

**Board of Minerals
and Environment**

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Pierre, South Dakota 57501-3182
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Live audio of the meeting is available at <http://www.sd.net>

Agenda

**Board of Minerals and Environment
Telephone Conference Call Meeting**

**February 18, 2021
10:00 a.m. Central Time**

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

Approval of minutes from December 17, 2020, meeting

Legislative Update – Mike Lees

Mining Issues

Consent Calendar – Tom Cline

Annual update of post closure financial assurance for Homestake Mining Company, Permits 332 & 456, and LAC Minerals (USA), LLC, Permit 445 – Eric Holm

Wharf Resources (USA), Inc. request for approval of its socioeconomic contractor for a large scale mine permit application pursuant to SDCL 45-6B-33.1 – Roberta Hudson

Public comment period in accordance with SDCL 1-25-1

Next meeting

Adjourn

Interested persons who wish to participate in the telephone conference call may do so by contacting Brenda Binegar at (605) 773-3886 no later than 3:00 p.m. Central Time on Wednesday, February 17, 2021.

The board packet is available at
<https://boardsandcommissions.sd.gov/Meetings.aspx?BoardID=67>

The audio recording and meeting packet for this meeting are 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
Remote Meeting via Audio/Visual Conference

December 17, 2020
10:00 a.m. Central Time

CALL TO ORDER: 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.

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

BOARD MEMBERS ABSENT: None.

OTHERS: DENR Staff - Mike Lees, Eric Holm, Tom Cline, Bret Graves, and Roberta Hudson, Minerals and Mining Program; Kyrik Rombough, Barb Regynski, Levi Jackson, Sam Olmstead, and Teresa Williams, Air Quality Program; Kent Woodmansey, Director of Agriculture and Environmental Services, Brian Walsh, Public Affairs Director, Jason Simmons, Director of Outreach, and Ron Duvall, Water Rights Program. Charles McGuigan, Deputy Attorney General; Ben Pierson, Sioux Valley Energy, Robert Raker, West River Electric; Matt Zietlow, Wharf Resources; Jay Gear, Joe Ungers, and Anne Beckelheimer, Couer Mining; Murray Epp, Marsh JLT Specialty; Nancy Kile, Julie Santella, Bruce Ellison, Carla Marshall, Cathy Sotherland, Kathryn Johnson, R.A. Bell, Bob Mercer, and Stephanie Kuntz.

APPROVAL OF MINUTES FROM NOVEMBER 19, 2020, MEETING: Motion by Blumhardt, seconded by Karpen, to approve the change on page 4 and to adopt the minutes of the September 17, 2020, Board of Minerals and Environment meeting, as amended. A roll call vote was taken, and the motion carried unanimously.

MINING ISSUES CONSENT CALENDAR: Prior to the meeting, the board received a table listing the department recommendation to release liability and \$1,000 surety for Cynthia and Timothy Henrich, Bellingham, MN, Mine License 16-1010. (See attachment.)

Motion by Blumhardt, seconded by Karpen, to accept the department recommendation for release of liability and surety as shown on the consent calendar. A roll call vote was taken, and the motion carried unanimously.

ACCEPTANCE OF SURETY BONDS TO COVER INCREASES TO WHARF RESOURCES' RECLAMATION AND POST-CLOSURE BONDS: Eric Holm reported that at its August 20, 2020, meeting, the board approved increases in Wharf's reclamation bond and post-closure

financial assurance. Wharf subsequently submitted surety bonds to cover these increases on November 23, 2020.

Reclamation Surety Bond

The current reclamation surety bonds are listed below.

Endurance Assurance	\$ 6,000,000
Everest Reinsurance	\$ 5,786,000
Liberty Mutual	\$10,000,000
Argonaut Insurance	\$ 7,593,300
Aspen American	<u>\$ 8,000,000</u>
Current Reclamation Bond	\$37,379,300

These surety bonds will remain in effect with no changes.

Before Wharf submitted the surety bonds, an adjustment to the reclamation bond was made. During the August 20, 2020, meeting, the board approved increasing the reclamation bond to \$56,693,500. This was based on complete backfilling of the Harmony Pit.

During an October 7, 2020, mine permit audit inspection, DENR learned that Wharf would not be completing the Harmony Pit backfill in 2020. In order to cover the remaining costs for backfilling of the pit, the department increased the reclamation bond to \$58,246,100. Backfilling of the pit was approximately 92 percent complete at the time of the mine permit audit inspection, with approximately 750,000 tons of backfill remaining.

