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MINERALS & MINING PROGRAM

Permit Application

Bentonite Performance Minerals Security Mine

Bentonite Performance Minerals, LLC
554 US HWY 212
Belle Fourche, SD 57717
307.896.2596

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The following is information necessary to address the requirements of ARSD 74:29:02:01 as set by the State of South Dakota

SDCL 45-6B	Location in Application
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5(2)	See 45-6B-7
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5(5)	180
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6(6)	5
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45-6B-11	Appendix C
45-6B-12	192
45-6B-14	3
45-6B-15	End of Appendix C
45-6B-16	End of Appendix C
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ARSD 74:29	Location in Application
74:29:02:02	129
74:29:02:03	83 & 239
74:29:02:04	134, 137, 142, 227 - 229
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4(2)	136 & Appendix A
4(3)	134-136
4(4)	Appendix A
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4(6)	N/A
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74:29:02:06	542
74:29:02:07	363
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1(3)	161
74:29:07:02	
2(1)	134, 137, 138 & 140
2(2)	134, 137 & 138
2(3)	134, 137 & 140
2(4)	134, 138, 140 & 142
2(5)	134 & 162
2(6)	134, 137, 140 & 142
2(7)	134, 137 & 138
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2(9)	134, 137, 138 & 142
2(10)	134, 137, 138 & 140

45-6B-33	169
45-6B-33.1	206
45-6B-33.3	358
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45-6B-39	160-161
45-6B-40	159
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45-6B-46	155 & 159
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7(3)	159-160
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7(5)	159-160
7(6)	159-160
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08(2)	143-144 & 154-155
08(3)	154-155
08(4)	154-155 & 162
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08(6)	Appendix A
74:29:07:09	
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09(2)	142 & 163
09(3)	142 & 163
09(4)	142 & 163
09(5)	142 & 163
09(7)	142 & 163
09(8)	142 & 163
74:29:07:10 (1)	142
74:29:07:11	154
74:29:07:12	143 & 163
74:29:07:13	143 & 154
74:29:07:14	156 & 163
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14(2)	157

14(3)	139 &157
14(4)	139 &143
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74:29:07:16	162
74:29:07:17	149
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20(3)	161 & 162 - 163
20(4)	173-175
74:29:07:27	144 & 163
74:29:08	
8(1)	155-159
8(2)	164
8(3)	See Reclamation Plan
8(4)	N/A

Section One

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Section One

BPM Security Bentonite Mine

Application For Mining/Milling Permit

Bentonite Performance Minerals, LLC Security Mine

SDCL 45-6B-32 & SDCL 45-6B-4
Compliance

Bentonite Performance Minerals, LLC has paid the required application fees. The application is complete and the surety will be posted. No part of the proposed mining operation, the reclamation program, or the proposed future use is in violation to the laws and regulation of the State of South Dakota or the United States.

The mining operation will not adversely affect the stability of any significant, valuable, or permanent man-made structures located within two hundred feet of the affected land, except where there is an agreement between the operator and the persons having an interest in the structure that damage to the structure is to be compensated for by the operator. A one call was completed and no underground utilities or pipelines were found within the proposed area to affect of the permit application.

The mining operation will not be in violation of any county zoning or subdivision regulations. The proposed mining operation and reclamation will be carried out in conformance with the requirements of statute 45-6B-35.

The operator is not currently found to be in violation of the provisions of this chapter with respect to any mining operation in this state. The proposed affected land is suitable for mining operation, as determined pursuant to statute 45-6B-33.

ARSD 74:29:03:16
Technical Revisions

Bentonite Performance Minerals, LLC (BPM) requests that the following technical revision options be listed with the permit conditions:

1. Seeding mixtures and rates, given additional consultation and approval from the SD DANR, Butte County NRCS and the Surface Owner
2. Topsoil stripping or storage.
3. Adding contiguous affected land within the permit area when the total of such additions does not exceed 20% of the originally permitted affected land area.
4. Modification or relocation of erosion, sedimentation, or drainage control.
5. Implementing new and improved reclamation techniques as they are developed.
6. Modification of the size and area to be worked at any one time.
7. Modification of operating timetables for proposed operation.
8. Modification of pit configuration within permitted pit limits.
9. Modification of the reclamation plan.
10. Modification of final post reclamation contours.
11. Should the surface owner request a stock pond to be constructed during final reclamation, BPM shall consult with the DANR and other appropriate agencies to ensure BPM follows the appropriate process.

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

LARGE SCALE MINING/MILLING PERMIT
Pursuant to SDCL 45-6B and ARSD 74:29

Relating to The Extraction and Processing of Minerals in Operations Affecting More Than 10 Acres and/or Removing over 25,000 Tons Per Year or For Operations Utilizing Cyanide Leaching or Other Chemical or Biological Leaching Agents

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Operator's name:
Bentonite Performance Minerals, LLC

General office address:
3000 N. Sam Houston Pkwy E
BLDG J - 4th Floor
Houston, Tx 77032

Telephone: 307.896.2596

Local mailing address:
554 US Hwy 212
Belle Fourche, SD 57717

Telephone: 307.896.2596

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

Resident agent address:
Capitol Corporate Services, INC
300 S. Phillips Ave, Ste 300
Sioux Falls, SD 57104

Resident agent telephone: 302.730.8212

Legal description of affected land: Township 09 North, Range 2 East
Section 31: SE¼SE¼NE¼NE¼, E½E½SE¼NE¼ and that portion of the E½E½NE¼SE¼ north of 3 Views Road.
Section 32: SW¼NW¼, NW¼SW¼, W½W½NE¼SW¼, those portions of the S½S½NW¼NW¼, SW¼NE¼NW¼ & W½W½SE¼NW¼ South of the ACC Haul Road and those portions of the W½W½SE¼SW¼ & NE¼SW¼SW¼ north of 3 Views Road.

County:
Butte

Name and address of surface owner:
David J. Graman
Po Box 207 Belle Fourche, SD 57717

Name and address of mineral owner:
Bentonite Performance Minerals, LLC
554 US Hwy 212
Belle Fourche, SD 57717

Minerals to be extracted or milled, or both:
Bentonite

Proposed starting date: 04/01/2024

Proposed completion date: 12/31/2031

Size of area (acres) to be worked at any one time: pit excavations of 2-20 acres w/ ≤ 25.75 acres of ancillary dist.

Estimated working days per year: 180

Estimated tons of ore per year: ~40,000

Estimated overburden/waste tons per year: ~250,000 tons

Estimated total tonnage per year: ~290,000 tons

Include a copy of your source of legal right to enter and initiate operations: ✓ Lease ____ Letter ____ USFS Permit

Include a copy of your source of legal right to dispose of tailings: ____ Lease ____ Letter ____ USFS Permit N/A

INSTRUCTIONS:

Please reference SDCL 45-6B and ARSD 74:29. This large scale mining/milling permit must be accompanied by:

1. A narrative description of the methods of mining and milling to be employed per Section 6(8).
2. A reclamation plan pursuant to Section 7.
3. A map of the affected area pursuant to Section 10.
4. A fee of $1,000 payable to the Department of Agriculture and Natural Resources pursuant to Section 14. For precious metals, coal, or uranium, a fee of $50,000 payable to the Department of Agriculture and Natural Resources is required.
5. A map clearly depicting all surface and mineral owners of the affected land pursuant to Section 10 and ARSD 74:29:02:03.
6. Proof of compliance with all local and county zoning ordinance requirements pursuant to Section 4 and ARSD 74:29:02:02.

Before a hearing on this large scale mining/milling permit can be conducted by the SD Board of Minerals and Environment, the operator must submit the following:

1. Certified mail receipts confirming mailing of notice to all surface owners and lessees pursuant to Section 17.
2. A copy of the affidavit of publication of notice pursuant to Section 16.
3. Proof of filing a copy of the large scale mining/milling permit with the Register of Deeds pursuant to Section 15.
4. A surety in an amount to be determined by the department pursuant to Section 20.
5. A copy of instruments of consultation from all surface landowners, if different than the owner of the minerals, including written receipt of the operating and reclamation plans pursuant to Section 12 and 13.

Applicant affirms that the mining or milling will be conducted pursuant to SDCL 45-6B or any regulations promulgated thereunder, that he will grant access to the SD Board of Minerals and Environment or its agents to the area under this large scale mining/milling permit from the date of application and during the life of the permit as necessary to assure compliance with SDCL 45-6B.

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.

_____ Date: October 6th, 2022
Signature

Title: Operations Manager

STATE OF Wyoming

COUNTY OF Crook

On this 6th day of October, 2022, before me personally appeared Tyler Tetrault, who acknowledged himself to be the Operations Manager (Title) for Bentonite Performance Minerals, LLC (Operator) and that he is authorized to execute the Large Scale Mining/Milling Permit for the purposes contained therein.

_____ My Commission Expires: 10-23-2024
Notary Public

SEAL

NOTARY PUBLIC
CHERYL L. WOLFF
STATE OF WYOMING
COUNTY OF CAMPBELL
My Commission Expires 10-23-2024

FOR DEPARTMENT USE ONLY

DATE APPROVED: BOND AMOUNT: PERMIT NUMBER:

_____
Chairman, SD Board of Minerals & Environment

Certification of Applicant

BPM Security Bentonite Mine

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STATE OF SOUTH DAKOTA

BEFORE THE SECRETARY OF

THE DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES

IN THE MATTER OF THE APPLICATION OF Bentonite Performance Minerals, LLC

STATE OF Wyoming

COUNTY OF Crook

CERTIFICATION OF APPLICANT

I, Tyler Tetrault, the applicant in the above matter after being duly sworn upon oath hereby certify the following information in regard to this application:

I have read and understand South Dakota Codified Law Section 1-41-20 which provides:

"The secretary may reject an application for any permit filed pursuant to Titles 34A or 45, including any application by any concentrated swine feeding operation for authorization to operate under a general permit, upon making a specific finding that:

(1) The applicant is unsuited or unqualified to perform the obligations of a permit holder based upon a finding that the applicant, any officer, director, partner, or resident general manager of the facility for which application has been made:

(a) Has intentionally misrepresented a material fact in applying for a permit;

(b) Has been convicted of a felony or other crime involving moral turpitude;

(c) Has habitually and intentionally violated environmental laws of any state or the United States which have caused significant and material environmental damage;

(d) Has had any permit revoked under the environmental laws of any state or the United States; or

(e) Has otherwise demonstrated through clear and convincing evidence of previous actions that the applicant lacks the necessary good character and competency to reliably carry out the obligations imposed by law upon the permit holder; or

(2) The application substantially duplicates an application by the same applicant denied within the past five years which denial has not been reversed by a court of competent jurisdiction. Nothing in this subdivision may be construed to prohibit an applicant from submitting a new application for a permit previously denied, if the new application represents a good faith attempt by the applicant to correct the deficiencies that served as the basis for the denial in the original application.

All applications filed pursuant to Titles 34A and 45 shall include a certification, sworn to under oath and signed by the applicant, that he is not disqualified by reason of this section from obtaining a permit. In the absence of evidence to the contrary, that certification shall constitute a prima facie showing of the suitability and qualification of the applicant. If at any point in the application review, recommendation or hearing process, the secretary finds the applicant has intentionally made any material misrepresentation of fact in regard to this certification,

consideration of the application may be suspended and the application may be rejected as provided for under this section.

Applications rejected pursuant to this section constitute final agency action upon that application and may be appealed to circuit court as provided for under chapter 1-26."

I certify pursuant to 1-41-20, that as an applicant, officer, director, partner, or resident general manager of the activity or facility for which the application has been made that I; a) have not intentionally misrepresented a material fact in applying for a permit; b) have not been convicted of a felony or other crime of moral turpitude; c) have not habitually and intentionally violated environmental laws of any state or the United States which have caused significant and material environmental damage; (d) have not had any permit revoked under the environmental laws of any state or the United States; or e) have not otherwise demonstrated through clear and convincing evidence of previous actions that I lack the necessary good character and competency to reliably carry out the obligations imposed by law upon me. I also certify that this application does not substantially duplicate an application by the same applicant denied within the past five years which denial has not been reversed by a court of competent jurisdiction. Further;

"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."

Dated this 6th day of October, 2022.

Applicant (print) Tyler Tetrault

Applicant (signature)

Subscribed and sworn before me this 10th day of October, 2022.

Notary Public (signature)

My commission expires: 10-23-2024

NOTARY PUBLIC
CHERYL L. WOLFF
STATE OF WYOMING
COUNTY OF CAMPBELL
My Commission Expires 10-23-2024

PLEASE ATTACH ANY ADDITIONAL INFORMATION NECESSARY TO DISCLOSE ALL FACTS AND DOCUMENTS PERTAINING TO SDCL 1-41-20 (1) (a) THROUGH (e). ALL VIOLATIONS MUST BE DISCLOSED, BUT WILL NOT AUTOMATICALLY RESULT IN THE REJECTION OF AN APPLICATION

Detailed Facility Report

Facility Summary

BENTONITE PERFORMANCE MINERALS PLANT

554 HWY 212, ALADDIN, WY 82710

FRS (Facility Registry Service) ID: 110010411624

EPA Region: 08

Latitude: 44.862972

Longitude: -104.141121

Locational Data Source: FRS

Industries: Mining (except Oil and Gas)

Indian Country: N

Enforcement and Compliance Summary

Statute	CAA
Compliance Monitoring Activities (5 years)	4
Date of Last Compliance Monitoring Activity	08/17/2022
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--
Statute	**SDWA**
Compliance Monitoring Activities (5 years)	--
Date of Last Compliance Monitoring Activity	--
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

Regulatory Information

Clean Air Act (CAA): Operating Major (WY0000005601100001)

Clean Water Act (CWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Resource Conservation and Recovery Act (RCRA): No Information

Safe Drinking Water Act (SDWA): OWNER: Private, PRIMARY SERVICE AREA DESCRIPTION: Industrial/Agricultural, SOURCE: Ground water, TYPE: Non-Transient non-community system Permit Active (WY5601476)

Toxic Releases (TRI): 82710BNTNT554US

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Go To Enforcement/Compliance Details
Known Data Problems <https://epa.gov/resources/echo-data/known-data-problems>

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110010411624					N	44.862972	-104.141121
ICIS-Air	CAA	WY0000005601100001	Major Emissions	Operating	CAANSPS, CAASIP, CAATVP		N	44.862972	-104.141111
TRI	EP313	82710BNTNT554US	Toxics Release Inventory	Last Reported for 2007			N	44.862972	-104.141121
SDWIS	SDWA	WY5601476	OWNER: Private, PRIMARY SERVICE AREA DESCRIPTION: Industrial/Agricultural, SOURCE: Ground water, TYPE: Non-Transient non-community system	Active	Population Served: 180		N		

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110010411624	BENTONITE PERFORMANCE MINERALS PLANT	554 HWY 212, ALADDIN, WY 82710	Crook County
ICIS-Air	CAA	WY0000005601100001	COLONY PLANT (BENTONITE PERFORMANCE MINERALS)	554 HWY 212, COLONY, WY 82729	Crook County
TRI	EP313	82710BNTNT554US	BENTONITE PERFORMANCE MINERALS LLC COLONY	554 US HWY 212, COLONY, WY 57717	Crook County
SDWIS	SDWA	WY5601476	BENTONITE PERFORMANCE MINERALS - COLONY	WY	

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description

No data records returned

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description
TRI	82710BNTNT554US	327999	All Other Miscellaneous Nonmetallic Mineral Product Manufacturing
ICIS-Air	WY0000005601100001	212325	Clay and Ceramic and Refractory Minerals Mining

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)

No data records returned

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)
CAA	WY0000005601100001	ICIS-Air	Inspection/Evaluation	PCE Stack Test	State	11/22/2023	Findings: Pass
CAA	WY0000005601100001	ICIS-Air	Inspection/Evaluation	PCE Stack Test	State	10/06/2023	Findings: Pass
CAA	WY0000005601100001	ICIS-Air	Inspection/Evaluation	PCE Stack Test	State	10/05/2023	Findings: Pass
CAA	WY0000005601100001	ICIS-Air	Inspection/Evaluation	PCE Stack Test	State	08/22/2023	Findings: Pass
CAA	WY0000005601100001	ICIS-Air	Inspection/Evaluation	PCE Title V CCR	State	01/26/2023	Reviewed: 02/09/2023 Undetermined
CAA	WY0000005601100001	ICIS-Air	Inspection/Evaluation	PCE Stack Test	State	09/29/2022	Findings: Pass Pollutants: VISIBLE EMISSIONS
CAA	WY0000005601100001	ICIS-Air	Inspection/Evaluation	FCE On-Site	State	08/17/2022	
CAA	WY0000005601100001	ICIS-Air	Inspection/Evaluation	PCE Stack Test	State	06/03/2022	Findings: Pass Pollutants: Carbon monoxide, NITROGEN OXIDES, Particulate Matter [Filterable]
CAA	WY0000005601100001	ICIS-Air	Inspection/Evaluation	PCE Title V CCR	State	01/26/2022	Reviewed: 02/15/2022 Undetermined
CAA	WY0000005601100001	ICIS-Air	Inspection/Evaluation	PCE Stack Test	State	11/17/2021	Findings: Pass Pollutants: Particulate matter
CAA	WY0000005601100001	ICIS-Air	Inspection/Evaluation	PCE Stack Test	State	09/15/2021	Findings: Pass Pollutants: NITROGEN OXIDES, Sulfur dioxide
CAA	WY0000005601100001	ICIS-Air	Inspection/Evaluation	FCE On-Site	State	08/31/2021	
CAA	WY0000005601100001	ICIS-Air	Inspection/Evaluation	PCE Title V CCR	State	01/22/2021	Reviewed: 01/22/2021 Undetermined
CAA	WY0000005601100001	ICIS-Air	Inspection/Evaluation	PCE Stack Test	State	10/07/2020	Findings: Pass Pollutants: NITROGEN OXIDES
CAA	WY0000005601100001	ICIS-Air	Inspection/Evaluation	FCE On-Site	State	08/31/2020	
CAA	WY0000005601100001	ICIS-Air	Inspection/Evaluation	PCE Stack Test	State	04/08/2020	Findings: Pass Pollutants: VISIBLE EMISSIONS

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)
CAA	*WY0000005601100001*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Stack Test*	*State*	*04/06/2020*	*Findings: Pass Pollutants: VISIBLE EMISSIONS*
CAA	*WY0000005601100001*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Stack Test*	*State*	*04/01/2020*	*Findings: Pass Pollutants: Particulate matter - PM10, VISIBLE EMISSIONS*
CAA	*WY0000005601100001*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Title V CCR*	*State*	*01/15/2020*	*Reviewed: 01/15/2020 Undetermined*
CAA	*WY0000005601100001*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Stack Test*	*State*	*12/19/2019*	*Findings: Pass Pollutants: Particulate matter - PM10*
CAA	WY0000005601100001	ICIS-Air	Inspection/Evaluation	FCE On-Site	State	08/14/2019	
CAA	*WY0000005601100001*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Stack Test*	*State*	*08/14/2019*	*Findings: Pass Pollutants: Particulate matter*
CAA	*WY0000005601100001*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Stack Test*	*State*	*08/13/2019*	*Findings: Pass Pollutants: NITROGEN OXIDES*
SDWA	*WYS601476*	*SDWIS*		*Sanitary Survey, Complete*	*EPA*	*06/22/2021*	

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy <https://www.epa.gov/compliance/compliance-monitoring-programs> activities or because they are not counted as inspections within EPA's Annual Results <https://www.epa.gov/enforcement/enforcement-data-and-results>.

SDWA (Safe Drinking Water Act) Sanitary Survey Results (5 Years)

Source ID	Date	Type	Agency	Data Verification	Distribution	Management Operation	Finished Water Storage	Operator Compliance	Other Evaluation	Pumps	Security	Source
WYS601476	06/22/2021	Sanitary Survey, Complete	Region	N (No deficiencies or recommendations.)	N (No deficiencies or recommendations.)	N (No deficiencies or recommendations.)	N (No deficiencies or recommendations.)	N (No deficiencies or recommendations.)	N (No deficiencies or recommendations.)	N (No deficiencies or recommendations.)	N (No deficiencies or recommendations.)	N (No deficiencie or recommendation

Sanitary survey result codes: *S = Significant Deficiencies* *M = Minor Deficiencies* *R = Recommendations Made* *N = No Deficiencies or Recommendations* *X = Not Evaluated* *Z = Not Applicable* *D = Sanitary Defect* *-- = Not Reported to EPA*

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
CAA	WY0000005601100001	No	02/03/2024	0	02/02/2024
SDWA	WYS601476	No	09/30/2023	0	01/09/2024

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12+
CAA (Source ID: WY0000005601100001)		04/01-06/30/21	07/01-09/30/21	10/01-12/31/21	01/01-03/31/22	04/01-06/30/22	07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24
	Facility-Level Status	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified
	HPV History												
	Violation Type / Agency / Programs / Pollutants												

Statute	Violation Type/Category	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12	QTR 13*
SDWA (Source ID: WYS601476)		10/01-12/31/20	01/01-03/31/21	04/01-06/30/21	07/01-09/30/21	10/01-12/31/21	01/01-03/31/22	04/01-06/30/22	07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23
	Facility-Level Status	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	In Progress
	Category / Violation Type													

*Quarter 13 data is voluntarily entered and/or incomplete, and may not form a complete picture for that quarter. Read more <https://epa.gov/help/reports/dfr-data-dictionary#sdwacomp>

SDWA Compliance Data Last Reported: 09/30/2023

Informal Enforcement Actions

Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute	System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost

No data records returned

SDWA (Safe Drinking Water Act) Violations and Enforcement Actions (5 Years)

Violations											Enforcement Actions			
Source ID	Noncompliance Period	Violation ID	Federal Rule	Contaminant	Category	Description	Measured Value	State MCL (Maximum Contaminant Level)	Federal MCL (Maximum Contaminant Level)	Status	Date	Category	Description	Agency

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?

No data records returned

Assessed Waters From Latest State Submission (ATTAINS)

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

SDWA (Safe Drinking Water Act) Lead and Copper (5 Years)

Source ID	Contaminant	Sample Dates	90th Percentile Sample Concentrations	Action Level	Health-Based Violations
WY5601476	Lead	2019-01-01 - 2021-12-31	.001 mg/L	0.015 mg/L	--
WY5601476	Lead	2016-01-01 - 2018-12-31	0 mg/L		
WY5601476	Copper	--	No data records returned.	1.3 mg/L	

Community

Environmental Justice

This section shows indexes from EJScreen, EPA's screening tool for environmental justice (EJ) concerns. EPA uses these indexes to identify geographic areas that may warrant further consideration or analysis for potential EJ concerns. Use of these indexes does not designate an area as an "EJ community" or "EJ facility." EJScreen provides screening level indicators, not a determination of the existence or absence of EJ concerns. For more information, see the EJScreen home page.

EJScreen Indexes Shown

Compare to ◉ US ○ State

Index Type ○ Environmental Justice ◉ Supplemental

Related Reports

EJScreen Community Report

Download Data

Census Block Group ID: 560119502001	US (Percentile)	
Supplemental Indexes	Facility Census Block Group	1-mile Max
Count of Indexes At or Above 80th Percentile	**0**	**0**
Particulate Matter 2.5	0	--
Ozone	21	21
Diesel Particulate Matter	2	2
Air Toxics Cancer Risk	2	2
Air Toxics Respiratory Hazard Index	3	3

○ Facility 1-mile Radius ☐ Facility Census Block Group

Census Block Group ID: 560119502001	US (Percentile)	
Supplemental Indexes	Facility Census Block Group	1-mile Max
Toxic Releases to Air	12	12
Traffic Proximity	0	--
Lead Paint	50	50
Risk Management Plan (RMP) Facility Proximity	0	--
Hazardous Waste Proximity	0	--
Superfund Proximity	7	7
Underground Storage Tanks (UST)	0	--
Wastewater Discharge	68	68



Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2010 U.S. Census and 2017 - 2021 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. EPA's spatial processing methodology considers the overlap between the selected radii and the census blocks (for U.S. Census demographics) and census block groups (for ACS demographics) in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

General Statistics (U.S. Census)	
Total Persons	8
Population Density	3/sq.mi.
Housing Units in Area	4

General Statistics (ACS (American Community Survey))	
Total Persons	2
Percent People of Color	0%
Households in Area	1
Households on Public Assistance	0
Persons With Low Income	1
Percent With Low Income	50%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	44.862972
Center Longitude	-104.141121
Land Area	100%
Water Area	0%

Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than $15,000	--
$15,000 - $25,000	--
$25,000 - $50,000	--
$50,000 - $75,000	--
Greater than $75,000	--

Age Breakdown (U.S. Census) - Persons (%)	
Children 5 years and younger	0 (0%)
Minors 17 years and younger	1 (13%)
Adults 18 years and older	6 (75%)
Seniors 65 years and older	3 (38%)

Race Breakdown (U.S. Census) - Persons (%)	
White	8 (100%)
African-American	0 (0%)
Hispanic-Origin	0 (0%)
Asian/Pacific Islander	0 (0%)
American Indian	0 (0%)
Other/Multiracial	0 (0%)

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	0 (0%)
9th through 12th Grade	0 (0%)
High School Diploma	1 (50%)
Some College/2-year	1 (50%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	0 (0%)

Detailed Facility Report

Facility Summary

BENTONITE PERFORMANCE MINERALS

554 US HIGHWAY 212, ALZADA, MT 59311

FRS (Facility Registry Service) ID: 110011047866

EPA Region: 08

Latitude: 45.025556

Longitude: -104.561667

Locational Data Source: NPDES

Industries: --

Indian Country: N

Enforcement and Compliance Summary

Statute	CWA
Compliance Monitoring Activities (5 years)	1
Date of Last Compliance Monitoring Activity	07/27/2023
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): Non-Major, Permit Effective (MTR000526), Non-Major, Permit Expired (MTR300092)

Resource Conservation and Recovery Act (RCRA): No Information

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Known Data Problems <https://epa.gov/resources/echo-data/known-data-problems>

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110011047866					N	45.025556	-104.561667
ICIS-NPDES	CWA	MTR000526	Non-Major: General Permit Covered Facility	Effective	Industrial Stormwater	01/31/2028	N	45.030833	-104.583333
ICIS-NPDES	CWA	MTR300092	Non-Major: General Permit Covered Facility	Expired	Industrial Stormwater	12/31/2012	N	45.030833	-104.583333

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110011047866	BENTONITE PERFORMANCE MINERALS	554 US HIGHWAY 212, ALZADA, MT 59311	
ICIS-NPDES	CWA	MTR000526	BENTONITE PERFORMANCE MINERALS	554 US HIGHWAY 212, ALZADA, MT 59311	Carter County
ICIS-NPDES	CWA	MTR300092	BENTONITE PERFORMANCE MINERALS	W OF ALZADA ON RIDGE ROAD, ALZADA, MT 59311	Carter County

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description
ICIS-NPDES	MTR000526	1459	Clay And Related Minerals
ICIS-NPDES	MTR300092	1459	Clay And Related Minerals

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description

No data records returned

Facility Industrial Effluent Guidelines

Identifier	Effluent Guideline (40 CFR Part)	Effluent Guideline Description

No data records returned

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)

No data records returned

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)
CWA	MTR000526	ICIS-NPDES	Inspection/Evaluation	Base Program, Industrial Stormwater - Evaluation	State	07/27/2023	

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy <https://www.epa.gov/compliance/compliance-monitoring-programs> *activities or because they are not counted as inspections within EPA's Annual Results* <https://www.epa.gov/enforcement/enforcement-data-and-results>.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
CWA	MTR000526	No	09/30/2023	0	02/02/2024
CWA	MTR300092	No	09/30/2023	0	02/02/2024

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12	QTR 13+
CWA (Source ID: MTR000526)		10/01-12/31/20	01/01-03/31/21	04/01-06/30/21	07/01-09/30/21	10/01-12/31/21	01/01-03/31/22	04/01-06/30/22	07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-02/02/24

Statute	Program/Pollutant/Violation Type	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12	QTR 13+
	Facility-Level Status	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	Undetermined
	Quarterly Noncompliance Report History													
CWA (Source ID: MTR300092)		10/01-12/31/20	01/01-03/31/21	04/01-06/30/21	07/01-09/30/21	10/01-12/31/21	01/01-03/31/22	04/01-06/30/22	07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-02/02/24
	Facility-Level Status	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	Undetermined
	Quarterly Noncompliance Report History													

Informal Enforcement Actions

Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute	System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?
101102010403	Middle Thompson Creek	AN UNNAMED TRIBUTARY OF THOMPSON CREEK, NORTH CREEK, SHELDEN CREEK	No	No	--	No
101102010404	Lower Thompson Creek	AN UNNAMED TRIBUTARY OF THOMPSON CREEK, NORTH CREEK, SHELDEN CREEK	No	No	--	No

Assessed Waters From Latest State Submission (ATTAINS)

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

CWA (Clean Water Act) Discharge Monitoring Report (DMR) Pollutant Loadings

DMR and TRI Multi-Year Loading Report

NPDES ID	Description

No data records returned

Community

Environmental Justice

This section shows indexes from EJScreen, EPA's screening tool for environmental justice (EJ) concerns. EPA uses these indexes to identify geographic areas that may warrant further consideration or analysis for potential EJ concerns. Use of these indexes does not designate an area as an "EJ community" or "EJ facility." EJScreen provides screening level indicators, not a determination of the existence or absence of EJ concerns. For more information, see the EJScreen home page.

EJScreen Indexes Shown

Compare to (●) US ( ) State

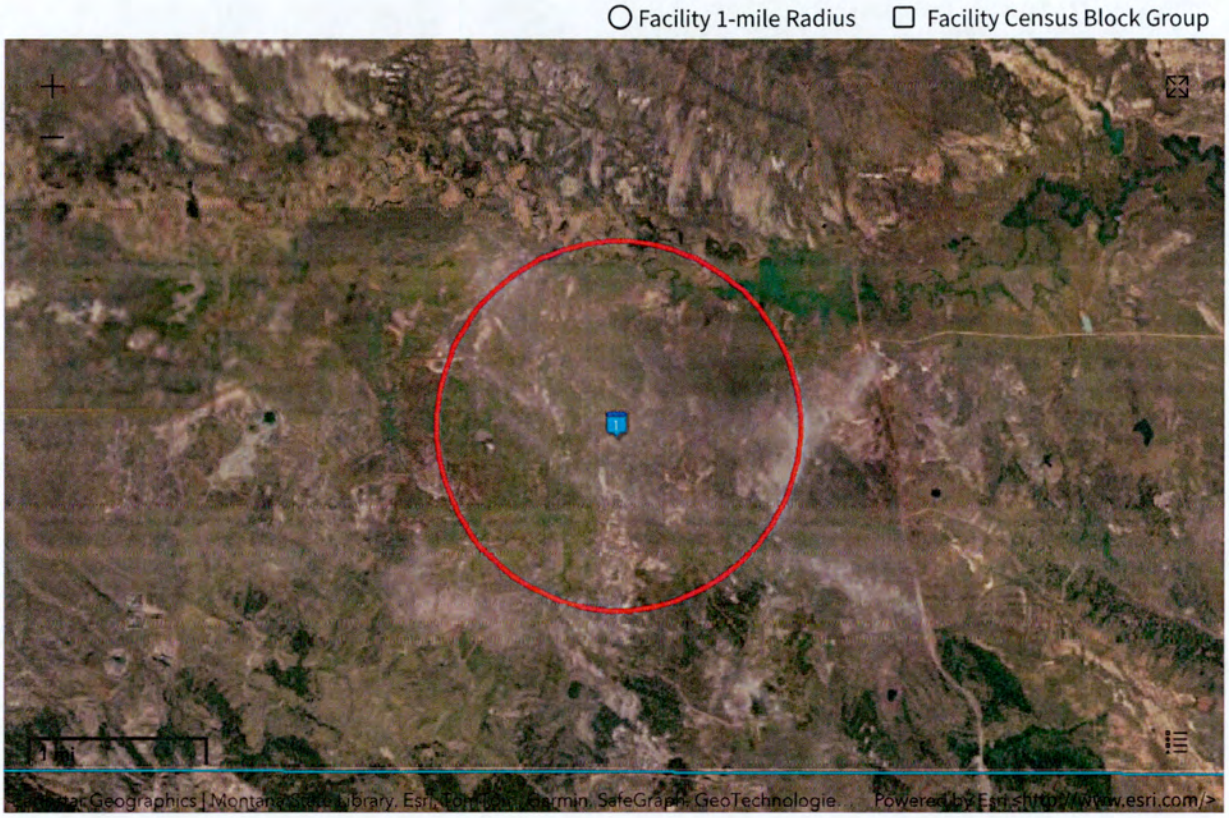
Index Type ( ) Environmental Justice (●) Supplemental

Related Reports

EJScreen Community Report

Download Data

Census Block Group ID: 300110003002	US (Percentile)	
Supplemental Indexes	Facility Census Block Group	1-mile Max
Count of Indexes At or Above 80th Percentile	**0**	**0**
Particulate Matter 2.5	4	4
Ozone	19	19
Diesel Particulate Matter	0	--
Air Toxics Cancer Risk	3	3
Air Toxics Respiratory Hazard Index	3	3
Toxic Releases to Air	0	--
Traffic Proximity	4	4
Lead Paint	65	65
Risk Management Plan (RMP) Facility Proximity	0	--
Hazardous Waste Proximity	0	--
Superfund Proximity	3	3
Underground Storage Tanks (UST)	0	--
Wastewater Discharge	8	8



Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2010 U.S. Census and 2017 - 2021 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. EPA's spatial processing methodology considers the overlap between the selected radii and the census blocks (for U.S. Census demographics) and census block groups (for ACS demographics) in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

General Statistics (U.S. Census)	
Total Persons	0
Population Density	0/sq.mi.
Housing Units in Area	0

General Statistics (ACS (American Community Survey))	
Total Persons	1
Percent People of Color	0%
Households in Area	0
Households on Public Assistance	0
Persons With Low Income	0
Percent With Low Income	0%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	45.025556
Center Longitude	-104.561667
Land Area	100%

Age Breakdown (U.S. Census) - Persons (%)	
Children 5 years and younger	--
Minors 17 years and younger	--
Adults 18 years and older	--
Seniors 65 years and older	--

Race Breakdown (U.S. Census) - Persons (%)	
White	--
African-American	--
Hispanic-Origin	--
Asian/Pacific Islander	--
American Indian	--
Other/Multiracial	--

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	0 (0%)
9th through 12th Grade	0 (0%)
High School Diploma	0 (0%)

Geography	
Water Area	0%
Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than $15,000	--
$15,000 - $25,000	--
$25,000 - $50,000	--
$50,000 - $75,000	--
Greater than $75,000	--

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Some College/2-year	0 (0%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	0 (0%)

Detailed Facility Report

Facility Summary

BENTONITE PERFORMANCE MINERALS-COLONY

554 HWY 212 (ZIP PROVIDED IS NOT WY), BELLE FOURCHE, SD 57717

FRS (Facility Registry Service) ID: 110063969843

EPA Region: 08

Latitude: 44.68109

Longitude: -103.8518

Locational Data Source: FRS

Industries: Mining (except Oil and Gas)

Indian Country: N

Enforcement and Compliance Summary

Statute	CAA
Compliance Monitoring Activities (5 years)	--
Date of Last Compliance Monitoring Activity	--
Compliance Status	--
Qtrs in Noncompliance (of 12)	--
Qtrs with Significant Violation	--
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): No Information

Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): 1003913

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Go To Enforcement/Compliance Details

Known Data Problems <https://epa.gov/resources/echo-data/known-data-problems>

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110063969843					N	44.68109	-103.8518
GHGRP	CAA	1003913	Direct Emitter	Reporting Year 2022: Emitter - Reporting and meeting Verification requirements.	General Stationary Fuel Combustion		N		

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110063969843	BENTONITE PERFORMANCE MINERALS-COLONY	554 HWY 212 (ZIP PROVIDED IS NOT WY), BELLE FOURCHE, SD 57717	
GHGRP	CAA	1003913	BENTONITE PERFORMANCE MINERALS-COLONY	554 HWY 212 (ZIP PROVIDED IS NOT WY), BELLE FOURCHE, SD 57717	Butte County

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description

No data records returned

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description
GHGRP	1003913	212323	Kaolin, Clay, and Ceramic and Refractory Minerals Mining

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)
Northern Cheyenne Indian Reservation	Northern Cheyenne Tribe of the Northern Cheyenne Indian Reservation, Montana	100000175	24.98

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy <https://www.epa.gov/compliance/compliance-monitoring-programs> *activities or because they are not counted as inspections within EPA's Annual Results* <https://www.epa.gov/enforcement/enforcement-data-and-results>.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed

No data records returned

Three-Year Compliance History by Quarter

Informal Enforcement Actions

Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute	System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?

