

Board of Minerals and Environment

523 East Capitol Avenue Pierre, South Dakota 57501-3182 (605)773-3151 Fax: (605)773-4068

AGENDA

Live audio of the meeting is available at http://www.sd.net/mtc

Board of Minerals and Environment Telephone Conference Call

April 16, 2020 10:00 a.m. Central Time

10:00 a.m. Call to order and roll call

Approval of minutes from February 20, 2020, meeting

Update on oil and gas bills HB 1025, HB 1026, and SB 17 – Secretary Roberts

Mining issues - Consent Calendar – Bret Graves

Transfer of Small Scale Mine Permit 479 from Stuart Goldsmith to Timmy R. Horn – Roberta Hudson

Simon Contractors of SD Inc. request for approval of its socioeconomic contractor for a large-scale limestone mine permit application pursuant to SDCL 45-6B-33.1 – Eric Holm

Forfeiture of Irrevocable Letter of Credit No. 21804-01, TrueStar Federal Credit Union, Bemidji, MN, for Exploration Notice of Intent, EXNI-408, for B4Time, LLC – Eric Holm

Petition to Reverse or Modify Rapid City Municipal Solid Waste Facility Permit Number 20-01 and Petition for Equitable Relief – Holly Farris

Public comment period

Next Meeting

Adjourn

Interested parties who wish to participate in the telephone conference call should contact DENR at (605) 773-3886 no later than 3:00 p.m. Central Time on Wednesday, April 15, 2020.

Notice is given to individuals with disabilities that this meeting is being held in a physically accessible location. Please notify the Department of Environment and Natural Resources by calling (605) 773-5559 at least 48 hours prior to the meeting if you have a disability for which special arrangements are required.

The audio recording for this meeting is available on the South Dakota Boards and Commissions Portal at http://boardsandcommissions.sd.gov/Meetings.aspx?BoardID=67

Minutes of the
Board of Minerals and Environment
Telephone Conference Call Meeting
Matthew Environmental Education and Training Center
523 East Capitol Avenue
Pierre, South Dakota

February 20, 2020 10:00 a.m. Central Time

<u>CALL TO ORDER</u>: The meeting was called to order by Chairman Rex Hagg. The roll was called, and a quorum was present.

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

<u>BOARD MEMBERS PRESENT</u>: Rex Hagg, Gregg Greenfield, Glenn Blumhardt, Dennis Landguth, Doyle Karpen, Daryl Englund, Jessica Peterson, Bob Morris, and John Scheetz.

BOARD MEMBERS ABSENT: None.

<u>OTHERS PRESENT</u>: Roberta Hudson, Bret Graves, and Lucy Blocker, DENR Minerals and Mining Program.

<u>UPDATE ON 2020 OIL AND GAS BILLS</u>: Chairman Hagg announced that Secretary Roberts was not available, so Lucy Blocker, Minerals and Mining Program, would present the update on SB 17, HB 1025, and HB 1026.

SB 17 is a bill to appropriate \$727,700 from the general fund for the purposes of plugging and reclaiming the surface sites of natural gas wells in Harding County. The bill has been referred to the Joint Committee on Appropriations, but has not yet been scheduled for hearing.

HB 1025 is a bill to revise the plugging and performance bond structure for oil and gas wells. It eliminates tiered bonding based on well depth, setting single well bonds at \$50,000 and the blanket bond amount at \$100,000. The bill also provides the board and the department the authority to require an additional \$20,000 bond for idle wells, as necessary.

HB 1025 was heard and passed by both the House Agriculture and Natural Resources Committee and the House of Representatives. No opposition was voiced at the hearing. Organizations such as the Stockgrowers, Isaac Walton League, and the Sierra Club testified as proponents. This bill makes South Dakota bonding as stringent as North Dakota and more stringent than other states.

In addition, the proposed idle well requirement is also more stringent than Wyoming and Colorado, which has a tiered system.

HB 1026 is a bill designed to clarify the acceptable use of forfeited oil and gas surety. If the surety for a well has been forfeited and is not required for site-specific reclamation activities, the state may use the funds for the environmental cleanup or remediation of any lands or resources regulated under chapter 45-9. This bill would allow the use of funds such as those revoked for the Quartz well, that are not required for reclamation, to be applied to reclamation activities such as plugging and reclaiming the Spyglass wells. This bill was also heard and passed in both the House Agriculture and Natural Resources Committee and the House of Representatives. There was no opposition for this bill.

