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### BEFORE THE ENVIRONMENTAL QUALITY COUNCIL STATE OF WYOMING

JAN 0 3 2014

Jim Ruby, Executive Secretary Environmental Quality Council

IN THE MATTER OF OBJECTION TO	)	*
MOUNTAIN CEMENT COMPANY PEMIT	)	DOCKET NO. 13-4807
PERMIT APPLICATION	)	
PERMIT NO. 298C-A7, TFN 5 1/110	)	

### MOUNTAIN CEMENT COMPANY'S WITNESS DISCLOSURES

Pursuant to the Environmental Quality Council's Scheduling Order, Mountain Cement Company (MCC) submits the following list of witnesses with areas of testimony:

I. List of Witnesses and Summary of Their Testimony.

MCC may call the following witnesses:

1. Andrew MacClugage

Quarry Manager & Geologist Mountain Cement Company 5 Sand Creek Road Laramie, WY 82070 (307) 745-4879

Mr. MacClugage's resume is attached as Exhibit A. He will testify about all aspects of MCC's permit application.

2. Jeff Brasher, Ph.D.

Quarry Technician/Botanist Mountain Cement Company 5 Sand Creek Road Laramie, WY 82070 (307) 745-4879

Mr. Brasher's Resume is attached as Exhibit B. He will testify about all aspects of MCC's permit application.

3. Bob Kersey

Chief Chemist Mountain Cement Company 5 Sand Creek Road Laramie, WY 82070 (307) 745-4879

Mr. Kersey was previously in charge of quarry operations and will testify about historic mining activities of MCC as well as his communications with Summit Estate property owners.

### 4. Ms. Amber Travsky

Real West Natural Resource Consulting 1116 Albin St. Laramie, WY 82072 (307) 742-3506

Mr. Travsky's Resume is attached as Exhibit C. She prepared and submitted the Wildlife study for MCC's permit application. She will be called to testify about her wildlife study and wildlife observations.

5. Michael J. Evers, P.G. Murray Schoreder, P.E. WWC Engineering 611 Skyline Road Laramie, WY 82070 (307)742-0031

Messrs. Evers and Shroeder resumes are attached as Exhibits D and E, respectively. They contributed to various parts of the permit application, and particularly the geologic and hydrologic portions of the permit application. They will be called to testify about the geological and hydrological portions of the permit application.

### 6. Mr. Lowell Spackman

District 1 Soil Scientist
Wyo. Dept. of Environmental Quality, Land Quality Division
Herschler Building, 3<sup>rd</sup> Floor West
122 West 25<sup>th</sup> Street
Cheyenne, Wyoming 82520
307-777-7756

Mr. Spackman may be called to testify regarding his knowledge of MCC's mining permit amendment application, its compliance with Wyoming Law, and the Division's decision to allow the permit amendment.

7. Mr. Steve Ingle

District 1 Geologist Wyo. Dept. of Environmental Quality, Land Quality Division Herschler Building, 3<sup>rd</sup> Floor West 122 West 25<sup>th</sup> Street Cheyenne, Wyoming 82520 307-777-7756

Mr. Ingle may be called to testify regarding his knowledge of MCC's mining permit amendment application, its compliance with Wyoming Law, and the Division's decision to allow the permit amendment.

8. Robin Jones

District 1 Supervisor Wyo. Dept. of Environmental Quality, Land Quality Division Herschler Building, 3<sup>rd</sup> Floor West 122 West 25<sup>th</sup> Street Cheyenne, Wyoming 82520 307-777-7756

Mr. Jones may be called to testify regarding his knowledge of MCC's mining permit amendment application, its compliance with Wyoming Law, and the Division's decision to allow the permit amendment.

9. MCC may call any witness listed by the objector in the above captioned matter. In addition, MCC may call any witness needed for rebuttal testimony.