No data records returned

Assessed Waters From Latest State Submission (ATTAINS)

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at

Air Pollutant Report

Site

TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

Community

Environmental Justice

This section shows indexes from EJScreen, EPA's screening tool for environmental justice (EJ) concerns. EPA uses these indexes to identify geographic areas that may warrant further consideration or analysis for potential EJ concerns. Use of these indexes does not designate an area as an "EJ community" or "EJ facility." EJScreen provides screening level indicators, not a determination of the existence or absence of EJ concerns. For more information, see the EJScreen home page.

EJScreen Indexes Shown

Compare to (•) US ( ) State

Index Type ( ) Environmental Justice (•) Supplemental

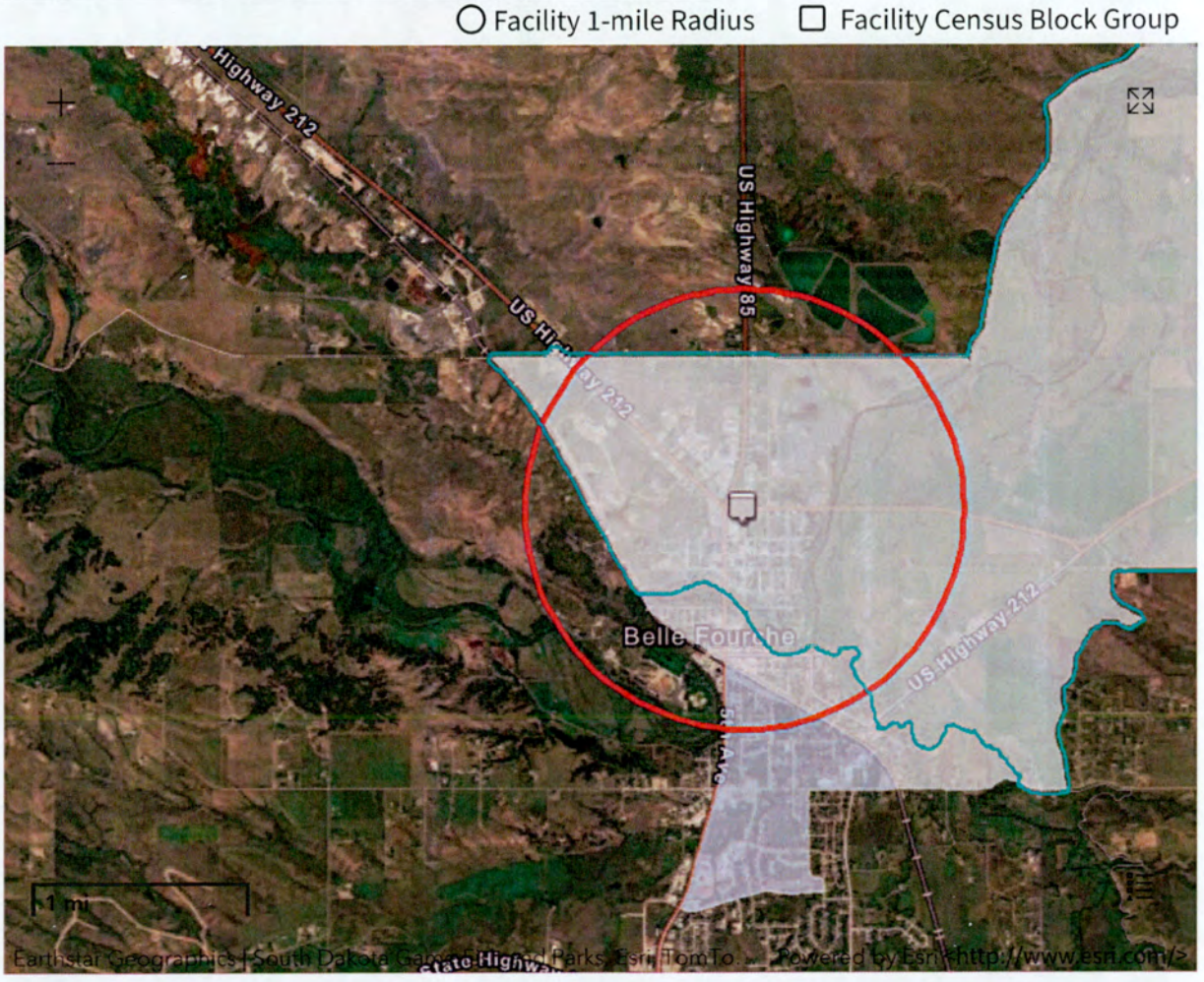
Related Reports

EJScreen Community Report

Download Data

Census Block Group ID: 460199677021	US (Percentile)	
Supplemental Indexes	**Facility Census Block Group**	**1-mile Max**
Count of Indexes At or Above 80th Percentile	**1**	**3**
Particulate Matter 2.5	0	4
Ozone	20	20
Diesel Particulate Matter	5	5
Air Toxics Cancer Risk	8	8
Air Toxics Respiratory Hazard Index	6	6
Toxic Releases to Air	5	5
Traffic Proximity	61	78
Lead Paint	76	! 87
Risk Management Plan (RMP) Facility Proximity	3	3

Census Block Group ID: 460199677021	US (Percentile)	
Supplemental Indexes	Facility Census Block Group	1-mile Max
Hazardous Waste Proximity	9	11
Superfund Proximity	48	49
Underground Storage Tanks (UST)	70	! 87
Wastewater Discharge	! 91	! 91



Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2010 U.S. Census and 2017 - 2021 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. EPA's spatial processing methodology considers the overlap between the selected radii and the census blocks (for U.S. Census demographics) and census block groups (for ACS demographics) in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

General Statistics (U.S. Census)	
Total Persons	1,604
Population Density	526/sq.mi.
Housing Units in Area	797

General Statistics (ACS (American Community Survey))	
Total Persons	691
Percent People of Color	5%
Households in Area	321
Households on Public Assistance	5
Persons With Low Income	281
Percent With Low Income	42%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	44.68109
Center Longitude	-103.8518
Land Area	99%
Water Area	1%

Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than $15,000	33 (10.28%)
$15,000 - $25,000	78 (24.3%)
$25,000 - $50,000	86 (26.79%)
$50,000 - $75,000	63 (19.63%)
Greater than $75,000	61 (19%)

Age Breakdown (U.S. Census) - Persons (%)	
Children 5 years and younger	153 (10%)
Minors 17 years and younger	398 (25%)
Adults 18 years and older	1,206 (75%)
Seniors 65 years and older	195 (12%)

Race Breakdown (U.S. Census) - Persons (%)	
White	1,445 (90%)
African-American	7 (0%)
Hispanic-Origin	85 (5%)
Asian/Pacific Islander	7 (0%)
American Indian	54 (3%)
Other/Multiracial	91 (6%)

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	20 (4.33%)
9th through 12th Grade	58 (12.55%)
High School Diploma	132 (28.57%)
Some College/2-year	143 (30.95%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	75 (16.23%)

Detailed Facility Report

Facility Summary

BENTONITE PERFORMANCE MINERALS

325 ROUNDUP ST, BELLE FOURCHE, SD 57717

FRS (Facility Registry Service) ID: 110071248847

EPA Region: 08

Latitude: 44.671367

Longitude: -103.856035

Locational Data Source: RCRAINFO

Industries: --

Indian Country: N

Enforcement and Compliance Summary

Statute	RCRA
Compliance Monitoring Activities (5 years)	1
Date of Last Compliance Monitoring Activity	02/16/2022
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Resource Conservation and Recovery Act (RCRA): Active VSQG, (SDR000206508)

Safe Drinking Water Act (SDWA): No Information

Compliance and Emissions Data Reporting Interface (CEDRI):
No Information

Go To Enforcement/Compliance Details
Known Data Problems <https://epa.gov/resources/echo-data/known-data-problems>

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110071248847					N	44.671367	-103.856035
RCRAInfo	RCRA	SDR000206508	VSQG	Active (H)			N	44.671367	-103.856035

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110071248847	BENTONITE PERFORMANCE MINERALS	325 ROUNDUP ST, BELLE FOURCHE, SD 57717	Butte County
RCRAInfo	RCRA	SDR000206508	BENTONITE PERFORMANCE MINERALS	325 ROUNDUP ST, BELLE FOURCHE, SD 57717	Butte County

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description

No data records returned

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description

No data records returned

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)
Northern Cheyenne Indian Reservation	Northern Cheyenne Tribe of the Northern Cheyenne Indian Reservation, Montana	100000175	24.77

Enforcement and Compliance

RCRA (Hazardous Waste (Resource Conservation and Recovery Act) Compliance Pipeline (Compliance Monitoring >> Violations >> Enforcement Actions) (10 Years)

This table shows how violations relate to compliance monitoring (CM) activities and enforcement. Currently available for RCRA only. Full CM history available below.
There are no relationships to display in the RCRA Compliance Pipeline table for this facility. Scroll down to view compliance monitoring history.

Compliance Monitoring History

Last 5 Years

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)
RCRA	SDR000206508	RCRAInfo		Compliance Evaluation Inspection	State	02/16/2022	No Violations Or Compliance Issues Were Found

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy <https://www.epa.gov/compliance/compliance-monitoring-programs> *activities or because they are not counted as inspections within EPA's Annual Results* <https://www.epa.gov/enforcement/enforcement-data-and-results>.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	SDR000206508	No	02/03/2024	0	02/02/2024

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type		QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12+
RCRA (Source ID: SDR000206508)			04/01-06/30/21	07/01-09/30/21	10/01-12/31/21	01/01-03/31/22	04/01-06/30/22	07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24
	Facility-Level Status		No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified
	Violation	Agency												

Informal Enforcement Actions

Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute	System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?

No data records returned

Assessed Waters From Latest State Submission (ATTAINS)

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

Community

Environmental Justice

This section shows indexes from EJScreen, EPA's screening tool for environmental justice (EJ) concerns. EPA uses these indexes to identify geographic areas that may warrant further consideration or analysis for potential EJ concerns. Use of these indexes does not designate an area as an "EJ community" or "EJ facility." EJScreen provides screening level indicators, not a determination of the existence or absence of EJ concerns. For more information, see the EJScreen home page.

EJScreen Indexes Shown

Compare to (●) US ( ) State

Index Type ( ) Environmental Justice (●) Supplemental

Related Reports

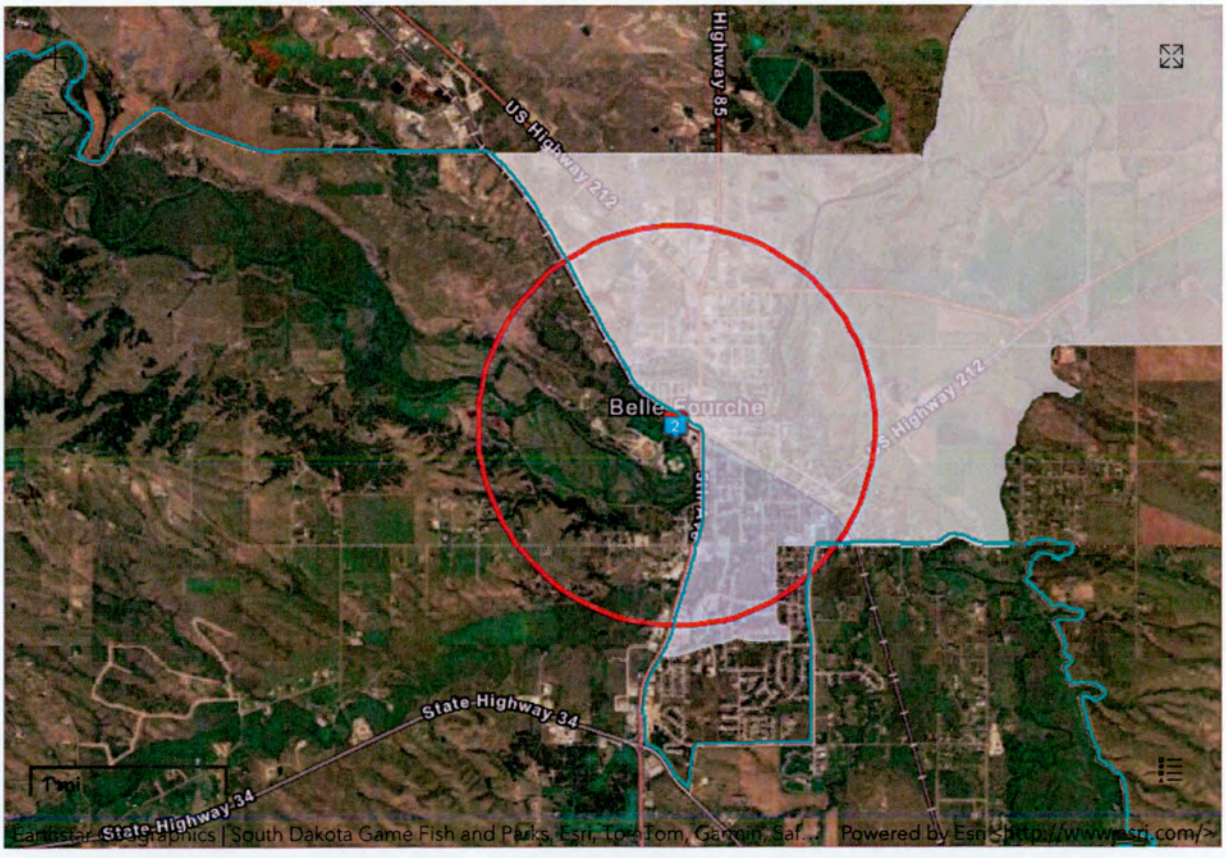
EJScreen Community Report

Download Data

Census Block Group ID: 460199677012	US (Percentile)	
Supplemental Indexes	Facility Census Block Group	1-mile Max
Count of Indexes At or Above 80th Percentile	**0**	**3**
Particulate Matter 2.5	0	--
Ozone	10	20

Census Block Group ID: 460199677012	US (Percentile)	
Supplemental Indexes	Facility Census Block Group	1-mile Max
Diesel Particulate Matter	2	5
Air Toxics Cancer Risk	1	8
Air Toxics Respiratory Hazard Index	0	6
Toxic Releases to Air	2	5
Traffic Proximity	25	78
Lead Paint	29	87
Risk Management Plan (RMP) Facility Proximity	0	3
Hazardous Waste Proximity	4	11
Superfund Proximity	21	49
Underground Storage Tanks (UST)	29	87
Wastewater Discharge	57	91

○ Facility 1-mile Radius ☐ Facility Census Block Group



Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2010 U.S. Census and 2017 - 2021 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. EPA's spatial processing methodology considers the overlap between the selected radii and the census blocks (for U.S. Census

demographics) and census block groups (for ACS demographics) in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

General Statistics (U.S. Census)	
Total Persons	3,018
Population Density	889/sq.mi.
Housing Units in Area	1,492

General Statistics (ACS (American Community Survey))	
Total Persons	1,388
Percent People of Color	12%
Households in Area	771
Households on Public Assistance	6
Persons With Low Income	585
Percent With Low Income	43%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	44.671367
Center Longitude	-103.856035
Land Area	100%
Water Area	0%

Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than $15,000	78 (10.13%)
$15,000 - $25,000	262 (34.03%)
$25,000 - $50,000	181 (23.51%)
$50,000 - $75,000	107 (13.9%)
Greater than $75,000	142 (18.44%)

Age Breakdown (U.S. Census) - Persons (%)	
Children 5 years and younger	257 (9%)
Minors 17 years and younger	722 (24%)
Adults 18 years and older	2,295 (76%)
Seniors 65 years and older	454 (15%)

Race Breakdown (U.S. Census) - Persons (%)	
White	2,793 (93%)
African-American	9 (0%)
Hispanic-Origin	146 (5%)
Asian/Pacific Islander	13 (0%)
American Indian	77 (3%)
Other/Multiracial	125 (4%)

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	14 (1.34%)
9th through 12th Grade	115 (11%)
High School Diploma	441 (42.2%)
Some College/2-year	272 (26.03%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	145 (13.88%)

Detailed Facility Report

Facility Summary

BENTONITE PERFORMANCE MINERALS

20 MILES WEST OF HIGHWAY 212, BEULAH, WY 82712

FRS (Facility Registry Service) ID: 110015305677

EPA Region: 08

Latitude: 44.543258

Longitude: -104.066291

Locational Data Source: Zip Code Centroid

Industries: --

Indian Country: N

Enforcement and Compliance Summary

No data records returned

Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): No Information

Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Go To Enforcement/Compliance Details

Known Data Problems <https://epa.gov/resources/echo-data/known-data-problems>

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110015305677					N		
ICIS		2629214					N		

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110015305677	BENTONITE PERFORMANCE MINERALS	20 MILES WEST OF HIGHWAY 212, BEULAH, WY 82712	Crook County
ICIS		2629214	BENTONITE PERFORMANCE MINERALS	20 MILES WEST OF HIGHWAY 212, BEULAH, WY 82712	Crook County

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description

No data records returned

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description

No data records returned

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)

No data records returned

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy <https://www.epa.gov/compliance/compliance-monitoring-programs> *activities or because they are not counted as inspections within EPA's Annual Results* <https://www.epa.gov/enforcement/enforcement-data-and-results>.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed

No data records returned

Three-Year Compliance History by Quarter

Informal Enforcement Actions

Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute	System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?

No data records returned

Assessed Waters From Latest State Submission (ATTAINS)

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

Community

Environmental Justice

This section shows indexes from EJScreen, EPA's screening tool for environmental justice (EJ) concerns. EPA uses these indexes to identify geographic areas that may warrant further consideration or analysis for potential EJ concerns. Use of these indexes does not designate an area as an "EJ community" or "EJ facility." EJScreen provides screening level indicators, not a determination of the existence or absence of EJ concerns. For more information, see the EJScreen home page.

No valid spatial coordinate is available for this facility.

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2010 U.S. Census and 2017 - 2021 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. EPA's spatial processing methodology considers the overlap between the selected radii and the census blocks (for U.S. Census demographics) and census block groups (for ACS demographics) in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

No demographic profile information available for this facility.

Detailed Facility Report

Facility Summary

BENTONITE PERFORMANCE MINERALS LLC, COLONY WYOMING PLANT

554 HIGHWAY 212, COLONY, WY 82710

FRS (Facility Registry Service) ID: 110070646820

EPA Region: 08

Latitude: 44.930607

Longitude: -104.276645

Locational Data Source: RCRAINFO

Industries: --

Indian Country: N

Enforcement and Compliance Summary

Statute	RCRA
Compliance Monitoring Activities (5 years)	1
Date of Last Compliance Monitoring Activity	04/25/2023
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Resource Conservation and Recovery Act (RCRA): Active VSQG, (WYR000211441)

Safe Drinking Water Act (SDWA): No Information

Compliance and Emissions Data Reporting Interface (CEDRI):
No Information

Go To Enforcement/Compliance Details
Known Data Problems <https://epa.gov/resources/echo-data/known-data-problems>

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110070646820					N	44.930607	-104.276645
RCRAInfo	RCRA	WYR000211441	VSQG	Active (H)			N	44.930607	-104.276645

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110070646820	BENTONITE PERFORMANCE MINERALS LLC, COLONY WYOMING PLANT	554 HIGHWAY 212, COLONY, WY 82710	Crook County
RCRAInfo	RCRA	WYR000211441	BENTONITE PERFORMANCE MINERALS LLC, COLONY WYOMING PLANT	554 HIGHWAY 212, COLONY, WY 82710	Crook County

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description

No data records returned

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description

No data records returned

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)

No data records returned

Enforcement and Compliance

RCRA (Hazardous Waste (Resource Conservation and Recovery Act) Compliance Pipeline (Compliance Monitoring >> Violations >> Enforcement Actions) (10 Years)

This table shows how violations relate to compliance monitoring (CM) activities and enforcement. Currently available for RCRA only. Full CM history available below.
There are no relationships to display in the RCRA Compliance Pipeline table for this facility. Scroll down to view compliance monitoring history.

Compliance Monitoring History

Last 5 Years

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)
RCRA	WYR000211441	RCRAInfo		Compliance Evaluation Inspection	State	04/25/2023	No Violations Or Compliance Issues Were Found

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy <https://www.epa.gov/compliance/compliance-monitoring-programs> *activities or because they are not counted as inspections within EPA's Annual Results* <https://www.epa.gov/enforcement/enforcement-data-and-results>.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	WYR000211441	No	02/03/2024	0	02/02/2024

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type		QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12+
RCRA (Source ID: WYR000211441)			04/01-06/30/21	07/01-09/30/21	10/01-12/31/21	01/01-03/31/22	04/01-06/30/22	07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24
	Facility-Level Status		No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified
	Violation	Agency												

Informal Enforcement Actions

Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute	System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?

No data records returned

Assessed Waters From Latest State Submission (ATTAINS)

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

Community

Environmental Justice

This section shows indexes from EJScreen, EPA's screening tool for environmental justice (EJ) concerns. EPA uses these indexes to identify geographic areas that may warrant further consideration or analysis for potential EJ concerns. Use of these indexes does not designate an area as an "EJ community" or "EJ facility." EJScreen provides screening level indicators, not a determination of the existence or absence of EJ concerns. For more information, see the EJScreen home page.

EJScreen Indexes Shown

Compare to (•) US ( ) State

Index Type ( ) Environmental Justice (•) Supplemental

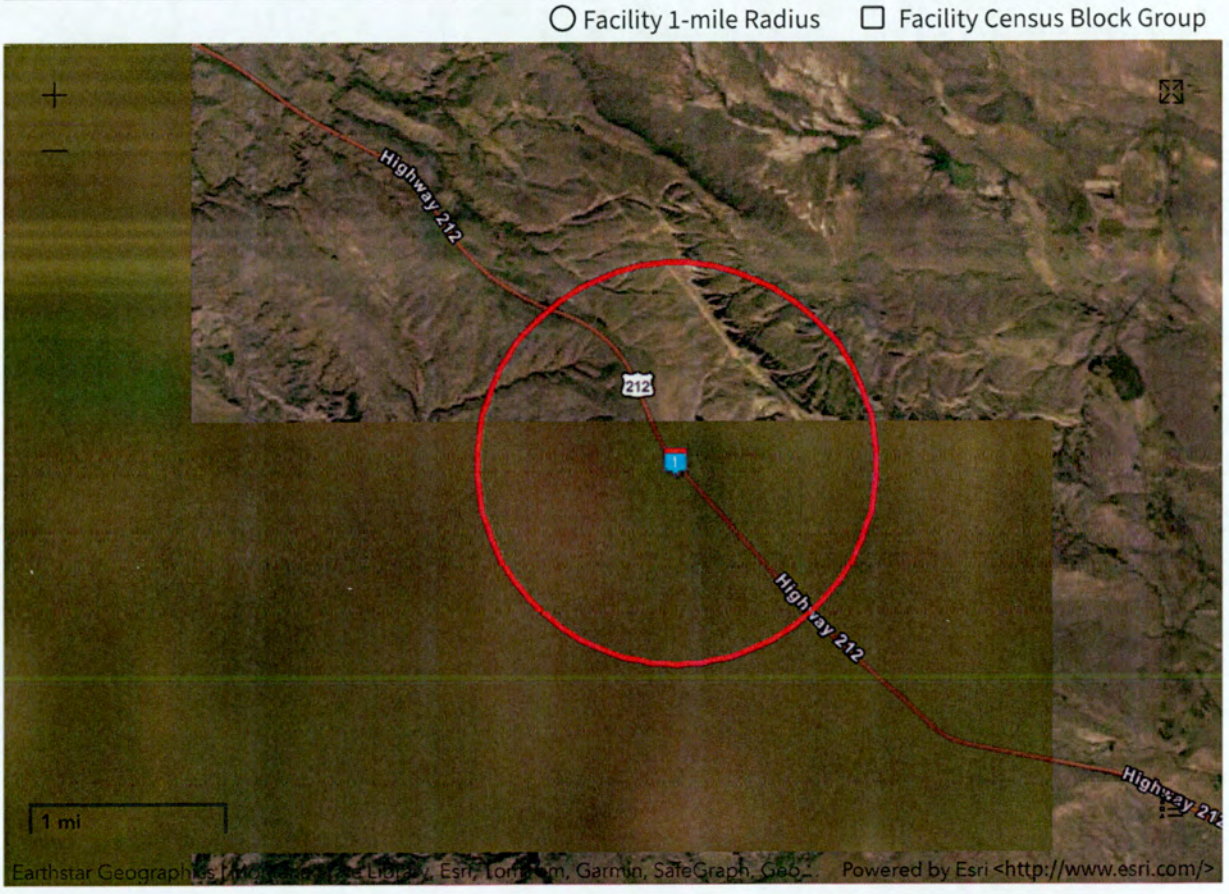
Related Reports

EJScreen Community Report

Download Data

Census Block Group ID: 560119502001	US (Percentile)	
Supplemental Indexes	Facility Census Block Group	1-mile Max
Count of Indexes At or Above 80th Percentile	**0**	**0**
Particulate Matter 2.5	0	--
Ozone	21	21
Diesel Particulate Matter	2	2
Air Toxics Cancer Risk	2	2
Air Toxics Respiratory Hazard Index	3	3
Toxic Releases to Air	12	12
Traffic Proximity	0	--

Census Block Group ID: 560119502001	US (Percentile)	
Supplemental Indexes	Facility Census Block Group	1-mile Max
Lead Paint	50	50
Risk Management Plan (RMP) Facility Proximity	0	--
Hazardous Waste Proximity	0	--
Superfund Proximity	7	7
Underground Storage Tanks (UST)	0	--
Wastewater Discharge	68	68



Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2010 U.S. Census and 2017 - 2021 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. EPA's spatial processing methodology considers the overlap between the selected radii and the census blocks (for U.S. Census demographics) and census block groups (for ACS demographics) in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

General Statistics (U.S. Census)	
Total Persons	0
Population Density	0/sq.mi.
Housing Units in Area	0

Age Breakdown (U.S. Census) - Persons (%)	
Children 5 years and younger	--
Minors 17 years and younger	--
Adults 18 years and older	--

General Statistics (ACS (American Community Survey))	
Total Persons	2
Percent People of Color	0%
Households in Area	1
Households on Public Assistance	0
Persons With Low Income	1
Percent With Low Income	50%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	44.930607
Center Longitude	-104.276645
Land Area	100%
Water Area	0%

Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than $15,000	--
$15,000 - $25,000	--
$25,000 - $50,000	--
$50,000 - $75,000	--
Greater than $75,000	--

Age Breakdown (U.S. Census) - Persons (%)	
Seniors 65 years and older	--
Race Breakdown (U.S. Census) - Persons (%)	
White	--
African-American	--
Hispanic-Origin	--
Asian/Pacific Islander	--
American Indian	--
Other/Multiracial	--

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	0 (0%)
9th through 12th Grade	0 (0%)
High School Diploma	1 (50%)
Some College/2-year	1 (50%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	0 (0%)

Detailed Facility Report

Facility Summary

BENTONITE PERFORMANCE MINERALS LLC LOVELL

789 HWY 14A, LOVELL, WY 82431

FRS (Facility Registry Service) ID: 110025331674

EPA Region: 08

Latitude: 44.82434

Longitude: -108.14365

Locational Data Source: TRIS

Industries: Mining (except Oil and Gas)

Indian Country: N

Enforcement and Compliance Summary

Statute	CAA
Compliance Monitoring Activities (5 years)	--
Date of Last Compliance Monitoring Activity	--
Compliance Status	--
Qtrs in Noncompliance (of 12)	--
Qtrs with Significant Violation	--
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): No Information

Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): 1003718

Toxic Releases (TRI): 82431BNTNT789HW

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Go To Enforcement/Compliance Details

Known Data Problems <https://epa.gov/resources/echo-data/known-data-problems>

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110025331674					N	44.82434	-108.14365
ICIS		3000036330					N	44.82434	-108.14365
GHGRP	CAA	1003718	Direct Emitter	Reporting Year 2022: Emitter - Reporting and meeting Verification requirements.	General Stationary Fuel Combustion		N		
TRI	EP313	82431BNTNT789HW	Toxics Release Inventory	Last Reported for 2007			N	44.82434	-108.14365

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110025331674	BENTONITE PERFORMANCE MINERALS LLC LOVELL	789 HWY 14A, LOVELL, WY 82431	Big Horn County
ICIS		3000036330	BENTONITE PERFORMANCE MINERALS	789 HIGHWAY 14A, LOVELL, WY 82431	Big Horn County
GHGRP	CAA	1003718	BENTONITE PERFORMANCE MINERALS LLC LOVELL	789 HWY 14A, LOVELL, WY 82431	Big Horn County
TRI	EP313	82431BNTNT789HW	BENTONITE PERFORMANCE MINERALS LLC LOVELL	789 HWY 14A, LOVELL, WY 82431	Big Horn County

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description

No data records returned

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description
GHGRP	1003718	212323	Kaolin, Clay, and Ceramic and Refractory Minerals Mining

System	Identifier	NAICS Code	NAICS Description
TRI	82431BNTNT789HW	327992	Ground or Treated Mineral and Earth Manufacturing
TRI	82431BNTNT789HW	327999	All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)
Crow Reservation	Crow Tribe of Montana	100000069	12.17

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy <https://www.epa.gov/compliance/compliance-monitoring-programs> *activities or because they are not counted as inspections within EPA's Annual Results* <https://www.epa.gov/enforcement/enforcement-data-and-results>.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed

No data records returned

Three-Year Compliance History by Quarter

Informal Enforcement Actions

Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute	System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?

No data records returned

Assessed Waters From Latest State Submission (ATTAINS)

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

Air Pollutant Report

TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

Community

Environmental Justice

This section shows indexes from EJScreen, EPA's screening tool for environmental justice (EJ) concerns. EPA uses these indexes to identify geographic areas that may warrant further consideration or analysis for potential EJ concerns. Use of these indexes does not designate an area as an "EJ community" or "EJ facility." EJScreen provides screening level indicators, not a determination of the existence or absence of EJ concerns. For more information, see the EJScreen home page.

EJScreen Indexes Shown

Compare to (•) US ( ) State

Index Type ( ) Environmental Justice (•) Supplemental

Related Reports

EJScreen Community Report

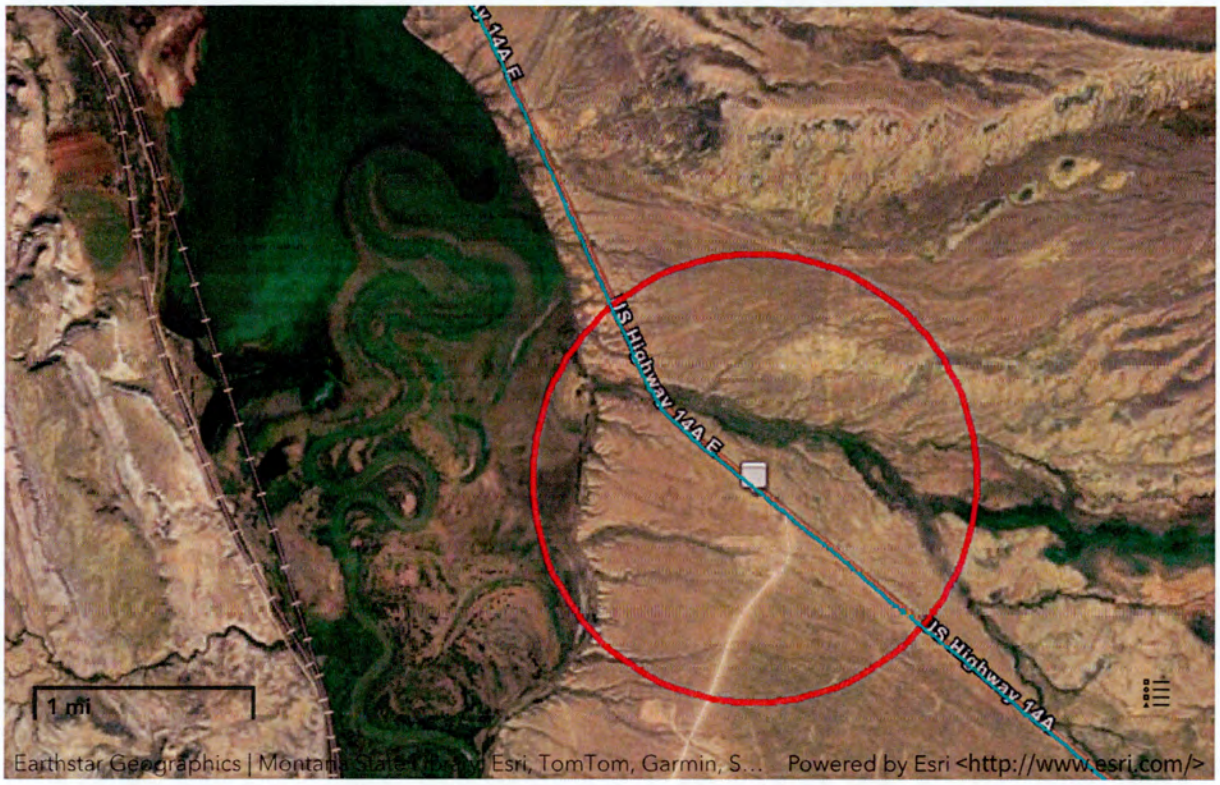
Download Data

Census Block Group ID: 560039628001	US (Percentile)	
Supplemental Indexes	**Facility Census Block Group**	**1-mile Max**
Count of Indexes At or Above 80th Percentile	**0**	**1**
Particulate Matter 2.5	0	--
Ozone	16	16
Diesel Particulate Matter	2	2
Air Toxics Cancer Risk	4	4
Air Toxics Respiratory Hazard Index	3	3
Toxic Releases to Air	3	3
Traffic Proximity	24	24
Lead Paint	65	65
Risk Management Plan (RMP) Facility Proximity	34	41
Hazardous Waste Proximity	0	--
Superfund Proximity	6	6
Underground Storage Tanks (UST)	37	37
Wastewater Discharge	18	! 80

( ) Facility 1-mile Radius ☐ Facility Census Block Group







Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2010 U.S. Census and 2017 - 2021 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. EPA's spatial processing methodology considers the overlap between the selected radii and the census blocks (for U.S. Census demographics) and census block groups (for ACS demographics) in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

General Statistics (U.S. Census)	
Total Persons	0
Population Density	0/sq.mi.
Housing Units in Area	0

General Statistics (ACS (American Community Survey))	
Total Persons	10
Percent People of Color	10%
Households in Area	3
Households on Public Assistance	0
Persons With Low Income	2
Percent With Low Income	20%

Age Breakdown (U.S. Census) - Persons (%)	
Children 5 years and younger	--
Minors 17 years and younger	--
Adults 18 years and older	--
Seniors 65 years and older	--

Race Breakdown (U.S. Census) - Persons (%)	
White	--
African-American	--
Hispanic-Origin	--
Asian/Pacific Islander	--
American Indian	--
Other/Multiracial	--

Geography	
Radius of Selected Area	1 mi.
Center Latitude	44.82434
Center Longitude	-108.14365
Land Area	100%
Water Area	0%

Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than $15,000	0 (0%)
$15,000 - $25,000	0 (0%)
$25,000 - $50,000	0 (0%)
$50,000 - $75,000	0 (0%)
Greater than $75,000	2 (100%)

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	0 (0%)
9th through 12th Grade	0 (0%)
High School Diploma	2 (40%)
Some College/2-year	2 (40%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	2 (40%)

Detailed Facility Report

Facility Summary

BENTONITE PERFORMANCE MINERALS/LOVELL-TREATMENT BUILDING

789 US HWY 14A E, LOVELL, WY 82431

FRS (Facility Registry Service) ID: 110050583221

EPA Region: 08

Latitude: 44.82382

Longitude: -108.409844

Locational Data Source: Zip Code Centroid

Industries: --

Indian Country: N

Enforcement and Compliance Summary

Statute	SDWA
Compliance Monitoring Activities (5 years)	--
Date of Last Compliance Monitoring Activity	--
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): No Information

Safe Drinking Water Act (SDWA): OWNER: Private, PRIMARY SERVICE AREA DESCRIPTION: Industrial/Agricultural, SOURCE: Ground water, TYPE: Non-Transient non-community system Permit Active (WY5601475)

Go To Enforcement/Compliance Details

Known Data Problems <https://epa.gov/resources/echo-data/known-data-problems>

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110050583221					N		
SDWIS	SDWA	WY5601475	OWNER: Private, PRIMARY SERVICE AREA DESCRIPTION: Industrial/Agricultural, SOURCE: Ground water, TYPE: Non-Transient non-community system	Active	Population Served: 68		N		

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110050583221	BENTONITE PERFORMANCE MINERALS/LOVELL-TREATMENT BUILDING	789 US HWY 14A E, LOVELL, WY 82431	Butte County
SDWIS	SDWA	WY5601475	BENTONITE PERFORMANCE MINERALS/LOVELL	WY	

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description

No data records returned

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description

No data records returned

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)

No data records returned

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)
SDWA	*WY5601475*	*SDWIS*		*Sanitary Survey, Complete*	*EPA*	*08/04/2022*	

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy <https://www.epa.gov/compliance/compliance-monitoring-programs> *activities or because they are not counted as inspections within EPA's Annual Results* <https://www.epa.gov/enforcement/enforcement-data-and-results>.