Both HB 1025 and 1026 were scheduled before the Senate Agriculture and Natural Resources Committee on February 20, 2020, at 10:00 a.m.

Chairman Hagg asked if there have been any new concerns or objections since the bills have come through the House.

Ms. Blocker stated that the main objection expressed is the desire for further bond increases. She noted that the levels proposed in the bills keep South Dakota competitive with other states in the region.

Chairman Hagg asked if the bills have been amended going through the House. Ms. Blocker answered that they have not been amended.

Chairman asked if the department has had any feedback on SB 17. Ms. Blocker stated that there has been no feedback regarding that bill.

<u>APPROVAL OF MINUTES FROM NOVEMBER 21, 2019, MEETING</u>: Motion by Morris, seconded by Blumhardt, to approve the minutes from the November 21, 2019, Board of Minerals and Environment meeting. A roll call vote was taken, and the motion carried unanimously.

MINING ISSUES:

<u>Consent Calendar</u>: Prior to the meeting, the board received a table listing the department recommendations for releases of liability and surety, transfers of liability, and releases of liability (see attachment).

Bret Graves, Minerals and Mining Program, was available to answer questions. There were no questions from the board.

Motion by Landguth, seconded by Peterson, to accept the department recommendations for releases of liability and surety, transfers of liability, and releases of liability, as shown on the consent calendar. A roll call vote was taken, and the motion carried unanimously.

ACCEPTANCE OF AMENDMENT TO LETTER OF CREDIT FOR MINERAL MOUNTAIN RESOURCES (SD) INC: Eric Holm was unable to attend the meeting. Roberta Hudson, Minerals and Mining Program, reported that in 2017, Mineral Mountain Resources (SD) Inc. obtained an Irrevocable Letter of Credit from Great Western Bank to serve as its \$20,000 statewide reclamation bond for EXNI-427. Under SDCL-45-6C-19, an operator may post a \$20,000 surety for statewide exploring in lieu of submitting a surety for each exploration operation.

In November 2019, the department issued a restriction letter for EXNI-434 for an additional exploration operation. The department required Mineral Mountain Resources to submit an amendment to the Irrevocable Letter of Credit to cover the new EXNI.

The department recommended that the board accept Amendment No. 1 to Irrevocable Letter of Credit No. 833 for Mineral Mountain Resources (SD) Inc. to cover EXNI-434.

Ratings for Great Western Bank are 4- and 5-star and A.

EXNI's 427 and 434 are located about one mile east of Rochford. EXNI-434 covers the drilling of up to 90 holes in nine separate drill pad locations with up to 10 drill holes per pad. Drill holes will not exceed 5,000 feet in depth. Each pad is 50 feet by 50 feet. Existing trails are being used.

Chairman Hagg asked what the cost would be to plug all of the exploration test holes. Ms. Hudson said the test holes are plugged with a standard bentonite grout and cement grout as needed, so there is not a specific cost to plug each one. She noted that test holes have to be plugged within 30 days of drilling.

Daryl Englund asked what diameter the holes are. Ms. Hudson stated that these are core holes that are four-inch total with a 2-inch core.

John Scheetz asked if it would be appropriate to review bonding requirements for mineral exploration operations.

Chairman Hagg asked if the 2020 legislative oil and gas bills are for mineral exploration and oil and gas. Ms. Hudson answered that the bills address only oil and gas bonding.

Chairman Hagg asked if the \$20,000 blanket bond is only for the test holes. Ms. Hudson stated that the bond is for reclamation of the entire exploration operation.

Mr. Scheetz suggested that the board review the bonding for exploration activities to make sure the bonding is adequate, the plugging procedures are adequate, and that the operator and the driller follow the permit requirements.

Chairman Hagg agreed that the board should review the bonding requirements. He suggested that by the next board meeting the board familiarize themselves with the bonding process and whether it is adequate.

Mr. Scheetz asked if a motion was needed to put it on the meeting agenda. Chairman Hagg stated that he would visit with the department about reviewing the bonding process.

Motion by Englund, seconded by Landguth, to accept Amendment No. 1 to Irrevocable Letter of Credit No. 833 for Mineral Mountain Resources (SD) Inc. to cover exploration permit EXNI-434. A roll call vote was taken, and the motion carried unanimously.