After the audit, the department required Wharf to submit a timetable to complete the Harmony Pit backfill and reclamation. In April 2021, Wharf plans to reopen access to the Golden Reward area. From May through November of 2021, Wharf intends to complete the Harmony Pit backfill, final sloping, contouring, topsoil placement, and seeding at the backfilled Harmony Pit and the backfilled Liberty Pit. In December 2021, final reclamation will be completed.

Mr. Holm reported that in November 2020, Wharf submitted the following new reclamation surety bonds to cover the increase in the reclamation bond:

United States Fire Insurance	\$10,866,800
Everest Reinsurance	<u>\$10,000,000</u>
New Reclamation Bond	\$20,866,800

Staff performed an analysis of United States Fire Insurance, which is a U.S. Treasury Certified Company. AM Best gave United States Fire Insurance an excellent rating, Standard & Poors (S & P) gave a strong rating, and Moody's gave a medium grade rating for financial strength. The outlook for AM Best and S & P is stable, and Moody's is positive.

Mr. Holm noted that included in the board packet was additional information on United States Fire Insurance from Marsh & McLennan Companies and a ratings table for the board to review.

AM Best ratings since 2016 for United States Fire Insurance for Financial Strength have been stable.

Everest Reinsurance Company is a U.S. Treasury Certified Company. AM Best's rating is superior, S & P gave a strong rating, and Moody's gave an upper medium grade rating. The outlook for all three are stable.

AM Best ratings since 2015 for Everest Reinsurance Company have been stable.

Mr. Holm stated that the current reclamation bond is \$37,379,300 and the new reclamation bond is \$20,866,800, for a total revised reclamation bond of \$58,246,100.

The department recommended that the board accept Bond No. ES00006613, Everest Reinsurance Company, in the amount of \$10 million and Bond No. 612414071, United States Fire Insurance Company, in the amount of \$10,866,800. The acceptance of these bonds will increase Wharf's reclamation bond to \$58,246,100.

Mr. Morris asked if Wharf can request that the reclamation bond be reduced after the backfill, final sloping, contouring, topsoil placement, and seeding at the backfilled Harmony Pit and the backfilled Liberty Pit are completed.

Mr. Holm answered that any reduction in the bond amount requested will be brought before the Board of Minerals and Environment at the appropriate time.

Chairman Hagg asked if the department is comfortable based on the research it has done, with the additional bonding that the board is being asked to accept. Mr. Holm answered yes.

Motion by Karpen, seconded by Scheetz, to accept Bond No. ES00006613, Everest Reinsurance Company, in the amount of \$10 million. A roll call vote was taken, and the motion carried unanimously.

Motion by Morris, seconded by Blumhardt, to accept Bond No. 612414071, United States Fire Insurance Company, in the amount of \$10,866,800. A roll call vote was taken, and the motion carried unanimously.

Post-Closure Financial Assurance

Wharf's current post-closure financial assurance is with Aspen American in the amount of \$26,800,000. To cover the increase in the post-closure financial assurance amount, Wharf has submitted a surety bond issued by Arch Insurance in the amount of \$11,596,200.

Arch Insurance Company is a U.S. Treasury Certified Company. AM Best's rating is superior, S & P gave a strong rating, Moody's gave an upper medium grade rating, and Fitch gave a strong rating.

AM Best, Moody's, and Fitch outlooks are stable. S & P outlook is negative, which is due to Covid-19 concerns and weather events such as hurricanes and wildfires.

AM Best ratings since 2015 for Arch Insurance Company have been stable.

Mr. Holm stated that with the current post-closure bond of \$26,800,000 and the new post-closure bond of \$11,596,200, the revised post-closure bond is \$38,396,200.

The department recommended that the board accept Bond No. SU 1170119, Arch Insurance Company, in the amount of \$11,596,200. The acceptance of these bonds will increase Wharf's post-closure financial assurance to \$38,396,200.

Motion by Englund, seconded by Landguth, to accept Bond No. SU 1170119, Arch Insurance Company, in the amount of \$11,596,200. A roll call vote was taken, and the motion carried unanimously.

UPDATE ON THE STATUS OF POWERTECH: Roberta Hudson provided an update on the status of permits for Powertech (USA), Inc.'s proposed uranium mine near Edgemont. Prior to commencement of mining, Powertech must receive a Large Scale Mine Permit, a Ground Water Discharge Plan, and a Water Rights Permit.