SDWA (Safe Drinking Water Act) Sanitary Survey Results (5 Years)

Source ID	Date	Type	Agency	Data Verification	Distribution	Management Operation	Finished Water Storage	Operator Compliance	Other Evaluation	Pumps	Security	Source
WY5601475	08/04/2022	Sanitary Survey, Complete	Region	N (No deficiencies or recommendations.)	N (No deficiencies or recommendations.)	N (No deficiencies or recommendations.)	N (No deficiencies or recommendations.)	N (No deficiencies or recommendations.)	N (No deficiencies or recommendations.)	N (No deficiencies or recommendations.)	N (No deficiencies or recommendations.)	N (No deficiencie or recommendation

Sanitary survey result codes:

S = Significant Deficiencies
M = Minor Deficiencies
R = Recommendations Made
N = No Deficiencies or Recommendations
X = Not Evaluated
Z = Not Applicable
D = Sanitary Defect
-- = Not Reported to EPA

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
SDWA	WY5601475	No	09/30/2023	0	01/09/2024

Three-Year Compliance History by Quarter

Statute	Violation Type/Category	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12	QTR 13*
SDWA (Source ID: WY5601475)		10/01-12/31/20	01/01-03/31/21	04/01-06/30/21	07/01-09/30/21	10/01-12/31/21	01/01-03/31/22	04/01-06/30/22	07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23
	Facility-Level Status	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	In Progress
	Category / Violation Type													

*Quarter 13 data is voluntarily entered and/or incomplete, and may not form a complete picture for that quarter. Read more <https://epa.gov/help/reports/dfr-data-dictionary#sdwacomp>

SDWA Compliance Data Last Reported: 09/30/2023

Informal Enforcement Actions

Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute	System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost

No data records returned

SDWA (Safe Drinking Water Act) Violations and Enforcement Actions (5 Years)

Violations											Enforcement Actions			
Source ID	Noncompliance Period	Violation ID	Federal Rule	Contaminant	Category	Description	Measured Value	State MCL (Maximum Contaminant Level)	Federal MCL (Maximum Contaminant Level)	Status	Date	Category	Description	Agency

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?

No data records returned

Assessed Waters From Latest State Submission (ATTAINS)

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

SDWA (Safe Drinking Water Act) Lead and Copper (5 Years)

Source ID	Contaminant	Sample Dates	90th Percentile Sample Concentrations	Action Level	Health-Based Violations
WY5601475	Lead	2021-01-01 - 2023-12-31	.004 mg/L	0.015 mg/L	--
WY5601475	Lead	2018-01-01 - 2020-12-31	.009 mg/L		
WY5601475	Copper	--	No data records returned.	1.3 mg/L	

Community

Environmental Justice

This section shows indexes from EJScreen, EPA's screening tool for environmental justice (EJ) concerns. EPA uses these indexes to identify geographic areas that may warrant further consideration or analysis for potential EJ concerns. Use of these indexes does not designate an area as an "EJ community" or "EJ facility." EJScreen provides screening level indicators, not a determination of the existence or absence of EJ concerns. For more information, see the EJScreen home page.

No valid spatial coordinate is available for this facility.

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2010 U.S. Census and 2017 - 2021 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. EPA's spatial processing methodology considers the overlap between the selected radii and the census blocks (for U.S. Census demographics) and census block groups (for ACS demographics) in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

No demographic profile information available for this facility.

Detailed Facility Report

Facility Summary

LOVELL GRINDING PLANT (BENTONITE PERFORMANCE MINERALS)

789 HIGHWAY 14A EAST, LOVELL, WY 82431

FRS (Facility Registry Service) ID: 110007347004

EPA Region: 08

Latitude: 44.858444

Longitude: -108.224285

Locational Data Source: EIS

Industries: Mining (except Oil and Gas)

Indian Country: N

Enforcement and Compliance Summary

Statute	CAA
Compliance Monitoring Activities (5 years)	3
Date of Last Compliance Monitoring Activity	07/18/2023
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	2
Qtrs with Significant Violation	2
Informal Enforcement Actions (5 years)	1
Formal Enforcement Actions (5 years)	1
Penalties from Formal Enforcement Actions (5 years)	$0
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

Regulatory Information

Clean Air Act (CAA): Operating Major (WY0000005600300015)

Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): No Information

Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): 8317411

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Go To Enforcement/Compliance Details

Known Data Problems <https://epa.gov/resources/echo-data/known-data-problems>

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110007347004					N	44.858444	-108.224285

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
ICIS-Air	CAA	WY0000005600300015	Major Emissions	Operating	CAANSPS, CAASIP, CAATVP		N	44.858444	-108.224278
EIS	CAA	8317411					N	44.859	-108.224
TSCA	TSCA	TSCA123513					N	44.858444	-108.224285

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110007347004	LOVELL GRINDING PLANT (BENTONITE PERFORMANCE MINERALS)	789 HIGHWAY 14A EAST, LOVELL, WY 82431	Big Horn County
ICIS-Air	CAA	WY0000005600300015	LOVELL GRINDING PLANT (BENTONITE PERFORMANCE MINERALS)	789 HIGHWAY 14A EAST, LOVELL, WY 82431	Big Horn County
EIS	CAA	8317411	LOVELL GRINDING PLANT	6,56N,94W, BIG HORN, WY 82410	Big Horn County
TSCA	TSCA	TSCA123513	LOVELL GRINDING PLANT (BPM)	789 HIGHWAY 14A EAST, LOVELL, WY 82431	Big Horn County

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description
ICIS-Air	WY0000005600300015	1459	Clay And Related Minerals

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description
EIS	8317411	212325	Clay and Ceramic and Refractory Minerals Mining
ICIS-Air	WY0000005600300015	212325	Clay and Ceramic and Refractory Minerals Mining

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)
Crow Reservation	Crow Tribe of Montana	100000069	9.81

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)
CAA	WY0000005600300015	ICIS-Air	Inspection/Evaluation	PCE Title V CCR	State	01/23/2024	Reviewed: 01/23/2024 Facility Reported No Deviations
CAA	WY0000005600300015	ICIS-Air	Inspection/Evaluation	FCE On-Site	State	07/18/2023	
CAA	WY0000005600300015	ICIS-Air	Inspection/Evaluation	PCE Title V CCR	State	01/25/2023	Reviewed: 01/26/2023 Undetermined
CAA	WY0000005600300015	ICIS-Air	Inspection/Evaluation	PCE Stack Test	State	01/09/2023	Findings: Pass Pollutants: VISIBLE EMISSIONS
CAA	WY0000005600300015	ICIS-Air	Inspection/Evaluation	PCE Stack Test	State	11/03/2022	Findings: Pass Pollutants: NITROGEN OXIDES
CAA	WY0000005600300015	ICIS-Air	Inspection/Evaluation	PCE Title V CCR	State	01/28/2022	Reviewed: 01/31/2022 Undetermined
CAA	WY0000005600300015	ICIS-Air	Inspection/Evaluation	PCE Stack Test	State	10/06/2021	Findings: Pass Pollutants: NITROGEN OXIDES
CAA	WY0000005600300015	ICIS-Air	Inspection/Evaluation	FCE On-Site	State	08/03/2021	
CAA	WY0000005600300015	ICIS-Air	Inspection/Evaluation	PCE Stack Test	State	07/13/2021	Findings: Pass Pollutants: Particulate matter
CAA	WY0000005600300015	ICIS-Air	Inspection/Evaluation	PCE Title V CCR	State	01/21/2021	Reviewed: 01/21/2021 Undetermined
CAA	WY0000005600300015	ICIS-Air	Inspection/Evaluation	PCE Stack Test	State	11/18/2020	Findings: Pass Pollutants: NITROGEN OXIDES
CAA	WY0000005600300015	ICIS-Air	Inspection/Evaluation	PCE Stack Test	State	05/06/2020	Findings: Pass Pollutants: Particulate matter - PM10
CAA	WY0000005600300015	ICIS-Air	Inspection/Evaluation	PCE Stack Test	State	03/26/2020	Findings: Pass Pollutants: Particulate matter - PM10, VISIBLE EMISSIONS
CAA	WY0000005600300015	ICIS-Air	Inspection/Evaluation	PCE Stack Test	State	03/26/2020	Findings: Fail Pollutants: Particulate matter
CAA	WY0000005600300015	ICIS-Air	Inspection/Evaluation	PCE Stack Test	State	03/26/2020	Findings: Pass Pollutants: Particulate matter - PM10, VISIBLE EMISSIONS
CAA	WY0000005600300015	ICIS-Air	Inspection/Evaluation	PCE Stack Test	State	03/26/2020	Findings: Pass Pollutants: Particulate matter - PM10, VISIBLE EMISSIONS
CAA	WY0000005600300015	ICIS-Air	Inspection/Evaluation	PCE Title V CCR	State	01/14/2020	Reviewed: 01/14/2020 Undetermined
CAA	WY0000005600300015	ICIS-Air	Inspection/Evaluation	PCE Stack Test	State	10/23/2019	Findings: Pass Pollutants: Particulate matter, Particulate matter - PM10, Sulfur dioxide, VISIBLE EMISSIONS
CAA	WY0000005600300015	ICIS-Air	Inspection/Evaluation	FCE On-Site	State	08/21/2019	

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy <https://www.epa.gov/compliance/compliance-monitoring-programs> *activities or because they are not counted as inspections within EPA's Annual Results* <https://www.epa.gov/enforcement/enforcement-data-and-results>.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
CAA	WY0000005600300015	No	02/03/2024	2	02/02/2024

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type				QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12+
CAA (Source ID: WY0000005600300015)					04/01-06/30/21	07/01-09/30/21	10/01-12/31/21	01/01-03/31/22	04/01-06/30/22	07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24
	Facility-Level Status				High Priority Violation	High Priority Violation	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified
	HPV History				Addressed-State	Addressed-State										
	Violation Type	Agency	Programs	Pollutants												
CAA	HPV	WY	CAATVP	Particulate matter - PM10	05/12/2020	07/09/2021										

Informal Enforcement Actions

Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date
CAA	ICIS-Air	WY0000005600300015	Notice of Violation	State	07/02/2020

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute	System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost
CAA	ICIS-Air	OTHER	AIR/WY0000005600300015	Judicial	WY000A200188424	State	D#6029-20	11/10/2020	1	11/10/2020	$0	$0	$0	$0	$0

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?

No data records returned

Assessed Waters From Latest State Submission (ATTAINS)

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

Air Pollutant Report

TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

Community

Environmental Justice

This section shows indexes from EJScreen, EPA's screening tool for environmental justice (EJ) concerns. EPA uses these indexes to identify geographic areas that may warrant further consideration or analysis for potential EJ concerns. Use of these indexes does not designate an area as an "EJ community" or "EJ facility." EJScreen provides screening level indicators, not a determination of the existence or absence of EJ concerns. For more information, see the EJScreen home page.

EJScreen Indexes Shown

Compare to (●) US ( ) State

Index Type ( ) Environmental Justice (●) Supplemental

Related Reports

EJScreen Community Report

Download Data

Census Block Group ID: 560039628001	US (Percentile)	
Supplemental Indexes	Facility Census Block Group	1-mile Max
Count of Indexes At or Above 80th Percentile	**0**	**0**
Particulate Matter 2.5	0	--
Ozone	16	16
Diesel Particulate Matter	2	2
Air Toxics Cancer Risk	4	4
Air Toxics Respiratory Hazard Index	3	3
Toxic Releases to Air	3	3
Traffic Proximity	24	24
Lead Paint	65	65
Risk Management Plan (RMP) Facility Proximity	34	41
Hazardous Waste Proximity	0	--
Superfund Proximity	6	6
Underground Storage Tanks (UST)	37	37
Wastewater Discharge	18	45

( ) Facility 1-mile Radius ☐ Facility Census Block Group



Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2010 U.S. Census and 2017 - 2021 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. EPA's spatial processing methodology considers the overlap between the selected radii and the census blocks (for U.S. Census demographics) and census block groups (for ACS demographics) in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

General Statistics (U.S. Census)	
Total Persons	12
Population Density	6/sq.mi.
Housing Units in Area	7

General Statistics (ACS (American Community Survey))	
Total Persons	10
Percent People of Color	10%
Households in Area	4
Households on Public Assistance	0
Persons With Low Income	3
Percent With Low Income	30%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	44.858444
Center Longitude	-108.224285
Land Area	96%
Water Area	4%

Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than $15,000	0 (0%)

Age Breakdown (U.S. Census) - Persons (%)	
Children 5 years and younger	0 (0%)
Minors 17 years and younger	3 (25%)
Adults 18 years and older	9 (75%)
Seniors 65 years and older	0 (0%)

Race Breakdown (U.S. Census) - Persons (%)	
White	12 (100%)
African-American	0 (0%)
Hispanic-Origin	1 (8%)
Asian/Pacific Islander	0 (0%)
American Indian	0 (0%)
Other/Multiracial	0 (0%)

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	0 (0%)
9th through 12th Grade	1 (14.29%)
High School Diploma	1 (14.29%)
Some College/2-year	1 (14.29%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	1 (14.29%)

Income Breakdown (ACS (American Community Survey)) - Households (%)	
$15,000 - $25,000	0 (0%)
$25,000 - $50,000	0 (0%)
$50,000 - $75,000	1 (50%)
Greater than $75,000	1 (50%)

Detailed Facility Report

Facility Summary

BENTONITE PERFORMANCE MINERALS

789 HIGHWAY 14A, LOVELL, WY 82431

FRS (Facility Registry Service) ID: 110070649019

EPA Region: 08

Latitude: 44.835908

Longitude: -108.156665

Locational Data Source: RCRAINFO

Industries: --

Indian Country: N

Enforcement and Compliance Summary

Statute	RCRA
Compliance Monitoring Activities (5 years)	1
Date of Last Compliance Monitoring Activity	06/20/2019
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Active VSQG, (WYR000212670)

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Safe Drinking Water Act (SDWA): No Information

Compliance and Emissions Data Reporting Interface (CEDRI):
No Information

Go To Enforcement/Compliance Details
Known Data Problems <https://epa.gov/resources/echo-data/known-data-problems>

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110070649019					N	44.835908	-108.156665
RCRAInfo	RCRA	WYR000212670	VSQG	Active (H)			N	44.835908	-108.156665

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110070649019	BENTONITE PERFORMANCE MINERALS	789 HIGHWAY 14A, LOVELL, WY 82431	Big Horn County
RCRAInfo	RCRA	WYR000212670	BENTONITE PERFORMANCE MINERALS	789 HIGHWAY 14A, LOVELL, WY 82431	Big Horn County

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description

No data records returned

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description

No data records returned

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)
Crow Reservation	Crow Tribe of Montana	100000069	11.37

Enforcement and Compliance

RCRA (Hazardous Waste (Resource Conservation and Recovery Act) Compliance Pipeline (Compliance Monitoring >> Violations >> Enforcement Actions) (10 Years)

This table shows how violations relate to compliance monitoring (CM) activities and enforcement. Currently available for RCRA only. Full CM history available below.
There are no relationships to display in the RCRA Compliance Pipeline table for this facility. Scroll down to view compliance monitoring history.

Compliance Monitoring History

Last 5 Years

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)
RCRA	WYR000212670	RCRAInfo		Compliance Evaluation Inspection	State	06/20/2019	No Violations Or Compliance Issues Were Found

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy <https://www.epa.gov/compliance/compliance-monitoring-programs> *activities or because they are not counted as inspections within EPA's Annual Results* <https://www.epa.gov/enforcement/enforcement-data-and-results>.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	WYR000212670	No	02/03/2024	0	02/02/2024

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type		QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12+
RCRA (Source ID: WYR000212670)			04/01-06/30/21	07/01-09/30/21	10/01-12/31/21	01/01-03/31/22	04/01-06/30/22	07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24
	Facility-Level Status		No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified
	Violation	Agency												

Informal Enforcement Actions

Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute	System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?

No data records returned

Assessed Waters From Latest State Submission (ATTAINS)

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

e-Manifest Hazardous Waste History (Public)

Hazardous Waste Shipped in Kilograms by Year (Through 11/4/2023)

Source ID	Waste Description	2021	2022	2023	2024
WYR000212670	Hazardous Waste	18	5	--	--
WYR000212670	Acute Hazardous Waste	0	0	--	--
WYR000212670	Pharmaceutical Hazardous Waste	0	0	--	--

Pharmaceutical Hazardous Waste is excluded from the Hazardous and Acute Hazardous Waste quantities shown above because Pharmaceutical Waste is managed under 40 CFR part 266 subpart P <https://www.epa.gov/hwgenerators/final-rule-management-standards-hazardous-waste-pharmaceuticals-and-amendment-p075>.

Community

Environmental Justice

This section shows indexes from EJScreen, EPA's screening tool for environmental justice (EJ) concerns. EPA uses these indexes to identify geographic areas that may warrant further consideration or analysis for potential EJ concerns. Use of these indexes does not designate an area as an "EJ community" or "EJ facility." EJScreen provides screening level indicators, not a determination of the existence or absence of EJ concerns. For more information, see the EJScreen home page.

EJScreen Indexes Shown

Compare to (●) US ( ) State

Index Type ( ) Environmental Justice (●) Supplemental

Related Reports

EJScreen Community Report

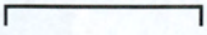
Download Data

Census Block Group ID: 560039628001	US (Percentile)	
Supplemental Indexes	**Facility Census Block Group**	**1-mile Max**
Count of Indexes At or Above 80th Percentile	**0**	**0**
Particulate Matter 2.5	0	--
Ozone	16	16
Diesel Particulate Matter	2	2
Air Toxics Cancer Risk	4	4
Air Toxics Respiratory Hazard Index	3	3
Toxic Releases to Air	3	3
Traffic Proximity	24	24
Lead Paint	65	65
Risk Management Plan (RMP) Facility Proximity	34	41
Hazardous Waste Proximity	0	--
Superfund Proximity	6	6
Underground Storage Tanks (UST)	37	37
Wastewater Discharge	18	45

( ) Facility 1-mile Radius ☐ Facility Census Block Group











Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2010 U.S. Census and 2017 - 2021 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. EPA's spatial processing methodology considers the overlap between the selected radii and the census blocks (for U.S. Census demographics) and census block groups (for ACS demographics) in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

General Statistics (U.S. Census)	
Total Persons	0
Population Density	0/sq.mi.
Housing Units in Area	0

General Statistics (ACS (American Community Survey))	
Total Persons	11
Percent People of Color	9%
Households in Area	4
Households on Public Assistance	0
Persons With Low Income	3
Percent With Low Income	27%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	44.835908
Center Longitude	-108.156665
Land Area	64%
Water Area	36%

Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than $15,000	0 (0%)
$15,000 - $25,000	0 (0%)
$25,000 - $50,000	0 (0%)
$50,000 - $75,000	0 (0%)
Greater than $75,000	2 (100%)

Age Breakdown (U.S. Census) - Persons (%)	
Children 5 years and younger	--
Minors 17 years and younger	--
Adults 18 years and older	--
Seniors 65 years and older	--

Race Breakdown (U.S. Census) - Persons (%)	
White	--
African-American	--
Hispanic-Origin	--
Asian/Pacific Islander	--
American Indian	--
Other/Multiracial	--

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	0 (0%)
9th through 12th Grade	0 (0%)
High School Diploma	2 (33.33%)
Some College/2-year	2 (33.33%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	2 (33.33%)

Detailed Facility Report

Facility Summary

BENTONITE MINE, LQD#685, OSHOTO AREA

UNKNOWN, UNKNOWN, WY 00000

FRS (Facility Registry Service) ID: 110055198995

EPA Region: 08

Latitude: 44.914078

Longitude: -104.686418

Locational Data Source: NPDES

Industries: --

Indian Country: N

Enforcement and Compliance Summary

Statute	CWA
Compliance Monitoring Activities (5 years)	2
Date of Last Compliance Monitoring Activity	09/20/2022
Compliance Status	Violation Identified
Qtrs in Noncompliance (of 12)	9
Qtrs with Significant Violation	2
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): Non-Major, Permit Effective (WY0096563), Non-Major, Permit Terminated; Compliance Tracking Off (WYR320215)

Resource Conservation and Recovery Act (RCRA): No Information

Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Go To Enforcement/Compliance Details

Known Data Problems <https://epa.gov/resources/echo-data/known-data-problems>

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110055198995					N	44.914078	-104.686418
ICIS-NPDES	CWA	WY0096563	Non-Major: NPDES Individual Permit	Effective		07/31/2025	N	44.914078	-104.686418
ICIS-NPDES	CWA	WYR320215	Non-Major: General Permit Covered Facility	Terminated; Compliance Tracking Off		03/31/2017	N	44.914078	-104.686418

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110055198995	BENTONITE MINE, LQD#685, OSHOTO AREA	UNKNOWN, UNKNOWN, WY 00000	
ICIS-NPDES	CWA	WY0096563	BENTONITE PERFORMANCE MINERALS-MAURER RANCH	UNKNOWN, UNKNOWN, WY 00000	
ICIS-NPDES	CWA	WYR320215	BENTONITE MINE, LQD#685, OSHOTO AREA	UNKNOWN, UNKNOWN, WY 00000	

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description
ICIS-NPDES	WYR320215	1459	Clay And Related Minerals

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description

No data records returned

Facility Industrial Effluent Guidelines

Identifier	Effluent Guideline (40 CFR Part)	Effluent Guideline Description

No data records returned

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)

No data records returned

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)
CWA	WY0096563	ICIS-NPDES	Inspection/Evaluation	Base Program - Audit	State	09/20/2022	
CWA	WY0096563	ICIS-NPDES	Inspection/Evaluation	Base Program - Evaluation	State	09/20/2022	

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy <https://www.epa.gov/compliance/compliance-monitoring-programs> *activities or because they are not counted as inspections within EPA's Annual Results* <https://www.epa.gov/enforcement/enforcement-data-and-results>.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
CWA	WY0096563	No	09/30/2023	9	02/02/2024
CWA	WYR320215	No	09/30/2023	0	02/02/2024

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type		QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12
CWA (Source ID: WY0096563)			10/01-12/31/20	01/01-03/31/21	04/01-06/30/21	07/01-09/30/21	10/01-12/31/21	01/01-03/31/22	04/01-06/30/22	07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23
	Facility-Level Status		No Violation Identified	No Violation Identified	Significant Category I Noncompliance	Significant Category I Noncompliance	No Violation Identified	Violation Identified	Violation Identified	Violation Identified	Violation Identified	No Violation Identified	Violation Identified	Violation Identified
	Quarterly Noncompliance Report History				Failure to Report DMR - Not Received	Failure to Report DMR - Not Received	Resolved	Reportable Noncompliance	Reportable Noncompliance	Reportable Noncompliance	Reportable Noncompliance	Resolved	Other Violation	Other Violation
	Single Event Violations	Agency												
CWA	Management Practice Violations - Improper Operation and Maintenance	State								09/27/2022	→	→	→	→
	Late or Missing Discharge Monitoring Report (DMR) Measurements													
	Counts of Late DMR Measurements		48	48										
	Counts of Missing DMR Measurements						1							
CWA (Source ID: WYR320215)			10/01-12/31/20	01/01-03/31/21	04/01-06/30/21	07/01-09/30/21	10/01-12/31/21	01/01-03/31/22	04/01-06/30/22	07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23
	Facility-Level Status		Terminated Permit	Terminated Permit	Terminated Permit	Terminated Permit	Terminated Permit	Terminated Permit	Terminated Permit	Terminated Permit	Terminated Permit	Terminated Permit	Terminated Permit	Terminated Permit
	Quarterly Noncompliance Report History													

Informal Enforcement Actions

Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 10 Years

Statute	System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?
101102010204	Lower North Fork Little Missouri River	--	No	No	--	Yes
101102010301	Little Missouri Creek-Lindsey Creek	--	No	No	--	Yes

Assessed Waters From Latest State Submission (ATTAINS)

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

CWA (Clean Water Act) Discharge Monitoring Report (DMR) Pollutant Loadings

DMR and TRI Multi-Year Loading Report

NPDES ID	Description

No data records returned

Community

Environmental Justice

This section shows indexes from EJScreen, EPA's screening tool for environmental justice (EJ) concerns. EPA uses these indexes to identify geographic areas that may warrant further consideration or analysis for potential EJ concerns. Use of these indexes does not designate an area as an "EJ community" or "EJ facility." EJScreen provides screening level indicators, not a determination of the existence or absence of EJ concerns. For more information, see the EJScreen home page.

EJScreen Indexes Shown

Compare to ◉ US ○ State

Index Type ○ Environmental Justice ◉ Supplemental

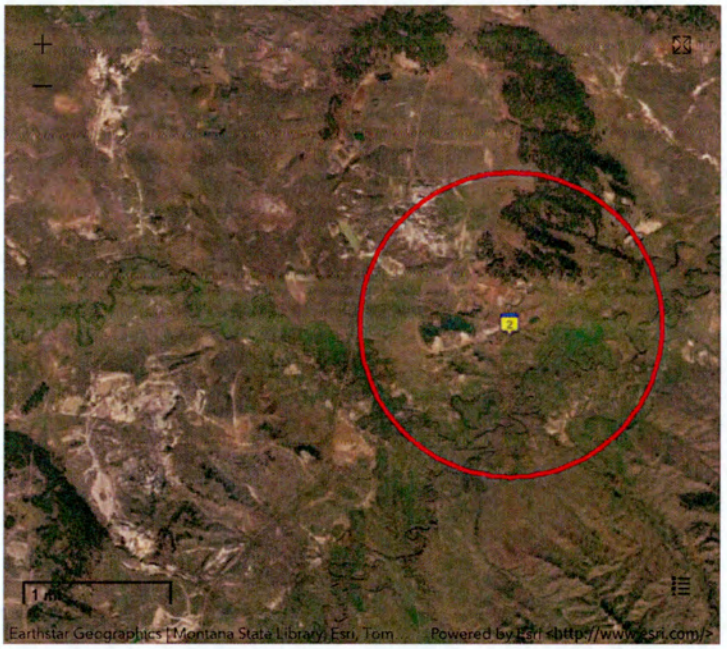
Related Reports

EJScreen Community Report

Download Data

Census Block Group ID: 560119502001	US (Percentile)	
Supplemental Indexes	Facility Census Block Group	1-mile Max
Count of Indexes At or Above 80th Percentile	**0**	**0**
Particulate Matter 2.5	0	--
Ozone	21	21
Diesel Particulate Matter	2	2
Air Toxics Cancer Risk	2	2
Air Toxics Respiratory Hazard Index	3	3
Toxic Releases to Air	12	12
Traffic Proximity	0	--
Lead Paint	50	50
Risk Management Plan (RMP) Facility Proximity	0	--
Hazardous Waste Proximity	0	--
Superfund Proximity	7	7
Underground Storage Tanks (UST)	0	--
Wastewater Discharge	68	68

○ Facility 1-mile Radius ☐ Facility Census Block Group



Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2010 U.S. Census and 2017 - 2021 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. EPA's spatial processing methodology considers the overlap between the selected radii and the census blocks (for U.S. Census demographics) and census block groups (for ACS demographics) in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

General Statistics (U.S. Census)	
Total Persons	0
Population Density	0/sq.mi.
Housing Units in Area	1

General Statistics (ACS (American Community Survey))	
Total Persons	2
Percent People of Color	0%
Households in Area	1
Households on Public Assistance	0
Persons With Low Income	1
Percent With Low Income	50%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	44.914078
Center Longitude	-104.686418
Land Area	100%
Water Area	0%

Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than $15,000	--
$15,000 - $25,000	--

Age Breakdown (U.S. Census) - Persons (%)	
Children 5 years and younger	--
Minors 17 years and younger	--
Adults 18 years and older	--
Seniors 65 years and older	--

Race Breakdown (U.S. Census) - Persons (%)	
White	--
African-American	--
Hispanic-Origin	--
Asian/Pacific Islander	--
American Indian	--
Other/Multiracial	--

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	0 (0%)
9th through 12th Grade	0 (0%)
High School Diploma	1 (50%)
Some College/2-year	1 (50%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	0 (0%)

Income Breakdown (ACS (American Community Survey)) - Households (%)	
$25,000 - $50,000	--
$50,000 - $75,000	--
Greater than $75,000	--

Detailed Facility Report

Facility Summary

BENTONITE PERFORMANCE MINERALS

217 LOMBARD ST, SAINT LOUIS, MO 63102

FRS (Facility Registry Service) ID: 110001466681

EPA Region: 07

Latitude: 38.61689

Longitude: -90.1905

Locational Data Source: FRS

Industries: Chemical Manufacturing

Indian Country: N

Enforcement and Compliance Summary

Statute	CAA
Compliance Monitoring Activities (5 years)	--
Date of Last Compliance Monitoring Activity	--
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

Statute	RCRA
Compliance Monitoring Activities (5 years)	--
Date of Last Compliance Monitoring Activity	10/28/2003
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

Regulatory Information

Clean Air Act (CAA): Operating Minor (MO0000002951001658)

Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Inactive Other, (MOR000003319)

Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): 63147MBLLX217LO

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Go To Enforcement/Compliance Details

Known Data Problems <https://epa.gov/resources/echo-data/known-data-problems>

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110001466681					N	38.61689	-90.1905
ICIS-Air	CAA	MO0000002951001658	Minor Emissions	Operating	CAANFRP		N	38.61689	-90.1905
TRI	EP313	63147MBLLX217LO	Toxics Release Inventory	Last Reported for 2002			N	38.61727	-90.19032
RCRAInfo	RCRA	MOR000003319	Other	Inactive ( )			N		

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110001466681	BENTONITE PERFORMANCE MINERALS	217 LOMBARD ST, SAINT LOUIS, MO 63102	St. Louis city
ICIS-Air	CAA	MO0000002951001658	M. A. BELL COMPANY	217 LONBARD ST, SAINT LOUIS, MO 63102	St. Louis city
TRI	EP313	63147MBLLX217LO	BENTONITE PERFORMANCE MINERALS	217 LOMBARD ST, SAINT LOUIS, MO 63102	St. Louis city
RCRAInfo	RCRA	MOR000003319	MA BELL CO	217 LOMBARD ST, ST LOUIS, MO 63102	St. Louis city

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description
ICIS-Air	MO0000002951001658	2992	Lubricating Oils And Greases

Facility NAICS (North American Industry Classification System)

Codes

System	Identifier	NAICS Code	NAICS Description
TRI	63147MBLLX217LO	324199	All Other Petroleum and Coal Products Manufacturing
ICIS-Air	MO0000002951001658	324191	Petroleum Lubricating Oil and Grease Manufacturing
RCRAInfo	MOR000003319	325998	All Other Miscellaneous Chemical Product and Preparation Manufacturing

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)

No data records returned

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy <https://www.epa.gov/compliance/compliance-monitoring-programs> *activities or because they are not counted as inspections within EPA's Annual Results* <https://www.epa.gov/enforcement/enforcement-data-and-results>.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
CAA	MO0000002951001658	No	02/03/2024	0	02/02/2024
RCRA	MOR000003319	No	02/03/2024	0	02/02/2024

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12+
CAA (Source ID: MO0000002951001658)		04/01-06/30/21	07/01-09/30/21	10/01-12/31/21	01/01-03/31/22	04/01-06/30/22	07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24
	Facility-Level Status	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified
	HPV History												
	Violation Type / Agency / Programs / Pollutants												

Statute	Program/Pollutant/Violation Type	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12+
RCRA (Source ID: MOR000003319)		04/01-06/30/21	07/01-09/30/21	10/01-12/31/21	01/01-03/31/22	04/01-06/30/22	07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24
	Facility-Level Status	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified
	Violation / Agency												

Informal Enforcement Actions

Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute	System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?

No data records returned

Assessed Waters From Latest State Submission (ATTAINS)

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)
Ozone	Yes	8-Hour Ozone (2015)	Yes	1-Hour Ozone (1979); 8-Hour Ozone (1997); 8-Hour Ozone (2008)
Lead	No	--	No	--
Particulate Matter	No	--	Yes	PM-2.5 (1997)
Carbon Monoxide	No	--	Yes	Carbon Monoxide (1971)
Sulfur Dioxide	No	--	No	--

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

Community

Environmental Justice

This section shows indexes from EJScreen, EPA's screening tool for environmental justice (EJ) concerns. EPA uses these indexes to identify geographic areas that may warrant further consideration or analysis for potential EJ concerns. Use of these indexes does not designate an area as an "EJ community" or "EJ facility." EJScreen provides screening level indicators, not a determination of the existence or absence of EJ concerns. For more information, see the EJScreen home page.