ANNUAL UPDATE OF POST-CLOSURE FINANCIAL ASSURANCE FOR HOMESTAKE MINING COMPANY, PERMITS 332 AND 456, AND LAC MINERALS (USA) LLC, PERMIT 445:

<u>Homestake Mining Company</u>: Ms. Hudson reported that in the May 18, 2006, order regarding the post-closure financial assurance for Mine Permits 332 and 456, it states the financial assurance shall be automatically extended for periods of one year. At the time of each annual extension, the face value of the financial assurance shall be adjusted to the bonding schedule set by the board in 2006 and updated every five years.

For 2020, the face value of the surety bond that serves as the post-closure financial assurance is required to be \$58,041,218. This is an increase from the \$56,460,929 which was submitted last year.

For the increase, Homestake submitted a rider to Surety Bond No. 8233-63-10, Federal Insurance Company, which increases the amount to the new face value. Federal Insurance is licensed in South Dakota and is on the US Department of Treasury list of approved surety companies. Ratings for the company from AM Best, Standard and Poor's, Moody's, and Fitch's are superior, very strong, high quality, and very high credit, respectively. Outlooks are stable except for a positive outlook from Moody's.

The department recommended that the board accept the rider to Surety Bond No. 8233-63-10, Federal Insurance Company, to increase the post-closure financial assurance amount to \$58,041,218.

Motion by Morris, seconded by Karpen, to accept the rider to Bond No. 82336310, Federal Insurance Company, increasing the post-closure financial assurance amount to \$58,041,218 for Homestake Mining Company, Permits 332 and 456. A roll call vote was taken, and the motion carried unanimously.

<u>LAC Minerals (USA) LLC</u>: Ms. Hudson reported that in the post-closure conditions for Mine Permit 445, which were approved by the board on January 21, 2016, it states the financial assurance shall be automatically extended for periods of one year. At the time of each annual extension, the face value of the financial assurance shall be adjusted to the bonding schedule set by the board in 2016.

For 2020, the face value of the surety bond that serves as the post-closure financial assurance is required to be \$21,789,741. This is an increase from the \$21,156,324 amount, which was submitted last year. For the increase, LAC Minerals submitted a rider to Surety Bond No.

09177703, Fidelity & Deposit Company of Maryland and Zurich American Insurance Company, which increases the amount to the new face value. Both surety companies are licensed in South Dakota and are listed on the US Department of Treasury's list of approved surety companies. Ratings for both companies from AM Best and Standard and Poor's are superior to very strong. Outlooks are stable to positive

The department recommended that the board accept the rider to Surety Bond No. 09177703, Fidelity & Deposit Company of Maryland and Zurich American Insurance Company, to increase the post-closure financial assurance amount to \$21,789,741.

Motion by Scheetz, seconded by Englund, to accept the rider to Surety Bond No. 09177703, Fidelity & Deposit Company of Maryland and Zurich American Insurance Company, to increase the post-closure financial assurance amount to \$21,789,741 for LAC Minerals (USA), LLC Permit 445. A roll call vote was taken, and the motion carried unanimously.

<u>PUBLIC COMMENT PERIOD</u>: There were no public comments.

NEXT MEETING: The next meeting, if needed, is scheduled for March 19, 2020.

Chairman Hagg stated that if the agenda is very light, he would rather hold the meeting via telephone conference call rather than bringing all of the board members to Pierre. He asked for comments from the board members on whether they would like to handle it differently. None of the other board members commented.

<u>ADJOURN</u> :	Motion by	y Landguth,	seconded by	Karpen,	that the	meeting	be adjourned.	A Roll
call vote was	s taken, and	d the motion	carried unar	nimously				

Secretary	Date Witness	Date						

					February 20, 2020
<u>License Holder</u>	License No.	Site No.	Surety Amount	Surety Company or Bank	DENR Recommendation
Releases of Liability and	d Surety:				
Douglas Leischer	95-568		\$1,000	First National Bank, Pierre	Release liability and \$1,000.
Pierre, SD		568001	SE1/4 Section 32;	T110N-R76W, Hughes County	
Pinnacle Land Company, LLC	11-913		\$1,000	First Interstate Bank, Sturgis	Release liability and \$1,000.
Sturgis, SD		042004	C1/2 NE1/4 C. 1	O TEN DEE M. A. C	
Transfers of Liability an	d Release of Su	913001	31/2 INLI/H Section	n 8; T5N-R5E, Meade County	
Lowell Swanson	15-983		\$5,000	Great Western Bank,	Transfer liability and release
Pukwana, SD		983001	N1/2 Section 5: T1	Chamberlain 03N-R69W, Brule County	\$5,000.
Transfer to:				,	
SO Unlimited LLC Chamberlain, SD	19-1055		\$1,000	First Dakota National Bank, Chamberlain	