Powertech must also receive an NRC Materials License, EPA Underground Injection Control Permits for Class III and V wells, and a BLM Plan of Operation.

Hearings on the state permits began in 2013; however, both the Board of Minerals and Environment and the Water Management Board issued Orders postponing the hearings until legal issues associated with the federal permits are resolved.

Ms. Hudson reported that the NRC Source Materials License and the EPA Class III and Class V permits have been issued by the federal government, but may be contested or appealed in federal court. There has been a delay in review of the BLM Plan of Operations while waiting for final EPA and NRC decisions. The draft Plan of Operations was opened for public comment in August 2020, and it has not been issued. The Plan of Operations may also be contested in court after it is issued.

Once all federal permits are finalized, Powertech may request that the Board of Minerals and Environment and the Water Management Board continue with the permit hearings.

Chairman Hagg stated that he had requested an update on the status of Powertech. He emphasized that the update was provided for informational purposes only, and no board action would be taken during today's board meeting. Chairman Hagg stated that he would allow comments regarding the status update.

There were no questions or comments from the board members.

Bruce Ellison, Counsel for Clean Water Alliance, requested that the Clean Water Alliance receive notice whenever an update is being presented to the board.

DISCUSSION REGARDING VOLKSWAGEN MITIGATION PLAN: Chairman Hagg asked staff to discuss the possibility of moving funds from other categories to the Electric Vehicle Charging Stations category.

Barb Regynski, DENR Air Quality Program, provided a slide presentation. She discussed a slide that shows the Volkswagen Mitigation Plan categories, funding percentage for each category, eligible mitigation action, amount available, amount requested to date, amount remaining, and the percentage of the funds used for each category to date.

The Trucks category has been used the least with 11 percent of that allotment being allocated to date. There have been three funding rounds for the trucks, and a total of 14 applications were submitted.

The Buses category runs in conjunction with the DERA Option, which also includes buses. The DERA Option funds are used to match the federal DERA funds that are received. To date 11 percent of the allotted amount for the buses has been used and 40 percent of the amount allotted for the DERA Option has been used.

Ms. Regynski noted that the department has received applications for another round of funding for the Buses category, so the DERA Option will be used to match approximately \$327,000, so the percentage of the amount allotted will go up.

Four percent of the allotted amount for Administrative Costs has been used to date.

Ms. Regynski said that if the board is interested in adjusting the available funds in certain categories, it may want to consider moving funds from the categories with the least interest.

Responding to a question from Mr. Morris, Ms. Regynski stated that with a 15 percent funding maximum for Electric Vehicle Charging, another \$812,000 could be used.

Ms. Regynski stated the possible changes to be considered include changing the category allotments in the Mitigation Plan, combining C2-Buses and C10-DERA for more flexibility, and giving maximums for funding amounts instead of set amounts for more flexibility in using categories with the most interest. She noted that before any changes can be made, a public notice will be issued to request public input.

Ben Pierson, Sioux Valley Energy, and Robert Raker, West River Electric, provided a slide presentation discussing electric vehicle charging levels and types, the driving factors for public charging stations, the economics of DC fast charging, potential partnerships, and the siting of public charging stations. They also provided maps of the U.S. DC fast charging infrastructure including Tesla, the U.S. DC fast charging infrastructure without Tesla, all non-Tesla public chargers in South Dakota, all Level 2 chargers in South Dakota, Tesla DC fast chargers in South Dakota, and the DC fast charging infrastructure plan for South Dakota. They also discussed the electric vehicle charging build out strategy.

Prior to the board meeting, Chairman Hagg submitted questions regarding charging stations. Some of the questions were addressed through the presentation by Mr. Pierson and Mr. Raker.

One of the questions Mr. Hagg had was whether rest areas along the interstate highways can be used for charging stations. Mr. Pierson stated that, in his opinion, a rest area is not an ideal location for charging stations because people want access to things to do while their electric vehicle is charging.

Another question Chairman Hagg had was what is the rate of return to providers of electricity to make it cost efficient, and are tax incentives available through the federal government? Mr. Pierson stated that the member-owned cooperatives are not necessarily looking for a rate of return, they just need to make ends meet. There is a 30 percent federal tax incentive that terminates at the end of 2020, but a cooperative cannot take advantage of that.