DATED: January 3, 2014

Mountain Cement Company

/s/ Philip A. Nicholas
Philip A. Nicholas
Mitchell H. Edwards
NICHOLAS & TANGEMAN, LLC
170 North 5th Street
P. O. Box 928
Laramie, WY 82070
(307) 742-7140
(307) 742-7354 (fax)

### Attorneys for Mountain Cement Company

### CERTIFICATE OF SERVICE

The undersigned certifies that the foregoing Witness Disclosure was served electronically to the following people on the 3<sup>rd</sup> day of January, 2014:

Mr. Brian R. Waitkus 80 Eagle Nest Lane Laramie, Wyoming 82070 wildphotol@juno.com

Nancy E. Vehr Hickey & Evans, LLP 1800 Carey Avenue, Suite 700 P.O. Box 467 Cheyenne, WY 82003-0467 NVehr@hickeyevans.com

Tiffanne Rowan EQC Office Assistant tyffanne.rowan@wyo.gov Andrew Kuhlmann
Assistant Attorney General
Wyoming Attorney General's Office
123 Capitol Building
Cheyenne, Wyoming 82001
307-777-7823
andrew.kuhlmann@wyo.gov

Todd Parfitt, DEQ Director
todd.parfitt@wyo.gov
Nancy Nuttbrock, LQQ Administrator
nancy.nuttbrock@wyo.gov
Department of Environmental Quality,
Land Quality division

/s/ Philip A. Nicholas
Philip A. Nicholas



## Andrew MacClugage

15 Lakeview Drive Laramie, Wyoming 82070

Cell: (845) 988-7942 Email: chauffer038@yahoo.com;

### **OBJECTIVE**

I seek a position where I can apply my background in geology and 6 years' experience in the mining industry to an in-the-field supervisory position where I might assist in mine planning, oversee production, and safety training.

### **EDUCATION**

State University of New York College at Cortland, Cortland, New York

B.S. Geology

Major GPA: 3.26 (overall GPA: 3.13)

Coursework included Mineralogy, Petrology, Stratigraphy, Structural Geology, Geomorphology, Oceanography, Invertebrate Paleontology, Plate Tectonics, Field Geology, and Hydrogeology.

### **EMPLOYMENT**

Quarry Manager/Geologist

Spring 2007 - Winter 2013/2014

**Mountain Cement Company** 

Supervising the day-to-day operations of the Quarry Department, which includes overburden stripping, blasting, and hauling, as well as coordinating with other department heads on a daily basis to ensure the plant's needs are met. Communicating with the Leadmen/Foremen beneath to ensure the department is working efficiently and safely. Completing daily hauling/production reports, monthly blasting reports, and logging employees' timecards. Writing and revising Mining Permits and Applications; maintaining compliance with the State-Issued Mining Permits and assisting Quarry Personnel in design and implementation of mine and reclamation plans for 2 limestone quarries, 3 shale quarries, 2 sand & gravel pits, and 1 gypsum quarry. Filing Mining Claims with the Bureau of Land Mangament. Communicating with government regulatory agencies. Overseeing/conducting exploratory drilling, sampling, and defining mineral reserves, including interpreting geologic data collected. Conducting Overburden analyses, including calculating tonnages from drill hole data. Writing annual reports for each quarry, annual grazing leases. Investigating new and less expensive sources of raw materials.

### SKILLS & TRAINING

- o Experienced using Microsoft Office programs, such as Word and Excel for the completion of daily and annual production reports; and mapping software such as ArcGIS ArcView, ArcPad, and AutoCAD. Familiar with Trimble GeoXM GPS unit loaded with ArcGIS & ArcPad; and Leica TPS Total Station surveying instrument. Have taken a 3- day training class on SurpacMinex's Quarry software.
- o Mine Safety & Health Administration trained Surface Miner, 8 hours yearly.
- Task Trained on operating Skid Steers, Backhoes, Excavators (bucket w/thumb & hammer), and 10 yd. Dump Trucks, 5,000 gallon water truck.