					February 20, 2020
<u>License Holder</u>	<u>License No.</u>	Site No.	Surety Amount	Surety Company or Bank	DENR Recommendation
Transfers of Liability an	d Release of Su	rety:			
Van Zee Gravel & Construction Platte, SD	83-223		\$8,000	Bank of The West, Platte	Transfer liability and release \$8,000.
Transfer to:		223009	NW1/4, SW1/4, & Aurora County	SE1/4 Section 35; T101N-R66W,	
Opperman, Inc. Gregory, SD	83-4		\$20,000	Sun Surety Insurance Company	
Transfers of Liability:					
James T. Goetz Estate Sheldon, IA	83-187		\$20,000	First National Bank, Yankton	Transfer liability.
Tanafanta		187003	W1/2 NW1/4 & NW T102N-R59W, Han	V1/4 SW1/4 Section 9; son County	
Transfer to:	10.1074		100.000		
JD Concrete Products LLC Mitchell, SD	19-1050		\$20,000	First Dakota National Bank, Mitchell	

					February 20, 2020
<u>License Holder</u>	License No.	Site No.	Surety Amount	Surety Company or Bank	DENR Recommendation
Transfers of Liability:					
Lien Transportation Company Aberdeen, SD	84-257		\$20,000	Western Surety Company	Transfer liability.
Aberdeen, 3b		257004	NW1/4 Section 33;	T127N-R64W, Brown County	
Transfer to:					
B & B Contracting, Inc. Aberdeen, SD	01-716		\$20,000	North American Specialty Insurance Company	
Dan L. Meyers Huron, SD	83-176		\$20,000	Sun Surety Insurance Company	Transfer liability.
		176021	N1/2 Section 25; T	108N-R61W, Sanborn County	
Transfer to:					
Michael Feistner Woonsocket, SD	03-759		\$8,500	First National Bank, Pierre First National Bank, Yankton	
Woonsocket, 3D				First National Bank, Woonsocket	
				Ween Been Co	
Releases of Liability:					
B & B Contracting, Inc. Aberdeen, SD	01-716		\$20,000	North American Specialty Insurance Company	Release liability.
, , -		716002	SW1/4 Section 24;	T123N-R65W, Brown County	

					February 20, 2020
<u>License Holder</u>	<u>License No.</u>	Site No.	Surety Amount	Surety Company or Bank	DENR Recommendation
Releases of Liability:					
Concrete Materials Sioux Falls, SD	83-144		\$20,000	United Fire & Casualty Company	Release liability.
		144006		NW1/4 & W1/2 NE1/4 Section 27 & SE1/4 Section 28;	
Buffalo County Highway Department Gann Valley, SD	83-50	50010	EXEMPT NW1/4 Section 18;	NA T109N-R71W, Hyde County	Release liability.
Todd County Highway Department	83-243		EXEMPT	NA	Release liability.
Mission, SD		243003	SW1/4 NW1/4 Sect County	tion 6; T39N-R31W, Todd	
Ziebach County Highway Department	83-246		EXEMPT	NA	Release liability.
Dupree, SD		246019	SE1/4 Section 30;	T9N-R24E, Ziebach County	

South Dakota Board of Minerals and Environment

				February 20, 2020
<u>Permit Holder</u>	<u>Permit No.</u>	Surety Amount	Surety Company or Bank	DENR Recommendation
Acceptance of Amendment	to Letter of Credit	for Mineral Mounta	ain Resources (SD) Inc.:	
Mineral Mountain Resources (SD) Inc. Vancouver BC, Canada	EXNI-427	\$20,000	Great Western Bank, Rapid City	Accept Amendment No. 1 to Irrevocable Letter of Credit No. 833 for Mineral Mountain Resources (SD) Inc. to cover exploration permit EXNI-434.
Annual Update of Post Close	ure Financial Assu	<u>irance:</u>		
Homestake Mining Company Central City, SD	332 & 456	\$56,460,929	Federal Insurance Company	Accept rider to Bond No. 82336310, Federal Insurance Company, increasing the Post Closure Financial Assurance amount to \$58,041,218.
LAC Minerals (USA), LLC Central City, SD	445	\$21,156,324	Fidelity & Deposit Company of Maryland Zurich American Insurance Company	Accept rider to Bond No. 09177703, Fidelity & Deposit Company of Maryland and Zurich American Insurance Company, increasing the Post Closure Financial Assurance amount to \$21,789,741.

