

**DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES
RECOMMENDATION
BENTONITE PERFORMANCE MINERALS, LLC – SECURITY PROJECT
LARGE SCALE MINING PERMIT APPLICATION**

The Department of Agriculture and Natural Resources is recommending conditional approval of Bentonite Performance Minerals LLC’s application for its Security bentonite mining operation. The proposed bentonite mine is located in portions of Sections 31 and 32; T9N-R2E, Butte County. The general location is approximately two miles northwest of Belle Fourche, South Dakota.

Bentonite Performance Minerals plans to use cut and fill mining procedures to mine bentonite from pits ranging in depth up to 40 feet and in size from two to ten acres. The bentonite will be hauled on Butte County 3 V Road (a.k.a. 3 View Road) and US Highway 212 to Bentonite Performance Minerals’ processing plant in Colony, Wyoming. Each pit will be backfilled with overburden from other pits as mining is completed. About 57.3 acres will be mined and a total of approximately 83 acres of permitted affected land will be disturbed during the project. Mining is expected to start during the third or fourth quarter of 2024, or after the mine permit is issued, and will be completed by December 31, 2031. Reclamation will occur concurrently with the mining operation. The proposed future use of the affected area is rangeland for livestock grazing, which is the current use of the proposed mine area.

REASONS FOR APPROVAL

The permit application addresses all requirements of South Dakota Codified Laws (SDCL 45-6B) and the Administrative Rules of South Dakota (ARSD) 74:29. The application with the Department’s recommended conditions (below) provides the necessary safeguards to protect the environment during and following operations and ensure that the land is reclaimed to a beneficial use following operations.

RECOMMENDED CONDITIONS

Technical Revisions

1. The board, pursuant to ARSD 74:29:03:16, authorizes the department to approve proposed technical revisions to Bentonite Performance Minerals LLC’s (hereafter called Bentonite Performance Minerals) Security mining permit for the following:
 1. Seeding mixtures or rates;
 2. Topsoil stripping or storage;
 3. Relocation or modification of roads within the permit boundary;

4. Adding contiguous affected land within the permit boundary area for this permit with the total of such additions not to exceed 20 percent of the permitted affected land area of 83.20 acres for this permit. The maximum amount of expansion allowed (20% of 83.20 acres) is 16.64 acres;
5. Modification or relocation of erosion, sedimentation, or drainage control including sediment control structures;
6. Implementing new and improved reclamation techniques as they are developed;
7. Modification of the size and area to be worked at any one time;
8. Modification of operating timetables for proposed operation;
9. Modification of pit configuration and mining sequence within permitted pit limits;
10. Modification of monitoring systems;
11. Location or modification of ancillary facilities within the permit boundary, including equipment storage areas, perimeter fencing, and stockpiles;
12. Modification of the reclamation plan;
13. Modification of final post reclamation contours; and
14. Allow the construction of stock ponds as final reclamation features or other ponds required for the mining operation.

Technical revisions must comply with ARSD 74:29:03:03, as applicable, and must be submitted to the department in writing. The department shall approve, disapprove, conditionally approve, or request additional information deemed necessary to approve technical revisions within thirty days of receipt.

General

1. The conditional approval of this permit application hereby incorporates by reference those representations made by Bentonite Performance Minerals as to plans, specifications, operations, environmental impacts, and reclamation as contained in the original permit application (submitted October 17, 2022), and addendum information (submitted February 28 and April 11 and April 25, 2024). The representations contained in these documents are general conditions of the permit unless modified by the following conditions, modified by future technical revisions, amendments, or permits, or modified by other conditions as may be imposed by the Board of Minerals and Environment.
2. This permit and all rights under such are expressly conditioned on the truth of representations made by Bentonite Performance Minerals, its officers, employees, and contractors in the application, supporting documentation related to the application, and evidence presented to the board. Should any such material representation prove to be false, this permit and all rights under such may be canceled upon such findings by the board.
3. This permit is conditioned upon compliance with all applicable laws and regulations.

4. All monitoring systems presented in the permit application or as modified by the Board shall be followed. Any changes in these monitoring systems must be approved by the department through technical revisions.
5. Bentonite Performance Minerals shall follow the recommendations of the South Dakota Archaeological Research Center, the South Dakota State Historical Society, the South Dakota Department of Game, Fish, and Parks, and the South Dakota Department of Health except as modified or restated under these conditions.
6. In accordance with ARSD 74:29:07:02(2), affected lands shall be cleared in small sections or increments to reasonably match the needs of mine production and to reduce the amount of dust generated from the operation.
7. Bentonite Performance Minerals is permitted to disturb only the lands shown in the Operating Plan Map submitted on April 11, 2024, during the mining and reclamation phases of the operation. Bentonite Performance Minerals will be required to submit a technical revision or a permit amendment for any disturbance outside the disturbance areas shown on the map.
8. Bentonite Performance Minerals shall submit a map showing the location of the landowner's new underground water line at least 30 days prior to installation.

