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Minutes of the
Board of Minerals and Environment
Matthew Training Center
523 East Capitol Avenue
Pierre, South Dakota

April 21, 2022
10:00 a.m. Central Time

CALL TO ORDER: The meeting was called to order by Vice Chairman Glenn Blumhardt. The roll was called, and a quorum was present.

Vice Chairman Blumhardt announced that the meeting was live-streaming on SD.net, a service of South Dakota Public Broadcasting.

BOARD MEMBERS PRESENT: Glenn Blumhardt, Gregg Greenfield, Doyle Karpen, Jessica Peterson, Daryl Englund, and Bob Morris participated in-person. John Scheetz participated via telephone conference call.

BOARD MEMBERS ABSENT: Rex Hagg and Dennis Landguth.

OTHERS PRESENT: Mike Lees, Roberta Hudson, Mike Erickson, DANR Minerals and Mining Program; Kent Woodmansey, Agriculture and Environmental Services; Kyrik Rombough, Rick Boddicker, Anthony Lueck, and Duncan Jakubowski, DANR Air Quality Program; Mark Tieszen and Jeff Burich, Barrick participated via telephone conference call.

APPROVAL OF MINUTES FROM MARCH 17, 2022, MEETING: Daryl Englund pointed out that on page 1 under "Mining Issues Consent Calendar" the third line in the second paragraph should be changed from "Don Driech" to "Don Kriech."

Motion by Englund, seconded by Greenfield, to approve the minutes from the March 17, 2022, Board of Minerals and Environment meeting, as amended. Motion carried.

PUBLIC HEARING TO CONSIDER THE SECOND ROUND REVIEW OF THE STATE IMPLEMENTATION PLAN FOR THE REGIONAL HAZE PROGRAM: Vice Chairman Blumhardt opened the hearing at 10:05 a.m.

In the 1990 Clean Air Act Amendments, Congress added section 169B to strengthen and reaffirm the national goal and address visibility impairment from a collection of sources whose emissions are mixed and transported over long distances to Class I Areas. South Dakota currently has two Class I Areas, Badlands National Park and Wind Cave National Park.

South Dakota's second round State Implementation Plan addresses the following:

- In accordance with 40 CFR §51.308(f), a commitment to conduct comprehensive

periodic revisions of South Dakota's State Implementation Plan for its Regional Haze Program, and the requirements for those periodic comprehensive revisions of the implementation plans;

- In accordance with 40 CFR §51.308(g), a commitment to periodically report the progress towards achieving reasonable progress goals;
- In accordance with 40 CFR §51.308(h), a commitment to determine the adequacy of the existing implementation plan; and
- In accordance with 40 CFR §51.308(i), the requirements for continued coordination with states and federal land managers.

Under the Regional Haze Program, the Federal Land Managers, which consist of the US Fish and Wildlife Service, the US Forest Service, and the National Park Service, are provided the opportunity to submit comments prior to the public hearing. During this period, the Federal Land Managers provided comments requesting South Dakota require additional emission control measures on its facilities during this second implementation plan period. The Federal Land Managers also requested South Dakota account for additional impacts to visibility from smoke due to the Federal Land Managers plan to increase the use of prescribed fires to address wildfire risks. The Federal Land Managers' specific and detailed comments can be viewed in Appendix A of the draft State Implementation Plan, which can be found on DANR's website at: <https://danr.sd.gov/Environment/AirQuality/RegionalHaze/default.aspx>

Rick Boddicker, DANR Air Quality Program, reported that the 30-day public comment period closed on April 20, 2022. DANR received additional written comments from EPA Region 8, the Sierra Club, and the National Park Service on April 20, 2022. He provided copies of the comments to the board members for their consideration.

The original State Implementation Plan was submitted in 2011. The plan was approved the EPA. The majority of that work included the controls that would be required at Big Stone Power Plant.

A five-year progress report was submitted to EPA and approved in 2016, which showed improvements that were made from those controls and other controls at facilities throughout the region.

Mr. Boddicker stated that the department is not proposing any new rules during this round.