					April 16, 2	
<u>License Holder</u>	<u>License No.</u>	Site No.	Surety Amount	Surety Company or Bank	DENR Recommendation	
Transfer of Liability:						
Lien Transportation Company Aberdeen, SD	84-257		\$20,000	Western Surety Company	Transfer liability.	
		257013	S1/2 SE1/4 Section County	26; T123N-R64W, Brown		
Transfer to:						
Harlan & Donald Young Aberdeen, SD	19-1059		\$4,000	Plains Commerce Bank, Aberdeen		

April 2020 Consent.doc

South Dakota Board of Minerals & Environment

				April 16, 2020
Permit Holder	Permit No.	Surety Amount	Surety Company or Bank	DENR Recommendation
Transfer of Small Scale Min	<u>e Permit 479:</u>			
Stuart Goldsmith Gillette, WY	479	\$2,500	First Interstate Bank, Gillette, WY	Transfer Permit 479 from Stuart Goldsmith to Timmy R. Horn and release CD No. 300017857, First Interstate Bank, in the amount of \$2,500. Accept CD No. 220146644, First Interstate Bank, in the amount of \$2,500.
		E1/2 SE1/4 NW1/4 Se	ection 28; T2N-R4E, Pennington County	
Transfer to:				
Timmy R. Horn Centennial, CO		\$2,500	First Interstate Bank, Gillette, WY	
Forfeiture of Reclamation S	Surety:			
B4Time, LLC Bemidji, MN	EXNI-408	\$1,000	TrueStar Federal Credit Union, Bemidji, MN	Declare Irrevocable Letter of Credit No. 21804-01, TrueStar Federal Credit Union, forfeited and transfer proceeds to the Department of Environment & Natural Resources.
		SW1/4 Section 7; T1	IN-R4E, Pennington County	

April 2020.doc

B4Time Mine - Proposed Reclamation Plan

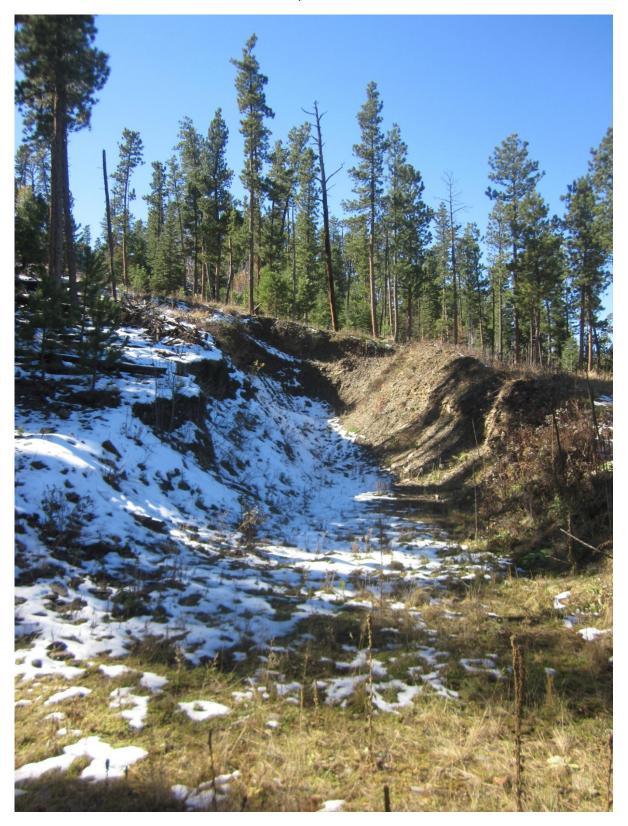


Photo 1. Exploration Trench. The trench will be filled to maximum extent practical and area contoured to blend with the undisturbed surrounding area.

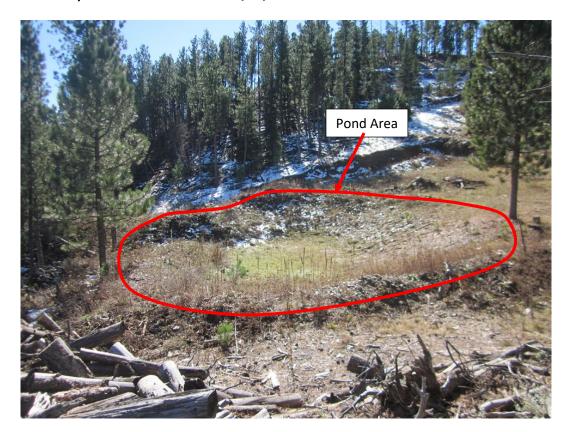


Photo 2. Holding Pond. Berm will be used to backfill pond to maximum extent practical and then contoured to blend with surrounding area.