EJScreen Indexes Shown

Compare to (•) US ( ) State

Index Type ( ) Environmental Justice (•) Supplemental

Related Reports

EJScreen Community Report

Download Data

Census Block Group ID: 295101274001	US (Percentile)	
Supplemental Indexes	**Facility Census Block Group**	**1-mile Max**
Count of Indexes At or Above 80th Percentile	**13**	**13**
Particulate Matter 2.5	97	97
Ozone	96	96
Diesel Particulate Matter	98	98
Air Toxics Cancer Risk	98	98
Air Toxics Respiratory Hazard Index	96	98
Toxic Releases to Air	96	96
Traffic Proximity	98	98
Lead Paint	94	94
Risk Management Plan (RMP) Facility Proximity	98	98
Hazardous Waste Proximity	98	98
Superfund Proximity	98	98
Underground Storage Tanks (UST)	97	97
Wastewater Discharge	96	96

( ) Facility 1-mile Radius ☐ Facility Census Block Group





Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2010 U.S. Census and 2017 - 2021 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. EPA's spatial processing methodology considers the overlap between the selected radii and the census blocks (for U.S. Census demographics) and census block groups (for ACS demographics) in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

General Statistics (U.S. Census)	
Total Persons	--
Population Density	0/sq.mi.
Housing Units in Area	--

General Statistics (ACS (American Community Survey))	
Total Persons	6,972
Percent People of Color	57%
Households in Area	4,047
Households on Public Assistance	85
Persons With Low Income	2,507
Percent With Low Income	39%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	38.61689
Center Longitude	-90.1905
Land Area	--
Water Area	--

Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than $15,000	426 (10.53%)
$15,000 - $25,000	465 (11.49%)
$25,000 - $50,000	896 (22.14%)
$50,000 - $75,000	562 (13.89%)
Greater than $75,000	1,698 (41.96%)

Age Breakdown (U.S. Census) - Persons (%)	
Children 5 years and younger	--
Minors 17 years and younger	--
Adults 18 years and older	--
Seniors 65 years and older	--

Race Breakdown (U.S. Census) - Persons (%)	
White	--
African-American	--
Hispanic-Origin	--
Asian/Pacific Islander	--
American Indian	--
Other/Multiracial	--

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	106 (1.99%)
9th through 12th Grade	285 (5.35%)
High School Diploma	1,001 (18.77%)
Some College/2-year	934 (17.52%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	2,667 (50.02%)

Summary of January 22, 2010 NOV#4623-10, Settlement Agreement & Notice of Compliance

Bentonite Performance Minerals (BPM) was issued a Notice of Violation (NOV), Docket Number 4623-10, from Wyoming's Department of Environmental Quality, Water Quality Division on January 22, 2010. The NOV alleged that BPM had an unpermitted discharge of wastewater and was in violation of the Wyoming Environmental Quality Act and applicable Wyoming Water Quality Rules and Regulations. The NOV was issued as a result of BPM's discharging wastewater from its facility into a leachate field that had the potential to pollute waters of the state. BPM completed corrective actions to remedy the alleged violations covered in the NOV, by constructing a septic system to capture wastewater produced from the facility and to prevent violations in the future, and BPM paid $1,600.00 for the stipulated penalty. The Notice of Compliance and Settlement Agreement issued by the Department of Environmental Quality for the Sate of Wyoming can be found in the ensuing pages.

KMW 9/13/10

DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE OF WYOMING

SEP 10 2010

IN THE MATTER OF THE NOTICE OF VIOLATION ISSUED TO:)

Bentonite Performance Minerals, LLC)
554 US Highway 212)
Belle Fourche, SD 57717)

SETTLEMENT AGREEMENT

The Wyoming Department of Environmental Quality (DEQ), Water Quality Division (WQD), and Bentonite Performance Minerals, LLC (BPM) a company authorized to do business in Wyoming, enter into this Settlement Agreement to fully and finally resolve without litigation the violation alleged in **Notice of Violation (NOV) Docket Number 4623-10 dated January 22, 2010. These violations occurred in Crook County, Wyoming.**

W.S. §35-11-901(a)(ii) authorizes the DEQ to negotiate a stipulated settlement, including payment of a penalty and corrective actions, in lieu of litigation. To that end, BPM and the DEQ hereby stipulate and agree as follows:

1. The DEQ, pursuant to W.S. §35-11-104, is a department in the executive branch of the state government of Wyoming and is principally situated in Cheyenne, Wyoming. DEQ is the agency with the responsibility for administering the Wyoming Environmental Quality Act (Act) including all provisions of the Wyoming Water Quality Rules and Regulations (WWQRR).

2. BPM has agreed to provide the DEQ with documentation demonstrating the steps taken to address the alleged violations covered by this NOV, including the ongoing operational programs designed to prevent violations in the future. Following implementation of the corrective actions, BPM shall provide to the WQD a written report of the completed corrective actions including photos of the impacted site.

3. BPM agrees to pay a total of one thousand six hundred dollars and no cents ($1,600.00) as a stipulated penalty. Payment to the DEQ is due within thirty (30) days of the full execution of this Settlement Agreement and shall be by check made payable to the Wyoming Department of Environmental Quality, Water Quality Division. Payment should be sent to Mr. Kevin M. Wells, Natural Resource Program Manager, Department of Environmental Quality, Water Quality Division, Herschler Building 4th Floor-West, 122 West 25th Street, Cheyenne, Wyoming 82002. The check should reference NOV Docket Number 4623-10.

4. BPM's full compliance with the terms of this signed settlement agreement shall constitute satisfaction for and resolution of all claims by the DEQ against BPM based upon the specific allegations in NOV docket number 4623-10. Contingent upon BPM's compliance with the terms of this Settlement Agreement, the DEQ will refrain from taking further enforcement action against BPM for these particular violations.

5. BPM waives any statute of limitations which may apply to an enforcement action by the DEQ involving the specific matters described in NOV Docket Number 4623-10 in the event that BPM fails to fulfill its obligations under this Settlement Agreement.

6. Nothing in this agreement precludes DEQ from taking additional enforcement action; including the issuance of a NOV, Order, and/or pursuing additional penalties, should BPM violate the Act, applicable rules and regulations, or WYPDES permit requirements in the future.

7. This settlement agreement represents a good faith settlement and resolution of the NOV in lieu of litigation and shall not constitute or be construed as an admission by BPM or a retraction by DEQ of the specific allegations in NOV docket number 4623-10.

8. This Settlement Agreement shall be admissible by either party without objection by the other party in any subsequent action between these parties to enforce its terms.

9. Notwithstanding any other language in this Settlement Agreement, the State of Wyoming and DEQ do not waive sovereign immunity by entering into this Settlement Agreement with BPM and specifically retain all immunity and all defenses available as sovereigns under state and federal law.

10. Each party shall bear its own attorney fees and costs, if any, incurred through the date this Settlement Agreement is signed by both parties.

11. BPM and the DEQ agree to comply with and be bound by the terms of this agreement and further agree they will not contest the basis or validity of this Settlement Agreement in any action taken by DEQ to enforce the terms of this Settlement Agreement. Therefore this Settlement Agreement is binding upon BPM, its successors and assigns, and upon the DEQ.

12. The persons signing this Settlement Agreement certify that they are duly authorized to bind their respective parties to this Settlement Agreement. Full execution of this Settlement Agreement shall be determined by the latest date of all parties signing.

FOR: BENTONITE PERFORMANCE MINERALS, LLC.

Signed: Danny Oaks

Typed: DANNY OAKS

Title: PLANT MANAGER

Date: 7-Sept-2010

FOR THE WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY:

John V. Corra
Director
Department of Environmental Quality

Date: 8/27/10

John F. Wagner
Administrator
DEQ/Water Quality Division

Date: 8/24/10

JVC/JFW/KMW/bb/rm/10-0712

cc: David Gwisdalla, 8ENF-W-NP, EPA Region 8 (PDF)
Bill J. DiRienzo (PDF)
IPS (for scanning) ► Docket **4623-10**
Keith Guille, DEQ Public Information Officer (PDF File of signed copy by all parties)
DEQ Director

BEFORE THE

DEPARTMENT OF ENVIRONMENTAL QUALITY

STATE OF WYOMING

IN THE MATTER OF THE NOTICE OF VIOLATION & ORDER ISSUED TO:

Bentonite Performance Minerals, LLC
Ms. Lesley Roth
554 US Highway 212
Belle Fourche, SD 57717

DOCKET NUMBER 4623-10

NOTICE OF COMPLIANCE

The Department of Environmental Quality (DEQ), Water Quality Division (WQD) issued Notice of Violation Docket Number **4623-10** on January 22, 2010 to Bentonite Performance Minerals, LLC (BPM). The NOV alleged that BPM had an unpermitted discharge of waste water and was in violation of the Wyoming Environmental Quality Act (Act) and applicable Wyoming Water Quality Rules and Regulations (WWQRR).

The Notice of Violations required BPM to pay a total of one thousand six hundred dollars and no cents ($1,600.00) and submit in writing actions to be taken to achieve compliance with permit requirements to the DEQ. Based on reviewed information submitted by BPM and receipt of the penalty payment BPM has complied with the conditions of the Settlement Agreement for Docket Number **4623-10** and the DEQ finds that all terms have been satisfied.

The DEQ looks forward to working with BPM in a proactive manner and is available for future meetings to discuss compliance issues or concerns regarding WYPDES permit requirements.

Dated this 13th day of September, 2010.

Kevin M. Wells
WYPDES Natural Resources Program Manager
Water Quality Division
Wyoming DEQ

KMW/rm/10-0801

cc: David Gwisdalla, 8ENF-W-NP, EPA Region 8 (PDF)
James B. Eisenhauer, Sheridan DEQ Office (PDF)
Bill J. DiRienzo ▶ Kevin M. Wells (PDF)
IPS (for scanning) ▶ Docket **4623-10**
Keith Guille, DEQ Public Information Officer

Names and Addresses of Surface and Mineral Owners

Bentonite Performance Minerals, LLC Security Bentonite Mine

Security Surface Owner List	
Within Permit Boundary	
Dave Garman	PO Box 207 Belle Fourche, South Dakota 57717
Adjacent Surface Owners	
Pioneer Townsite Company C/O American Colloid Company	PO Box 2010 Belle Fourche, South Dakota 57717
Harvey A. Garr	10737 3V Road Belle Fourche, South Dakota 57717

Security Mineral Owner List	
For Minerals to be Mined	
Bentonite Performance Minerals, LLC	554 US HWY 212, Belle Fourche South Dakota 5771
For Minerals NOT to be mined	
David Garman	PO Box 207 Belle Fourche, South Dakota 57717
Chicago and North Western Railway Company	226 West Jackson Boulevard
Please see Map on Page 239 for Representation of Ownership	
BPM does not warrant the ownership of minerals except those held exclusively by BPM.	

Legal Right to Enter Lease & Limited Warranty Deed

BPM Security Bentonite Mine

Confidential

County Zoning Requirements

Bentonite Performance Minerals, LLC Security Mine



BUTTE COUNTY DIRECTOR OF EQUALIZATION & PLANNING

Mailing Address
117 5th Avenue
Belle Fourche, SD 57717

Phone: (605) 892-3950
Fax: (605) 892-0240
Email: donnaj@buttesd.org

RECEIVED
FEB 28 2024
MINERALS & MINING PROGRAM

April 7, 2022

To Whom it May Concern,

Butte County, South Dakota has not adopted any zoning regulations that are applicable to the proposed project.

Section 31: That portion of the NE4SE4 (N of 3V Road); E2SW4NE4; SE4NE4NE4
Section 32: NW4SW4; SW4NW4; S2NW4NW4 (S of ACC Haul Road); W2NE4SW4; NW4SE4SW4 (N of 3V Road)
All within T9N, R2E, B.H.M., Butte County, South Dakota

There are no zoning regulations that apply to the Bentonite Mining Security Project. We do request that BPM apply for Building and Septic Permits in compliance with Ordinance 2010-1 and 2007-1 if any new construction is planned.

Thank you,

Donna Jones,
Director of Equalization
Butte County Equalization

Section Two

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Section Two

BPM Security Bentonite Mine

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MINERALS & MINING PROGRAM

Operating Plan

Bentonite Performance Minerals Security Mine

Bentonite Performance Minerals, LLC
554 US HWY 212
Belle Fourche, SD 57717
307.896.2596

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Operating Plan

BPM Security Bentonite Mine

1.0 Security Bentonite Mine Overview (SDCL 45-6B-6 (1-4, 6-7))

Bentonite Performance Minerals, LLC (BPM) has prepared the Security Bentonite Mine Permit Application to support BPM's ongoing efforts to provide environmentally safe and economical bentonite to consumers in accordance with all local, state and federal laws. BPM has successfully mined and is currently monitoring the final reclamation of the Killinger and Purple Bentonite Mines, permits 481 and 482 respectively, located 4 miles to the northwest of the Security Bentonite Mine.

The permit boundary for the Security Bentonite Mine is legally described as:

Township 9 North, Range 2 East, Black Hills Meridian, Butte County, South Dakota

Section 31: SE4SE4NE4NE4, E2E2SE4NE4 and that portion of the E2E2NE4SE4 north of 3 View Road.
Section 32: SW4NW4, NW4SW4, W2W2NE4SW4, those portions of the S2S2NW4NW4, SW4NE4NW4, & W2W2SE4NW4 south of the ACC Haul Road and those portions of the W2W2SE4SW4 & NE4SW4SW4 north of 3 View Road.

BPM holds the bentonite mineral rights as patented mining claims (Patent #1207088) and the surface estate is held by David Garman. Please refer to the Surface and Mineral Ownership map in Appendix A. Disturbances shall occur north of 3 View Road and south of American Colloid Company's Haul Road (ACC Road), both shown on the Operating Plan Map in Appendix A. BPM will retain a Surface Use Agreement with the surface owner through the life of the mining operation as described in the Operating and Reclamation plan.

BPM processes crude bentonite at BPM's processing plant in Colony, WY, located approximately 17 miles NW of the Security permit area. The plant is considered the local office for this project, contact information is provided below:

Bentonite Performance Minerals, LLC
554 US HWY 212
Belle Fourche, SD 57717
307-896-2596

2.0 Mining Method and Type (SDCL 45-6B-6 (8(a -d)), ARSD 74:29:02:04 (1, 2, 3 & 6), ARSD 74:29:07:04 (6 & 7) & ARSD 74:29:07:02 (1 - 10))

Bentonite Performance Minerals (BPM) will use surface mining methods exclusively to extract bentonite by removing bentonite exposed at the surface and by stripping overburden stratigraphically above deposits of bentonite. Mining will occur in a series of relatively small (2 to 10 acres) engineered pits designed to sustain desired annual production. After the initial pit is mined out, concurrent reclamation begins by using the overburden from the next pit to backfill the initial pit minimizing the number of pits open at any one time. This mining method will be used

throughout the mine.

Approximately 83 acres of the 128.4 acre permit boundary will be affected by BPM's operation. Approximately 69% of the total disturbance area is comprised of bentonite pits and 31% for associated disturbance. Temporary haul roads and spurs, soil placement areas, mine camps and other ancillary mining features are examples of associated disturbance and are generated as needed.

Topsoil and subsoil will be removed with scrapers and stockpiled in designated areas or applied directly onto previously backfilled pits. Overburden is typically ripped with track dozers or motor graders and then is removed with scrapers or pushed by dozers to the previously mined pit. Due to the relatively soft nature of the overburden associated with bentonite mining, blasting is not a consideration for this mining project.

Bentonite is stripped from the pits with scrapers and then piled either in the bentonite pit itself or in a designated stockpile area. The depth of mining will vary throughout the project. Bentonite is exposed at the surface immediately north of 3 View Road. The depth of bentonite gradually increases to a depth of approximately forty (40) feet below ground surface along the northern extents of the bentonite pits south of the ACC Haul Road. BPM intends to begin excavations in the SW portion of the property and advance north and then swing eastward. BPM will then mine from the north to the south to finish the pit sequences on the eastern half of the permit boundary. BPM utilizes a backcast mining method and estimates a total of approximately fifty (50) bentonite pits, approximately ten (10) per phase through the life of the mining project. Phases have been generated to depict to the agencies the approximate order in which the property will be mined. BPM shall remove the soils and overburden in compliance with the SD DANR rules and regulations and shall determine the most economically and cost-effective methods in the field.

Front-end loaders will load the clay into haul trucks that will transport bentonite to BPM's processing plant in Colony, WY. 3 View Road and Highway 212 will be primarily utilized to transport bentonite between the mine and the plant. There will be no tailings produced at this site therefore, no onsite tailings disposal is required.

BPM's mine design utilizes the available space between pit sequences for ancillary disturbances that facilitate mining, this practice minimizes the size of the permit boundary and optimizes utilization within the mining area. BPM will consider the existing topography and drainage patterns when designing temporary drainages to ensure that the existing outfall locations along the permit boundary are not impacted during and after mining operations. The post-mining topography shall approximately match the pre-mining topography, including slope direction. As BPM mines through any particular area, BPM shall ensure that proper through drainage shall be maintained to prevent excess surface water out falling into a pit, eroding a stockpile or otherwise impacting surface features. Therefore, any given drainage may be relocated however, BPM shall construct the temporary or permanent drainage to ensure that surface waters will not overwhelm the constructed feature and that surface waters will discharge to the current out fall locations along the permit boundary. All mine related features and equipment are subject to BPM's Best Management Practices (BMP) discussed in Section 10.0 to ensure that potential impacts are minimized.

For any permanent reclamation feature, BPM shall contour the feature itself and the surrounding topography to reduce/remove erosion potential and ensure that proper drainage is maintained post mining in accordance with the information provided in this permit application. The permanent out of pit overburden pile shall be the only feature that will notably augment the pre-mine topography. BPM shall blend the reclaimed stockpile surface to match existing topography and

the reclamation slopes shall adhere to the pertinent sections of the permit application. Small scale features on the property have variable slope angles between 1 and 18%. The Overall slope between 3 View Road and the ACC haul road is approximately 3.2%. Overall, the slope direction has a bearing of ~42 degrees. Local features have variable slope angles with the majority bearing perpendicular to northeasterly drainage directions.

Reclamation will occur as soon as reasonably possible after bentonite has been removed from a pit. Reclamation activities are conducted while mining progresses through the planned pit sequences. Pits are backfilled and contoured to naturally blend into surrounding topography. Subsoil and then topsoil are reapplied once the pit has been backfilled. Reclamation is completed using a no-till seed drill which places the seed at the correct depth and then presses the soil back over the seed promoting suitable soil to seed contact while minimizing potential erosion. The land will be reclaimed to rangeland, which is the primary pre-mine land use.

The contour basis for the mining operation will adhere to the 2015 United States Geological Survey (USGS) Sourdough Flats, SD Topographic map, which depicts the region in 20-foot vertical contours. Premining contours shall reasonably match the post mining contours upon final reclamation with the exception of the proposed overburden stockpile as depicted in the Pre-Mine and Post-Mine Contour Maps in Appendix A. Overburden depth ranges from zero (0) to forty (40) feet below ground surface. The deepest pits are located at the northern portion of the disturbance boundary and bentonite outcrops on the southern portion of the disturbance boundary.

Visual inspections for health, safety and environmental hazards are evaluated before employees begin work each working day. CPM will perform monthly visual inspections if BPM is not actively working on the property. Visual inspections are also conducted as part of the Storm Water Pollution Prevention Plan (SWPPP), Spill Prevention Control and Countermeasure Plan (SPCC), quarterly contractor assessments, and unscheduled and regular site visits by the Mine Manager and Mine Supervisor. General site conditions, ground control, equipment, temporary storage facilities and excavations are examined to ensure that HSE standards are met and are in compliance with issued permits.

Site access to any BPM mining property controlled and maintained by BPM to ensure public safety. Signs are placed at the entrance(s) to the property to restrict access to authorized personnel only, notify of mining related traffic and provides the public with contact information. The Surface Owner for this property maintains site access with fencing that is currently installed on the permitter and within his privately held surface estate. The Surface Owner does not allow the general public to enter his property without prior consent from the Surface Owner.

3.0 Life of the Mining Operations (SDCL 45-6B-6)

BPM intends to conduct mining and reclamation operations over a 5-to-8-year timeframe however, this schedule is dependent on market conditions. The initial proposed sequence proposes to accomplish the actual mining over a 6-year period. The Operating Plan Map included in Appendix A depicts the planned sequence of mining and the general timeframes for the mining of different areas.

4.0 Primary Equipment Used in Mining Operations

BPM utilizes some combination of the following equipment to conduct the bentonite mining operations:

- D9L & D9T Caterpillar dozers

- Caterpillar 637E & 637D scrapers
- Caterpillar 988 front-end loaders
- Caterpillar 14G or 14H patrol blade
- Track-hoe excavator
- Highway Tractor-Trailers Haul Trucks
- Water trucks

This equipment list may change as new equipment is incorporated into the current fleet. BPM may utilize contractors for various operations. Contractor's equipment fleet may vary from the above list however, the equipment selected will be of a similar and reasonable scale to perform the contracted work.

5.0 Mining Progression, Planning & Time Schedule (SDCL 45-6B-6 (8(a & b) &9) & ARSD 74:29:07:02 (1 - 3, 6 - 10) & ARSD 74:29:02:04 (3))

Typically, BPM excavates a sequence of small pits which are 2-10 acres in size. Each small pit removes 50,000-450,000 cubic yards of overburden depending upon the depth of overburden and the size of the pit.

As each new cut is made, the salvaged topsoil, subsoil and overburden materials are used to reclaim the previous pits in a timely and contemporaneous manner. The Operating Plan map in Appendix A illustrates the integrated mining and reclamation process, storage locations and general site layout. The mining progression will follow the generalized sequences described below.

The overburden from the first pit is used to re-contour the landscape near the pit. Then the tiered system of backfilling of successive pits will be utilized. The last pit is filled by leveling out the immediate area surrounding that pit. This scenario is useful to make the landscape more traversable to livestock and wildlife and to stabilize slopes. An alternative method of mining is when the overburden from the first pit is used to backfill the last pit of different sequence. The last pit is filled by leveling out the immediate area surrounding that pit.

When concurrent reclamation is not feasible BPM includes storage locations for topsoil, subsoil and overburden as on the Operating Plan map of this permit. These locations were selected by evaluating reasonable distances to the excavating areas, site access, surface hydrology considerations and by determining storage needs. Typically, BPM has elects the shortest viable storage location on relatively even ground with enough storage capacity to reduce energy usage, prevent cross contamination and to minimize project disturbance.

The Operating Plan Map illustrates the proposed sequence and schedule for mining operations within the proposed mine. As per SDCL 45-6B-36, BPM will within 60 days of the anniversary of the permit approval submit an updated Operating Plan Map illustrating the mining and reclamation progress made over the course of the past year and propose any changes in the proposed mining time schedule.

The design of the mine facilities is compatible with surrounding land uses which is primarily Rangeland, to which some has been historically mined for bentonite. BPM has suggested utilizing modern and concurrent mining practices for this property as the surface and land use is typical of the other mining properties BPM has and is successfully mining today. Concurrent mining practices do not significantly permanently alter the ground surface.

BPM's mining and reclamation practices described in this permit application will result in similar pre-mine and post-mine topography and revegetated surfaces.

Bentonite Performance Minerals does not intend on future exploration or mining plans for the Security Bentonite Mine for the legal descriptions to which BPM holds the mineral rights.

6.0 Topsoil and Subsoil Salvage, Storage and Protection Procedures (SDCL 45-6B-6 (8(c)) ARSD 74:29:07:14 (3, 4))

In general, A horizons and the top of B horizons are salvaged as topsoil and the bottom of the B horizon through the C horizons are salvaged as subsoil. Paralithic material is not salvaged with the subsoil.

Topsoil and subsoil salvage operations are supervised by the Mine Manager or Mine Operation Supervisor. Salvage instructions are taken from the approved permit and written on a pit diagram for the Stripping Supervisor to implement in the field. Soil salvage information is available in the Soils Baseline Report in Appendix C and on the Soil Salvage Map in Appendix A.

BPM will salvage all topsoil and subsoil from affected lands including:

- overburden stockpile sites
- bentonite stockpile sites
- new haul roads
- all pit areas and a buffer zone around their perimeter
- all equipment parking, fueling and maintenance areas

BPM (and its contractors) generally use rubber-tired scrapers to salvage topsoil and subsoil. Topsoil and subsoil will be separately and selectively salvaged. If backfilled and regraded lands are available, BPM will live-spread the salvaged subsoil and topsoil in their premining vertical arrangement.

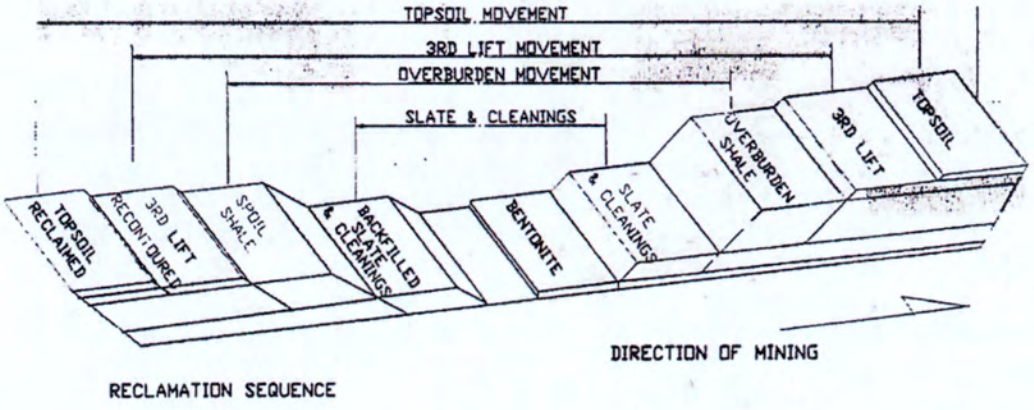
The topsoil and subsoil stockpiles will be marked with signs reading "TOPSOIL" or "SUBSOIL" and the stockpiles are constructed according to the best practices in BPM's SWPPP to prevent erosion and surface degradation. The sign lettering will be clearly visible from a reasonable distance. New topsoil and subsoil stockpiles will be seeded with the approved permanent seed mix during the first available fall seeding period. The Annual Report will show the location and type of all existing stockpiles.

A Petroleum Contaminated Soils Land Farm (PCS Farm) was permitted within the property and was closed in 2008 by the surface owner. Site closure was approved by the DANR in 2008. BPM will salvage and store the PCS Farm soils separately from the rest of the area. BPM anticipates 17,328 cubic yards of topsoil and 51,221 cubic yards of subsoil to be salvaged from this area. The Operating Plan Map in Appendix A depicts soil storage space for these soils. This space allows for four piles to be constructed that will have a capacity of ~20,000 cubic yards per pile. These soils will be replaced in the PCS Farm footprint upon final reclamation. These soils will be seeded and revegetated in the same manner as all other lands and in accordance with this reclamation plan.

7.0 Overburden Removal, Handling and Backfilling Procedures (SDCL 45-6B-6 (8(c)), ARSD 74:29:07:14 (3, 4) & ARSD 74:29:07:02 (1, 2, 4, 7-10))

After removing the defined topsoil and subsoil on a specific pit, dozers usually rip the overburden in lifts. Rubber-tired scrapers remove the overburden and use it to backfill an open pit. Figure 1 illustrates the general process.

FIGURE 1. MINING & RECLAMATION SCHEMATIC OF MATERIAL MOVEMENT



BPM will utilize a "tiered" system for backfilling open pits. The tiered system consists of placing poor quality overburden from pit excavation to fill the lower third of the previous pits. The upper portion of overburden removed from the next pit is placed on top of the previous pit's lower quality material. This procedure enables the overburden closest to the bentonite to be buried as deep as possible. Third lift material immediately below the subsoil from the next successive pit is then placed on top of the upper portion of overburden removed from the previous pit. The third lift material is brought to the approximate original grade and blended with the surrounding native lands. Topsoil and subsoil are then direct hauled from the next pit and placed on the third lift.

If the overburden is not directly backfilled, it will be stockpiled on lands stripped of subsoil and topsoil. A containment berm will prevent stockpile runoff from contaminating native soils and to minimize loss of materials due to water erosion. Overburden stockpiles will not be placed in intermittent or perennial stream channels. Overburden stockpiles will not be placed directly in defined ephemeral drainage channels unless a temporary drainage is developed. Overburden may be temporarily or permanently relocated to improve site access during the mining operations. Relocated overburden is placed in areas only deemed necessary and that have had the topsoil and subsoil removed in accordance with Section 6.0. Topsoil and subsoil will be replaced upon reclamation of any relocation area.

Historical analyses of overburden and bentonite beds have not identified combustible, toxic, acid-forming or otherwise hazardous materials. Should any such materials be encountered in the mining process, it will be handled according to applicable state and federal laws.

8.0 Bentonite Handling Procedures (SDCL 45-6B-6)

Exposed bentonite beds are typically ripped by a dozer then removed by rubber-tired scrapers and stockpiled for field drying or temporary storage.

Bentonite stockpiles will be created only on surfaces where native topsoil and subsoil have been removed in accordance with Section 6.0. If the stockpile is not confined by an open pit, a containment berm is constructed around the stockpile, removing or reducing a potential loss of bentonite and prevents potential pollution of soils and surface waters.

Bentonite will be loaded into side dump or belly dump trucks (from the pit or stockpiles) for over-the-road delivery to the permittee's processing plant at Colony, WY

9.0 Protection of Other Resources (ARSD 74:29:07:02 (3, 4 & 6))

Due to the shallow at depth which mining will occur, it is not anticipated that groundwater will be encountered or impacted by mining operations.

Watersheds and existing drainages will be minimally affected during mining. Surface flow will be temporarily diverted around active disturbance and into the existing drainages. Final contouring will direct similar-size drainages and watersheds toward the premine outfalls. No significant effects on surface water are anticipated due to mining.

Wildlife observed within or near the Security permit area during mining and reclamation operations will not be intentionally impacted by BPM and their contractors. Should species listed under the U.S. Fish and Wildlife Service Threatened and Endangered Species, South Dakota Endangered and Threatened Species or other species of concern be noted during operations, BPM will contact the appropriate state or federal agencies as soon as reasonably possible.

The mining operation will be readily visible from 3 View Road and can also be seen from a distance from Highway 212 in both the NW and SE directions. Pits, stockpiles equipment and other mine facilities will be visually inspected every operating day while BPM has equipment and a presence onsite. Should BPM demobilize from the mining area for any duration greater than 4 weeks, BPM shall conduct a visual site inspection monthly to ensure the obligations of this permit application are met.

Residences in the area do not have a direct line of sight of the entire proposed mine permit boundary due to topographic relief. BPM does not intend to implement visual screening that would prevent the public from observing mining and reclamation activities on the project. The closest residence is ~.25 miles from the center of the permit area however, the topographic relief and minor trees block the direct line of sight to most of the proposed activities. Evidence of mining and reclamation activities are readily observed NE of 3 View Road. BPM's optimized seasonal mining and concurrent reclamation will reduce the opportunity for visual impacts to the public. BPM does not anticipate the need to visually block the proposed activities from the public utilizing 3 View Road or Highway 212.

10.0 Best Management Practices (ARSD 74:29:07:02 (1, 4, 6, 8, 10), ARSD 74:29:02:11 (13))

BPM will apply for coverage under SD's General Permit for Storm Water Discharges Associated with Industrial Activities prior to beginning mining operations. A SWPPP has been prepared for

the mining activities as is required for coverage under the general permit. The SWPPP is included in Appendix B of this application. The SWPPP lists general Best Management Practices (BMP's) that BPM will utilize to prevent pollution from occurring during storm water discharge at the mine during active and inactive periods for the mine. These BMP's include:

- Total Suspended Solids (TSS) resulting from entrainment from sediment into storm water is managed by maintaining a vegetated buffer and/or depressions around overburden piles that collect runoff. Further, any errant runoff from the overburden is collected in drainages that have additional BMPs such as water bars and sediment ponds.
- Before pumping from a pit, sediments in the water must first be given an opportunity to settle. Water then may only be pumped into an area that does not connect with a major drainage. If water is pumped to a major drainage, the drainage must contain BMPs such as water bars or a sediment pond(s).
- Fueling of pumps is performed either in the pit bottom or in camp areas which have been stripped of topsoil and are cupped/bermed for containment.
- Topsoil is usually live-spread immediately after it is collected in accordance with BPM's policy of concurrent mining and reclamation. However, there are times when topsoil and subsoil piles must be stockpiled for final reclamation. New topsoil and subsoil stockpiles will be seeded with the approved seed mix during the first available fall seeding period. A berm can be placed around topsoil and subsoil stockpiles to prevent storm water from eroding the piles and/or catchment basins or sumps can be downgradient of the stockpiles to minimize sediment loading to the surrounding native ground.
- Each campsite is bermed and constructed on a shallow one to three percent grade. On the down-gradient end of the camp, a sump is constructed to catch runoff and prevent possible discharge. All trash and debris generated at the camp is collected and regularly transported to the plant site or landfill for disposal.
- The management of field storage, dispensing, and clean-up of hydrocarbons is discussed in BPM's SPCC Plan (Appendix C). In summary, this plan directs all storage of petroleum products to be maintained within the bermed and graded camp area. The camp area has a sump that is capable of storing 110% of the largest storage container in the camp area. Fueling of equipment is also performed in the camp area. Camp areas are situated on bentonitic overburden. The bentonitic overburden readily absorbs and retains possible spilled petroleum products, due to the presence of the absorbing clays. The bentonitic component of the overburden swells upon absorption and prevents further infiltration of contaminates. In the event of a spill of petroleum product, the overburden is excavated and placed into a pile and transported to BPM's permitted PCS

landfarm in Colony, WY. The spill is reported internally as a spill inside containment per the SPCC plan.

- Management of the roads includes dust control, blading and ditching, crowning, use of proper road construction materials and routine maintenance. The dust control measures include watering the roads using several water trucks on a regular basis during each day. The roads are also bladed with a maintainer to remove fines and help establish a crown. The road ditches are cut to help promote water runoff and settling. Appropriately sized culverts are installed to divert water under roads to control and maintain proper drainage.
- Stockpiled bentonite is cupped (ditched) and bermed to prevent loss of material (product).
- Loading of bentonite outside of pits occurs in areas that have been cleared of topsoil and has had a berm placed around it to prevent contamination of storm water.

11.0 Temporary Diversion of Unchannelized and Ephemeral Stream Flows, Proposed Reservoirs, Tailings Ponds, Tailings Disposal Sites, Dams and Dikes (SDCL 45-6B-7 (10), SDCL 45-6B-41, ARSD 74:29:02:11 (9) ARSD 74:29:02:04 (5), ARSD 74:29:07:09 (1- 5, 7 & 8) & ARSD 74:29:07:10 (1))

There are no unchannelized, perennial or intermittent streams within 10 feet of the proposed permit boundary. Tailings dams/ponds, reservoirs, heap leach pads and other critical earth structures will not be constructed to support this bentonite mining project therefore, no stability analysis was performed in support of this permit application.

Drainages may be temporarily diverted to support the Operating Plan. Temporary drainages will be constructed to minimize hazards to humans, wildlife and livestock, will utilize riprap, filters or other methods and will not have side slopes greater than 2:1 and will be seeded and stabilized as needed to prevent erosion. Diversions will not be constructed in rock and will not discharge onto topsoil, subsoil, spoil storage areas or other unconsolidated material such as newly reclaimed lands. Drainage from the property will not be impacted and culverts will be utilized as necessary where traffic intercepts existing and temporary drainage diversions. Culverts will be sized appropriately to handle a 2-year, 6-hour storm event and will be regularly inspected and maintained as needed. Other transport facilities and utilities (as they may apply) shall be constructed and maintained to control degradation of water quality and quantity. Diversion ditches shall be constructed to minimize hazards to humans, wildlife and livestock as needed. All surface water diversions shall be capable of carrying a minimum of a two-year six-hour precipitation event. Please refer to the Surface Hydrology and Features Maps in Appendix A.

12.0 Wetland Disturbance

There are no wetlands present within the mine boundaries according to the U.S. Fish and Wildlife Service National Wetlands Inventory.

13.0 Processing and Handling Facilities (SDCL 45-6B-6 (8(c)))

All bentonite mined at this site will be hauled to BPM's bentonite processing plant at Colony, WY. There will be no bentonite processing facilities located at this site. There will be no tailings produced at this site therefore, no onsite tailings disposal is required.

14.0 Solid Waste Disposal (ARSD 74:29:07:02 (4, 6, 8, 9), SDCL 45-6B-38 & ARSD 74:29:07:05

Solid waste generated as part of the approved mining activities will be removed from the permit boundary by BPM or a third-party contractor and disposed of in a permitted landfill or will be managed appropriately and in accordance with South Dakota regulations by the third party. BPM will not establish a solid waste disposal site within the permit boundary or attempt to utilize the existing closed solid waste facilities previously permitted. BPM employees will be informed, and the necessary training will be provided to ensure personal and mining related waste products do not accumulate onsite and are managed as they are generated.

