another at any time.
** Thickspike wheatgrass may be substituted for western wheatgrass if the later is not available but only west of the Missouri River.
To calculate the amount needed multiply the western wheatgrass seeding rate by .72

[SD Seed Laws](#) [Codified Laws Statute 38-12A](#) [Seed testing](#) [SD state seed-lab](#)

LOCATION MAP

Tract _____

Planning Assistance By: Andrea Westlake 7/13/2023
Name Date

Plan Meets SD Standards (if no explain) Yes No

Prescribed re-vegetation will be accomplished as soon as possible; however, revegetation will be performed in the proper season in accordance with accepted agricultural and reforestation practices identified in consultation with USFS personnel on a site-specific basis.

3. Describe how the reclamation plan will rehabilitate the affected land.

- The objectives of reclamation measures under this Plan of Operations are to:
- Reclaim the surface disturbed by operations by taking such measures as will prevent or control off-site damage to the environment and forest service resources (36 CFD 228.8 (g)).
 - Return areas disturbed by the operation to a stable configuration that approximates the original condition to the extent possible. All surface areas disturbed by the operation shall be contoured in such a way as to closely approximate either surface contours existing in the disturbed area before the start of operations or surface contours of immediately and adjacent undisturbed terrain. In all cases, resulting contours shall be made to blend and merge with surrounding natural ground surfaces in an unobtrusive way imitating natural surface features commonly found in the immediate area.

4. Describe the anticipated temporary and permanent plugging and capping procedures to be used. Please refer to SDCL 45-6C-28 through 45-6C-30, SDCL 45-6D-33 through 45-6D-35, and the state's hole plugging regulations as detailed in ARSD 74:11.

Drill holes will be sealed within 24-48 hours of drilling completion and before moving the drill rig.

- **74:11:08:04 Minimum acceptable plugging method.**

Test holes that encounter no water or only low-permeability formations such as clays, shales, and till must be backfilled to restore natural conditions as nearly as possible. Except as provided in §§ 74:11:08:05 to 74:11:08:07.02, inclusive, the minimum acceptable test hole plugging method is the return of the excess drill cuttings to the drill hole to a point not less than eight feet below the ground surface. Backfill material must be free of contamination and have a permeability equal to or less than the permeability of the formations encountered in the borehole. A nondegradational, nonslip plug shall be placed at a point not less than eight feet below the ground surface, and a five-foot column of cement grout shall be placed above the plug. Topsoil or material representative of the undisturbed surface material shall be tamped into the upper three feet of the drill hole.

Bentonite chips may be used as an alternative to cement grout in the top eight feet of the test hole if bentonite grout or bentonite chips are used to plug the test hole.

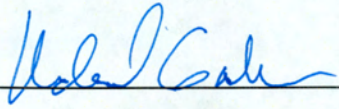
Due to the removal of core and the absence of excess drill cuttings to return to the drill hole, and the angle of the drill holes, bentonite or cement grout will be placed in the drill hole to a point not less than eight feet below the ground surface.

5. Provide the estimated cost of implementing and completing the proposed reclamation, and, the estimated cost of plugging and sealing each test hole.