Photo 3. Access Road. Road will be obliterated and area contoured to blend with existing topography.



Photos 4 & 5. All lumber, piping and other manmade materials will be will be removed from the mine site and disposed of at an approved solid waste facility. All slash will be scattered across the site in such a manner that it does not exceed a height of 18 inches above ground level.

B4Time Mine Proposed Reclamation Plan 03/19/2020

Other reclamation activity:

- 1. All disturbed areas will be covered with 4 inches of topsoil if available on-site. No topsoil will be brought to the site.
- 2. All disturbed areas will be seeded using the Forest Service's High Elevation-Mid Zone Seed Mixture with the following composition:

30% Annual ryegrass

25% Slender Wheatgrass

20% Green needlegrass

10% Canada wildrye

10% Canby blue grass)

5% Purple prairie clover or American vetch

3. Once reclamation is completed the mine site will be monitored for noxious weeds and treated for at least three years.

RAPID CITY OFFICE

Hills Materials DBA Simon 3975 Sturgis Road, Rapid City, SD 57702 PO Box 2720, Rapid City, SD 57709 TEL 605.394.3300 FAX 605.341.3446 (estimating) FAX 605.342.4513 (accounting)



FEB 1 0 2020
MINERALS & MINING PROGRAM

February 6, 2020

Board of Minerals and Environment SD Department of Environmental and Natural Resources 523 E Capitol Avenue Pierre, South Dakota 57501

RE: Approval of Socioeconomic Assessment Author

Dear Board of Minerals and Environment:

Please consider this letter a request for the South Dakota Board of Minerals and Environment to review and approve the qualifications of Dr. Michael K. Madden to complete a socioeconomic assessment of the effects a mine in Custer, County SD. Simon will in the near future be submitting a Request for Determination of Special, Exceptional, Critical or Unique Lands and a Large Scale Mine Permit Application. Simon currently operates the Loring Quarry (limestone) under a mine license, and due to changes in the operation will be applying for a Large Scale Mine Permit.

Simon requests that Dr. Madden be approved to conduct the socioeconomic assessment for the proposed mine. The assessment will be completed by Dr. Madden and included in the Large Scale Mine Permit Application. Dr. Madden has conducted these assessments for other Large Scale Mine Permit Applications in SD, and his resume is attached for your review. Thank you in advance for consideration of Dr. Madden.

Sincerely,

TIM FOERSTER, PE

Manufacturing Manager

NORTH REGION OFFICE

3975 Sturgis Rd Rapid City, SD 57702

OFFICE 605.718.5328 MOBILE 605.390.8406

RESUME'

PERSONAL DATA: Dr. MICHAEL K. MADDEN

Date of Birth: September 13, 1943.

Residence: 512 North Pinnacle, Buffalo, Wyoming 82834

Telephone:307-620-9065

ACADEMIC QUALIFICATIONS:

B. S. 1965. South Dakota State University, Economics and Mathematics. Ph. D. 1970. Iowa State University, Economics and Statistics.

Research Reports and Publications Etc.

Economic Impact of Central States Fair Facilities, February, 2109.

Limited Socioeconomic Assessment, Proposed Bentonite Mine Permit, State Line Permit Area, American Colloid Company, July, 2017

Limited Socioeconomic Assessment, Bentonite Mineral Performance, Inc., January, 2013.

Socioeconomic Assessment, VMC, LLC, The Deadwood Standard Project, February 2012.

Economic Update, of and Eastside Gaming Facility Near Kadoka, SD, April 2011.

Statistical Update, Economic and Fiscal Impacts Associated with the Travel Industry in South Dakota, January 2011.

Socioeconomic Assessment, Wharf Mining Company, October, 2010

Limited Socioeconomic Assessment, Proposed Bentonite Mine Permits, Davis North and Davis South, American Colloid Company, March, 2010.

Statistical Update, Economic and Fiscal Impacts Associated with the Travel Industry in South Dakota, January 2010.

Assessment of Socioeconomic Impacts Expected with the Keystone XL Pipeline Project, October, 2009

Demographic and Economic Characteristics of Snowmobile Recreation in the Province of Saskatchewan, For the Provincial Government of Saskatchewan, July 2009.