- o Certified U.S.D.O.T. Controlled Substance Training and Alcohol Misuse Training for Supervisors, 2 hours/yearly.
- Erosion & Sediment Control Training, 6 hours.
- o American Heart Association Heartsaver First Aid CPR AED certified (exp. 11.2015)

### REFERENCES

**Tom Hamp-** Plant President Mountain Cement Company Office: 5 Sand Creek Rd. Laramie, WY 82070 (307) 745-2665

Phil Lane- Plant Manager Mountain Cement Company Office: 5 Sand Creek Rd. Laramie, WY 82070 (307) 745-4879

**Bob Kersey**- Chief Chemist/Lab Manager Mountain Cement Company Office: 5 Sand Creek Rd. Laramie, WY 82070 (307) 745-2669

**David Challacomb**-Plant President Central Plains Cement Company, Sugar Creek, Mo. & Tulsa, Ok. Office: 15100 E. Courtney Atherton Rd, Sugar Creek, MO 64058 (816) 257-4034

### Jeff Brasher, Ph.D.

2207 Sheridan St., Laramie, WY 82070 cell: 307-399-2803 email: jeff.brasher@sbcglobal.net

### SUMMARY

I have a Ph.D. focused on biology of plants. My training is for research and teaching at a university but with my current job I use this background to effectively communicate well-studied decisions about land and natural resource management in the mining industry. I have an array of science-related knowledge and skills that I enjoy putting to use for my employer.

### **EDUCATION**

- Wyoming Pesticide Applicator Licenses, 2007-2014
- · Ph.D. Biological Education, University of Northern Colorado, Greeley, 2006
- Ph.D. Program: Plant Biology, Arizona State University, Tempe, 1996-2002
- . M.S. Botany, Brigham Young University, 1996
- B.S. Botany/Biotechnology, Brigham Young University, Provo, 1995

#### SCIENTIFIC CONTRIBUTIONS

- Peer-reviewed paper publications numbering 12
- · Invited presentations numbering 13

### PROFESSIONAL EXPERIENCE

#### QUARRY TECHNICIAN/ BOTANIST

Mountain Cement Company (subsidiary of Eagle Materials), 2008 - present

### **FAVORITE ACCOMPLISHMENTS**

Using GPS and GIS I mapped Noxious Weed infestations of high control priority for minimizing regulatory compliance costs. I applied principles of Early Detection and Rapid Response to develop and implement an Integrated Weed Management Plan. The top priority for control is an infestation with a high potential for wide dispersal by earth-moving equipment. Its eradication plan has resulted in an apparent population reduction of 70% over three years with zero documented spread.

I planned, conducted, wrote, submitted, and revised a Vegetation Inventory and a Re-vegetation Plan for a WY DEQ-LQD Mining Permit expansion. The land area for this permit is twice as big as any in company history and these permit documents are being held to higher standards than any in company history. The documents address biological and political issues much more challenging than the company's previous permits.

I led the effort to de-water a quarry pit for a mining campaign, accomplishing de-watering in about 25% of the time taken in the prior campaign. This has allowed the current campaign to be on schedule to be twice as productive as the last campaign within the 9-month window of opportunity allowed by legal agreements.

### OTHER WORK

- -environmental permitting
- -regulatory compliance
- -land management
- -vegetation studies for mine permit expansions and revegetation bond release
- -revegetation
- -mine equipment operation

### INSTITUTE FACULTY FELLOW

University of Wyoming - Summer High School Institute, Jun 2008

- -Developed & Taught Course entitled: "Discover the Secrets of Life: Come do Biological Research"
- -Selected based on competitive application process including course proposal

### POSTDOCTORAL ASSOCIATE

Wyoming Geographic Information Science Center (WyGISC), Univ. of WY., July - Nov. 2008

I successfully led vegetation mapping crews comprising about 15 people in a large season-long field data collection campaign all over Wyoming.