Other Permits

1. Bentonite Performance Minerals shall obtain, if necessary, a water right permit from DANR's Water Rights Program.
2. These conditions do not change the requirements of other existing and future permits for the project, including the General Permit for Stormwater Discharges for Industrial Activities.

Closed Rubble Facility

1. In the event the final cover over the closed rubble facility is impacted during mining operations, Bentonite Performance Minerals shall immediately notify DANR's Waste Management Program. Bentonite Performance Minerals must work with the Waste Management Program on the proper disposal of any excavated wastes and how the final cover system will be reestablished. Any mining or other activities in the impacted areas shall cease until written approval from the Waste Management Program is given.

Reclamation

1. Before reclamation bond and liability release, reclaimed and revegetated areas must exhibit a vegetative cover that is capable of self-regeneration and at least equal in cover, density, diversity, and composition to the existing vegetation in the extended comparison area.
2. Before final closure and reclamation bond release, Bentonite Performance Minerals shall maintain sufficient access to reclaimed areas to allow for any necessary reclamation maintenance required. Roads not necessary for future use shall be reclaimed upon determination of the success of reclamation of all other affected and reclaimed areas.
3. Bentonite Performance Minerals shall seed the affected area in such a manner to ensure species diversity and to avoid the establishment of monocultures.
4. Bentonite Performance Minerals shall use the seed mix specified in the permit application during reclamation of the mine site. A technical revision shall be submitted to the department for any changes to the seed mix. The modified seed mix cannot be used until the department approves the technical revision.
5. Bentonite Performance Minerals shall seed topsoil and subsoil stockpiles as required in the reclamation plan if they are in place for more than six months.

Noise and Dust Control

1. Bentonite Performance Minerals shall effectively control fugitive dust and other air emissions from the operation. Dust control measures may include using water trucks, dust filters on equipment, dust suppressants (such as magnesium chloride) on roads, and/or vegetating disturbed areas as soon as possible.
2. Bentonite Performance Minerals shall notify the department within five working days of written complaints from adjacent landowners concerning dust and/or noise. The department, upon finding that a complaint is based in fact on a potential permit violation, may require Bentonite Performance Minerals to develop a mitigation plan to correct the potential violation.

Erosion and Sediment Control

1. Thirty days prior to construction, Bentonite Performance Minerals shall submit to the department for approval final plans and specifications for the rerouted drainages shown on the Surface Hydrology and Features maps submitted on April 11, 2024. All surface water diversions and all final reclamation drainage channels must meet the requirements of ARSD 74:29:07:09.

The department shall not unreasonably withhold its final approval of the plans and specifications if they reflect the technical parameters specified in the permit application. Within 30 days of submittal, the department shall approve, disapprove, conditionally approve, and request additional information deemed necessary to approve the plans and specifications. If disapproved, the department shall identify those items necessary for approval. If plans and specifications are disapproved or a request of additional information is made, the department shall, within 30 days of receipt of the response, either approve, conditionally approve, or disapprove such plans and specifications.

Conditions placed on plans and specifications approval by the department shall be considered permit conditions. These conditions will not alter the conceptual design of the diversion ditches as permitted. Bentonite Performance Minerals may request a hearing before the board to contest any conditions placed on plans and specifications.

2. To prevent sediment from the operation from entering Middle Creek to the north, Bentonite Performance Minerals shall install rock check dams, hay bales, additional diversion ditches, or other adequate structures to minimize channelization and erosion from surface runoff. Bentonite Performance Minerals shall, as soon as possible, contact the Department of Agriculture and Natural Resources and the Department of Game, Fish, and Parks if any sediment is found entering the creek.
3. Erosion and sediment control structures shall be in place and functional during all operational and reclamation phases in accordance with Bentonite Performance Minerals' General Storm Water Construction Permit. Periodic maintenance and repair shall be required on all erosion and sediment control structures to ensure control effectiveness.
4. Interim sedimentation and erosion controls shall be used as necessary on disturbed land during mining and reclamation until these areas are stabilized by vegetation.