Anthony Lueck provided a slide presentation discussing South Dakota's Regional Haze State Implementation Plan proposal. The slide presentation is available on the Boards and Commission Portal at [https://boardsandcommissions.sd.gov/bcuploads/April%202022%20BME%20Packet%20\(1\).pdf](https://boardsandcommissions.sd.gov/bcuploads/April%202022%20BME%20Packet%20(1).pdf).

In response to a question from the board members, Kyrik Rombough stated that the Regional Haze Program requires each state to conduct a full update of its Regional Haze State Implementation Plan every 10 years and to determine if additional controls need to be added to the plan.

EPA's rule requires states to establish goals that provide for reasonable progress toward achieving natural visibility conditions for each Class I area in the state by 2064. South Dakota is projected to meet the goal at Badlands by 2028 and shortly thereafter at Wind Cave.

Mr. Boddicker stated that following the staff's four factor analysis, the department determined that no additional control measures are needed at this time, and the department recommended that the board approve the Regional Haze State Implementation Plan.

Mr. Lueck and Duncan Jakubowski with the Air Quality Program read a summary of all of the comments submitted and the department's response to each comment.

Motion by Greenfield, seconded by Englund, to approve the Regional Haze State Implementation Plan, as presented. A roll call vote was taken, and the motion carried. Due to technical issues with the conference phone, Mr. Scheetz's vote was not heard.

The South Dakota Regional Haze State Implementation Plan will be submitted to EPA for approval.

MINING ISSUES CONSENT CALENDAR: Prior to the meeting, the board received a table listing the department recommendations for transfers of liability and release of surety, releases of liability, and transfer of liability. (See attachment)

Motion by Morris, seconded by Greenfield, to accept the department recommendations for transfers of liability and release of surety, releases liability, and transfer of liability, as listed on the consent calendar. Motion carried unanimously.

UPDATE OF POST CLOSURE FINANCIAL ASSURANCE FOR LAC MINERALS (USA), LLC: Roberta Hudson stated that the table that was included in the board packet had an incorrect surety amount for LAC Minerals. The correct amount is \$20,340,657.

Ms. Hudson presented a slide presentation that was prepared by Eric Holm.

The Board of Minerals and Environment approved the 100-year post-closure period in October 2015. At that time, 220.64 released, reclaimed acres and 73.33 unreclaimed acres used for water management and treatment were placed under the post-closure plan. The post-closure bond is recalculated during the five-year review.

The department is requesting approval of an update to LAC Minerals' post-closure financial assurance. The post-closure period under the bond is reduced to 94 years and ends in 2115. Credit was given for activities completed up to post-closure year six (2021). The post-closure financial assurance covers water treatment, monitoring, and maintenance of post-closure areas.

The current financial assurance is \$20,340,567, and the updated financial assurance amount is \$30,838,220, which is an additional \$10,497,653 in financial assurance.

The reasons for this increase include inflation for labor, heavy equipment and seed costs, water treatment, water sampling and analysis, and year 94 site closure costs. The increase also includes new costs for pipeline and power line removal, increase support staff, sales tax, and final closure monitoring and fence removal for five years after site closure is completed.

The post-closure financial assurance is based on perpetual water treatment calculations developed by other state and federal agencies, a present worth analysis of annual costs adjusted for inflation. The post-closure bond is calculated using the sum of the present worth. For the actual water treatment costs, staff used LAC Minerals' actual water treatment and maintenance costs for the last five years.

The following shows the annual operation and maintenance costs:

Road Maintenance	\$8,243
ATV Side-by-Side (Every 10 Years)	\$30,000
Weed Control	\$10,303
Fence Repair & Maintenance	\$3,189
Erosion Control	\$1,985
Two Vehicles (Every 10 Years)	\$64,000
Vehicle Fuel & Maintenance	\$8,872
Caretaker/Water Sampler	\$55,577
Pond Liner Maintenance/Repair	\$4,142
Pond liner Replacement (Every 25 Years)	\$1,585,660

Ms. Hudson stated that, using information provided by LAC Minerals regarding the actual costs over the last five years, staff calculated the amounts for weed control, fence repair and maintenance, erosion control, vehicle fuel and maintenance, and pond liner maintenance and repair. The road maintenance costs are for the site caretaker to use a grader at the site, as necessary. The ATV costs are for access areas around the site. The pond line replacement is currently assessed at \$2.00 per square foot for 815,000 square feet of liner in the storage and Spruce Gulch ponds.