The closed solid waste facilities, permitted not by BPM, contained within the Security permit boundary will not be utilized by BPM. BPM has identified the physical boundaries of the closed solid waste facilities based on the surface expression of piled rubble and other solid wastes on the provided Pre-Existing Permitted Disturbance map in Appendix A and at the end of Appendix C.. Bentonite outcrops nearby the solid waste facilities and bentonite exists below the solid waste facilities themselves. BPM will not excavate the bentonite underlying the solid waste facilities. BPM does intend to mine the bentonite exposed at the surface nearby the solid waste facilities and will leave sufficient space between the boundaries of excavation and the solid waste facilities to prevent potential negative impacts to the closed solid waste facilities.

In the event BPM impacts the closed solid waste facilities, BPM shall immediately notify the DANR and begin the appropriate permitting process to manage the impacted facilities if necessary.

Acid-forming or toxin-producing materials are not anticipated to be mined according to the data supplied by BPM and the DANR regarding this property. Should any Acid-forming or tox-producing materials be encountered, they shall be handled and disposed of in a manner that will control unsightliness and protect the hydrologic system from pollution and shall be handled in accordance with the South Dakota hazardous waste regulations in ARSD 74:28. This includes petroleum contaminated soils generated by BPM's equipment during the mining process from leaks, spills or other actions as a direct result by BPM personnel. BPM does not anticipate the need to remove contaminated soils from the closed PCS Farm as the closure of the permit was approved by the DANR.

15.0 Power Transmissions and Communication Lines

No power transmission or communication lines will be constructed for the mining operations. BPM will not mine within a ten-foot radius of any power or communication poles. This practice ensures a stable pedestal will be left around any poles in the permitted area, thus preventing destabilization. Any underground utilities will be relocated before mining or marked by the utility company to ensure mining does not impact those utilities.

16.0 Haul, Access and Light Use Roads (ARSD 74:29:07:12)

A county road (3 View Road) and a Bentonite haul road owned by American Colloid Company transverse portions the disturbance boundary as seen on the Roads and Utility Map in Appendix A. These existing roads will be utilized to haul the mined bentonite to the Colony Wyoming Plant.

3 View Road will be primarily used to access US Highway 212 to haul bentonite to the Colony, WY plant. There will be no roads constructed across perennial, intermittent streams, riparian zones or significant water features. Temporary haul roads may be constructed across drainages as needed and will be constructed at or near right angles whenever possible. Running width of roads will be sized for mining traffic and will be approximately 20-25 feet of not including the needed amount of disturbance to ensure drainage ditches are effective. Culverts will be installed and inspected as needed to avoid plugging, collapsing or erosion at the inlet and outlet. Culverts will be routinely inspected, repaired, and cleaned. All roads will have ditches and culverts as needed and road surfaced will be sloped as discussed in the SWPPP.

17.0 Buildings and Structures (ARSD 74:29:07:13)

No buildings, structures or railroads exist within the proposed Security Project Bentonite Mine boundary. No buildings, structures or railroads will be constructed at the site.

18.0 Operational Water Use (ARSD 74:29:07:04 (6), ARSD 74:29:02:11 (11), SDCL 45-6B-41 & ARSD 74:29:07:08 (1 & 2))

BPM will not construct any processing facilities at this site. The only site operational water use will be for road dust suppression. BPM will apply water to 3 View Road and the ACC Road during the life of this project as needed. BPM either perform these activities with their own equipment or utilize a subcontractor. Water will come from a pond near BPM's Colony Plant which is permitted according to applicable Wyoming regulatory requirements. Water trucks can hold 8,000 gallons, which will water approximately 8 miles of road. The initial flow rate will be 1,000 gallons per mile of road, depending upon conditions; the flow rate may be more or less. BPM will not need to obtain any water right permits for water used during the life of this project.

Any disturbance to the quality and quantity prevailing hydrologic balance of the affected land and the surrounding area is not anticipated to be impacted in any capacity. In the event any disturbance to the affected land does, BPM shall minimize any impacts during and after the mining operation and during reclamation.

BPM shall comply with South Dakota water rights laws and regulations and water quality laws and regulations.

19.0 Impoundments ARSD 74:29:07:27

BPM does not anticipate any impoundments to remain on the affected land that require a permit once mining is complete.

Section Three

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Section Three

BPM Security Bentonite Mine

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Mine Reclamation Plan

BPM Security Bentonite Mine

Bentonite Performance Minerals, LLC
554 US HWY 212
Belle Fourche, SD 57717
307.896.2596

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Reclamation Plan

BPM Security Project Bentonite Mine

1.0 Types of Reclamation (SDCL 45-6B-7 (1), ARSD 74:29:07:20 & ARSD 74:29:07:01)

Bentonite Performance Minerals, LLC (BPM) will restore all mining related disturbances to rangeland to match the surrounding area and to conform with the surface owner's future land use plans. The concurrent and collective reclamation techniques discussed in Section 5.0 and BPM's history of successfully reclaiming bentonite mines will ensure compliance with South Dakota Codified Law (SDCL) 45-6B-7 and Administrative Rules of South Dakota (ARSD) 74:29:07:01

2.0 Soil Survey (SDCL 45-6B-7 (2), SDCL 45-6B-8, SDCL 45-6B-9 & ARSD 74:29:07:17))

The SWCA Environmental Consultants (SWCA) baseline soils survey in Appendix C indicates there are seven overall soil mapping units consisting of five different soil series in the portion of the project area to be disturbed by mining activities. These soil series are very typical of soils in this region and areas mined for bentonite. These soil series should not create any unusual issues with revegetation once mining has been completed.

Soil profiles were described in the field, GPS coordinates were collected for each sample location and a minimum of one laboratory confirmation sample was collected for each soil series identified. From this data, determinations were made about the depths of available topsoil and subsoil materials. The study was conducted by Chris Johnston, a Certified Professional Soil Scientist, and the lab work was conducted by Pace Analytical in Sheridan, Wyoming.

The predominant soil series is Grummit clay found in both the Grummit and Grummit – Shale Land Map Units. This soil type occupies a large, central, east-west swath and is a thin, intermittent soil comprised of a thin A horizon over altered shale bedrock. The soil series in the northeastern and southeastern section of the project area are Bidman loam and Demar loam soil series. These soil types consist of deep to very deep, moderately well-drained and well-drained loams parting to clay with depth. The soil series in the western section of the Project are Hisle silt loam with a small area of Graner clay on the westernmost edge. These series consist of moderately deep and very deep soils that are well drained. Previous mining of any kind or variety has not occurred within the permit boundary. Overtime, previous surface owners permitted a Solid Waste Facility located in the southwest portion of the permit area and a Petroleum Contaminated Soils Land Farm was permitted in central portion of the permit boundary. The Request for Determination of Special, Exceptional, Critical or Unique Lands addresses these previous permits which are now closed.

Detailed reports on the baseline soil surveys are included in Appendix C of this mine permit application.

3.0 Vegetative & Wildlife Surveys (SDCL 45-6B-7 (3-4))

Environmental baseline surveys for both vegetation and wildlife were conducted by SWCA between September 2020 and May 2021 and are presented in Appendix C. The result of these wildlife and vegetation baseline studies indicates that the proposed permit area lacks any special, exceptional, critical or unique characteristics, features or habitats. The study also indicates that the area does not appear to be ecologically fragile. Plant and wildlife species here are adapted to withstand wide ranges of fluctuation in temperature, moisture, sunlight,

and wind. It is not expected that the proposed mining operation will have a strong influence on the total ecosystem.

The vegetation surveys show that the dominant plant community observed in the project area was perennial graminoid grassland. Species diversity and composition sampling show the area is dominated by native cool season perennial grasses with 95% of transects containing one or more species from this category. The dominant cool season grass is western wheatgrass. Introduced perennial grasses were the second most common type of grass found in 80% of the transects. Kentucky bluegrass and crested wheatgrass were the two most common introduced perennial grasses. Plant species in the survey area are very similar to the surrounding area.

The vegetation survey did not identify any state or federal threatened, endangered, or rare plant species or habitat in the Project area. No wetlands were identified. The survey also did not identify any critical resources as identified by SDCL 45-6B-92(3)) which include riparian zones, mountain meadows, wetlands, and threatened or endangered species.

A wildlife survey including a desktop analysis was performed, and results were field verified for potential habitat or presence of federally or state-listed species or other species of concern. No federally threatened or endangered species were observed within the Project and no habitat was identified. Additionally, no South Dakota State–listed endangered or threatened species were observed and no suitable habitat was identified within the Project. Seventeen bird species were observed in the survey area during breeding bird surveys, none of which were federally or state listed. The Project is unlikely to have population-level impacts on the observed species as any displaced individuals could use similar habitat adjacent to the proposed Project.

No bald eagle roosts or active raptor nests were observed within the project area; however, there is potential habitat that could be used by eagles within 0.5 mile of the project boundary. Four raptor species were observed during the surveys or general site visit.

The northern-long eared bat is unlikely to occur within the Project. There are no caves or mines that would provide suitable winter habitat within project boundary. There are also no large tracts of continuous forested land within the project area that would provide habitat.

The proposed Project is not anticipated to negatively impact populations of upland game birds, small mammals, reptiles, or big game species as any displaced individuals could use similar habitat adjacent to the proposed Project. The mine impacts will be temporary in nature as once the mining is completed, the area will be revegetated.

The proposed Project is not anticipated to negatively impact populations of amphibians, waterfowl and shorebirds, or fish species. There are no aquatic habitats present within the project boundary and no mine related activities will impact either the Belle Fourche River or Middle Creek.

4.0 Known Significant Characteristics (SDCL 45-6B-7 (5))

The land does not have unique historic, archaeologic, geologic, scientific, or recreational features of significance. The land can return to its former uses as soon as reclamation is complete.

4.1 Historic, Archaeological, Cultural, Ethnological

In June 2021, Quality Services, Inc. (QSI) conducted a Level III cultural resources inventory on behalf of BPM for the Security Project. Cultural resources records search with the South Dakota State Historic Society revealed no cultural resources in the area of potential effect but did reveal multiple sites within one mile. A pedestrian survey totaling 133.98 acres was conducted, covering the area of potential disturbance. One isolate flake was located during the inventory. The site is recommended not eligible for the National Register of Historic Places. QSI concluded that no significant cultural resources will be impacted by the proposed project.

4.2 Water Resources

The project area is located between two streams, the Belle Fourche River and Middle Creek. Middle Creek is a perennial stream located to the north-northwest of the project area. The stream is approximately 650 feet from the project boundary at the closest point. Middle Creek has an annual mean flow of 2 cubic feet per second in this area. The Belle Fourche River is south of the Project and is also a perennial stream. The stream is approximately 600 feet from the project boundary at the closest point. The Belle Fourche River in this area has an annual mean flow of 228 cubic feet per second (USGS 2021). No intermittent drainages are shown crossing the proposed mine on available topography maps.

The Belle Fourche River is classified for Fish/Wildlife Propagation Recreation and Stock Watering; Immersion Recreation; Irrigation Waters; Limited Contact Recreation; and Warmwater Permanent Fish Life. The river is classified as full support for the Irrigation Waters, Limited Contact Recreation and Fish/Wildlife Propagation Recreation. The river is listed as Non-Support for Immersion Recreation due to Fecal Coliform and as Non-Support for Warmwater Permanent Fish Life for Total Suspended Solids.

There are no surface water rights in the project area or within 1 mile of the project area.

National wetlands inventory mapping (Appendix A & D) and baseline vegetation surveys did not identify any wetlands in the project area.

There are no groundwater wells within the project boundary and no groundwater was encountered during exploration drilling. There are two wells located within 1 mile of the project boundary. The closest well is a domestic/stock well approximately 500 feet from the southwest corner of the project boundary. Information regarding these wells is shown on Table 1.

Table 1. Groundwater Wells within 1 mile

Owner	Location	Depth (feet)	Completion date	Type
Gary Steel	NESE, S31, T9N, R2E	510	2004	Domestic
Craig Saiz	NWNE, S31, T9N, R2E	560	2015	Domestic

Note: S = Section; T = Township; R = Range; N = north; E = east.
Source: SD DANR (2021).

4.3 Scenic

The project area has historically been used for rangeland. The area is similar to surrounding lands and does not exhibit unique scenic or aesthetic qualities. The area lies between Colony, Wyoming, and Belle Fourche, South Dakota, a region which has been historically mined for bentonite and sand and gravel. There are several active bentonite mines located in this area currently.

There are three residences located within 0.5 mile of the project boundary. All residences are located on the south side of 3 View Road, where no mining activity is planned. The closest residence is approximately 250 feet from the west side of the project boundary. The second home is approximately 1,000 feet from the southeast corner and the third home is approximately 2,000 feet from the west side of the project boundary.

The proposed permit land is rangeland pasture that is similar to surrounding lands and does not exhibit unique scenic or aesthetic qualities. A Petroleum Contaminated Soils Land Farm (PCS Farm) was permitted within the central portion of the permit area by the previous surface owners. The current surface owner applied for closure of the PCS Farm and it was closed by the DANR in 2008.

The proposed mining activities on the project will be visible to occasional motorists on the nearby 3 View Road (Butte County) and ranchers in the area but should not have a strong or significant impact. The nearest resident is Harvey A. Garr, who lives approximately .5 miles southwest of the proposed mining.

4.4 Topographic

There are no unique topographic features within or near the project area. The Project is located to the northwest of the Black Hills in Butte County, South Dakota, and is approximately 3 miles northwest of Belle Fourche, South Dakota. The Project sits on an upland area between the Belle Fourche River and Middle Creek. The area has minimal relief and generally slopes downward from the southwest to the northeast at approximately 1%. Elevations in the project area range from 3,080 to 3,115 feet above mean sea level, with the highest area being in the southwest corner.

4.5 Geologic

The project area is located in the Black Hills bentonite mining district, which includes parts of Crook County, Wyoming; Carter County, Montana; and Butte County, South Dakota (U.S. Geological Survey [USGS] 1962). Bentonite mining has occurred in the Belle Fourche area for over 50 years. Today, there are several active bentonite mines located between Colony, Wyoming, and Belle Fourche, South Dakota. The Project is in the Semiarid Pierre Shale Plains of the Northwestern Great Plains ecoregion (Bryce et al. 1996). The overall geologic structure of this area is that of a broad northwestward-plunging anticline, in which the strata dips gently toward the northeast, north, and northwest. The overall structure is interrupted, however, by several subordinate folds. The northern Black Hills district is an important source of commercial gel-forming bentonite (USGS 1962).

The formation of bentonite resulted from an in-situ alteration of volcanic ash. Volcanic ash was ejected into the atmosphere by volcanic activity and deposited as sediment in a marine environment. The volcanic ash was subsequently buried by sea and terrestrial sediments, encouraging diagenesis. The resulting alteration of volcanic ash is the material we call bentonite.

The many uses of bentonite include: bonding agent for sands used in foundry cores and molds; drilling muds for commercial and domestic wells; binder for animal and poultry feeds; in water retention applications; in cosmetics, wine clarification, cat litter, etc.

Mining on the Security Project Bentonite Mine will consist of surface mining for bentonite clay in the "Commercial" bentonite bed.

Based on exploration drilling conducted in 2019, the overburden depth ranges from 5 to 40 feet and the bentonite bed is approximately 26 inches thick. The drill logs and laboratory analyses do not indicate any special or unique geologic characteristics.

4.6 Scientific

Baseline soils, vegetation, wildlife and water resource surveys did not identify any special, unique, or critical resources in the Project. The baseline surveys show that project area is similar to what is typically found in this region. Bentonite mining and livestock grazing are typical in this area.

4.7 Recreational

There are no unusual or aesthetic features that would suggest that the area should be classified as a recreational site or that it has been used for recreational activities. The area has historically been used as rangeland. There are isolated areas, less than 5 acres, within the project area that have been used for equipment storage. The project area lies between and is adjacent to ACC Haul Road on the north side and the 3 View Road to the south. The 3 View Road acts as the southwest boundary of the project area.

Further beyond these two roads are Middle Creek to the north and the Belle Fourche River to the south. Both streams are perennial and are more than 500 feet, at their closest point, from the project boundary. Neither stream will be impacted by the proposed mining activity. Recreational use is limited to hunting, which is restricted by the landowners. Reclamation activities will occur concurrently with mining and as soon as possible after mining and will restore what recreational value exists within the proposed mine boundaries.

4.8 Critical Resources

The Request for Determination of Special, Exceptional, Critical or Unique Lands submitted to the SD DANR did not identify any Critical Resources within the permit area that may be affected by the mining or reclamation activities. Critical Resources include wildlife, aquatic, vegetation, water, visual resources, soils, cultural resources, air quality and noise.

5.0 Description of Reclamation (SDCL 45-6B-7 (6,7))

Reclamation of the approximately 86 acres of surface disturbances generated by mining and mining related activities will restore the surface to rangeland use after mineral removal will be conducted according to the following practices, methods and schedules.

5.1 Disposal of Refuse. (SDCL 45-6B-38, ARSD 74:29:07:05 & ARSD 74:29:07:13)

Disposal of refuse will not occur at the site during mining or during reclamation activities. Temporary storage of refuse in labeled storage containers may occur until proper offsite disposal can be arranged. BPM will remove any and all equipment upon final reclamation of the property. Site inspections in compliance with BPM's Best Management Practices (BMPs) ensure proper handling and disposal of refuse generated during the mining process. Mechanical processing is not a consideration for this mining project, therefore oversized rocks and tailings will not need to be managed.

The surface owner may have wind shelters on the property to support his cattle operation. Should the structures need to be relocated, BPM and the surface owner will relocate the wind shelters at a mutually agreed upon location that will not interfere with the mining or cattle operation. BPM will not erect any structures to support mining and reclamation activities.

5.2 Hydrologic Balance (SDCL 45-6B-41, ARSD 74:29:02:11 (1, 3 & 4), ARSD 74:29:07:08 (1-4 & 6) through ARSD 74:29:07:11 & ARSD 74:29:07:27)

Bentonite mining has historically occurred in proximity to the Belle Fourche River and Middle Creek between Colony, WY and Belle Fourche, SD. Bentonite mining does not occur within the respective channels. The USGS Sourdough Flats Topographic map (Appendix A) does not depict any perennial or intermittent streams, springs, lakes or significant ponds within the within the permit boundary. Therefore, surface water will not need to be diverted around the permit boundary. SWCA's baseline Hydrology report is located in Appendix C of this permit application.

Surface water runoff within the permit area will be managed in accordance with the Storm Water Pollution Prevention Plan (SWPPP) located in Appendix B. The primary outfalls are located along the eastern boundary of the permit area, BPM's mining and reclamation activities will not impact existing outfalls. Dams or ponds will not be constructed for utilization by BPM to support mining and reclamation activities. Operational use of water is described in Section 18 of the Operating Plan, chemicals will not be utilized for dust suppression. Potential adverse impacts to surface features and environmental resources will be avoided or minimized due to the local topography and BMPs discussed in the Storm Water Pollution Prevention Plan (SWPPP). 3 View Road acts as a ridge along the southern disturbance boundary, serving as a physical barrier between the mining operations and the Belle Fourche River. Any temporary sedimentation, erosion or drainage control structures shall be removed after the affected lands have been vegetated and stabilized.

Subsurface baseline water quality was not required by the DANR to support this permit application due to the shallow nature of bentonite mining. The nearest well draws water from approximately 2,550 feet above sea level (asl) and the anticipated depth of mining is above 3,000 feet asl. In addition, ground water was not encountered during exploratory drilling. There are no wells located within the permit boundary. There are two wells located within 1 mile of the project boundary. The closest well is a domestic/stock well approximately 500 feet from the southwest corner of the project boundary. Both of these wells are at least 500 feet deep and will not be impacted by the shallow bentonite mining activity. Well locations are depicted on the Surface Hydrology Map in Appendix A. The surface owner has a water line for Rangeland use located in the southern portion of Phase 5 on the Operating Plan Map. BPM intends to temporarily remove only the needed portions within the planned disturbance to allow for mining and will replace the water line in approximately the same location.

Wetlands will not be impacted due to wetlands not being present within the boundaries of the proposed mine on the U.S. Fish and Wildlife National Wetland Inventory Map in Appendix A and in Appendix D.

BPM shall conduct mining operations in compliance with state, federal and local water quality laws and dredge and fills laws as applicable. BPM shall also comply with Dredge and Fill laws in sections 401 and 404 of the Federal Clean Water Act as they existed on February 1, 1987.

5.3 Storm Water Pollution Prevention (SWPP) ARSD 74:29:02:11 (7 – 9)

BPM will apply for coverage under SD's General Permit for Storm Water Discharges Associated with Industrial Activities prior to beginning mining operations at the facility. A Storm Water Pollution Prevention Plan (SWPPP) has been prepared for the mining activities as is required for coverage under the general permit to discharge. The SWPPP is included in Appendix B of this application. The SWPPP lists BMPs that BPM will utilize to prevent pollution from occurring during storm water discharge at the mine during active and inactive periods for the mine. More information on the SWPPP is included in Section 9.0 of the Security Project Operating Plan.

5.4 Backfill, Grading, Contouring Plans and Schedules (SDCL 45-6B-46)

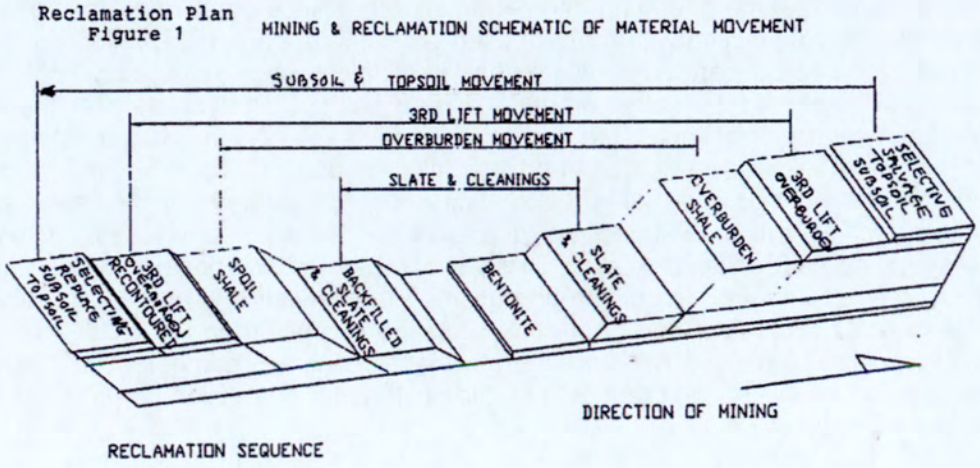
The BPM Security Bentonite Operating Plan Section 5.0 outlines the general mining progression and schedule. This Reclamation Plan section describes detailed and general reclamation practices which demonstrate timely reclamation that is concurrent with the mining operations. Ti also depicts reclamation activities with provides surface configurations that support the specified land uses. There are no roads, permanent pools or lakes which will be disturbed by mining activity where reclamation will not be feasible. A PCS land farm is located within the proposed disturbance area. No reclamation issues are expected as DANR has approved the closure of this land farm. If unforeseen soil degradation is encountered during the mining process, BPM will notify DANR immediately to generate a resolution plan. As discussed in the operating plan, soil salvaged from the land farm shall be piled separately from other soils. Individual pits will be reclaimed within a five-year period or when the pit is ready to be reclaimed as part of the concurrent sequence. Disturbances for mine camps, stockpiles and other reasons ancillary to mining will be reclaimed as soon as reasonably possible.

BPM will not utilize tailings impoundments, tailings disposal areas, heap leaching facilities nor spent ore disposal areas and, therefore, this Reclamation Plan does not address such facilities or areas.

5.5 Backfill Progressions, Temporary Overburden Stockpiles and Schedules (SDCL 45-6B-37, ARSD 74:29:07:03 & 74:29:07:04)

The BPM Security Project Bentonite Operating Plan Sections 5.0 & 6.0 and Operating Plan Figure 1 outline the general backfill progression and demonstrate that backfill is placed at approximately the same stratigraphic level from which it was removed. The cleanings from the top of the bentonite bed and other slate/shale cleanings are backfilled on the previous pit bottom. The "tiered" system (Reclamation Plan Figure 1) continues by replacing the lower overburden layers from the current pit over the cleanings. The upper portion of the mined overburden from the current pit is placed at an intermediate level in the backfilled pit. Lastly, the third lift (immediately below the subsoil) from the current pit is placed closest to the surface. This third lift is graded to the desired contour and surface configuration as shown in Reclamation Plan Figure 1.

Reclamation Plan
Figure 1



All temporary overburden stockpiles will be used in backfill as soon as possible consistent with reclamation progressions and schedules.

5.6 Permanent Out of Pit Overburden (SDCL 45-6B-37, ARSD 74:29:07:03, ARSD 74:29:07:04 & ARSD 74:29:07:14 (1))

The BPM Security Bentonite Operating Plan Section 5.0 discusses an initial pit cut being excavated, deposited nearby the initial pit cut where soils have been removed and finally contoured to the existing topography. Contouring is accomplished by utilizing the existing topography and the permanent features to create a continuous reclamation surface that blends into the existing topography.

If BPM creates a permanent overburden stockpile, the reclamation will achieve the following:

- Overburden placement will not occur on native slopes that exceed 20 degrees (approximately 33% or 3:1 slopes).
- Stabilizing the overburden slopes by grading and contouring them to approximately 33% or 3:1, or less, to blend with adjacent native and reclaimed lands.
- Covering the stabilized overburden by covering it with subsoil and topsoil.
- Seeding the topsoil with an approved permanent seed mix.
- Overburden placement will not block intermittent or perennial drainage channels. If any existing drainage is augmented, it shall adhere to Section 8.0 of this Reclamation Plan.
- Areas outside of permanent reclamation features shall be protected by the above practices and monitoring and remediation if necessary.
- BPM has held a record of successful reclamation with these same practices in Montana and Wyoming on significantly similar projects.

BPM believes that the operating and reclamation practices contained within this permit application in conjunction with the proposed size and topographic location do not merit the need for a critical earthen structure analysis. The proposed stockpile will not impound water, will be sloped and allow proper drainage, will not significantly alter the existing topography and will not impact the post-mine land use. BPM has constructed permanent overburden stockpiles in Montana and Wyoming as part of their mine and reclamation operations without being required to conduct a stability analysis. BPM has a record of success with post mine topography by implementing the same practices as described in the operating and reclamation plan, SWPPP and other supporting information provided which BPM applies at their mining operations. In the event the board determines that BPM must demonstrate long-term stability of the dump through geotechnical stability analysis conducted by a registered professional engineer competent in the field of geotechnical analysis, BPM requests that the criteria for evaluation be provided to BPM to fulfill the request.

5.7 Reclamation Progression Maps and Schedules

The BPM Security Project Bentonite Operating Plan Section 5.0 outlines the general progression of mining and reclamation during the life of the mine. The Operating Plan Map in Appendix A illustrates the proposed sequence and schedule for mining operations within the proposed mine. As described in Section 5.4 of this reclamation plan, reclamation progress is concurrent with mining progress based on the sequential way pits are mined and backfilled.

Seeding is conducted annually usually in the fall of the year to take advantage of proven reclamation techniques. Seeding may also occur in the spring in the event a given year provides for suitable planting. All reclaimed land that is contoured and ready for seeding will be seeded annually as the mining progresses according to the schedule on the Operating Plan Map.

As per SDCL 45-6B-36, BPM will within 60 days of the anniversary of the permit approval submit an updated Operating Plan Map illustrating the mining and reclamation progress made over the course of the past year and proposing any changes in the proposed mining time schedule.

5.8 Post Mining Slopes (ARSD 74:29:07:20(2))

In general, the post mining slopes will approximate the premining slope configurations except where initial "box cut" overburden material is permanently reclaimed. The reconstruction of approximate original slope gradients and timely completion of reclamation will assure stability of post mining landscapes.

The slopes on the final pit in any given sequence may have slopes as steep as 3:1 (~20 degrees or 33%). The permittee will ensure that these slopes blend with surrounding native lands and reclaimed lands, that the slopes support the post mining land uses and that the slopes are stable.

5.9 Grading and Post Mining Topography (SDCL 45-6B-37 & ARSD 74:29:07:04)

All post mining topography will be integrated with the surrounding topography and terrain and will re-establish stable contours consistent with the existing pre-mining topography and post mining land uses. BPM has provided a Post-Mine Contours Map in Appendix A that shows expected topography of the reclaimed land.

Grading will occur during concurrent reclamation as described in Sections 5.0, 6.0 and 7.0 of the Operating Plan and Sections 5.5 & 5.6 of this Reclamation Plan. All disturbed mining related features such as temporary roads, piling areas, pits and mine camps will be graded and contoured when operationally feasible.

BPM will reclaim the final pit in a pit series by either utilizing overburden generated and stored from the initial pit(s) or by reducing the highwall and creating through drainage where necessary. The reduced highwall slopes may be as steep as 3:1 (18 degrees or 33%) and will be revegetated for stability. To ensure stability on relatively steep slopes and/or long slope lengths, BPM will break up these slopes by creating terraces during grading the third lift backfill. These terraces will generally be approximately the width of a single pass of reclamation equipment. The gradient of the terraces will be as gentle as possible and non-erosive. The downstream end of terraces will feather into the reclaimed surfaces to create non-erosive transitions.

Reclamation features, including backfilled pits, reclaimed pit with highwall reductions, backfill pits and/or any other permanent reclamation feature shall be visually and functionally compatible, structurally stable and suitable for the post mining land use of rangeland by being subject to the following:

- Reclamation features shall not have slopes that exceed ~20 degrees (33%).
- Reclamation features shall provide for suitable through drainage to prevent water pooling, undercutting or otherwise eroding the reclamation efforts.
- Reclamation features shall be suitably compacted by the operating equipment once located.
- Reclamation features shall be contoured and blended into the existing adjacent topography.
- Reclamation features shall not be equal to or greater than the angle of repose.
- BPM shall use equipment suitable for reclamation and will include graders, dozers, backhoes, articulated trucks, and other equipment as needed in order to obtain the needed reclamation slopes, compaction, grading and contouring.

Backfilled pits shall be visually and functionally compatible with the pre and post mining contours. Backfilled pits are filled with overburden material in accordance to section 5.5, the relocated overburden is compacted by the mining equipment during the placement process. BPM does not anticipate notable loss of volume after extracting the bentonite due to the swell and compaction of the overburden, resulting in structural stability and visually minimal differences in pre and post mining topography. Therefore, the final slopes shall not exceed the angle of repose.

Un-backfilled pit and highwall reduction of any final pit not fully backfilled shall have the following:

1) Slopes shall not exceed 33%
2) Shall be covering the stabilized overburden by covering it with subsoil and topsoil.
3) Slopes will approximate existing topography and through drainage shall be maintained.

For more information on permanent out of pit reclamation features, please see Section 5.6.

5.10 Through Drainage

All backfilling, grading and contouring operations will maintain through drainage on all reclaimed lands. There will be no depressions which accumulate water unless a similar depression was already existing prior to mining. Restored drainage patterns and through drainage will be designed to prevent pollution or diminution of the quantity and quality of surface and subsurface

waters. Generally, final drainage patterns shall resemble pre-mine drainage patterns to the effect that fall out locations shall remain the same and shall receive approximately the same amount of water prior to mining activities.

5.11 Subsoil and Topsoil Redistribution Methods (SDCL-6B-7 (11), SDCL 45-6B-46 (2), SDCL 45-6B-40 & ARSD 74:29:07:07 (1,3-8))

5.11.1 Introduction

The BPM Security Project Bentonite Operating Plan Sections 5.0 & 6.0 outline BPMs topsoil and subsoil salvage and storage (stockpile) procedures. BPM practices concurrent reclamation whenever possible to minimize the amount of topsoil and subsoil in a stockpile and duration of time stockpiles are retained. BPM shall remove and replace subsoil and topsoil according to the topsoil salvage depths as recommended in the September 2021 SWCA Security Project Baseline Soil Survey. Temporarily stored subsoil and topsoil shall be marked with clearly identifiable signs containing letters not less than six inches high. The volume of topsoil required to establish vegetation is estimated to be the same amount of subsoil (163,808.7 CY) and topsoil (54,651.5 CY) to be removed from the respective areas. Should BPM discover a shortage of subsoil and/or topsoil to revegetate the disturbance area as described in the plan, BPM shall consult with the DANR to develop a resolution plan. A Petroleum Contaminated Soils Land Farm (PCS Farm) was permitted within the central portion of the permit area by the previous surface owners. The current surface owner applied for closure of the PCS Farm, and it was closed by the DANR in 2008. Soils from the PCS Farm will be extracted and piled separately from other soils salvaged within the permit boundary. These same soils will be replaced within the PCS Farm footprint upon final reclamation. These soils will be seeded and revegetated in the same manner as all other lands and in accordance with this reclamation plan. BPM anticipates 17,328 cubic yards of topsoil and 51,221 cubic yards of subsoil to be salvaged from this area. The Operating Plan Map in Appendix A depicts soil storage space for these soils. This space allows for four piles to be constructed that will have a capacity of ~20,000 cubic yards per pile. Trees, large rocks and other waste material shall be identified, collected and appropriately discarded offsite prior to soil salvaging activities. At this time, no fertilizer or other soil amendments have been identified to be added to the topsoil to establish and maintain vegetative cover.

5.11.2 Subsoil Redistribution Methods and Depths

BPM will use scrapers to replace all subsoil. As shown in Reclamation Plan, Figure 1, the available subsoil will be replaced on top of the recontoured "third lift" overburden. Should BPM determine that the third lift, has been unduly compacted, the high compaction areas will be ripped to eliminate slippage between the backfill and subsoil. If BPM is direct hauling from a new pit cut, all the salvaged subsoil will be redistributed at approximately uniform depths. When redistributing stockpiled subsoil, the redistribution depths will be approximately uniform. Subsoil will be replaced as soon as operationally feasible. The subsoil will be graded as necessary, during grading activities excessive compaction will be reasonably avoided.

5.11.3 Topsoil Redistribution Methods and Depths

BPM will use scrapers to replace all topsoil as illustrated in Reclamation Plan, Figure 1. If BPM is direct hauling from a new pit cut, all the salvaged topsoil will be redistributed on available

subsoil at approximately uniform depths. When redistributing stockpiled topsoil, the redistribution depth will be approximately uniform. The redistributed topsoil may be graded and will be left in a roughened condition to protect the topsoil from wind and water erosion. The permittee will always conduct operations to limit excessive compaction of the redistributed topsoil and efforts will be made to redistribute topsoil as soon as operationally feasible.

5.12 Revegetation and Seeding Method (SDCL 45-6B-39, ARSD 74:29:07:05 & ARSD 74:29:07:06)

5.12.1 Seedbed Preparation, Seed Mix and Seeding

BPM has consulted with Butte County Natural Resources Conservation Service and the Surface Owner to select a seed mix that will support the postmining rangeland land use. The seed mixture includes a variety of species selected based on the soil type and current USDA_NRCS guidance. The NRCS has also provided a seed mixture to support annual crop cover for temporary features, such as temporary soils stockpiles.

Permanent seeding will occur from September to November each year as long as the topsoil is not frozen. Given suitable planting conditions, BPM may elect to seed in the spring as well. Seeding will occur as soon as reasonably possible and opportunities for areas to be seeded will be assessed annually. The seedbed will be prepared with a no-till drill, which consists of a specialized disk set-up that opens the dirt to allow for the placement of seeds at an appropriate depth and then presses the soil back over the seed promoting good soil to seed contact and prevents erosion. Seeding will be on the topographic contour unless safety considerations overrule or are perpendicular to the prevailing wind direction on very flat lands. Topsoil may be seeded with a temporary crop cover in the event permanent placement of the topsoil occurs untimely in consideration to optimal seeding timeframe. The temporary cover will protect the topsoil and help conserve available moisture. No irrigation of the reclaimed and revegetated lands is proposed.