Update 1/2023				
RECLAMATION BOND CALCULATION SHEET				
PROJECT NAME: NEMO South				
OPERATOR: Pete Lien & Sons				
CALCULATED BY: KME				
DATE: 9/16/2023 - Updated 12/01/2023				
I. Miles of Road Reclamation: (earthwork only)				
	(miles)	(cost per mile)		
Overland travel - Scarify and Cross Ditch	0.00 X	\$700.00 =	\$0.00	
0 to 9.9% Slope - Complete recontour	0.90 X	\$1,100.00 =	\$990.00	
10 to 19.9% Slope - Complete recontour	0.00 X	\$3,300.00 =	\$0.00	
20 to 29.9% Slope - Complete recontour	0.00 X	\$6,100.00 =	\$0.00	
30 to 39.9% Slope - Complete recontour	0.00 X	\$12,750.00 =	\$0.00	
40 to 49.9% Slope - Partial recontour	0.00 X	\$23,000.00 =	\$0.00	
50 to 59.9% Slope - Partial recontour	0.00 X	\$36,600.00 =	\$0.00	
60% and over Slope - Partial recontour	0.00 X	\$58,400.00 =	\$0.00	
			Total	\$990.00
II. Number of Drill Pads Off Road:				
	(count)	(cost per count)		
Track Drill Rig (30'x50')	32 X	\$200.00 =	\$6,400.00	
Truck Drill Rig (50'x70')	0 X	\$500.00 =	\$0.00	
Drill site on >=30% underlying slope for double handle	0 X	\$2,000.00 =	\$0.00	
			Total	\$6,400.00
III. Number of Sumps / Infiltration Galleries				
Sumps are considered a part of total disturbance (10' x 10')	32 X	\$170.00 =	\$5,440.00	
			Total	\$5,440.00
IV. Acres of Seeding Required (include roads)				
	(acres)	(cost per acre)		
0 to 39% grade	8.28 X	\$275.00 =	\$2,276.18	
40% to 60% grade*	0.00 X	\$400.00 =	\$0.00	
Reference 2022 SRCE Cost Data File \$50.00 equipment \$138.00 labor \$363.00 m ² x 3 seed				Total
				\$2,276.18
V. Equipment Walk in to Project and around Work Areas (estimate)				
	(hours)	(\$ per hour)		
Dozer/Excavator	1.0 X	\$179.00 =	\$179.00	
Operator	0.0 X	\$0.00 =	\$0.00	
			Total	\$179.00
VI. Open Drill Holes¹				
	(count)	(cost per count)		
Bond for 1 open drill hole per active drill rig onsite \$1,500 minimum, from Drill Hole plugging page	1	\$1,500.00	\$1,500.00	
			Total	\$1,500.00
VII. Other (include separate justification worksheet)				
	(count)	(cost per count)		
Noxious Weeds from Weed Control sheet	Years 2	\$ 1,000 =	\$1,000.00	
Road Maintenance	x	\$ - =	\$0.00	
Trenches	x	\$ - =	\$0.00	
Monitoring (as applicable)	x	\$ - =	\$0.00	
Monitoring wells	x	\$ - =	\$0.00	
Amount from NDEP Mob/Demob spreadsheet		\$ 1,045 =	\$1,045.00	
Other (total cost and source)	x	\$ - =	\$0.00	
			Total	\$2,045.00
SUBTOTAL				Total
				\$18,830.18
INDIRECT COSTS:				
Engineering redesign	8% (No redesign if no road construction)	8%	=	\$1,506.41
Agency Administration	10%	10%	=	\$1,883.02
Contingency	10%	10%	=	\$1,883.02
Contractor Cost (Insurance, Bond, Profit Insur., Profit, etc.)				
\$2K - \$100K = 18.5%, >\$100K = 13.5%	18.5% (13.5% to 30%)		=	\$3,483.58
Inflation-include inflation for 3 years at 2% compounded annually to account for 2 years of operations and 1 year to reclaim the site.	6.0%		=	\$1,129.81
Sub-total			=	\$9,885.84
Grand Total				28,716.02
Rounded up to nearest \$100.00				\$28,800.00
40 to 60% Grade* The cost of seeding is increased about 25% for seeding that might be needed down slope from the overcast fines that cannot be pulled back to the road cut.				
Drill Hole Plugging ¹ - Drill hole and well (water, monitoring and piezometer) abandonment must meet all applicable Federal and State standards. This task includes plugging, capping, and segregating drill holes from the ground water system. In Nevada, drill holes that will be plugged as per MAC 534 with onsite drilling equipment do not have to be bonded. Drill holes that are to be left open at any time during the life of the project must be bonded. To avoid bonding for all proposed drill holes, operators must state in their plan of operations that drill holes will be plugged before the drill rig has been moved from the drill pad and will not be left open at any time during the life of the project. In addition, the reclamation cost estimate must include the estimated plugging cost of at least one drill hole for each active drill rig in the project area to account for an unanticipated improperly plugged hole.				

It is understood that the USFS may require additional bonding above any State of South Dakota specified amount. Pete Lien & Sons, Inc., is prepared to provide whatever that may be.

I declare and affirm under the penalties of perjury that this claim (petition, application, information) has been examined by me, and to the best of my knowledge and belief, is in all things true and correct.



Signature

Date: 2/9/2024

Title: Technical Director of Mine Planning, Pete Lien & Sons, Inc.

Nemo Quarry

Location:
Lawrence County
SE1/4 S 33 T3N R5E
NE1/4 S 34 T3N R5E

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- Legend
- DOT_Roads_SD
 - Boundary_Nemo
 - PLS Claims
 - Active
 - Townships - SD



1 inch = 1,400 feet



Last Revised: 8/21/2023
Drawn by: THutchens
Verified by: None
Surveyed:

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