Below are the operation and maintenance annual indirect costs:

Mobilization*	5%
Contractor Overhead	8%
State Excise Tax	2%
Contractor Profit	10%
Contingency	5%
Administration	5%
Engineering/Consulting	1%
Scope and Bid*	5%

*Applied every 10 years beginning in year 7 (adjusted year 1)

The annual water treatment costs are as follows:

Plant Reagents	\$52,338
Propane	\$14,391
Electricity	\$131,978
Diesel	\$2,217
Rental	\$2,520
Equipment Replacement Costs	\$26,855
Long-Term RO Unit Replacement (Every 25 years)	\$300,000
Long-Term Plant Replacement (Every 25 years)	\$200,000

Ms. Hudson noted that the costs listed for the first six items are based on LAC Minerals' average costs over the past five years.

The plant manager and operator costs are not addressed in the LAC post-closure bond because the water treatment plant is controlled remotely at Homestake's Blacktail Treatment Plant, so those costs are covered under Homestake's post-closure bond.

Below are the water treatment annual indirect costs:

Mobilization*	5%
Contractor Overhead	8%
State Excise Tax	2%
Contractor Profit	10%
Contingency	10%
Administration	5%
Engineering/Consulting*	3%
Scope and Bid*	

*Applied every 10 years beginning in year 7 (adjusted year 1)

The annual monitoring costs associated with the mine are listed below:

Water Sample Analysis	\$38,786
(Post-closure years 7, 12, and 17)	\$40,097
Aquatic/Biological Monitoring	\$35,000
(Post-closure years 7, 12, and 17)	
Water Sampling Equipment	Varies from \$3,376 to \$9,730
Pit Impoundment Monitoring	\$13,000

Ms. Hudson stated that these analyses are based on the required parameters for the site. This is evaluated with the lab costs with a 15% discount. The post-closure cost for years 7, 12, and 17 is based on additional parameters that are required as part of the aquatic and biological monitoring. The aquatic/biological monitoring is scheduled to end in post-closure year 17 based on current surface water discharge requirements. The yearly cost for pit impoundment monitoring is based on LAC Minerals' actual costs from 2016 to 2021.

Below are the monitoring annual indirect costs:

Mobilization*	5%
Contractor Overhead	8%
State Excise Tax	2%
Contractor Profit	10%
Contingency	5%
Administration	5%
Scope and Bid*	5%

*Applied every 10 years beginning in year 7 (adjusted year 1).

Not applied to analysis costs.

Below is a list of final closure costs for year 94:

Surveyor	\$27,592
Plug Monitoring Wells	\$99,202
Spruce Gulch Facilities/Ponds	\$163,660
South Gulch Facilities/Ponds	\$22,747
Process Area Water Treatment Facility	\$503,286
Maintenance/Geo Buildings	\$91,569
Haul Road/New Access	\$410,298
Building and Other Demolition	\$132,108
Pipeline and Powerline Removal	\$735,085
Labor	<u>\$299,671</u>
Total Base Closure Cost	\$2,413,218

This is a list of year 94 final closure indirect costs:

Base Closure Cost	<u>\$2,413,218</u>
5% Mobilization	\$120,661
1% Performance Bond	\$24,132
8% Contractor Overhead	\$193,057
2% State Excise Tax	\$48,264
10% Contractor Profit	\$241,322
10% Contingency	\$241,322
5% Administration	\$120,661
3% Engineering/Consulting	\$72,397
2% Scope and Bid	<u>\$120,661</u>
Total Closure Cost	\$3,595,695

The cost for inspection and monitoring and final fence removal five years after closure (year 99) is \$51,497.

The five-year monitoring indirect costs are shown below:

Mobilization*	5%
Contractor Overhead	8%
State Excise Tax	2%
Contractor Profit	10%
Contingency	10%
Administration	5%
Scope and Bid*	5%

*Applied in years 101 and 105 (adjusted years 95 and 99)

There are additional costs for a cap failure contingency in the amount of \$200,000 and cap failure mitigation in the amount of \$100,000.