5.12.2 Seed Mix Substitutions

BPM commits to the permanent seed mix in the Seeding Plan and Record when the mix components are readily available. Seed purchasing history for the Killinger and Purple permits, where 7 of the 9 species, and consultation with BPM's seed vendors indicates that purchasing the approved seed mixture annually will be likely. In the event any species approved in this permit is unavailable, BPM shall consult with the DANR, the Butte County NRCS and the Surface Owner to determine what varieties may be available and if a minor modification is needed to supplement the approved seed mixture. In addition, BPM will submit a Technical Revision to the DANR for approval prior to any changes being made to the seed mix.

- The species and/or the preferred variety may not be available because of a poor seed crop or because federal or state agencies have purchased large quantities of seed.
- The cost may be prohibitive.
- The amount of available seed may not be adequate for the reclamation acreage.

BPM may need to substitute a small number of species given the above considerations. If the total number of substitutions is one (1) or more, BPM will secure prior approval from the landowner and the SD DANR, Board of Minerals and Environment. Otherwise, BPM will

substitute a native or naturalized species of the same life form with similar characteristics. BPM will report the substitutions in the first available Annual Report.

5.12.3 Vegetation Reference Area (SDCL 45-6B-39 & ARSD 74:29:07:06 (2-3))

BPM and SWCA have selected vegetation reference areas which are depicted on the Soils Salvage Map in Appendix A and Vegetation Map in Appendix C. Reference areas were selected based on their representative qualities of rangeland use and similarity to the proposed disturbance sites. The reference areas are currently and will continue to be utilized as rangeland. The eastern reference area is 3.9 acres, and the western area is 3.8 acres, both of which are located outside of proposed disturbance and will not be impacted by mining. These areas are large enough to measure reclamation success and are representative of rangeland surface use. Existing fencing and the surface owners use of the surface will help ensure similar management of the reference area and the proposed permit area.

5.13 Husbandry Practices on Revegetated Lands (SDCL 45-6B-43 & ARSD 74:29:07:15))

5.13.1 Noxious Weed Plan

BPM will use certified weed-free seed and standard agricultural practices to minimize the introduction of noxious weeds. BPM will consult with appropriate county and state agencies when other weed control methods, e.g., spraying, appear appropriate to control localized weed infestations on stockpiles or revegetated lands. BPM will continue these practices until the reclaimed lands are fully released from the reclamation performance bond.

5.13.2 Protection of Revegetated Lands (ARSD 74:29:17:20 & SDCL 45-6B-45 (2))

BPM will protect newly seeded areas from livestock, as needed, until the vegetation is self-renewing. BPM will employ some combination of the following practices to accomplish this standard.

5.13.3 Selective Fencing

Based upon agreements with respective surface owners, the permittee may selectively fence reclaimed lands to control the pattern and duration of domestic livestock grazing. The fences will be removed after bond release if the surface owner requests.

5.13.4 Grazing Deferral and Controlled Grazing

Based upon agreement with respective surface owners and grazing lessees, the permittee will seek to properly manage livestock grazing on revegetated lands so that the self-renewing capacity of the revegetation is not negatively impacted.

5.14 Evaluation of Revegetation Success, Bond Release and Post Closure Plan (SDCL 45-6B-5(5), SDCL 45-6B-91, ARSD 74:29:07:01 (1-3)), ARSD 74:29:07:20)

BPM will restore a stable, non-erosive post mining surface which promotes a post mining rangeland use. Revegetation practices will establish cover sufficient to prevent undue erosion. Revegetation will establish cover and production and species diversity and composition which support the land use. A Revegetation Success Plan for evaluating reclamation success based on completeness standards as set in ARSD 74:29:07:06 can be found attached to this

Reclamation Plan. The revegetated lands will be reclaimed to support a livestock carrying capacity that is equivalent to that of the surrounding area or to that of the reference area; slopes will not exceed three to one unless approved by the SD DANR, and reclamation will be deemed complete when the reclaimed range can support proper stocking rates for two consecutive years prior to bond release. All reclamation activities for the duration of the mining project shall be subject to the concurrent, interim, and final reclamation requirements of chapter 74:29:08 and as discussed in this permit application. Sampling for final bond release will be in accordance with the Reclamation Requirements section of the Reclamation Plan contained within this application.

5.15 Drainage, Sediment and Erosion Control Plan (ARSD 74:29:02:11(9), ARSD 74:29:07:04(2), ARSD 74:29:07:08 (4) & SDCL 45-6B-41)

It is a common mining practice for BPM to construct and implement BMPs, as described in detail in the SWPPP, to reduce or prevent sediment loss and erosion potential. BMPs consist of constructing temporary sediment traps to reduce water flow rates, berms to prevent storm water from entering open pits, diversions to re-route water from contacting open pits and soil piles. Soils piles will be seeded to establish vegetation and prevent erosion. Final reclamation topography and temporary piles will be constructed with slopes that are no greater than 3:1. All diversion, berms and sediment traps will not be permanent and will be removed as part of final reclamation. Temporary diversions and sediment traps will be implemented as needed throughout the permit area as mining progresses. The dimensions for the BMPs will vary at each location in efforts to construct small enough features to minimize disturbance but large enough to be effective. Temporary sedimentation, erosion or drainage control structures shall be removed once a features purpose is no longer needed or after affected lands have been vegetated and stabilized.

Final reclamation features will have reclamation slops of 3:1 or less, they shall be compacted by heavy operating equipment, be constructed to allow for proper drainage, topsoil and subsoil placed in accordance with this permit application, seeded and subject to site monitoring and remediation as necessary to ensure final reclamation success. These factors shall reduce/remove the potential for slides occurring during final grading and after reclamation is complete.

6.0 Reclamation Map (SDCL 45-6B-7(8))

BPM has included a Post Mine Land Use Map in Appendix A.

7.0 Slides, Subsidence, or Damage Protection, Fencing (SDCL 45-6B-42, ARSD 74:29:07:16 & ARSD 74:29:07:02 (5))

BPM minimizes hazards posed by post reclamation slides and subsidence by adequately compacting and contouring backfilled excavations to merge with the undisturbed topography. During contouring activities, the operating equipment sufficiently compacts overburden which prevents settling and subsidence post reclamation. Drainages are constructed to prevent surface water runoff collecting or pooling to ensure proper through drainage to protect the reclaimed areas. Postmining contours will approximately match premining contours, therefore there will be minimal topographic changes or hazards upon reclamation that will require mitigation or management.

During mining operations, BPM maintains shallow highwalls on advancing and retreating pit faces during mining activities, these shallow slopes allow suitable ingress and egress for wildlife, livestock and equipment. Highwalls with steeper slopes are bermed in accordance with MSHA requirements to prevent equipment and deter wildlife and livestock from entering pit areas with relatively steeper slopes. Reclamation activities remove highwalls by backfilling excavations or by contouring excavations to merge with the surrounding topography as discussed in Section 5.9.

Fencing may be utilized to prevent livestock from impacting newly seeded areas as discussed in Section 5.13. Fencing of mining related features is not anticipated post reclamation as the premining contours will approximately match the post mining contours. BPM and the surface owner will mutually agree upon fence locations during mining and reclamation activities that support both the mining operation and the surface owners' activities.

Mining and reclamation activities will occur on private land. The surface owner controls access to his surface through the use of adequate fence and gates on the perimeter of his property restricting access to the general public. The portion of the surface owner's property subject to mining and reclamation activities will be contained within the fence. BPM will access the property across a gate and/or cattle guard/auto gate from 3 View Road. The gate shall remain controlled by the Surface Owner and BPM shall comply with the Surface Owners requests to keep the gate locked if the surface owner desires the gate to be locked. BPM's access to the property is governed by a formal agreement between BPM and the Surface Owner. The Surface Owner does not allow the general public to enter his property without prior consent from the Surface Owner.

8.0 Location of Certain Proposed Features (ARSD 74:29:07:27, ARSD 74:29:07:14 (1), ARSD 74:29:07:12 (9) & ARSD 74:29:07:09 (1 - 5 & 7- 8))

BPM is not proposing the creation of any reservoirs, tailings ponds, tailings disposal sites, dams or dikes during the mining activities at the site. BPM intends to construct a diversion channel to appropriate water around the proposed permanent out of pit overburden stockpile. BPM does not intend to change the outfall location and the existing channel shall remain relatively close to its current location however, the center line of ephemeral flow will be relocated to the north within the same drainage itself. The diversion will not be constructed in rock and will have sides that are no steeper than 2 horizontal to 1 vertical to maintain stable sides and to protect wildlife. BPM will utilize BMPs (riprap, filters etc.) to ensure that erosion in the diversion is minimized, surface water does not impact existing or proposed topographic features, topsoil storage areas or vegetation resources. Culverts will be utilized as necessary to ensure that surface waters can flow through or bypass any topographic features during the mining and reclamation activities. Upon final reclamation, any culverts employed will be removed and topography will be restored to premining contours to ensure stable through drainage. Other transport facilities and utilities (as they may apply) shall be constructed and maintained to control degradation of water quality and quantity. Diversion ditches shall be constructed to minimize hazards to humans, wildlife and livestock as needed. All surface water diversions shall be capable of carrying a minimum of a two-year six-hour precipitation event.

9.0 Stripping, Storage and Replacement of Overburden

Section 5.0 of this reclamation plan includes information on the Stripping, Storage and Replacement of Overburden.

10.0 Reclamation Costs (ARSD 74:29:02:08, SDCL 45-6B-7(12))

Detailed costs are attached to this Reclamation Plan. BPM will hold the full bond amount for all surface disturbance activities which include soil removal and storage, grading and seeding for the entire planned permit disturbance. BPM will account for two years of overburden (500,000 cubic yards) in the reclamation bond amount, which coincides with the mine and reclamation plan activities. Reclamation costs were calculated using Wyoming Department of Environmental Quality, Land Quality Division's Guideline 12.

11.0 Interim Reclamation and Temporary Cessation (ARSD 74:29:08:02, 74:29:07:01 (2) & 74:29:07:07)

BPM does not intend to cease operations for a period of more than two years which would prevent concurrent reclamation from occurring. In the event operations cease for more than 2 years, BPM will initiate interim reclamation which shall conclude one year after the two-year period. Interim reclamation shall consist of regrading, recontouring, revegetating and implementing other measures, as necessary, to effectively control drainage and erosion to the existing features onsite, including topsoil piles, and in compliance with chapter 74:29:07. In the event of a temporary cessation, BPM shall adhere to 74:29:07:07 (2) to ensure proper protection of resources.

12.0 Description of Critical Resources affected by Reclamation Plan (SDCL 45-6B-92)

(1) The proposed mine site and vicinity lacks suitable habitat for any federally threatened, endangered, or candidate wildlife species with the exception of the Northern Long-eared Bat. This species is unlikely to inhabit the mine site itself due to the lack of suitable habitat which would include cave or underground mines and no large tracts of contiguous forested habitat. The Black Hills National Forest is located to the south of the mine site; therefore, this species may be present in the vicinity of the mine site however, it is very unlikely to observe this species within the mine site itself. Of the animal species listed as threatened or endangered by the State of South Dakota, potentially suitable habitat is present on the site or in the vicinity for the Osprey, Peregrine Falcon and Swift Fox. The Swift Fox inhabits open shortgrass or mixed-grass prairies, the mine site and surrounding area can contain open grasslands therefore the fox has low potential to occur at the mine site. The Black Hills National Forest is the only location within South Dakota that may occupy in the summer months. Trees suitable for nesting is present within the vicinity of the mine site however, not located within the mine site itself. The Peregrine falcon are considered statewide migrants are uncommon during the winter months and has limited nesting distribution in South Dakota. It is unlikely that this species would occur in the survey area; any occurrences would likely consist of individuals passing

through the area. The SD GFP has not designated any critical deer winter range in Butte County.

(2) There do not appear to be any special, exceptional, critical, or unique aquatic resources within the Security Project. The Belle Fourche River is located approximately one tenth of a mile south of the proposed mine boundary. There is a topographic high separating the mine site from the Belle Fourche River and mining activity is not expected to affect the Belle Fourche River due to the topographic relief between the mine and the river. Middle Creek is located approximately one tenth of a mile to the north-northwest of the proposed mine boundary and is outside of the permit boundary. The ACC Haul Road separates Middle Creek from the permit boundary and will not be disturbed. Storm water pollution prevention BMPs as listed in Section 6.0 of the SWPP Plan will be employed to prevent or minimize any impacts to either stream.

(3) The vegetation survey did not locate any unique vegetation communities or species on the proposed permit. There were no threatened, endangered, and sensitive vegetative species identified during baseline surveys. (See Vegetation Survey)

(4) Exploration drilling encountered no ground water within the proposed mine boundaries; therefore, it is anticipated that groundwater will not be impacted. BPM is not aware of any domestic or livestock wells within the proposed mine boundary.

(5) Visual resources are not unique within the proposed permit boundary. Bentonite mining is common in the region and is frequently visible from roads in the area. The mining operation will be readily visible from 3 View Road and can also be seen from a distance from Highway 212 in both the NW and SE directions. Pits, stockpiles equipment and other mine facilities will be visually inspected every operating day while BPM has equipment and a presence onsite. Should BPM demobilize from the mining area for any duration greater than 4 weeks, BPM shall conduct a visual site inspection monthly to ensure the obligations of this permit application are met. BPM's optimized seasonal mining and concurrent reclamation will reduce the opportunity for visual impacts to the public. BPM does not anticipate the need to visually block the proposed activities from the public utilizing 3 View Road or Highway 212.

(6) The soil surveys and topsoil/subsoil analyses did not reveal any unique properties of the soils on the proposed permit, although erosion hazard requires best management practices during reclamation and revegetation. The shale-bentonite outcrop (SBO) soil unit encompasses less than seven percent of the proposed disturbance area and has no salvageable topsoil or subsoil. No other soils were identified with a low revegetation potential.

(7) A Class III cultural resource inventory was conducted for Bentonite Performance Minerals' SD Permit Colony Mine, Security Claim area, Belle Fourche Archeological Region, Butte County, South Dakota by Quality Services, Inc. This resource inventory showed that the land does not have unique scenic historic, archeologic, topographic, geologic, ethnologic, scientific, cultural, or recreational feature of significance. The land can return to its former uses as soon as reclamation is complete.

(8) Dust suppression is accomplished by water spraying to minimize dust. The nearest residence is owned by Harvey Garr located approximately two tenths of a mile to the

southeast of the proposed permit boundary. Haul trucks will utilize 3VVV Road to gain access to Highway 212 and then travel northwest to BPM's processing plant in Colony, WY.

(9) Noise levels generated by BPM's mining and hauling operations have been within acceptable ranges. No complaints have been received from any of BPM's previous mining operations. Mining and haulage activity are generally conducted during daylight hours to minimize noise impacts to nearby residence.

(10) The S.D. Department of Environment and Natural Resources has determined that the proposed permit area does not have special, exceptional, critical, or unique land status.

13.0 Post Mine Land Use (ARSD 74:29:06:02 (1-4))

(1) This permit application itself demonstrates that the affected land has the capability of meeting reclamation criteria of chapter 74:29:07.

(2) All land surrounding the purposed mine is currently used for livestock grazing, which demonstrates that the postmining land use is compatible with surrounding land uses.

(3) The reclamation plan included in Section 3 of this permit application details support and maintenance activities required for successful implementation.

(4) (a) BPM has had successful reclamation operations in similar conditions throughout parts of Wyoming and South Dakota, including the Purple and Killinger mines. The primary land use on the proposed permit has been as rangeland for livestock grazing for many years and this will be the postmining use.

(b) BPM and the Solid Waste Program of the DANR have identified and discussed potential environmental impacts regarding the pre-existing permitted and closed Solid Waste Facility and Petroleum Contaminated Soil Land Farm. BPM has discussed the known information about these facilities and has adopted mining and reclamation practices in this permit application to address initial concerns brought forth by the Solid Waste Program of the DANR. BPM anticipates working closely with the DANR to ensure mining and reclamation practices described are effective and the known potential impacts are mitigated and/or avoided.

(c) The outline of costs found in the Section 3 of the permit application shows that the proposed operation is practicable on the basis of private financial capability for completion.

(d) The schedule found in Section 2 of this permit application integrates the mining operation and reclamation with the postmining land use.

(e) The proposed mine plan is consistent with existing state and local land use plans and programs.

(f) The proposed mining and reclamation operations will be of beneficial use.

14.0 Statement of Compliance to Permit Requirements (SDCL 45-6B-32 & SD CL 45-6B-33 (1-6)) & ARSD 74:29:07:18))

BPM's Permit Application and all supporting components have been constructed and compiled to be in compliance with any and all applicable local, state and federal laws for lands that are suitable

for mining as defined by SDCL 45-6B-33. This application has been reviewed by BPM and their consultants to ensure the Permit Application is:

- Complete.
- BPM either has retained, or will retain, a bond that is suitable for the proposed actions contained within this permit application prior to commencement of mining.
- BPM intends to pay all fees required by the DANR and its Divisions as well as any other fees in order to hold and maintain a mining permit.
- There are no man-made structures located within two hundred (200) feet of the proposed land to be affected.
- The Operating and Reclamation plans do not violate any county zoning or subdivision regulations as supported by the Zoning Letter from Butte County, SD in Section 1 of this Permit Application.
- The proposed mining operations and reclamation can be carried out in conformance with the SDCL 45-6B-35.
- BPM is not in violation of the provisions of SDCL 45-6B with respect to any mining operations in this State.
- Reclamation of the affected land pursuant to the requirements of this chapter is physically and economically feasible.
- Substantial disposition of sediment in stream or lake beds, landslides, and water pollution is feasibly preventable.
- The proposed mining operation will not result in the loss or reduction of long-range productivity of aquifers, public or domestic wells, watershed lands, aquifer recharge areas, or significant agricultural areas.
- The biological productivity of the land is such that the loss would not jeopardize threatened or endangered species of wildlife indigenous to the area.
- The probable adverse socioeconomic impacts of the proposed mining operation do not outweigh the probable beneficial impacts of the operation.
- The Request for Determination of Special, Exceptional, Critical, or Unique Lands (Request) was received by the DANR in December of 2021. The DANR has determined that the lands to be affected by the mining operation are not unsuitable lands as defined by SDCL 45-6B-7 (5) and SDCL 45-6B-33 (1-6) for the activities described in this permit application.
- BPM will submit to the DANR, annually within sixty (60) days of the anniversary date of the permit, map(s) on the scale provided by subdivision 45-6B-10 (3) that depicts the reclamation accomplished and any deviations from the originally approved operating and reclamation plans. The Operating and Reclamation plans in the Permit Application conform to the requirements of 45-6B-45.
- The Reclamation Plan was developed by Jennifer Henson (previously Hartman), Michael Barr, Nathan Swanson, and Jay Pfarr of Halliburton/BPM in conjunction with the support of Lecia Craft of SWCA. Jennifer and Jay have been with Halliburton/BPM for over 10 years working on mine permitting and operations and Michael and Nathan have been with the company for over 5 years working on mine permitting and operations. Lecia Craft has worked in the mining industry for the majority of her career in mine planning, permitting and reclamation.

Reclamation Requirements

BPM Security Bentonite Mine

SDCL 45-6B-33
Unsuitable Land

Reclamation of the affected land pursuant to the requirements of this chapter is physically and economically feasible. Substantial disposition of sediment in stream or lake beds, landslides, and water pollution is feasibly preventable.

The letter from the Department of Environment and Natural Resources at the beginning of Appendix C of this permit verifies that the land to be affected by the proposed mining operation does not include any land that is special, exceptional, critical, or unique as defined in statute 45-6B-33.3.

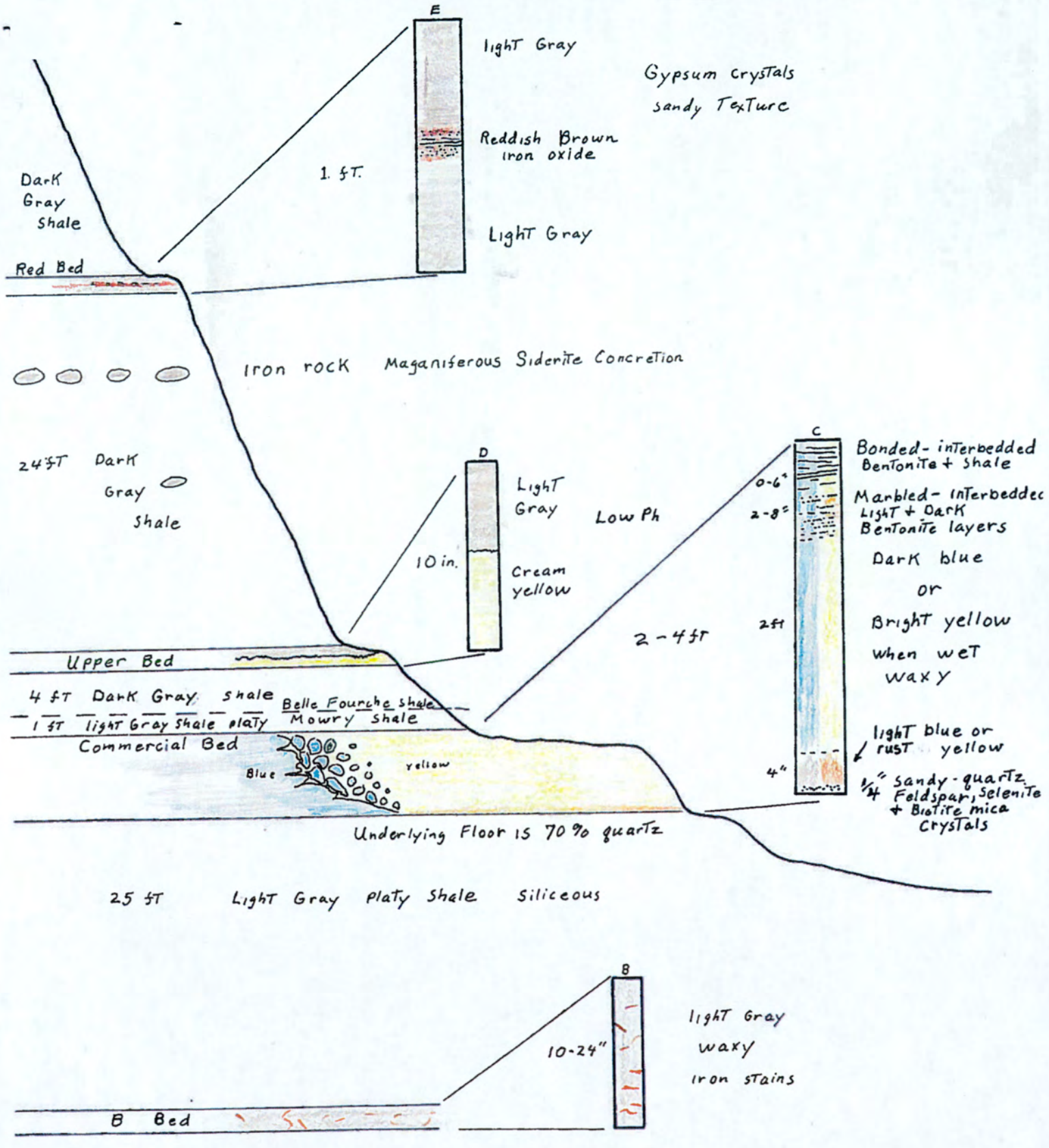
The proposed mining operation will not result in the loss or reduction of long-range productivity of aquifers, public or domestic wells, watershed lands, aquifer recharge areas, or significant agricultural areas.

The Wildlife Report, in Appendix C of this permit, demonstrates that the biological productivity of the land is such that the loss would not jeopardize threatened or endangered species of wildlife indigenous to the area.

The Socioeconomic Assessment, in Section 4 of this permit, demonstrates that the probable adverse socioeconomic impacts of the proposed mining operation do not outweigh the probable beneficial impacts of the operation.

GEOLOGIC X-SECTION

Representative Cross Section of Bentonite Outcrops in the Northern Black Hills



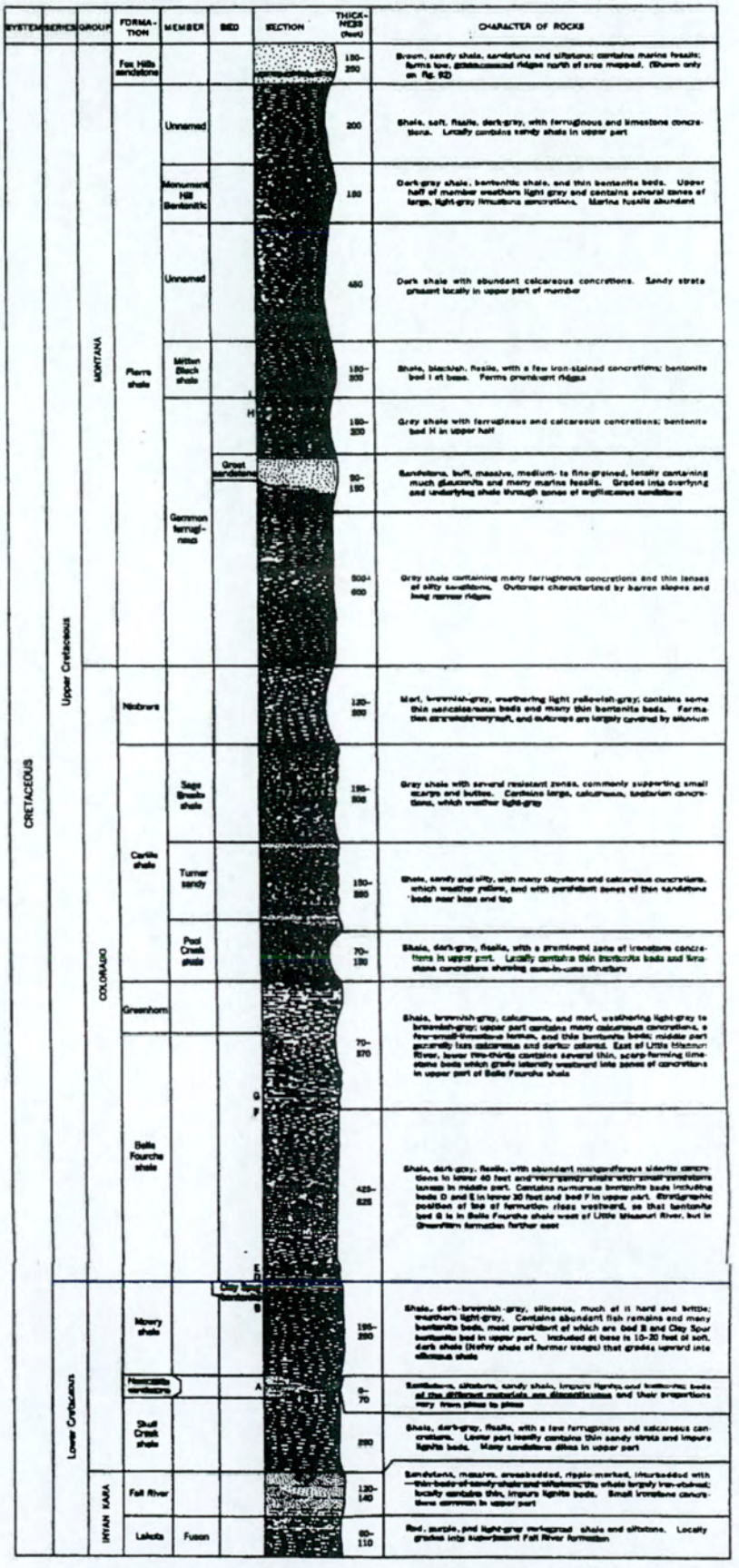
Criteria: ARSD 74:29:02:11 (2)
Bentonite Performance Minerals, LLC

NL Baroid
MCR 10/27/87

Representative Geological Cross Section

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

BULLETIN 1082
PLATE 61



COLUMNAR SECTION OF ROCKS EXPOSED IN NORTHERN BLACK HILLS DISTRICT, WYOMING, MONTANA, AND SOUTH DAKOTA, SHOWING STRATIGRAPHIC POSITIONS OF BENTONITE BEDS

Criteria: ARSD 74:29:02:11 (2)

Bentonite Performance Minerals, LLC

December 2023

ARSD 74:29:06:02
General Requirements for the Determination of Reclamation Type

The regulatory assessment submitted with this permit demonstrates that the affected land has the capability of meeting reclamation criteria of ARSD 74:29:07. All land surrounding the purposed mine is currently used for livestock grazing, which demonstrates that the post mining land use of rangeland is compatible with surrounding land uses. The Reclamation Plan found in Section 3 of this permit details support and maintenance activities required for successful implementation. There are no critical earthen structures that require a stability analysis.

BPM has had successful reclamation operations in similar conditions throughout parts of Wyoming and South Dakota. The primary land use on the proposed permit has been rangeland for several years and this will be the postmining land use. There are no public agency interests in the proposed mine lands.

The outline of costs found attached to the Reclamation Plan shows that the proposed operation is practicable on the basis of private financial capability of completion. The schedule found in Section 2 of this permit integrates mining operation with the postmining land use.

There is no evidence of historic mining within the mining property. A portion of the property was utilized as a Petroleum Contaminated Soils (PCS) Farm. The PCS farm is discussed in Section 6 of the Operating Plan and Sections 4.3 and 5.11.1 of the Reclamation Plan. BPM shall replace soils salvaged from the PCS farm in the same approximate area it was salvaged from. A portion of the property was also utilized as a Solid Waste Facility. The Solid Waste Facility is discussed in Section 2.0 of the Reclamation Plan. BPM will not excavate, more or otherwise impact the existing footprint of the Solid Waste Facility.

Bentonite Performance Minerals

Revegetation Success Plan

Bentonite Performance Minerals will determine successful reclamation based on completeness standards as set in ARSD 74:29:07:06. The post-mine land use will be reclaimed as rangeland or livestock use. Sampling methods will consist of the point/line intercept method in the reclaimed area and then it will be compared to an adjacent comparison area using the same sampling methodology. Usable forage production in the reclaimed area will be sampled and compared to the undisturbed comparison area as well. Sampling will start in July or August prior to livestock grazing and once started will be completed within a three week period.

Sampling Parameters:

Vegetation cover and total ground cover data will be collected for all species from sample sites randomly located on the reclamation as well as the comparison areas. However, total species vegetation cover minus noxious weed species will be used in the revegetation success comparisons and evaluations. Post-mined species composition of the reclaimed area will be consistent with pre-existing vegetation and seed mix was determined with assistance from USDA NRCS personnel.

Methodology

Sample sites on the reclaimed and comparison study areas will be randomly located using a Random Point cartographic tool in ArcMap computer software. These sample sites will be plotted on a map as selected by the cartographic tool. Random sample sites will consist of a 50 meter transect for point/line intercept to determine species composition and vegetation cover. For every 10 acres of revegetated rangeland, 1 randomly located transect will be recorded in the reclaimed area and in comparison areas. The randomly generated sample points will be downloaded on a hand held GPS for actual location in the field.

The randomly located sample sites plotted on the map are located in the field using aerial photos, GPS, or topographic maps. The cover transects are run in a random compass direction (from a random numbers table, 0° to 359°) from this point. If a transect runs out of the sampling area then a new random compass direction (from a random numbers table, 0° to 180°) will be selected, at the point the transect leaves the sampling area, that will return the transect back into the area without overlapping the original transect line. Transect locations will be submitted to DENR for review and verification prior to sampling.

Cover Sampling

Cover samples will be collected from the randomly located 50 meter transects with a pin drop every meter for 50 points per transect. The pin drop method consists of vertically dropping (sighted plumb to the ground) a one meter long pin (1/8" diameter straight rod, sharpened to a pin point) at each meter mark along a 50 meter tape and recording the species or ground cover class intercepted by the pin. First hits will be recorded and will be used for data analysis. Second hits may be recorded. Cover data will be collected by species and will be listed by life form. Percent cover measurements will record "first-hit" point-intercepts by live foliar vegetation species, litter, rock, or bare ground. Hits on lichen, moss, or fungi will be counted toward total ground cover only. Noxious weeds will be recorded but will not be included for species cover calculation.

Usable Forage Production Sampling

Forage production will be calculated by clipping all above ground vegetation in a .5m2 quadrat for each sample site location. All aboveground current annual growth of forage within the vertical boundaries of the frame will be clipped and bagged separately by species, excluded noxious weeds, for each quadrat. All forage production samples will be oven dried and weighed (to the nearest 0.1 gram). Drying will occur at 105°C until a stable weight is achieved (usually after 24 hours). Samples then will be weighed to determine the biomass of the forage. Usable forage will be calculated by multiplying the biomass of forage (by species) by the percent palatability (usability) for the species, as determined from USFS (1937).

Plant Species Composition

A plant species list will be compiled for each reclaimed area. These lists will contain all species recorded in the cover samples and all other species observed during the course of sampling. Species will be presented by life form using both scientific and common names. Species diversity, composition and palatability will be evaluated using the cover data collected. This method consists of a comparison of the numbers of plant species recorded in the sampling data, by life form, between the reclaimed area and comparison area.

Sustainability of the Reclamation

Sustainability of the reclamation will be determined by visual inspections of reclaimed units by DENR personnel and BPM personnel, following two years of grazing under proper stocking rates.

Comparison Process

The comparison process for cover will begin by calculating the average ground cover values (excluding listed noxious weeds) for the revegetation sampled unit. Successful vegetation and sample adequacy will be determined by using the Mann-Whitney Test of Reverse Null Hypothesis, in which the reclaimed area must be equal to or greater than the comparison areas cover vegetation.

Usable forage production (biomass), of current annual production for each reclaimed disturbed area will be compared to adjacent undisturbed comparison areas. Successful revegetation for production will be met if the sample amount of usable forage is equal to or greater than the sample amount of usable forage of the adjacent undisturbed area. Species composition of the reclamation will be evaluated by noting the palatability of species present, as determined from USFS (1937). A majority of the species present must have a percent palatability greater than or equal to 50 percent to meet the criterion for adequate species composition. The requirement for sustainability of the reclamation will be satisfied if DENR personnel determine that the reclaimed units have withstood two years of grazing under proper stocking rates, based on visual inspections of the units.

117 5th Avenue
Belle Fourche, SD 57717
Phone: (605) 892-4414

Butte County W&P Dept.

October 4, 2023

Michael Barr
Sr Project Coordinator/BMP
554 US Hwy 212
Belle Fourche, SD 57717

Subject: Weed Control Plan

Dear Michael Barr,

The Butte County W&P Board received your Weed Control Plan Permit and they have looked it over. The permit has all the correct information and was approved by the Board. We would like to thank you for following the mining guidelines on weed control.

We have filed the letter as part of your work plan. If you have any questions, feel free to contact the Butte Co Hwy Office at 605-892-4414.

Sincerely,

Butte Count W&P Board

Security Bentonite Mine Large Scale Mining Permit
Weed Control Plan

Noxious weeds are non-native plant species that are a concern to South Dakota land owners and managers. They can seriously impact the native plant community.

The South Dakota weed list contains the following species:

Canada thistle
Leafy spurge
Perennial sowthistle
Russion Knapweed
Hoary cress
Purple lossestrife
Salt Cedar

The following weeds may be locally noxious or pests in certain counties in South Dakota:

Absinth wormwood
Bull thistle
Chicory
Common burdock
Common mullein
Common tansy
Dalmation toadflax
Diffuse knapweed
Field bindweed
St. Johnswort
Giant knotweed
Houndstongue
Muck thistle
Plumeless thistle
Poison hemlock
Puncturevine
Scotch thistle
Spotted knapweed
Yellow Toadflax

None of these species were documented during the baseline surveys on the Security Bentonite Mine lands

Reclamation seeding is with a seed mix that is certified to be weed free or as weed free as possible.