Archaeologic and Cultural

1. If, in the future, Bentonite Performance Minerals plans to disturb the area south of 3V Road during the Security Mine project, an archaeological survey shall be completed prior to any disturbance.
2. If any human remains, animal bones, artifacts, cultural features, foundation remnants, or other evidence of previously unrecorded past human use are discovered within the project area, all work shall be halted, and Bentonite Performance Minerals shall immediately contact the state archaeologist.

Spill Contingency Plan

1. Bentonite Performance Minerals employees at the mine site are required to become familiar with the spill contingency plan and the spill reporting requirements. Employees

shall take all necessary steps to prevent spills from occurring. Any spills that occur that exceed the reporting requirements of SDCL 34A-12 and ARSD 74:34:01:04 must be reported to the department at (605) 773-3296 during normal business hours and (605) 773-3231 after business hours and holidays.

Biological Monitoring

1. Bentonite Performance Minerals shall promptly report to the Department of Game, Fish and Parks any species or critical habitat of such species listed as state or federal rare, threatened, or endangered. Upon notification, Bentonite Performance Minerals shall consult with the Department of Agriculture and Natural Resources and the Department of Game, Fish and Parks. Based on this consultation, conditions under which Bentonite Performance Minerals may proceed with mining shall be identified.

Reclamation Surety

1. Bentonite Performance Minerals shall submit a reclamation surety in the amount of \$786,500 before the permit is issued which will cover the first year of disturbance at the Security Mine. After the initial year, the bond will be re-evaluated and revised as necessary to account for additional disturbance and reclamation completed. Bentonite Performance Minerals shall submit additional bonding (if necessary) to cover each succeeding year's disturbance. The additional bond shall be submitted prior to the disturbance for that particular year. The department reserves the right to adjust the bond at any time based on the amount of new disturbance, the reclaimed acreage, and any changes to the original mine plan. The reclamation surety may also be adjusted downward as reclamation work is completed.

Postclosure

1. Before the start of the postclosure period, Bentonite Performance Minerals shall submit an updated postclosure plan (if necessary) to the department for approval. The postclosure plan shall be updated to reflect actual site conditions at the time of mine closure, and shall include hydrologic monitoring, vegetation monitoring, sediment and erosion control, and miscellaneous maintenance and care. The department reserves the right to modify postclosure monitoring plans, schedules, and parameters if monitoring results indicate a modification is warranted.
2. In accordance with SDCL 45-6B-91, Bentonite Performance Minerals shall submit a postclosure financial assurance (if necessary) at the time of mine closure to cover postclosure care and maintenance costs for Mine Permit No. 491 as identified in the approved postclosure plan. The postclosure financial assurance will be calculated at the time of mine closure. The postclosure financial assurance will be used to carry out postclosure care activities if Bentonite Performance Minerals fails to complete them.

The department and the board reserve the right to increase or reduce the amount of postclosure financial assurance based on site performance factors including site stability, presence of hazards, revegetation success, hydrologic impacts, the need for long-term surface or ground water mitigation, and releases of substances that adversely impact natural resources.

3. If necessary, the postclosure period shall begin at the time of reclamation surety release (mine closure) and shall last for a period of 30 years, unless the board determines that an alternative period is necessary to ensure compliance with all applicable performance standards or design and operating criteria. The postclosure financial assurance shall be held for the designated postclosure period to ensure that all established reclamation and performance standards are met, and the site is maintenance free to the extent practicable.
4. In accordance with SDCL 45-6B-91, Bentonite Performance Minerals' liability for the affected mine area shall continue (if necessary) until certification of the completion of the postclosure care plan is approved by the board. When Bentonite Performance Minerals deems it is in full and continuing compliance with applicable performance standards, it may petition the board for release or reduction of the postclosure financial assurance by submitting certification that postclosure care is complete. Funds left at the end of the postclosure period will be released to Bentonite Performance Minerals.
5. Bentonite Performance Minerals grants to the board or its representatives permission to enter the reclaimed area to monitor reclamation success during the postclosure period. The department shall give Bentonite Performance Minerals the opportunity to accompany any inspector from the department or other agent of the board during the postclosure period.

This recommendation is being mailed to you pursuant to ARSD 74:29:01:15. Petitions to intervene and become party to the proceedings pursuant to ARSD 74:29:01:09 must be filed with the Department of Agriculture and Natural Resources no later than June 25, 2024. The department will issue the permit on this date if no petitions to intervene are received.

Persons needing further information about this permit application may contact Eric Holm, Minerals, Mining, and Superfund Program, Department of Agriculture and Natural Resources, 523 East Capitol Avenue, Pierre, South Dakota 57501-3182, or phone (605) 773-4201.



Hunter Roberts
Secretary
Department of Agriculture and Natural Resources

June 18, 2024