Chairman Hagg also asked if there is an interest in installing charging stations at gas stations in the future. Mr. Pierson stated that in his experience so far, gas stations are only interested if there is a payback or if it is not going to cost them any money. At this time the charging station utilization is low, but once utilization rates go up, gas stations may possibly install charging stations on their own.

Chairman Hagg asked if there are any issues with the electricity provider's ability to supply. Mr. Pierson stated that at this time, there is not an issue with the type of charging stations the electric cooperative is installing.

Chairman Hagg thanked Mr. Pierson and Mr. Raker for their presentation. He noted that it is important to install charging stations along the interstate highways so people can at least drive across the state.

Mr. Englund asked if Tesla paid 100 percent of the cost of installing its charging stations. Mr. Raker stated that Tesla paid 100 percent of the cost of installation and they are paying for 100 percent of the electric bill for those. Mr. Raker said he believes those expenses were originally included in the cost of the Tesla vehicles. People now have to pay to use the Tesla chargers.

Mr. Landguth said at first, he believed that rest areas would be good places to install charging stations, but he has since changed his mind. He stated that the study involving the Department of Transportation is critical to decide where the best locations should be.

Ms. Regynski said she visited with the Department of Transportation and learned that state law does not allow anything commercial at rest areas, so if a charging station was installed at a rest area, it would have to be offered for free. The Department of Transportation did indicate that it could be helpful in planning by helping with traffic counts and where the chargers would be most needed.

Ms. Regynski discussed the public input process for making changes to the Mitigation Plan. Following DENR's draft of the proposed changes to the plan is a 30-day public notice period to request public input on the draft changes to the plan. The public comments are considered, and staff makes any needed revisions to the plan. There is another 30-day comment period for the hearing on the revised plan in front of the Board of Minerals and Environment. At the hearing, the

board considers any new comments that are received, and finalizes and approves the plan. Following approval by the board, the plan will be submitted to the trustee.

Ms. Regynski stated that 25 applications requesting a total of \$1,315,291.90 were received for the first round of funding for electric vehicle charging stations. A total of \$406,250.00 is available for round one.

Staff approved funding in the amount of \$58,035 each for seven of the 25 applications that were submitted. The funding is for installation of fast charge electric charging stations along the interstate.

Ms. Regynski asked how the board felt about her proposal to offer maximum percentages for funding amounts instead of set amounts for more flexibility in using categories with the most interest.

Chairman Hagg stated that he is fine with the flexibility. He said he also likes the idea of getting the second round of funding done and then reviewing the plan again.

Motion by Morris, seconded by Karpen, that the department proceed with the 30-day public notice to request public input on the draft changes to the Volkswagen Mitigation Plan. A roll call vote was taken, and the motion carried unanimously.

BOARD MEMBER BIOGRAPHY: Jessica Peterson provided a personal biography.

PUBLIC COMMENT PERIOD: There were no public comments.

NEXT MEETING: The next meeting is scheduled for February 18, 2021.

ADJOURN: Motion by Morris, seconded by Englund, that the meeting be adjourned. A roll call vote was taken, and the motion carried unanimously.

Secretary

Date

Witness

Date

Consent Calendar

South Dakota Board of Minerals & Environment

December 17, 2020				
<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 & Surety:</u>				
Cynthia & Timothy Henrich Bellingham, MN	16-1010	1010001	\$1,000	State Bank of Bellingham, Bellingham, MN SW1/4 Section 20; T120N-R47W, Grant County
				Release liability and \$1,000.

South Dakota Board of Minerals & Environment

December 17, 2020			
<u>Permit Holder</u>	<u>Permit No.</u>	<u>Surety Amount</u>	<u>Surety Company or Bank</u>
<u>Acceptance of Reclamation Bond Increase for Wharf Resources (USA), Inc.:</u>			
Wharf Resources (USA), Inc. Lead, SD	356, 464, & 476	\$10,000,000	Everest Reinsurance Company
			Accept Bond No. ES00006613, Everest Reinsurance Company, in the amount of \$10,000,000.
		\$10,866,800	United States Fire Insurance Company
			Accept Bond No. 612414071, United States Fire Insurance Company, in the amount of \$10,866,800. The acceptance of these bonds will increase the Wharf reclamation bond to \$58,246,100.
<u>Acceptance of Post-Closure Bond Increase for Wharf Resources (USA), Inc.:</u>			
Wharf Resources (USA), Inc. Lead, SD	356, 464, & 476	\$11,596,200	Arch Insurance Company
			Accept Bond No. SU 1170119, Arch Insurance Company, in the amount of \$11,596,200. The acceptance of this bond will increase the Wharf Post-Closure bond to \$38,396,200