If infestations of noxious weeds appear during BPM's mining operation or on the reclamation land, BPM will contract out services of a licensed professional weed sprayer. BPM's current contractor for weed control is Steve Geis. However, if a new contractor is needed for weed spraying, there will be a three party bid to determine the new contractor. Control will follow the guidelines for noxious weed control as published by Cooperative Extensive Service (SDSU) and upon recommendations by the Butte County Weed Board or BPM's weed spraying contractor. Only herbicides that are applicable for the infested weed species and approved for the surrounding ecosystem will be used.

Security Bentonite Mine Large Scale Mining Permit

Sediment and Erosion Control Plan

It is a common mining practice for BPM to construct and implement BMPs, as described in detail in the SWPPP, in order to reduce sediment loss and erosion potential. BMPs consist of constructing temporary sediment traps to reduce water flow rates, berms to prevent storm water from entering open pits, diversions to re-route water from contacting open pits and soil piles. Soils piles will be seeded to establish vegetation and prevent erosion. Final reclamation topography and temporary piles will be constructed with slopes that are no greater than 3:1. All diversion, berms and sediment traps will not be permanent and will be removed as part of final reclamation. Temporary diversions and sediment traps will be implemented as needed throughout the permit area as mining progresses; the dimensions for the BMPs will vary at each location in efforts to construct small enough to reduce disturbance but large enough to be effective. Temporary sedimentation, erosion or drainage control structures shall be removed once a features purpose is no longer needed or after affected lands have been vegetated and stabilized.

Final reclamation features will have reclamation slops of 3:1 or less, they shall be compacted by heavy operating equipment, be constructed to allow for proper drainage, topsoil and subsoil placed in accordance with this permit application, seeded and subject to site monitoring and remediation as necessary to ensure final reclamation success. These factors shall reduce/remove the potential for slides occurring during final grading and after reclamation is complete.

Security Bentonite Large Scale Mining Permit
Spill Prevention Plan and Spill Contingency Plan

Bentonite Performance Minerals (BPM) has a detailed Spill Prevention, Control and Countermeasure (SPCC) plan for the mine sites and processing plants. To briefly summarize the document:

Fuel will be delivered to the mine sites and stored in mobile tanks that will be relocated as necessary as mining equipment moves. Containment berms will be constructed around the mobile fuel tanks which will be located in areas where topsoil has been removed, thereby creating a secondary containment basin. If a spill were to occur, mine personnel are instructed to make sure the site is safe, stop additional spillage, ensure containment of spilled materials, and contact the company's environmental representative. The clean-up process would be competed with appropriate earth-moving equipment depending on the size of the spill. Disposal of the contaminated material would be coordinated by BPM environmental personnel at an approved landfarm in accordance with State and Federal Regulations.

The amount of oil that BPM will store on site will be less than the 1,320 gallon threshold requiring a Spill Prevention, Control and Countermeasures Plan.

SDCL 45-6B-91
Post Closure Plan

Treatment of tailings does not apply to the proposed mine permit. If there is evidence of seeding failure after the bond release, BPM will consider reseeding and/or interseeding efforts as necessary. If erosional concerns arise due to lack of vegetation, BPM will put forth efforts to stabilize the erosion in question, including reseeding. BPM personnel will inspect reclaimed areas regularly to monitor revegetation success and any erosional concerns that may arise.

Seeding Plan and Record

Bentonite Performance Minerals, LLC Security Mine

Michael Barr

From: Faulkner, Mitch - NRCS, Belle Fourche, SD <mitch.faulkner@usda.gov>
Sent: Friday, December 16, 2022 11:40 AM
To: Michael Barr
Subject: [EXTERNAL] Seeding Plans- Security Mine
Attachments: 000_SD_EST_SD-CPA-4_Security Mine part 2.pdf; 340_SD_IR_Cover_Crop_SD-JS-340_2021_ver2_2 _stockpile_Cover Crop _Security Permit _ Baroid HIP.pdf

External Sender: Use caution with links/attachments.

Hello Michael see attached a perennial seeding plan and a short-term annual cover with some details below for the Security Mine project. (NOTE: Each of these are on a 1 Ac basis only)

Triticale is a recommendable cover crop for short-term cover to minimize erosion. According to NRCS technical guides triticale is a recommendable cover crop species based on three of the characteristics I assume are goals of soil stockpiling for this project. The cover crop plan includes a full seeding rate of triticale and it is assumed this is a full cover crop prior to the perennial seeding (i.e. not a nurse or companion crop).

1.) Reduce soil erosion. 2.) consider a tolerance to salts, and 3.) maintain mycorrhizal fungi association. In addition I wanted to pass along the guidelines we recommend as you evaluate cover for the short-term stockpiled soil piles.

Additional Considerations to Reduce Erosion by Wind or Water
To reduce erosion, best results are achieved when the combined canopy and surface residue cover is at 90% or greater during the period of potentially erosive wind or rainfall.

Let me know if you have any questions,
Thanks

Mitch Faulkner
Area Rangeland Management Specialist
USDA-NRCS
Belle Fourche, SD
Cell: (605) 519-1446

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U.S. DEPARTMENT OF AGRICULTURE
RVATION SERVICE

SD-CPA-4 3/16
PLANNED

Instructions

SEEDING PLAN

Producer	Bairoid HIP/Security Mine	Conservation District:	Butte	MLRA	60A
Program	CTA	Practice No.	342	Practice Name:	Critical Area Seeding
CI or Referral No.		Contract #			

Resource Concern (CPPE Impact)	Purpose:
	342- Stabilize areas with existing or expected high rates of soil erosion by wind or water

PLANNED		
Tract		Seedbed Preparation
Field	NA	Clean, smooth, weed free seedbed will be prepared
Acres	1.00	
Group or Site	Critical Area Group	
Site (Web Soil Survey)	Clayey Texture	
Date to be Planted (TechNote4)	Early Spring Prior to 5/15	
Alternative planting dates		Protection Provided
Alternative planting dates		Clip weeds before they compete for moisture and light
Seeding Equipment	Special Grass Drill	
Companion Crop	None	

PLANNED

Species * ** (max % or Rating)	1/ Select Improved Variety (recommended) or select common seed (see note below)	Percent in Mixture 107	Pure Live Seeds (PLS) per square foot 36.68	Pure Live Seed (PLS) lbs/ac Needed	Acres to Seed	Pure Live Seed (PLS) lbs Required
Western wheatgrass		30.0	9.00	3.50	1.00	3.50
Thickspike wheatgrass		20.0	7.50	2.11	1.00	2.11
Green needlegrass		20.0	7.50	1.82	1.00	1.82
Sideoats grama		20.0	7.50	1.82	1.00	1.82
Slender wheatgrass		10.0	2.55	0.72	1.00	0.72
American vetch		1.0	0.38	0.54	1.00	0.54
Western yarrow		1.0	0.38	0.01	1.00	0.01
Big bluestem		5.0	1.88	0.46	1.00	0.46

To meet SD NRCS Standards Please Note:

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 tolerence 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 _____

N

S. _____

T. _____

R. _____

Planning Assistance By: Mitch Faulkner 12/15/2022
Name Date)

Plan Meets SD Standards (if no explain) Yes ☐ No ☐

Instructions

COVER CROP SEEDING PLAN AND RECORD

version 2.2

Video Tutorial

Producer Name: Baroid HIP | NRCS Field Office: Belle Fourche | Phone: 605-892-3368

Producer Phone #: | Practice Purpose: Reduce erosion from wind and water

Conservation District: Butte | SD_Cover_Crop_Technical_Note_16.pdf

Program: CTA | Prepared Mix : Optional, Choose from list ---------->

	PLANNED	APPLIED
Field Number(s)	NA	
Fertilization	None	
Seeding Equipment	Drill	
Acres	1.00	
Planned seeding window	Early spring through August 20 – cool season winter kill species	
Seeding Date		
Suggested Seeding Depth*	1.5 inch	
Termination Method		

* Based on the deep range of the shallowest species.

CROP HISTORY

Current Crop:		*Herbicide carryover from previous crop production may be incompatible with some cover crop species. Read the herbicide label and follow all species compatibility and cropping interval restrictions and guidelines.*
Previous Crop:		

PLANNED COVER CROP

Seed Species	Variety	% of NRCS full seeding rate in Mix	NRCS Full Seeding Rate (PLS lbs/ac)	Planned Seeding Rate (PLS lbs/ac)	Acres to Seed	Total Seed Required (PLS lbs)	Seeding Depth (Inches)
Triticale		100.0%	60.0	60.00	1	60.00	.5 - 1.5
	Totals:	100%		60.00	1.00	60.00	

APPLIED COVER CROP

Seed Species	Variety	% Purity (or) % in **Mix**	Germination %	Bulk Seed Total (LBS.) of **Mix**	Seed Planted (LBS)	*Total Acres Planted*	Seed Planted (lbs/acre)	*Enter Applied Seeding Method* % of NRCS Full Seeding Rate
				Bulk Seed **Individual species** (LBS.)		Acres Planted		
Totals for Mixed species --->			Totals -->					

Planning Assistance By: _____ (Name) _____ (Date)

Certified By: _____ (Name) _____ (Date)

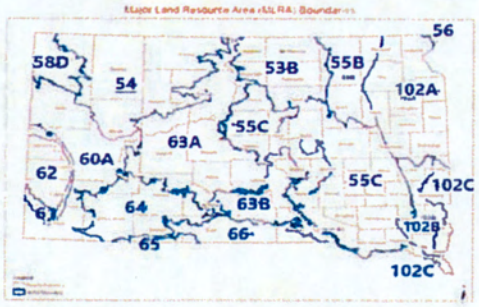
Guide to Certification

Applied Practice Meets SD standards and specifications: ☐ Yes ☐ No

Select the method used to certify and enter data below

Comments:

The seeding plan was developed from recommendations based on the NRCS Soil Survey and South Dakota Field Office Technical Guide.



Critical Area Group	**Clayey Texture**
This seeding is planned in Major Land Resource Area (MLRA)	**60A**

Varieties/Cultivars that are approved for South Dakota include:

Common Name

Prairie sandreed

Bowman (ND-95)	Common	Goshen	Pronghorn

Big bluestem

Bison	Bonanza	Bonilla	Bounty
Central Iowa Germplasm	Champ	Common	Northern Iowa Germplasm
Pawnee	Rountree	Sunnyview	

Green needlegrass

AC Mallard Ecovar	Common	Lodorm	

Little bluestem

Badlands Ecotype	Blaze	Camper	Central Iowa Germplasm
Common	Itasca	Northern Iowa Germplasm	Southern Iowa Germplasm

Western wheatgrass

Arriba	Barton	Common	Flintlock
Recovery	Rodan	Rosana	Walsh

Sideoats grama

Butte	Central Iowa Germplasm	Common	Killdeer
Northern Iowa Germplasm	Pierre	Southern Iowa Germplasm	Trailway

Slender wheatgrass

AC Pintail Ecovar (Bearded)	AC Sprig Ecovar (Bearded)	Adanac	AEC Hillcrest
Common	Elbee	FirstStrike	Primar
Pryor	Revenue		

American vetch
Common

Western yarrow
Common

Guidance for Critical Area Planting (342)

The following is an excerpt from RANGE TECHNICAL NOTE NO. 4 PERENNIAL VEGETATION ESTABLISHMENT GUIDE.

For detailed information see Range Tech Note 4 at: https://efotg.sc.egov.usda.gov/#/details

Click link, Pick State (SD), Select Section 1, Pick All Tech Notes, Range, then Tech Note 4

Seeding of a critical area may take place at any time of the year as long as a reasonable expectation of a successful seeding establishment is expected.

Site Preparation:

Follow guidance for seedbed preparation (Section 2 above) and the additional following criteria.

If necessary, divert offsite water away from the critical area. This may require a permanent conservation practice, or in other instances, a temporary measure that will be effective during the period of establishment.
Where practical, grade to permit the use of conventional equipment for seedbed preparation, seeding, mulch application, and anchoring. Cabling of equipment to prevent rollover may be necessary on some slopes such as newly constructed dams.
On construction sites where the exposed and underlying soil material will not support adequate vegetation, minimum topsoil dressing of six inches will be applied as part of construction.
After construction is complete, the seedbed will be worked to a depth of three to five inches to break up compacted areas and permit rapid root development. Drag or pack to break up large clods and firm the seedbed.
Where slopes are steeper than 1.5:1, use some means other than vegetation to stabilize slopes.

Species Selection:

Allowable species will be selected from Table 7 for the appropriate MLRA.

A minimum of 75% of the mixture will be made up of sod forming species. Grass mixtures may include all native species, all introduced species, or a mixture of native and introduced species. Mixing smooth bromegrass, Kentucky bluegrass, and/or crested wheatgrass with native species is not typically recommended.

When smooth brome is to be seeded in a mixture, do not include more than 10% of other native or introduced species for early establishment.
Single species may be used on saline or wet areas (Table 7).
Do not select aggressive species such as smooth bromegrass when the adjacent area is dominated by native species.

When quick growth and/or protection of a critical area is needed, a quick establishing grass can be added in addition to the selected permanent seeding mixture. Use either slender wheatgrass or annual ryegrass. Slender wheatgrass can be used statewide and annual rye grass can be used in MLRAs 102A, 102B, 102C, 53B, 53C, 55B, 55C, 63B, 66, and 62. Add a maximum of three PLS pounds per acre of slender wheatgrass or a maximum of two PLS pounds per acre of annual ryegrass to the selected full seeding.

Conventional Seeding:

Seeding activities will follow recommendations found elsewhere in this technical note unless otherwise stated in this section.
Seeding rates will be 1.5 times those recommended in Table 2 when using a drill (recommended rate multiplied by 1.5).
When possible, drilling will be accomplished perpendicular to the slope. On grassed waterways, drilling will follow a serpentine pattern.

Broadcasting:

Many critical area plantings are too steep or too small to efficiently and safely utilize a drill. In these cases, seed may be broadcast and incorporated by harrowing, packing, or raking by hand. When broadcast seeding, increase the seeding rates found in Table 2 by two times (recommended rate multiplied by two).

Hydroseeding:

On sites that are too steep for regular equipment to operate, the use of a hydro seeder is an acceptable alternative. Seed, fertilizer, and mulch materials will be applied in one operation. Limit the application of 150 pounds of solids per 100 gallons of water. If a legume seed is included in the mixture, any lime or fertilizer should be applied separately. A second trip may also be needed to apply an asphalt emulsion to long fiber mulches.

When using hydroseeding technique, increase seeding rates found in Table 2 by a factor of two (recommended rate multiplied by two).

Sodding:

Sod may be used on areas requiring immediate cover to prevent erosion. The sod should be in strips or blocks of native grass mixture, switchgrass, prairie cordgrass, reed canary grass, or other suitable grasses. Bluegrass sod is to be used only when the areas is irrigated and is desired for aesthetic purposes. Sod materials are to be taken from solid, thick growing stands.

Sod will be cut in strips of uniform width and to a uniform thickness of at least three inches for tall grass and ½ to 1½ inches for short grasses. Lay sod within 24 hours after it was cut.

Sod strips should be carefully placed in rows across (at right angles) to the direction of slope. The sod strips will be placed together tightly so that no open joints are left between the strips or between the end of strips. Joints between the end strips will be staggered. Any spaces between the joints will be filled with topsoil and all edges covered with topsoil at least two inches deep. The edge of the sod at the top of slopes will be turned under and a layer of soil compacted over the edge so as to conduct surface water over and onto the top of the sod. The sod will be well tramped to help it remain in place.

Fertilizing:

Do not fertilize predominantly warm-season grass seeding unless the soil material is very infertile.

Thoroughly mix all fertilizer into the upper three to five inches of the soil during final seedbed preparation.

Apply fertilizer based on the recommendations from a soil test or apply 30 to 40 lbs. of actual Nitrogen (N) and 40 to 60 pounds of Phosphorus pentoxide (P_2O_5) per ac. Ten to 15 tons of manure per ac may be used in lieu of the commercial fertilizer and will also increase organic matter.

On medium textured soils, the addition of 5 to 10 lbs. of zinc per ac may speed up growth.

Mulching:

All mulching will be done in accordance with the SD CPS for Mulching (484). Mulching of critical area plantings is required for any of the following conditions:

Where seeding cannot be accomplished during the approved seeding periods and a cover crop is not used;

On grassed waterways, where a cover crop or companion crop is not used, and seeding is placed on a bare seedbed, and the design velocity is more than 2.5 feet per second;

Where a grassed waterway is established at the time of terrace construction, and the channel slope is 2% or greater;

On slopes 3:1 or steeper that are 10 feet or more in vertical height or longer than 20 feet; on cut south and west facing slopes; On all saline and alkaline areas.

Drill grass in the prepared seedbed, immediately prior to mulching or at the next suitable seeding period after mulching.

Management of Critical Areas During and After Establishment :

Weeds will be controlled as described elsewhere in this technical note. All use will be excluded until vegetation is well established.
Mow grassed waterways for hay annually after establishment. Other critical areas may be mowed as needed for stand maintenance.
Fertilize as necessary to maintain stand.
Inspect critical areas each spring and following heavy rain. Reshape and reseed eroded areas promptly.
Reinforce grass seeding where stands are thin.

Manage any grazing use to ensure long-term survival of the stand
Lift tillage implements and shut off sprayers when crossing critical areas. Do not till parallel to grassed waterways.
Avoid vehicular travel on critical areas.
Providing Food, Cover, and Shelter for Wildlife:

Wildlife habitat should be considered when developing critical area planting plans and species selection. For plant species to improve wildlife habitat, refer to the SD CPS Upland Wildlife Habitat Management (645).

Bond Calculation & Cost Analysis

BPM Security Bentonite Mine

Bond Calculation

Bonding information used in the Permit Application is supported below:

1. **Out of Pit Spoil/Backfill:** All open pits are accounted for in this calculation. The total yards (bank cubic) removed from the last pit in a pit series will require backfill. All pits previous to the last pit are assumed to be 50% full (this is a conservative assumption). Thus all partially backfilled pits will have a liability of 50% of their removed yards.

2. **Contouring Costs:** The Contouring cost is pulled from the Wyoming Department of Environmental Quality Guideline 12, specifically Appendix G which details the cost for contouring with a 16M Motor Grader.

3. **Scarification Costs:** The Ripping cost is pulled from the Wyoming Department of Environmental Quality Guideline 12, specifically Appendix M which details the cost for scarification with a D9 or 854G Dozer. All roads, camps, and backfilled areas are assumed to be scarified.

4. **Topsoiling Costs:** All topsoil is assumed to come from topsoil piles or live spread and to be spread by scrapers. It is assumed that 12 inches of topsoil will be spread on all disturbed areas (with the exception of soil piles themselves).

5. **Seeding Costs:** Seeding costs are documented in the text of this report. The seeding cost for the bond calculation is $200.0/acre.

Proposed mining liability is calculated as follows. Spoil liability for pits that are part of an existing pit series do not incur an additional liability. This is because the spoil from a new pit excavated in 2024 will be cast into a 2023 open pit. This will in turn offset the stated 2023 liability. For instance, in 2023 there is a stated liability associated with a pit series depending on the number of open pits and the Bank Cubic Yards removed from each pit. In 2024 a new pit will be added on to this series. The spoil from this pit will be cast into the 2023 open pits creating a new advancing graded and contoured line and by default fewer yards required to fill these pits.

6. **Drill Hole Liability** is calculated as follows: <u>All</u> drill holes drilled by BPM are immediately backfilled and topsoiled after drilling and clay sampling. The area of disturbance is small and typically native grasses re-seed the area within one-two years where drill holes are not mined through by an advancing pit series. Liability of $10/hole is maintained for drill holes as requested by WDEQ.

Summary Bond Calculation - Security

Property		Acres Disturbed (acres)	Open Pit (acres)	Needs Graded & Contoured (acres)	Needs Topsoil & Subsoil (acres)	Needs Seeding (acres)	Acres Reclaimed (acres)	Graded & Contoured %	Yards Removed (CY)	Backfill Liability(1) ($)	Grading & Contour Liability[2] ($)	Topsoil & Subsoil Liability[3] ($)	Seed Liability[4] ($)	Total Liability ($)
Security	**Pits**	57.56	57.56	57.56	57.56	57.56	0.00	100%	**500,000**	$303,000.00	$5,579.29	$67,326.01	$11,512.00	$387,417.30
	Associated Dist.	25.64		25.64	24.70	24.70	0.00	100%	**0**		$2,485.29	$29,990.25	$5,128.00	$37,603.54
Total		83.20	57.56	83.20	82.26	82.26	0.00		**500,000**	$303,000.00	$8,064.58	$97,316.27	$16,640.00	$425,020.84

Backfill Liability*	$303,000.00		
Contouring Liability*	$8,064.58		
Topsoil Liability*	$97,316.27		
Seeding Liability*	$16,640.00		
Total		$425,020.84	
Total Liability without Rec. Contingency			$425,021
Rec. Contingency ($300 x Per Acre)			$24,960
Total Liability with Rec. Contingency			$449,981

Administrative Contingencies		
Site Investigation	1%	$4,500
Project Management	2%	$9,000
Mobilization	1%	$4,500
Bid Preparation	1%	$4,500
Contract Engineering	2%	$9,000
Reclamation Contract	10%	$44,998
Liability Insurance	1%	$4,500
DANR Administration	2%	$9,000
Total Admin. Contingencies		$89,996
Total Estimated Liability		**$539,977**

Commodity	Average Distance To Open Pit (ft)	Backfill Cost (per CY)	Topsoil & Subsoil Cost (per CY)	Contouring Cost (per acre)	Scarification Cost (per acre)
Topsoil	**1000**	N/A	**$ 0.73**	**$ 49.94**	**$ 46.99**
OverBurden	**500**	**$ 0.61**	N/A	N/A	N/A

Seed Mixture	**$ 200.00**	**per acre**

Appendix C utilized for both backfill cost and topsoil/subsoil cost
overall grade of property is ~4%

Appendix G utilized for contouring cost
Appendix M utilized for scarification cost

Reclamation Plan Approval

Bentonite Performance Minerals, LLC Security Mine

RECEIVED
FEB 28 2024
MINERALS & MINING PROGRAM

Approval of Reclamation Plan for
BPM Security Bentonite Proposed Seed
Mix for Reclamation

Located in those portions of Sections 31 and 32 of
Township 09 North Range 01 East Butte County, South Dakota

I, DAVID J. GARMAN (landowner) have reviewed the reclamation plan for the Security Bentonite Mine. I approve the Reclamation Plan including the attached Seeding Plan and Record for use on my property.

David J. Garman
Landowner Signature

9-19-2023
Date

BENTONITE
Performance Minerals LLC
Colony, Wyoming Plant
554 US Hwy 212,
Belle Fourche, SD 57717
Phone (307)896-2596/Fax (307)896-4588

July 25, 2022

Pioneer Townsite Company
C/O American Colloid Company
PO Box 2010 Belle Fourche, SD 57717

Bentonite Performance Minerals, LLC Mine and Reclamation Plan Development – Adjacent Landowner Consultation - SDCL 45-6B-44

Pioneer Townsite Company,

Bentonite Performance Minerals, LLC (BPM) intends to submit a Large Scale Mining Permit Application to the Department of Agriculture and Natural Resources pursuant to South Dakota Codified Law 45-6B-5. The application will begin the permitting process for proposed mining, hauling and reclamation activities to occur within the following legal land description:

Township 9 North, Range 2 East
Section 31: SE4SE4NE4NE4, E2E2SE4NE4 and that portion of the E2E2NE4SE4 north of 3 View Road.
Section 32: SW4NW4, NW4SW4, W2W2NE4SW4, those portions of the S2S2NW4NW4, SW4NE4NW4, & W2W2SE4NW4 south of the ACC Haul Road and those portions of the W2W2SE4SW4 & NE4SW4SW4 north of 3 View Road.

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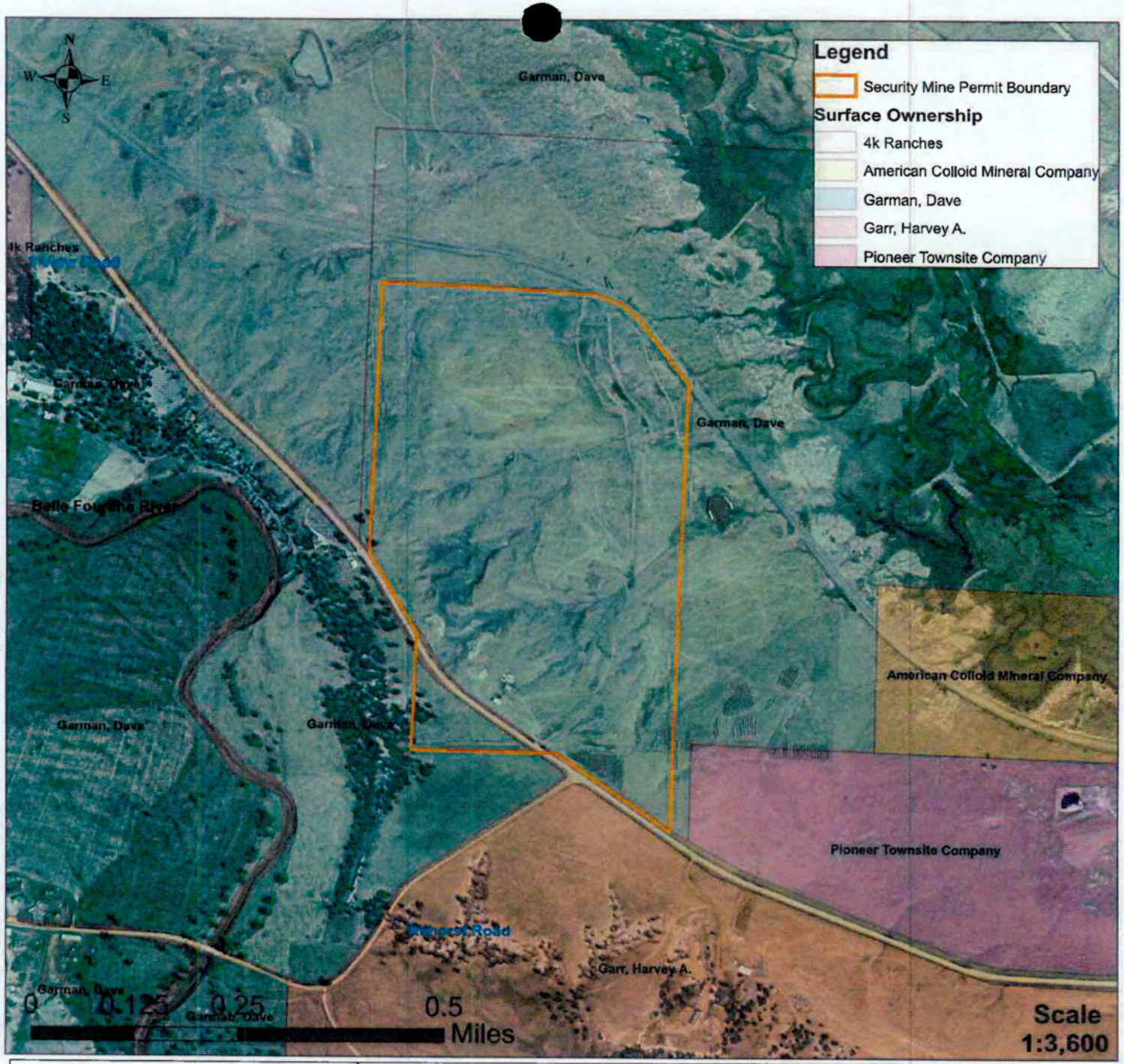
In accordance with South Dakota Codified Law 45-6B-44, BPM is providing you this letter via certified mail to inform you of BPM's obligation to inform you of your right to provide BPM with a written request to obtain a copy of the proposed reclamation plan.

Please feel free to contact myself at 307-896-6060 or at Michael.Barr@Halliburton.com.

Regards,

Michael Barr
Senior Resource Coordinator

Enclosures: Map of proposed permit boundary and surface ownership



Map Prepared By: Michael Barr	Date Prepared: 7/25/22	**BENTONITE** *Performance Minerals LLC*	554 US HWY 212 Belle Fourche, SD 57717
Signature:	Legal Requirement: SDCL 45-6B-44		

BENTONITE
Performance Minerals LLC
Colony, Wyoming Plant
554 US Hwy 212,
Belle Fourche, SD 57717
Phone (307)896-2596/Fax (307)896-4588

July 25, 2022

Harvey A. Garr
10737 3V Road
Belle Fourche, SD 57717

Bentonite Performance Minerals, LLC Mine and Reclamation Plan Development – Adjacent Landowner Consultation - SDCL 45-6B-44

Mr. Harvey A. Garr,

Bentonite Performance Minerals, LLC (BPM) intends to submit a Large Scale Mining Permit Application to the Department of Agriculture and Natural Resources pursuant to South Dakota Codified Law 45-6B-5. The application will begin the permitting process for proposed mining, hauling and reclamation activities to occur within the following legal land description:

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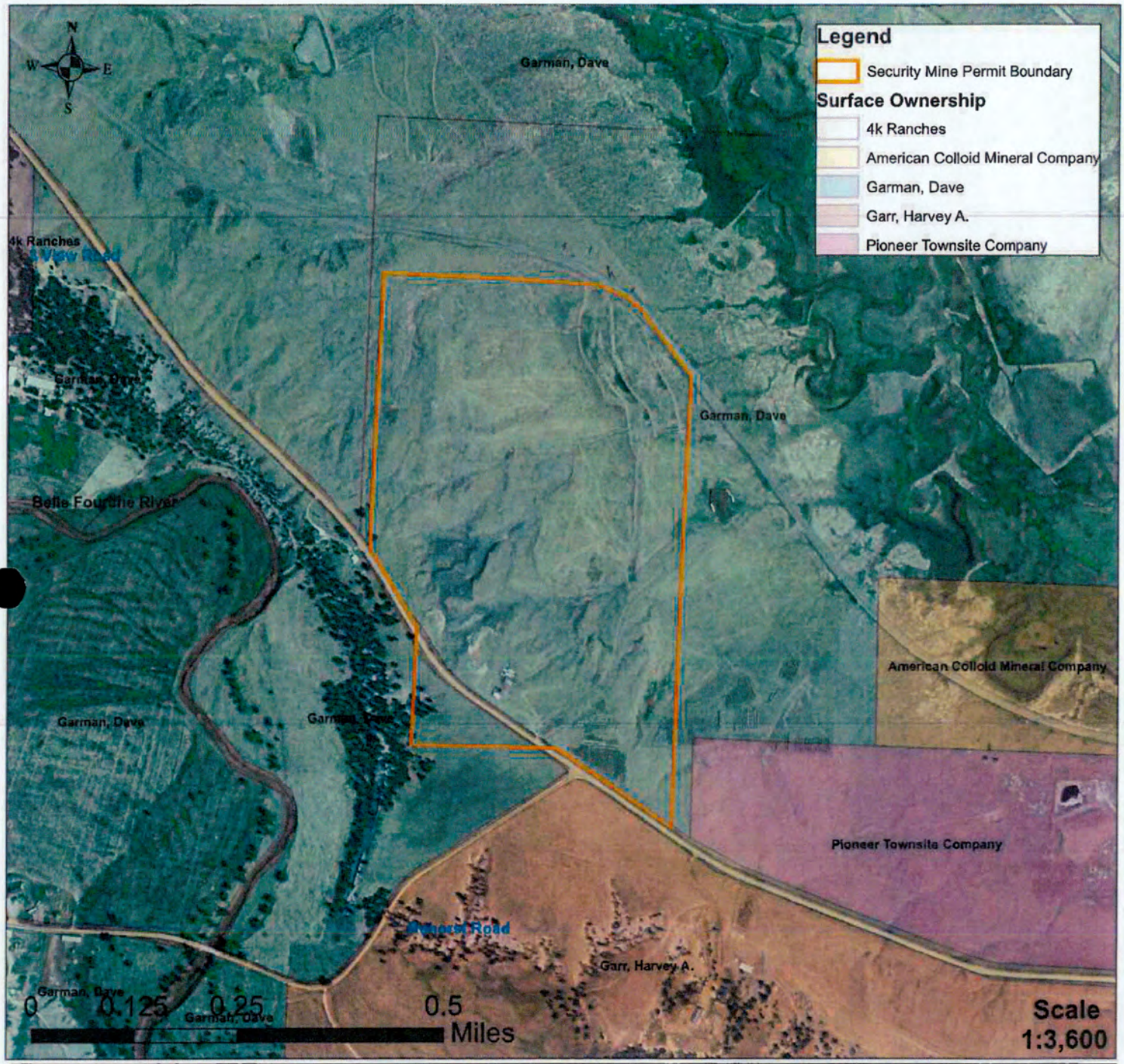
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Michael Barr
Senior Resource Coordinator

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Map Prepared By: Michael Barr	Date Prepared: 7/25/22	BENTONITE Performance Minerals LLC	554 US HWY 212 Belle Fourche, SD 57717
Signature:	Legal Requirement: SDCL 45-6B-44		

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c/o American Colloid Company
P.O. Box 2010
Belle Fourche, SD 57717

9590 9402 1661 6053 2817 62

2. Article Number (Transfer from service label)
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☐ Adult Signature Required	$0.00
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Total Postage and Fees	$7.85

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07/27/2022

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City, State, ZIP+4®: Belle Fourche, SD 57717

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Postage	$0.60
Total Postage and Fees	$7.85

0717 02
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07/27/2022

Sent To: Harvey A. Carr
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City, State, ZIP+4®: Belle Fourche, SD 57717

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BENTONITE
Performance Minerals LLC
Colony, Wyoming Plant
554 US Hwy 212,
Belle Fourche, SD 57717
Phone (307)896-2596/Fax (307)896-4588

December 16, 2023

American Colloid Company
PO Box 2010
Belle Fourche, SD 57717

Bentonite Performance Minerals, LLC Mine and Reclamation Plan Development – Adjacent Landowner Consultation - SDCL 45-6B-44

American Colloid Company,

Bentonite Performance Minerals, LLC (BPM) intends to submit a Large Scale Mining Permit Application to the Department of Agriculture and Natural Resources pursuant to South Dakota Codified Law 45-6B-5. The application will begin the permitting process for proposed mining, hauling and reclamation activities to occur within the following legal land description:

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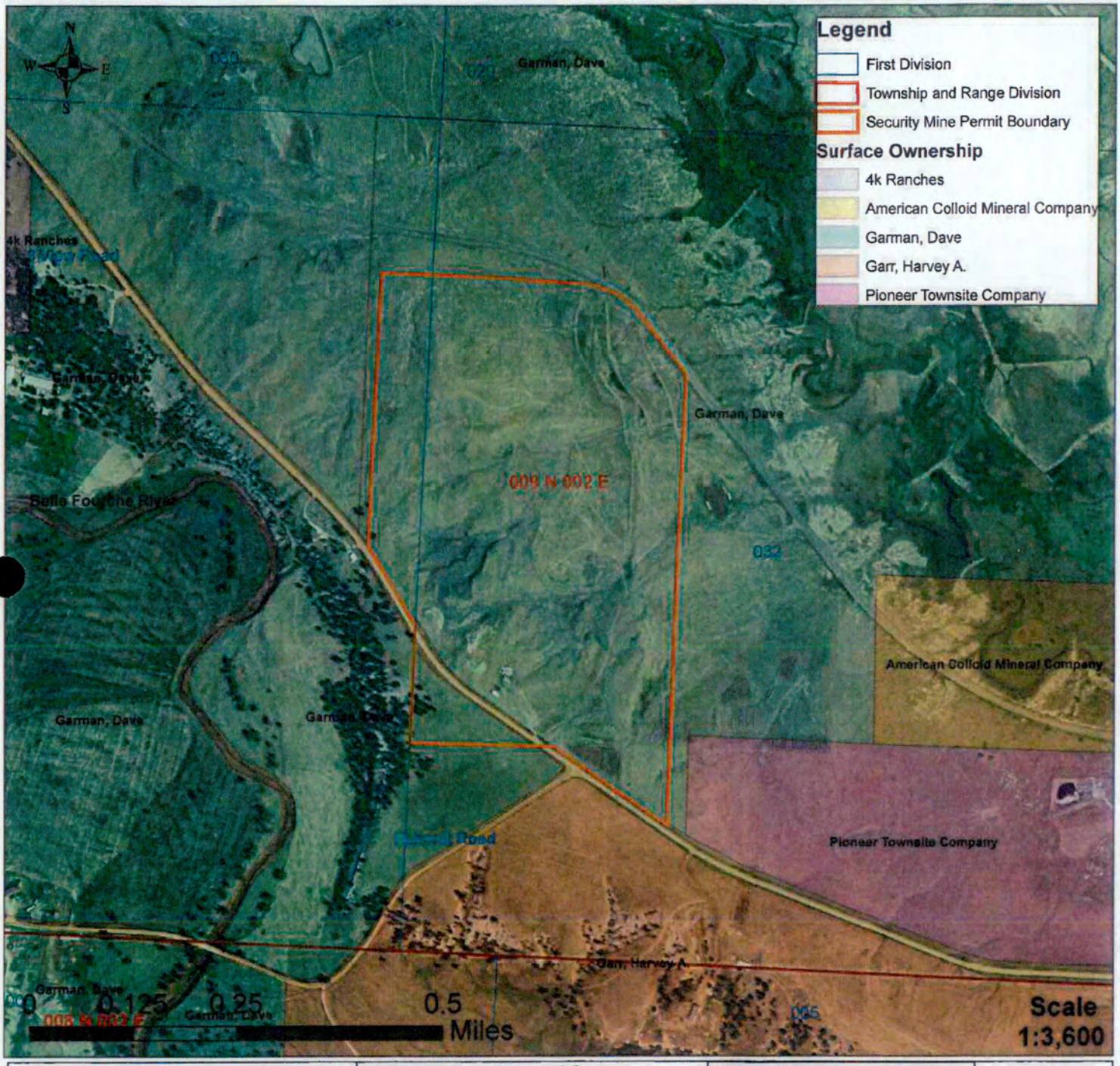
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Please feel free to contact myself at 307-896-6060 or at Michael.Barr@Halliburton.com.