### ASSISTANT RESEARCH SCIENTIST – WEED SCIENCE PLANT TAXONOMIST

Univ. of Wyoming Cooperative Extension Service and Dept. of Plant Sciences, 2006-2008

Conducted various research, writing, and teaching efforts pertaining to Noxious weeds & look-alikes

FAVORITE ACCOMPLISHMENT: I co-authored a Risk Assessment Ranking of invasive weeds for Wyoming. This included species that could become as problematic as those currently on the Wyoming Designated Noxious Weeds List.

### **GRADUATE RESEARCH ASSISTANT - BOTANY**

Univ. of Northern Colorado - School of Biological Sciences, 2002-2006

FAVORITE ACCOMPLISHMENT: I re-organized the University of Northern Colorado Herbarium of over 15,000 specimens to better serve research and teaching. To facilitate comparisons of related plants I repositioned the alphabetically arranged families of Angiosperms according to an Angiosperm Phylogeny Group phylogenetic arrangement. Within a family the genera and species remained alphabetical but nomenclature was updated according to a current species checklist. For better accessibility specimens were placed in new folders representing geographic categories.

### ADJUNCT FACULTY

Chandler-Gilbert Community College (CGCC), 1999-2001

- -Biology 181 General Biology I (for majors), 2<sup>nd</sup> Summer Session 1999 -Biology 100 Biology Concepts (for non-majors), 1<sup>st</sup> Summer Session 2000, 2001

### **GRADUATE TEACHING & RESEARCH ASSISTANT**

Arizona State University, Department of Plant Biology, 1996-2002

By semester served as TA for various biology courses or RA for Arizona plant taxonomy research

#### **FURTHER INFORMATION**

- Linked-In Profile 100% complete: www.linkedin.com/in/jeffbrasher
- Full CV (18 pages) available on request

### Company Owner Project Investigator

### Amber L. Travsky

### Contact Information

1116 Albin Street

Laramie, WY 82072

(307) 742-3506

atravsky@wyoming.com

Assignment

Wildlife Biologist/Ecologist

Wetland Specialist

Education

M.S., Zoology,

University of Wyoming,

Laramie, 1981

M.S. Exercise Physiology,

University of Wyoming,

Laramie 1986

Experience

30+ years

Started Firm

### Memberships and Certifications

Permitted/Certified to conduct surveys for the following:

- Black-footed ferret
- Preble's meadow jumping mouse
- Wyoming toad

Wildlife Society, member

### Relevant Expertise

- Threatened and Endangered Species Surveys
- National Environmental Policy Act (NEPA) Experience
- Mine Permitting
- Wetland Delineations and Mitigation
- Wildlife Monitoring
- Vegetation Sampling
- Baseline vegetation and wildlife surveys
- Wetland site creation
- Preparation of Environmental Assessments and Environmental Impact Statements

### **Experience Summary**

Ms. Travsky is the owner of Real West Natural Resource Consulting. She has 30 years of experience as a professional range and wildlife biologist, research scientist, manager, and administrator. Ms. Travsky has considerable experience assisting clients in compliance with the National Environmental Policy Act, Threatened & Endangered (T&E) Species Act, Migratory Bird Treaty Act, Bald Eagle Protection Act and Clean Water Act. Ms. Travsky has been responsible for all facets of wildlife and vegetation surveying including study design, field monitoring, data analysis, report preparation, impact analysis, mitigation, agency consultation, staff supervision, public participation, and project management. Ms. Travsky has experience in conducting baseline surveys and preparing permit applications for coal and non-coal mine permits. Ms. Travsky has considerable experience with public meetings, having served two terms as Mayor for the City of Laramie.