In development of the post-closure financial assurance, staff had discussions with the State Investment Council regarding the proper inflation and discount rates. Historically, there has been

a 2% difference between the two rates, with the inflation rate at 3% and the discount rate at 5%. Those two rates are applied to all large-scale gold post-closure bonds. Each total annual cost (direct plus indirect) is first adjusted for inflation. The future value of each annual cost is calculated using the 3% inflation factor over the 100-year period.

The present worth brings the future value back to today's dollars. The present worth of each inflated value is calculated using a discount rate of 5% over the 100 years.

Year one of the adjusted post-closure period is year 7 of the project period. Escalation and present worth factors begin at year 7.

Ms. Hudson explained an example of the present worth analysis. The present value from year 1 to year 99 is \$29,369,733. The face value in 2022 is \$30,838,220.

Ms. Hudson stated that if the board approves the amount of the updated post-closure financial assurance, LAC Minerals will submit a surety bond rider with the new amount. The surety bond rider will be presented to the board for approval at its May 19, 2022, meeting.

The department recommended that the board approve the increase in LAC Minerals' post-closure financial assurance from \$20,340,567 to \$30,838,220.

Ms. Hudson answered questions from the board about the post-closure financial assurance.

Mr. Greenfield expressed concern that if LAC Minerals defaults on the post-closure requirements, the board may not be able to collect the entire amount of the financial assurance at once from the surety company.

Motion by Karpen, seconded by Morris, to increase the LAC Minerals (USA), LLC post-closure financial amount to \$30,838,220. Motion carried.

TRANSFER OF SMALL SCALE MINE PERMIT 479 FROM TIMMY R. HORN TO ROBERT W. PACE: Ms. Hudson reported that Robert W. Pace requested transfer of Small Scale Mine Permit 479 from Timmy R. Horn. The location of the permitted operation is approximately three miles east of Rochford, SD. Under SDCL 45-6B-47, any mine permit can be transferred from one operator to another with the successor operator assuming all reclamation liability.

The transfer application form was submitted and deemed complete on March 28, 2022. The \$100 transfer fee was submitted on February 28, 2022, and the \$2,500 replacement surety was submitted on March 23, 2022.

The department recommended transfer of the permit on March 28, 2022. The recommendation was published in the Rapid City Journal on April 7 and 14, 2022. Affidavits of Publication were received on April 19, 2022.

No petitions to intervene were received.

Board of Minerals and Environment
April 21, 2022, Meeting Minutes

Under SDCL 45-6B-47, the board cannot deny a mine permit transfer unless the operation is not or cannot be brought into compliance with all applicable federal, state or local laws or the successor operator is in violation of state mining laws or mine permit conditions for any mining operation in the state. The current mine permit and Robert W. Pace are in compliance with all federal, state, and local laws and regulations. Robert W. Pace also submitted a Certification of Applicant form and disclosed no violations.

Staff recommendation was to transfer Small Scale Mine Permit 479 to Robert W. Pace and release CD No. 220146644, First Interstate Bank, Gillette, Wyoming, in the amount of \$2,500 and accept CD No. 6701000601, First Interstate Bank, New Underwood, SD, in the amount of \$2,500.

In response to a question from Mr. Morris, Ms. Hudson stated that under SDCL 45-6B the bond for a small scale mine permit is capped at \$2,500.

Motion by Karpen, seconded by Peterson, to transfer Small Scale Mine Permit 479 to Robert W. Pace and release CD No. 220146644, First Interstate Bank, Gillette, Wyoming, in the amount of \$2,500 and accept CD No. 6701000601, First Interstate Bank, New Underwood, SD, in the amount of \$2,500. Motion carried.

PUBLIC COMMENT PERIOD IN ACCORDANCE WITH SDCL 1-25-1: There were no public comments.

NEXT MEETING: The next meeting will be via telephone conference call on May 19, 2022.

ADJOURN: Motion by Morris, seconded by Greenfield, to adjourn the meeting. A roll call vote was taken, and the motion carried unanimously.