Regards,

Michael Barr
Senior Resource Coordinator

Enclosures: Map of proposed permit boundary and surface ownership



Map Prepared By: Michael Carr	Date Prepared: 12-16-23	BENTONITE Performance Minerals LLC	554 US HWY 212 Belle Fourche, SD 57717
Signature:	Legal Requirement: SDCL 45-6B-44		

BENTONITE
Performance Minerals LLC
Colony, Wyoming Plant
554 US Hwy 212,
Belle Fourche, SD 57717

December 16, 2023

Butte County Highway Office
830 6th Ave #1
Belle Fourche, SD 57717

Bentonite Performance Minerals, LLC Mine and Reclamation Plan Development – Adjacent Landowner Consultation - SDCL 45-6B-44

Butte County Highway Office,

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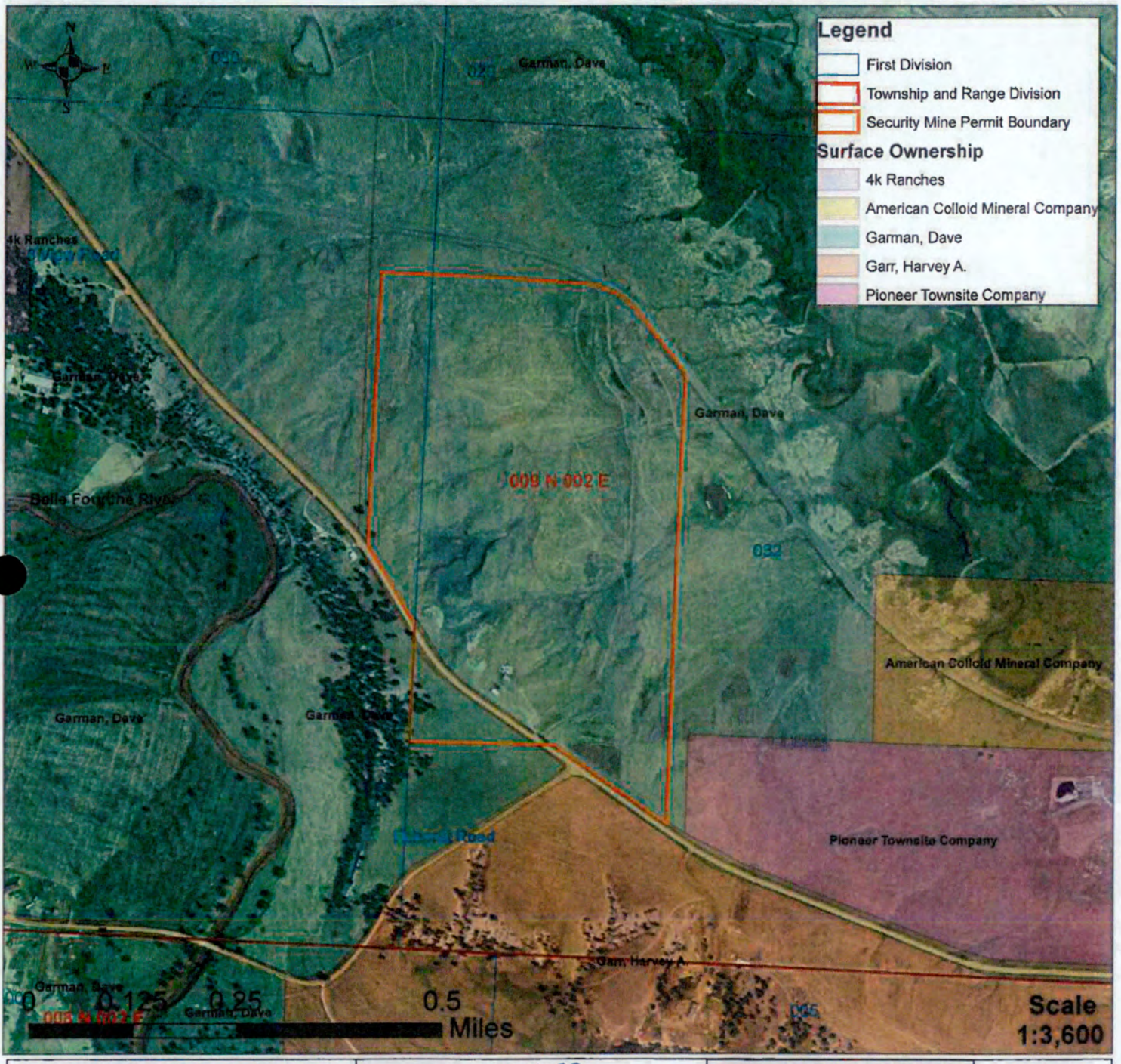
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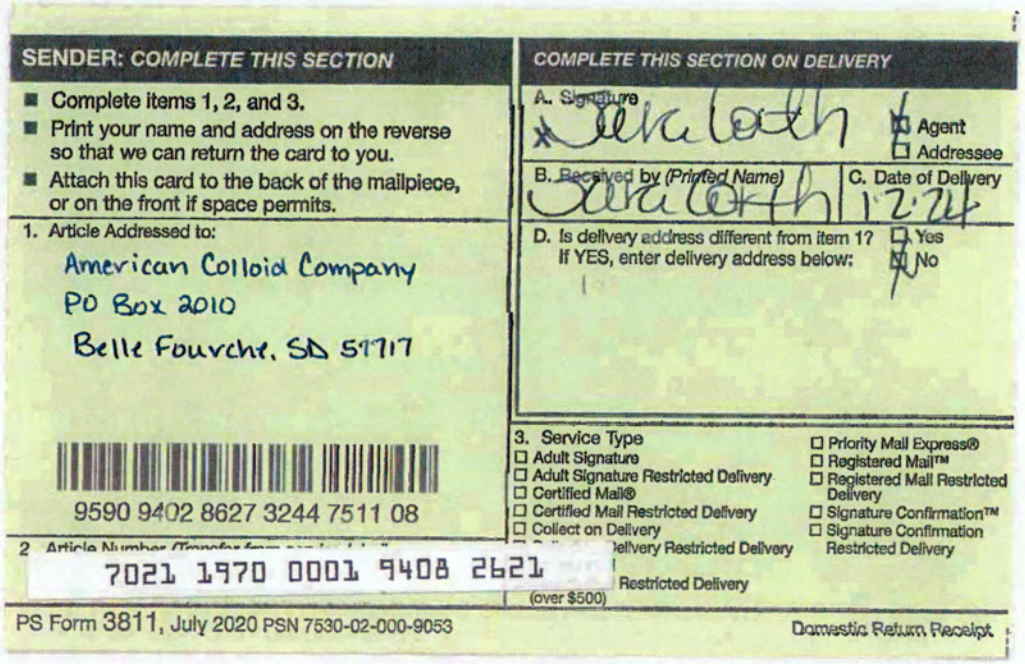
Regards,

Michael Barr
Senior Resource Coordinator

Enclosures: Map of proposed permit boundary and surface ownership



Map Prepared By: Michael Carr	Date Prepared: 12-16-23	BENTONITE Performance Minerals LLC	554 US HWY 212 Belle Fourche, SD 57717
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American Colloid Company
PO Box 2010
Belle Fourche, SD 57717

9590 9402 8627 3244 7511 08

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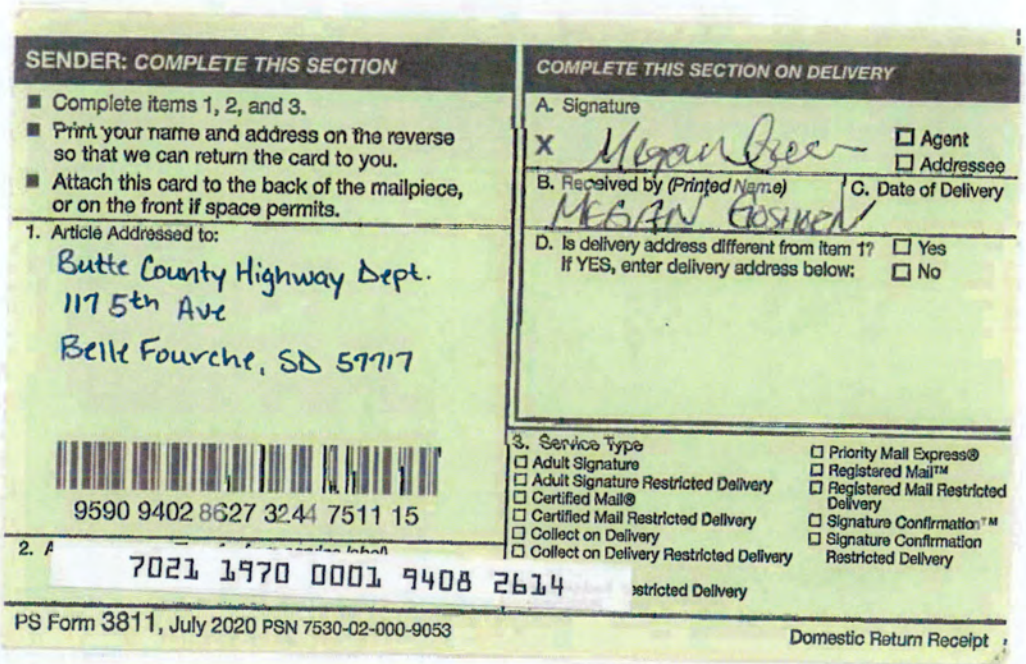
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X [signature] ☐ Agent ☐ Addressee

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1. Article Addressed to:

Butte County Highway Dept.
117 5th Ave
Belle Fourche, SD 57717

9590 9402 8627 3244 7511 15

2. Article Number (Transfer from service label)
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Section Four

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MINERALS & MINING PROGRAM

Section Four

BPM Security Bentonite Mine

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MINERALS & MINING PROGRAM

Socioeconomic Assessment

Bentonite Performance Minerals, LLC Security Mine

LIMITED SOCIOECONOMIC ASSESSMENT

PROPOSED BENTONITE MINE PERMIT

SECURITY PROJECT

BENTONITE PERFORMANCE MINERALS, LLC

November 2021

Prepared by:

Dr. Michael K. Madden
Business and Economic Research
Buffalo, Wyoming

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SECTION IV	FISCAL ENVIRONMENT		10
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SECTION I
INTRODUCTION

This research is prepared for the purpose of documenting the socioeconomic characteristics of Butte County and to also identify any impacts that may be associated with the extension of mining acreage via a mine permit application proposed by Bentonite Performance Minerals, LLC (hereafter, BPM). Technically the expansion is referred to as large scale mine in conformance to South Dakota Codified Laws. These statutes include the need for a limited socioeconomic assessment. The information that is contained in the analysis below conforms to SDCL 45-6B-33.1, which is the statute that describes the topical content of a Socioeconomic Study.

The permit area referenced here is known as the Security Project (Project) parcel. The proposed Project will replace two existing parcels in South Dakota that were permitted by BPM in 2014 and are known as the Killinger and Purple permit locations. These earlier parcels are located in Butte County , SD and were actively utilized until 2020 when the parcels were reclaimed.

The new pending permit application involves additional acreage approximately three miles west of the City of Belle Fourche, SD. The approval of the new proposed permit does not change the intended scope or intensity of the business, but is rather part of the ongoing process of adding new resources and unique types of bentonite ore as the business continues to efficiently and effectively operate.

In addition to the Killinger and Purple mining areas in Butte County, BPM holds permitted mining properties that are situated in nearby areas outside of Butte County. They include permits in Wyoming near Colony, in Crook County Wyoming and additional parcels in Carter County Montana.

As is the case with the two existing Butte County parcels, as well as the Montana and Wyoming permitted acreages, the bentonite ore from the proposed Project will be transported to the company processing facility in nearby Colony, Wyoming.

Inputs of BPM manpower and equipment are deployed to various mine pits and processing locations dependent on market demands for bentonite and other economic conditions associated with the bentonite industry. The essential consideration regarding this socioeconomic report is that total company input requirements are not significantly affected by the possible addition of the pending permit for the Project. To a large extent, existing manpower and equipment will be deployed to these areas as business conditions require.

It is projected that the addition of the proposed Project will involve about seven years of activity including preparation of the parcel, actual mining activity and reclamation. However, since individual permits are utilized intermittently, it is possible that mining activity could extend that time period. Because of strategic plans of the company, ore products from a given permitted parcel are generally not operated continuously in the bentonite industry as normally observed in the case of other mining operations. As a result, pending parcel, if approved, will join several other active mining parcels managed by the company in the tri-state region and each will be utilized as particular ore content and the demand for specific bentonite products vary in the future.

When examining regional socioeconomic factors, it is observed that currently and in the recent past the vast majority of company workers reside in Butte County. Of the current 141 employees well over 100 are Butte County residents with most of them living in or near Belle Fourche. Others live in Lawrence County, primarily in Spearfish as well as a limited number in Crook County, Wyoming and Carter County, Montana. In terms of the socioeconomic environment of the company, it is reasonable to concentrate on Butte County as the primary region in which company activities exert economic and social influences

Demographic baseline factors and trends will be discussed in the next section of this report. Characteristics such as population, age distribution, households by type and housing patterns will be examined. Section III will involve basic economic data for Butte County such as employment and income. Section IV will involve fiscal impacts surrounding the BPM operation. An assortment of other socioeconomic considerations including housing and public service requirements will be briefly identified in Section V.

SECTION II
POPULATION DEMOGRAPHICS

The following table provides a demographic snapshot of Butte County as of the 2020 census.

TABLE 1

SELECTED DEMOGRAPHIC STATISTICS - BUTTE COUNTY, SD 2020		
	Number	Percent of Total
Total Population	10,243	
Under 18 years	2,530	24.7%
65 years and over	2,100	20.5%
Median Age	41.4	
Households	4,164	
Average Size	2.42	
Total Housing Units	4,906	
Owner Occupied	3,783	77.1%
Median Value, Owner-occ.	$139,000	
Renter Occupied	1,123	26.8%

Source: Census 2020 Summary File 1

In comparison, Butte County is fairly typical to that of the South Dakota in general, varying demographically by only minor amounts to the overall state. However, the median age of 41.4 in Butte County is notably higher than the South Dakota state median age of 37.7.

The level of population has experienced moderate fluctuations in Butte County over the past thirty years. During the nineteen eighties, the number of residents of the county dropped by 5.6 percent falling to about 7,900 by 1990. This was largely accounted for by the sluggish national economy and was accentuated by the accelerated growth in retail and business activity in Black Hills counties to the south.

In the nineteen nineties substantial population growth took place in Butte County especially during the fist half of this decade. During the nineteen nineties, the number of county residents

moved from 7,923 to 9,111, a growth rate of 15 percent. Much the same pattern following in the 2000 decade. During the decade which just ended in 2020, population levels remained flat.

Actual population statistics in five-year intervals appear in Table 2.

TABLE 2

POPULATION TRENDS - BUTTE COUNTY, 2020		
1980	8,372	Percent Change
1985	8,007	-4.4%
1990	7,923	-1.0%
1995	9,090	14.7%
2000	9,111	0.2%
2005	9,175	0.7%
2010	10,110	10.2%
2015	10,219	1.1%
2020	10,243	0.2%

Butte County Communities

The non farm-ranch population of Butte County is largely concentrated in the city of Belle Fourche. In 2020, 5,617, or slightly over half of the 10,243 county residents resided in Belle Fourche. A significant additional number are located in the immediate environs of Belle Fourche on ranchettes and rural subdivisions adding perhaps- another 900 to 1,100 residents to the general Belle Fourche area.

The second largest town in the county is Newell in the eastern part of the county with a 2020 population of 615. Two communities, Nisland and Fruitdale, are very small hamlets with a combined population of about 300. These latter communities primarily consist of households of retired people and others who commute to larger cities for work opportunities.

SECTION III
EMPLOYMENT AND OME

Employment

A snapshot of the distribution of employment can be gained in the following table.

TABLE 3

EMPLOYMENT BY PLACE OF WORK - BUTTE COUNTY 2019		
	Number	Percent of Total
Employment by place of work	5,262	
Wage and salary employment	3099	58.9%
Proprietors employment	2163	41.1%
Farm proprietors employment	514	23.8%
Nonfarm proprietors employment 2/	1649	76.2%
By industry		
Farm employment	577	11.0%
Nonfarm employment	4685	89.0%
Private nonfarm employment	3981	85.0%
Forestry, fishing, and related activities	(D)	
Mining, quarrying, and oil and gas extraction	(D)	
Utilities	16	0.4%
Construction	346	8.7%
Manufacturing	242	6.1%
Wholesale trade	184	4.6%
Retail trade	719	18.1%
Transportation and warehousing	199	5.0%
Information	25	0.6%
Finance and insurance	200	5.0%
Real estate and rental and leasing	230	5.8%
Professional, scientific, and technical services	(D)	
Management of companies and enterprises	(D)	
Administrative and support and waste	(D)	
Educational services	31	0.8%
Health care and social assistance	329	8.3%
Arts, entertainment, and recreation	71	1.8%
Accommodation and food services	386	9.7%
Other services (except government and	389	9.8%
Government and government enterprises	704	17.7%
Federal civilian	110	15.6%
State and local	594	84.4%

Source: Bureau of Economic Analysis, Dept. of Commerce. (D) signifies that the small number of firms prevents disclosure of data.

An inspection of similar data in 2010 indicates that the employment composition by industry of Butte County workers has remained quite stable. The overall level of employment has risen 4.3 percent since 2010. Some increases in retail and service sector employment is observed in 2019 which is a reversal from the previous 10 year period from 2000 to 2010.

Earnings

Average earnings are relatively low in Butte County relative to the balance of the state of South Dakota. In 2019 Butte County averaged $38,160 for all wage and salary workers. During the same year, average compensation per job for wage and salary employees for the entire state was nearly $44,961. This, of course, is due to the heavy influence of larger metropolitan areas such as Sioux Falls as well as other areas dominating the averaging process among their higher paying professions.

TABLE 4

ANNUAL COMPENSATION PER JOB
BUTTE COUNTY, 2019

TOTAL EMPLOYMENT, WAGE PER JOB	43,447
Wage and salary workers	38,160
Non Farm Proprietors	80,347
Private workers	25,375
Forestry, Fishing and Related (D)	
Mining, Quarying and Oil (D)	
Utilities	111,376
Construction	39,659
Manufacturing	37,004
Wholesale trade	51,299
Retail trade	26,882
Transportation and warehousing	43,226
Finance and insurance	23,695
Professional, scientific, and technical services (D)	24,031
Accommodation and food services	18,837
Other services, except public administration	20,039
Government and government enterprises	
Federal	66,833
State and local	42,024

Source: Bureau of Economic Analysis, US Department of Commerce.
(D) indicates an insufficient number of employers for disclosing industry averages

Another factor involves the employment composition of the labor force with respect to industry mix within the county. There are a relatively large number of workers in the county employed in service and retail industries.

It is also noted that considerable variation exists in the level of compensation from industry to industry. As is typical in other regions, retail trade and accommodation and food services workers are among the lower paid workers. Federal government employees and those working in utility businesses are the highest paid among the selected classes in the above table.

Mining in Butte County

The vast majority of mining employees working in Butte County are employed by the major bentonite mining and processing companies, American Colloid and Bentonite Performance Minerals. Because of the limited number of firms in that industry, total mining employment for Butte County is not reported by government statistical reporting services in order to prevent the disclosure of confidential information pertaining to a given firm.

However, by examining the major area companies in that industry it is apparent that the number of workers employed in the bentonite industry approximates about 300 currently. The total number of wage and salary employees working in Butte County in 2019 (the latest year for which data is available) was equal to 3,099. Accordingly, the bentonite industry accounts for the equivalent of about 10 percent of all wage and salary workers and 6 percent of the entire work force in Butte County.

The *separate* impact of the BPM bentonite operation involves about 141 company employees. In addition, there are a significant number of workers employed by subcontractors whose jobs are directly related to the bentonite industry. The extraction and hauling of ore material is occasionally subcontracted to local firms by the two major bentonite mining companies in Butte County. Thus, for economic purposes their employment they would be classified as extraction employees.

Preliminary estimates of the additional labor requirements suggest that perhaps five additional employees will be required as the proposed Security permit area is developed and ore production takes place.

Mining industry workers employed in this industry are among the highest paid workers in Butte County. According to company records average compensation per worker was in excess of $80,000 including benefits in 2020. (Source: Company Records Recorded in 2020) This is nearly double the average compensation for workers in general in the county and compares favorably to utility industry employees who are paid highest among all other reporting industries in the county.

In 2019, total compensation paid to *all* wage and salary workers in Butte County summed to $105,861,000. According to payroll records maintained by BPM, $11.3 million in total compensation were paid to their employees. A large majority of these wages were received by residents of Butte County employed by BPM .

Accordingly, it can be summarized that the BPM and their two major subcontractors employ the equivalent of 4.6 percent of the wage and salary workforce but because of the relatively high wages paid by the company, total wage and salary income of company workers represent10.6 percent of total worker compensation in the county.

Induced Economic Impacts

Additional economic impacts are often equally important when analyzing a basic industry such as mining. These are impacts that are often termed induced impacts because they are created in the region because of the initial economic activity generated in the basic industry. An example of this phenomenon is in the case of input requirements that are purchased by the mining operation itself and the resulting additional business volume generated within other industries. In turn, new workers are required by these supplying industries. Another example of induced impacts is traced to the additional jobs generated in local businesses as employees in the mining industry dispense their earnings throughout the regional economy. Since wages and salaries in the mining industry are substantially higher than regional wages in general, the multiplier effect of mining activity is quite significant.

The Regional Input-Output Modeling System developed by the Bureau of Economic Analysis suggests that the earnings multiplier applicable to the type of mining engaged in by BPM is equal

to 1.546. The employment multiplier is equal to 2.027. These multipliers are applicable to the combined four county region of Butte, Lawrence, Meade and Pennington.

This means that for every direct dollar of earnings generated by the mining industry another .546 dollars are generated in households employed in other industries within this four-county region. Similarly, every employment position in the mining industry supports an additional 1.027 employment positions in other industries.

Currently there are approximately 141 workers directly employed in connection with the local BPM operation in the Butte County area. This means that there are an additional 145 (ie.141 X 1.027) workers employed in other industries that are induced as a result of the 143 mining workers. Similarly, it was discussed above that the company and its two major subcontractors paid $11.3 million in total compensation to their employees in 2019. The earnings multiplier would suggest that an additional $6.16 million (ie. $11.3 X .546) in new earnings are associated with the 147 additional workers.

Thus, when direct and induced impacts are added together, it is estimated that there is a four-county regional impact of 288 employees and $17.5 million in total earnings supported by the current BPM operation in Butte County.

SECTION IV
FISCAL ENVIRONMENT

South Dakota local governments rely primarily on sales or excise taxes and property taxes. School districts are also heavily dependent on property taxes, but also finance a significant part of their budgets with school aid provided by the state of South Dakota.

Property Taxes

The following table summarizes the allocation of property taxes by political subdivision for Butte County. The data is for 2019.

TABLE 5

BUTTE COUNTY PROPERTY TAXES COLLECTED BY SUBDIVISION		
	Collected	Percent of Total
County	$3,466,189	28.1%
School	6,813,264	55.2%
City	2,010,473	16.3%
Other	43,191	0.4%
Total	$12,333,119	

Source: South Dakota Valuations, Levies and Taxes 2019 Recap.

Almost 55 percent of all local property taxes collected are directed to school districts in the county. The second largest user of property taxes is the county government with somewhat over one-fourth of all taxes collected used by that political subdivision.

Municipalities collectively account for just over 16 percent of property tax collections. More than 85 percent of all municipal property taxes was levied by the City of Belle Fourche. Other organized towns in Butte County accounts for the remaining 15 percent of the municipal levy.

In Butte County BPM has paid approximately $30,000 in property taxes on the existing two mining parcels during their active mining life. Property taxes will also increase commensurately once the proposed new permit is developed and under production. It is also the case that an undetermined but substantial amount of residential property taxes will continue to be collected

from the company employees who own and/or rent housing and other real estate in the county. It is beyond the scope of this study to arrive at estimates of this component of the property tax impact.

Sales and Gross Receipts Taxes

Municipal governments in South Dakota have become increasingly dependent on sales taxes for paying for municipal services. The City of Belle Fourche imposes a two percent general sales tax applicable to the majority of goods and services sold within the city boundaries. An additional gross receipts tax of 1 percent is levied on purchases of prepared food, beverages and lodging in addition to a few other minor items. In 2020, the amount of municipal sales taxes collected by Belle Fourche was equal to $3,276,527 . (Source: South Dakota Sales and Use Tax Reports, SD Department of Revenue and Regulation.)

The workers employed by the company and their subcontractors spend an undetermined portion of their household income in Belle Fourche. Those workers who live in Butte County very likely spend a higher proportion of their income in Belle Fourche than the remainder who live in other counties. A rough approximation to the proportion of sales taxes paid by workers directly or indirectly working due to the BPM operation can be gained by recalling the earnings traced to the company. In 2020, total wages and salaries received by Butte County residents was $106 million. Total direct and indirect earnings of BPM is equal to $11,300,000. It is estimated that 80 to 90 percent of the company's employees live in Butte County. Thus, between $9 and $10 million or about 9 percent of wage and salary income to Butte County is traceable to BPM. If spending on taxable sales items in Belle Fourche is proportionate to earnings, it would imply that approximately 9 percent of municipal sales taxes are related to economic activity generated by BPM employees.

Many business purchases made by the company itself are subject to municipal as well as state sales taxes. For example in 2020, records show that approximately $13,000,000 in purchases of goods and services for mining operations occurred. An undetermined, but undoubtedly substantial, amount of state and local sales taxes were due in connection with these purchases. Other company subcontractors in addition to those already discussed in this document also pay sales taxes according to input needs.

State Taxes

The primary state fiscal benefit concerns sales tax receipts generated through the purchases of goods and services required by the mining company and its employees. Also, an undetermined amount of sales tax is assessed on the various bentonite products that are sold to taxable entities in the state.

The additional benefit to the state is generated through spending by employees whose incomes are directly or indirectly traced to the production of bentonite products in South Dakota. A conservative estimate of the amount of the total income of $11.3 million that reaches the South Dakota taxable sales stream is 60 percent. The 4.5 percent general state portion of sales tax generated from this proportion of disposable income is equal to about $305,000.

SECTION V
OTHER SOCIOECONOMIC FACTORS

Housing

No significant market impacts are anticipated in the housing industry since the level of employment is not projected to change appreciably. However, the life of BMP's ongoing mining operations are expected to be extended - allowing workers directly and indirectly related to the bentonite mining to perhaps make longer term housing plans. These plans may include moving up into higher quality, more long-term housing. These plans may also involve the shift from rental to owner occupied housing or the upgrade of housing among households benefitting from assurances of an extended mine life.

The median house value as of 2019 was equal to about $139,000 compared to a statewide median of $167,100. Median contract rent amounted to $724 per month, about $70 lower than the state-wide average. (US Bureau of the Census, 2019 Est.)

Basically, the housing market in Butte County gives all indications of being stable with ample opportunities to renting or purchasing housing. Prices are favorable relative to other communities in the state, and no impact can be expected as a result of the pending permits being approved.

Recreation

Recreation activity regarding the permit acreage is currently limited to antelope and deer hunting and any past activity has been dependent on landowner policies. During periods of mining activity on the sites, presumably hunting activity would be curtailed for a variety of safety factors. Hunting activities are currently controlled entirely at the discretion of the landowner and it is anticipated that this practice would continue to be the case in normal instances. There are no other recreation opportunities known to be affected either on the premises or elsewhere in the county.

Highways and Roads

County road impacts probably represent the only public service for which a potential impact may occur within Butte County. The process of mining bentonite ore from the proposed permit areas and transporting it to processing facilities in Colony, Wyoming is expected to bear an impact on the existing roads. However, the road distance is small, totaling no more than 15 miles in South Dakota. An additional 6 miles of travel will involve portions of Highway 212 lying in Wyoming. Some haul activity may also occur on a private company road that traverses the area in a south-east to north west manner near Highway 212 toward Colony, WY. Because of the expected intermittent operation of the Project, it is not possible to provide a precise amount of traffic on Highway 212. It is projected that hauling will take place only 12 days per year. BPM estimates at the present time that the company will use up to10 trucks each day of hauling making about seven trips each per day. Thus, about 70 truck loads will travel the highway to Colony each of the 12 days per year in which hauling is expected to take place. This process is expected to be complete over the course of six years, at which point the bentonite ore from the Project will be exhausted.

Overall, from the standpoint of highway utilization, measurable added traffic on Highway 212 will be only about 12 days per year.

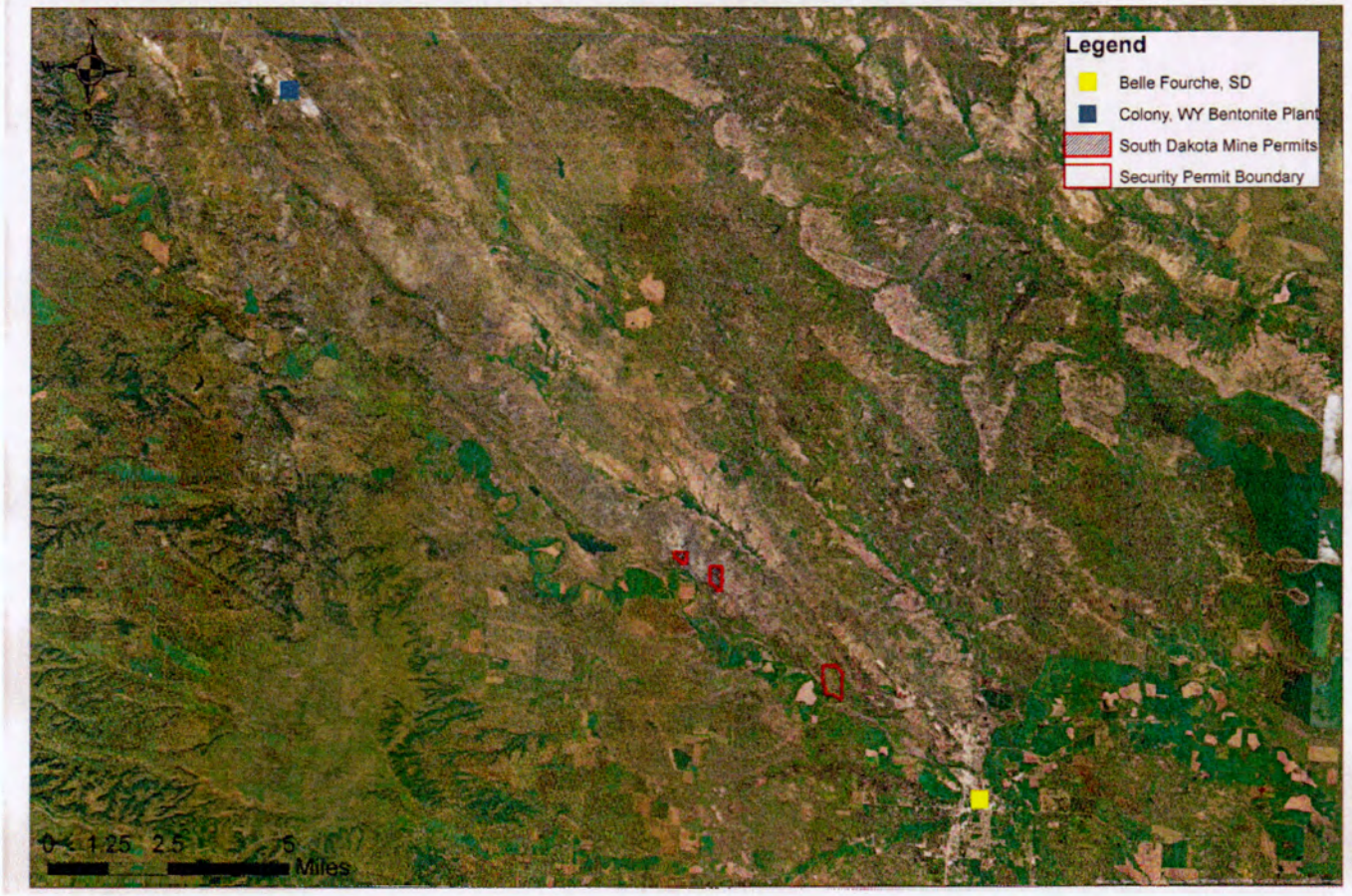
In addition to the obvious impact of transport trucks carrying material from the mine sites, there are also additional marginal impacts due to transporting equipment to and from the pits and the commuting of workers when the mine pits are being utilized. This type of traffic will be of much less volume than is the transporting of ore material to the processing plant in Colony.

In summary, among all of the socioeconomic impacts considered in this document county road challenges appear to be the only issues of significance to local governments.

Public Services

Examples of community services considered here include public education, fire and police protection, solid waste disposal, water and sanitary sewer. These community services provided by local units of government are not expected to experience any significant change in demand whether or not the pending permit is approved in the short run.

In the long run, if the permit is not be granted, (thereby shortening the life of the mine operation) the demand for these public services would be reduced to the extent that the drops in direct and induced employment in the area could possibly result in out-migration from the Belle Fourche Community.


Legend
Belle Fourche, SD
Colony, WY Bentonite Plant
South Dakota Mine Permits
Security Permit Boundary
0 1.25 2.5 5
Miles