Statistical Update, Economic and Fiscal Impacts Associated with the Travel Industry in South Dakota, January 2009.

Statistical Update, Economic and Fiscal Impacts Associated with the Travel Industry in South Dakota, January 2008.

Statistical Update, Economic and Fiscal Impacts Associated with the Travel Industry in South Dakota, January 2007.

Economic Impact of Native American Educational Institution Graduates, The Case of United Tribes Technical College, Update, July, 2007.

Sector Economic Impacts Associated with Big Stone II Power Plant, June 2006.

Statistical Update, Economic and Fiscal Impacts Associated with the Travel Industry in South Dakota, January 2006.

Estimate of the Distribution of Economic benefits by Travel Season, February, 2005.

Economic Feasibility of a Tribal Casino near Kadoka, South Dakota, June 2005.

Estimate of the Distribution of Economic benefits by Travel Season, February, 2005.

Statistical Update, Economic and Fiscal Impacts Associated with the Travel Industry in South Dakota, January 2005.

Economic Impact of Native American Educational Institution Graduates, The Case of United Tribes Technical College, May, 2005.

Statistical Update, Economic and Fiscal Impacts Associated with the Travel Industry in South Dakota, January 2004.

South Dakota Occupancy and International Travel Survey, 2003, December 2003.

Economic and Market Issues Relevant to a Trust Company Application in Southeastern South Dakota, October 2003.

Economic Issues Associated with a Proposed Branch Bank in the Rapid City Area, September 2003.

Marketing and Promotion Update, Rapid City Convention and Visitors Bureau, May 2003.

Economic and Fiscal Issues Associated with Additional Meeting Facilities in Oacoma, SD, February 2003.

Statistical Update, Economic and Fiscal Impacts Associated with the Travel Industry in South Dakota, January 2003

South Dakota Occupancy and Foreign Travel Survey, 2002, December 2002.

Economic Impacts related to Buffalo Gap National Grassland, June 2002

Market and Promotion Update, Rapid City Convention and Visitors Bureau, April 2002.

Statistical Update, Economic and Fiscal Impacts Associated with the Travel Industry in South Dakota, January 2002.

South Dakota Occupancy and Foreign Travel Survey, 2001, December 2001.

Market Feasibility for a Choice Hotels International Lodging Property in Rapid City, Sept 2001.

Visitor Industry Potential for the City of Lead and Estimates of Economic Impacts, June 2001

Statistical Update, Economic and Fiscal Impacts Associated with the Travel Industry in South Dakota, January 2001.

South Dakota Occupancy and Foreign Travel Survey, 2000, December 2000.

Taxable Sales in Six Western South Dakota Communities, September 2000.

External Economic Impacts Traced to the Deadwood Hospitality Industry, February 2000.

Statistical Update, Economic and Fiscal Impacts Associated with the Travel Industry in South Dakota, January 2000.

South Dakota Occupancy and Foreign Travel Survey, 1999, December 1999.

Economic Feasibility and Market Analysis of Expanded Visitor Amenities in the City of Huron, August 1999.

Economic and Fiscal Incentives and Disincentives Associated with Urban Sprawl, April 1999.

Economic and Fiscal Impacts of the North Dakota Travel Industry, April 1999.

Economic, Fiscal and Funding Issues Associated with the Rapid City Hospitality Industry, March 1999.

Statistical Update, Economic and Fiscal Impacts Associated with the Travel Industry in South Dakota, January 1999.

Economic Impact of The Hospitality Industry in Pierre, SD, November, 1998

Earnings and Employment Survey, Deadwood Gaming Association, October 1998

Market Analysis of a Financial Institution for the Hermosa Area, June 1998

Economic and Fiscal Impacts of the North Dakota Travel Industry, June 1998

Economic Redevelopment Issues Associated with Lawrence County, April 1998

Market Characteristics of Terry Peak Real Estate, March 1998.

An Analysis of Flows of Public School Revenue and Expenses Related To Wharf Resources And its Employee Households, February, 1998.

Property Taxes for County Purposes, The Case In Lawrence County, February, 1998

Fiscal Impact to the State of Repealing the Contractor's Excise Tax, January 1998

Economic Issues Associated with Conversion of Bison to Federal Mandatory Meat Regulations, January 1998.

Statistical Update, Economic and Fiscal Impacts Associated with the Travel Industry in South Dakota, December 1997.

Socioeconomic Analysis of a Rural Water System in West-Central South Dakota, Socioeconomic Portion of Environmental Assessment, June 1997.