Consent Calendar

South Dakota Board of Minerals & Environment

<i>February 18, 2021</i>				
<u>License Holder</u>	<u>License No.</u>	<u>Site No.</u>	<u>Surety Amount</u>	<u>Surety Company or Bank</u>
<u>Release of Liability and Surety:</u>				
Myrl & Roy's Paving, Inc. Sioux Falls, SD	83-95	95008	\$20,000 SW1/4 Section 20; T95N-R55W, Yankton County	Great American Insurance Company Release liability and \$20,000.
<u>Release of Liability:</u>				
Ziebach County Highway Department Dupree, SD	83-246		EXEMPT	NA Release liability.
		246023	SE1/4 Section 7; T14N-R20E, Ziebach County	

South Dakota Board of Minerals & Environment

<i>February 18, 2021</i>				<u>DENR Recommendation</u>
<u>Permit Holder</u>	<u>Permit No.</u>	<u>Surety Amount</u>	<u>Surety Company or Bank</u>	
<u>Annual Update of Post Closure Financial Assurance:</u>				
Homestake Mining Company Central City, SD	332 & 456	\$58,041,218	Federal Insurance Company	Accept rider to Bond No. 82336310, Federal Insurance Company, increasing the Post Closure Financial Assurance amount to \$59,607,847.
LAC Minerals (USA), LLC Central City, SD	445	\$21,789,741	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, decreasing the Post Closure Financial Assurance amount to \$20,340,567.



Wharf Resources (USA), Inc.

RECEIVED
JAN 22 2021
MINERALS & MINING PROGRAM

January 19, 2021

Ms. Roberta Hudson
SD DENR
Minerals & Mining Program
Joe Foss Building
523 East Capitol Avenue
Pierre, SD 57501

RE: Request for Approval of Socioeconomic Contractor

Dear Ms. Hudson:

This letter to the South Dakota Department of Environment and Natural Resources is to request that the Board of Minerals and Environment approve Dr. Michael Madden as a socioeconomic contractor for Coeur Wharf (Wharf). Wharf is planning a potential mine permit boundary expansion along the southern edge of the Wharf Mine along the Portland Ridgeline (i.e. the Boston Expansion).

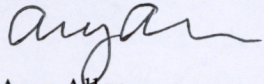
A socioeconomic analysis will be conducted to meet the needs of a mine permit application that will meet or exceed the requirements of both Lawrence County Zoning ordinance and SDCL 45-6B-33(1). The study will evaluate the potential impacts of the proposed mining operation within the following areas: population base, employment and income, tax base, housing, community services, recreational opportunities, or other beneficial uses of land within and adjacent to the permit area.

The socioeconomic study for the Boston Expansion will primarily be an update to the 2010 socioeconomic study prepared as part of Wharf's last mine expansion. Dr. Madden will update that document with new publicly available census data, employment and tax information from Wharf, and other supplemental information provided via interviews with Wharf and neighboring communities.

Dr. Madden prepared Wharf's 2010 socioeconomic study and has extensive experience in the field, as evidenced by his resume (attached).

If you need additional information, please contact me at aallen@coeur.com or 605-584-4112.

Sincerely,

A handwritten signature in cursive script, appearing to read "Amy Allen".

Amy Allen
Sr. Environmental Compliance Coordinator

Enc.: Resume Dr. Michael Madden

RECEIVED
JAN 22 2021
MINERALS & MINING PROGRAM

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.

Limited Socioeconomic Assessment, Large Scale Mine Permit - Loring Quarry, Custer County, South Dakota, July 2020.

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

Statistical Update, Economic and Fiscal Impacts Associated with the Travel Industry in South Dakota, December 1992.

Market Survey, St. Mary's Hospital, Pierre, SD, December 1992.

Economic and Fiscal Impacts of Gaming in Deadwood South Dakota, 1992 Update, November, 1992.

Long Term Projections of the Black Hills Economy and Forecasts of Energy Demands, October 1992.

Socioeconomic Impacts of a Natural Gas Pipeline into the City of Pierre, SD. September, 1992.

Socioeconomic Impacts of an Ash Monofill near Edgemont, SD, (With Others) September, 1992.

Socioeconomic Impact analysis of Wharf Resources Inc. Update, September, 1992.

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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.

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