



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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March 6, 2024

Michael Barr
Senior Project Coordinator
Bentonite Performance Minerals, LLC.
554 US Highway 212
Belle Fourche, SD 57717

RE: Security Large Scale Mine Permit Application

Dear Mr. Barr:

The department has completed its review of Bentonite Performance Minerals' (BPM) revised large scale mine permit application submitted on February 28, 2024, for the proposed Security Mine. Based on our review, we have determined that the mine permit application is incomplete. BPM will need to address the following items in order to complete the application:

1. Application Form: I have enclosed the front page of the Large Scale Mine Permit application form for the following revisions:
 - a) The proposed starting date of April 1, 2024, is not feasible since the current public, review agency, and other timelines will not allow our program to issue the mine permit until May at the earliest. Therefore, please change the proposed starting date to another date, such as "June 1, 2024, or when mine permit is issued".
 - b) Instead of using the local address phone number for the general address location in Houston, Texas, please change the phone number for the general address to the phone number for the Houston office.
 - c) In addition to Mr. Garman, the name and address for the Butte County Highway Department needs to be added to the "Surface Owner" portion of the form. Also, the name and address for Dave Garman and the Chicago and Northwestern Railway need to be added to the "Mineral Owner" portion of the form". Please note that you can refer to the surface and mineral table on page 84 of the mine permit application.

I have also enclosed a new Large Scale Mine Permit form if you want to submit a new form instead of revising the current form.

2. SDCL 45-6B-10(3), ARSD 74:29:01:17, ARSD 74:29:02:09, ARSD 74:29:02:11(2) and ARSD 74:29:02:12(7): Regarding the Operating Plan Map, the proposed mine permit boundary is not included in the map legend. Please submit a new map with the permit boundary included in the map legend. Also, there is no map scale on the two Surface Hydrology and Feature maps. Please submit new maps with a map scale. In addition, the Surface and Mineral Ownership map does not have a title and the "American Colloid" name under "Surface Ownership" in the map legend has something else typed over it and is hard to read. Please submit a new map with a title and the typo in the legend corrected.

Finally, the geologic cross section on page 170 of the application is more a generic cross section rather than a representative one. This cross section would not apply to all bentonite operations since some may mine the Pierre Shale in addition to the Belle Fourche Shale. Also, depths and thicknesses of the units depicted in the cross-section may vary depending on location of the mining area. Therefore, please include a narrative with the cross section which describes the geology of the Security Mine area, the thickness of the Belle Fourche Shale, the general trend of the formations, whether the bentonite bed is found shallower or deeper in areas due to formation thickness, and which portions of the proposed mine area has shallower and deeper bentonite beds.

3. SDCL 45-6B-12, SDCL 45-6-44, and ARSD 74:29:02:03: In the Surface and Mineral Ownership table on page 83 of the mine permit application, the name and address for the Butte County Highway needs to be added to the "Surface Owner Within Permit Boundary" portion of the table. Also, the name and address of Dave Garman, American Colloid, and the Butte County Highway Department needs to be added to the "Adjacent Surface Owner" portion of the table.

In addition, BPM only submitted an acknowledgement from Mr. Garman that he received a copy of the reclamation plan. Since Mr. Garman is the surface owner, SDCL 45-6B-12 requires BPM to send him an instrument of consultation in which Mr. Garman acknowledges receipt of the **operating and reclamation plan** and grants BPM permission to enter and commence the mining operations on his property. Also, since Butte County Highway Department is also a surface owner, BPM will also need to send them an instrument of consultation. Therefore, please send both parties copies of the operating and reclamation plan along with an instrument of consultation which is to be signed and dated by both parties. I have enclosed an example of an instrument of consultation that you can use as a template.

Finally, in Section 1.0 on page MP3 of the Operating Plan, please discuss the mineral rights held by Dave Garman and the Chicago and Northwestern Railway.

4. SDCL 45-6B-7(11), SDCL 45-6B-40 and ARSD 74:29:07:07(2 and 5): In Section 5.11.1 on page RP14 of the Reclamation Plan, BPM lists topsoil and subsoil salvage volumes

from Table A-6 in the Baseline Soil Survey. However, these volumes are for the entire project area or the entire area inside the mine permit boundary. Since BPM does not plan to disturb the entire area within the mine permit boundary, it should only list the topsoil and subsoil salvage volumes listed in Table A-7 of the Baseline Soil Survey for the proposed disturbed area where the topsoil and subsoil will be removed. Also, the topsoil and subsoil removal volumes should be included in Section 6.0 of the Operating Plan.

Also, for areas undergoing interim reclamation or during periods of temporary cessation, please address **in detail** the temporary distribution of topsoil as required under subsection 2 of ARSD 74:29:07:07. In your discussion, please address whether topsoil productivity will be diminished, whether it will be protected from erosion, and whether it will be available for final reclamation.

We also have the following technical comments:

1. BPM's Response to DANR's November 7, 2022, Comment Letter: Under the response to Item No. 3 in the comment letter, BPM states the planned pits are subject to change given changes in the market, ground conditions, or other factors. All pits should be considered conceptual at this point. Please note that any changes to the pit locations or sequences shown on the Operations Plan Map will require BPM to submit a technical revision to our office before any changes to the mine plan can be made.
2. Section 5.12.2, Seed Mix Substitutions, Page RP-15, Reclamation Plan: In the last paragraph of this section, please clarify the statements "Otherwise, BPM will substitute a native or naturalized species of the same life form with similar characteristics" and "BPM will report the substitutions in the first available annual report". Are these two sentences necessary since BPM will be required to submit a technical revision for any seed mix changes?
3. Section 5.13.1, Noxious Weed Plan, Page RP-16, Reclamation Plan: In this section, please refer to the Weed Control Plan approved by the Butte County Weed and Pest Board on pages 176 and 177 of the mine permit application.
4. Section 10.0, Reclamation Costs, page RP19, Reclamation Plan: In the second sentence of this section, BPM states it will hold the full bond amount. This sentence will need to be changed so that it reads that DANR will hold the full bond amount. After a final bond amount is determined, BPM will submit the appropriate bond instrument (certificate of deposit, surety bond, letter of credit) with the final amount to DANR before the mine permit is issued.
5. Bond Calculation, pages 190 and 191: In the bond calculation, BPM estimates that a total of 500,000 cubic yards of material will need to be moved during final reclamation.

What is this figure based on? How many pits are open and need to be backfilled and how deep are the pits?

BPM should also be aware of the following general comments and questions concerning the permit application:

1. ARSD 74:29:01:10. Please find enclosed a summary document for the permit application. DANR is required under ARSD 74:29:01:10 to consult with BPM during development of the summary document. Therefore, please review the document and let me know if any changes are needed.
2. In responding to the items requested in this letter, BPM does not need to resubmit the entire mine permit application. BPM only needs to replace the sections of the application that need to be revised.

If you have any questions, please feel free to contact our office.

Sincerely,

\s/

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Enclosures