Business Volume Projections, Involving a Historical Park Near Spearfish, SD, April, 1997.

The Economic Significance of the Travel Industry in North Dakota, March 1997.

Statistical Update, Economic and Fiscal Impacts Associated with the Travel Industry in South Dakota, December 1996.

Issues Concerning the Medically Indigent in South Dakota Counties, September 1996.

A Study of Alternative uses of a Lodging Property, July 1996.

Limited Socioeconomic Analysis, Wharf Resources, June 1996.

A Preliminary Market Analysis of Thunderhead Episcopal Camp, May 1996.

A Study of the Multifamily Housing Market, Rapid City, SD, March, 1996.

Statistical Update, Economic and Fiscal Impacts Associated with the Travel Industry in South Dakota, January 1996.

Economic Impacts Associated with the University of South Dakota School of Medicine, November 1995.

Economic Impact of the Mining Industry in South Dakota, June 1995.

Economic Significance of the Retail Sector in Sioux Falls, SD, May 1995.

Limited Socioeconomic Assessment of a Proposed Mine Expansion of Brohm Mining Company, April 1995.

Community Survey: Watertown, South Dakota, (Jointly with Personal Group, Inc.), March 1995.

Community Survey: Hughes and Stanley Counties, (Jointly with Personal Group, Inc.), February, 1995.

1994 South Dakota Non-Point Source Pollution Survey Report, (Statistical Analysis Section), January 1995.

Statistical Update, Economic and Fiscal Impacts Associated with the Travel Industry in South Dakota, December 1995.

Time and Motion Study, Supervisors Pennington County Jail, December 1994.

A Study of the Economic Consequences and Visions for Future Economic Development in the Rapid City Area, Rapid City Economic Development Partnership, November 1994.

Wages and Benefits in the Rapid City Region, A Comparative Analysis, September 1994.

Economic Impact of the Health Industry in Sioux Falls, South Dakota, September 1994.

Fiscal Issues Associated with the 1994 Property Tax Limit Initiative, July, 1994.

Volume Projections, Solid Waste Facility, Rapid City, SD, June 1994.

Statistical Update, Economic and Fiscal Impacts Associated with the Travel Industry in South Dakota, January 1994.

Socioeconomic Issues Relevant to Development of Launch Control Complex Visitor Center, For US Park Service, December 1993.

A Baseline Socioeconomic Analysis of Keystone, South Dakota, December 1993.

South Dakota Lodging, Occupancy Survey Annual Report, November, 1993.

Survey of Technical Training Needs in Central South Dakota, September 1993.

Economic Significance of the Travel Industry in Twelve South Dakota Towns and Cities, October 1993.

Population Perspectives, City of Spearfish, June, 1993.

A Value Added Analysis of John Morrell & Company, Sioux Falls, SD, June, 1993.

The Gold Market Infrastructure and its Relation to Homestake Mining Company, May 1993

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Major Advisor of Approximately 140 Master's student research papers and theses in the areas of Business Analysis and Economics.

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PROFESSIONAL EDUCATIONAL EXPERIENCE:

Instructor of Economics, Iowa State University, 1967-1968.

Assistant Professor of Economics, University of Wyoming. 1968-72

Associate Professor of Economics, South Dakota State University. 1972-75.

Associate Professor of Economics and Statistics, University of South Dakota, 1975-77.

Professor of Economics, University of South Dakota, 1977 - 1998.

Dean of Graduate Studies, National American University, 1999 - 2003

COMMUNITY SERVICE:

Secretary-Treasurer, Rapid City Civic Center Corporation, 1974 - 84.

Policy Board, Black Hills Council of Local Governments, 1975 - 82.

Alderman, Rapid City Common Council, 1974 - 82.

Insurance, 1976 - 1982.

Trustee, South Dakota State Board of Retirement and Director, West Dakota Water Development District, 1984 - 1990.

Member and Director, Whispering Pines Volunteer Fire Department, 1984 - 1989.

Member and Second Vice Chairman, Black Hills Area Red Cross, 1987 -1990.

Member, South Dakota Governor's Council of Economic Advisors, 1991 to 2003.

Member, Board of Directors, Enchanted Hills Water Assn.., 1985-90, 1992 to 2004.

Member, Buffalo Chamber of Commerce, 2003-present

President, Mountain Ridge Development and Improvement Association 2006 - 2017

Member, Johnson County Tourism Board, 2005 -2018

Legislator, Wyoming State House of Representatives, District 40, 2006 -2019