Secretary

Date

Witness

Date

Consent Calendar
South Dakota Board of Minerals & Environment

April 21, 2022

<u>License Holder</u>	<u>License No.</u>	<u>Site No.</u>	<u>Surety Amount</u>	<u>Surety Company or Bank</u>	<u>DENR Recommendation</u>
<u>Transfer of Liability & Release of Surety:</u>					
Cannon River Ranches Inc. Miller, SD	08-860		\$1,000	The First National Bank of River Falls, River Falls, WI	Transfer liability and release \$1,000.
		860001	NW1/4 Section 11; T109N-R71W, Hyde County		
Transfer to:					
W6 Ranch Ree Heights, SD	22-1108		\$2,000	Quoin Financial Bank, Miller	
Donald Cuka Huron, SD	97-624		\$500	First National Bank, Pierre	Transfer liability and release \$500.
		624001	S1/2 Section 34; T96N-R56W, Yankton County		
Transfer to:					
Jason Fischer dba Fischer Gravel Lesterville, SD	08-862		\$500 \$2,000	First National Bank, Yankton First Dakota National Bank, Yankton	
Robert Weverstad Yankton, SD	94-533		\$2,000	First Dakota National Bank, Yankton	Transfer liability and release \$2,500.
		533001	\$500 W1/2 NE1/4 Section 25; T94N-R56W, Yankton County	Wells Fargo Bank, Yankton	
Transfer to:					
Prairie Creek Ranch LLC Yankton, SD	22-1110		\$2,500	CorTrust Bank, Yankton	

*Consent Calendar
South Dakota Board of Minerals & Environment*

April 21, 2022

<u>License Holder</u>	<u>License No.</u>	<u>Site No.</u>	<u>Surety Amount</u>	<u>Surety Company or Bank</u>	<u>DENR Recommendation</u>
<u>Release of Liability:</u>					
B & B Contracting Inc. Aberdeen, SD	01-716	716004	\$20,000	North American Specialty Insurance Company N1/2 Section 4; T124N-R63W, Brown County	Release liability.
Bowes Construction Inc. Brookings, SD	83-164	164031	\$20,000	Hudson Insurance Company NE1/4 Section 31; T117N-R57W, Clark County	Release liability.
Carr Towing & Construction Redfield, SD	87-349	349006	\$7,030	Heartland State Bank, Tulare Heartland State Bank, Redfield NE1/4 Section 16; T116N-R67W, Hand County	Release liability.
<u>Transfer of Liability:</u>					
WC Land, LLC Crooks, SD	18-1044	1044001	\$20,000	United Fire & Casualty Company SE1/4 Section 18; T109N-R49W, Brookings County	Transfer liability.
Transfer to:					
Winter Contracting, LLC Volga, SD	19-1049		\$20,000	United Fire & Casualty Company	

South Dakota Board of Minerals & Environment

April 21, 2022

<u>Permit Holder</u>	<u>Permit No.</u>	<u>Surety Amount</u>	<u>Surety Company or Bank</u>	<u>DENR Recommendation</u>
<u>Transfer of Small Scale Mine Permit 479:</u>				
Timmy R. Horn Aurora, CO	479	\$2,500	First Interstate Bank, Gillette, WY	Transfer liability and release CD No. 220146644, First Interstate Bank, Gillette, WY, in the amount of \$2,500. Accept CD No. 6701000601, First Interstate Bank, New Underwood, in the amount of \$2,500.
			E1/2 SE1/4 NW1/4 Section 28; T2N-R4E, Pennington County	
Transfer to:				
Robert W. Pace New Underwood, SD		\$2,500	First Interstate Bank, New Underwood	
<u>Update of Post Closure Financial Assurance for LAC Minerals (USA), LLC :</u>				
LAC Minerals (USA), LLC Central City, SD	445	\$20,340,567	Fidelity & Deposit Company of Maryland Zurich American Insurance Company	Recommend increasing the Post Closure Financial Assurance amount to \$30,838,220.

ATTENDANCE SHEET
BOARD OF MINERALS AND ENVIRONMENT
DATE 4-21-22

NAME (PLEASE PRINT)

ADDRESS

REPRESENTING

Rick Bocklicker

Pierre

DANR

Duncan Jakubowski

Pierre

DANR

Kent Woodmarsey

Pierre

DANR

Kyril Rombough

Pierre

DANR - ~~AD~~

Roberta Hudson

Pierre

DANR-mm

M. K. Lees

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Anthony Weck

Pierre

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