Ms. Travsky has conducted surveys for the following T&E, sensitive, rare or candidate plant and wildlife species:

- Sage-grouse and sharp-tailed grouse
- Preble's meadow jumping mouse
- Black-footed ferret
- Swift fox
- Grizzly bear
- Grev wolf
- Preble's shrew
- Pygmy rabbit
- Wolverine
- Lynx
- River otter Townsends' long-eared bats
- Fringed myotis
- Small-footed myotis
- Harlequin duck
- Mountain plover
- Lewis' woodpecker
- Burrowing owl

- Peregrine Falcon
- Goshawk
- Trumpeter swan
- Ferruginous hawk
- Long-billed curlew
- Black tern
- Loggerhead shrike
- Spotted frog
- Wyoming toad
- Boreal toad
- Wood frog
- Northern leopard frog
- Sagebrush lizard
- Faded midget rattlesnake
- Ute ladies'-tresses
- Plains topminnow
- Bald eagle White-faced ibis

Ms. Travsky is U.S. Fish and Wildlife Service certified to conduct or supervise field searches for the endangered black-footed ferret; permitted to conduct surveys for the threatened Preble's meadow jumping mouse; and approved to conduct surveys for the endangered Wyoming toad.

### Representative Projects

Wildlife Surveys for proposed coalbed methane sites in Wyoming's Powder River Basin for: EMATS, Inc., J.M Huber Corp., Black Diamond, CH4 Energy, Inc., Baker Energy, Inc., Pearl Development, and CBM Associates, Inc. Conducted environmental evaluations, Threatened and Endangered species surveys, sagegrouse lek surveys, and habitat assessments of proposed coalbed methane well sites in the Powder River Basin of Wyoming and southeastern Montana.



#### Awards and Honors

Chair, Wyoming Governor's Council for Physical Fitness and Sports (2000 to 2004); member by gubernatorial appointment (1994 to 2006).

Chair, Cycle Wyoming (volunteer position - 2004 to present)

Director, Tour de Wyoming bicycle Tour. (Volunteer position - 1997 to present).

Honorary Member, Wyoming Association of Municipalities (1997).

Elected as Mayor and President of the Laramie City Council (1990 to 1994).

Appointed by President Bill Clinton to the President's Council on Physical Fitness and Sport. (1994 to 2002).

Elected to the Laramie City Council (1988 to 1991 and 1992 to 1996).

Awarded 7<sup>th</sup> Degree Black Belt in Okinawan Kempo through Lau Hau Kenpo (2010).

### PROFESSIONAL APPOINTMENT AND AWARD

Served on the Wyoming Governor's Task Force to address concerns with the endangered Wyoming toad. Award from the EPA "for superior leadership and dedication in protecting the Wyoming toad while minimizing the impact on local communities."

Freelance Writer:

Columnist in the Wyoming Tribune-Eagle and Laramie Boomerang newspapers; Author: Mountain Biking Wyoming and Mountain Biking Jackson Hole, both published by Falcon Press. Baseline Wildlife Monitoring for Two Potential Wind Farm Sites in Southeast Wyoming. Conducted extensive raptor and passerine bird surveys using point-count methodology. Surveys included spring, last spring and fall migration surveys as well as sage-grouse lek surveys, bat monitoring site set-up, and big game monitoring.

Environmental Report and Wetland Delineations for the Laramie River Pipeline Project. Conducted an environmental review, including raptors, T&E species, vegetation, and other species and habitats of concern, as well as a wetland delineation for a municipal water pipeline project.

Biological Assessment and Evaluation for South Dakota Broadcasting Microwave Tower Site (Subcontractor to Land Recyclers, Inc.) Conducted site surveys and reporting for a proposed microwave tower on the Buffalo Gap National Grasslands of the Nebraska National Forest.

Baseline Wildlife Surveys for a Gold Mine Exploration Operation. Conducted wildlife surveys, including raptor, T&E, sage-grouse, big game and other wildlife species; mitigated raptor nest impacts by moving a nest and erecting a nesting platform.

Environmental Assessment for the Killdeer Wetlands Project in Green River, Wyoming. Prepared the EA for a proposed wetland enhancement project adjacent to the Green River near the town of Green River, but on lands managed by the BLM.

Wyoming Department of Environmental Quality – Abandoned Mine Land, Cheyenne, Wyoming. NEPA Coordinator - Consents and Compliance. Obtained Office of Surface Mining and Reclamation Authorization to Proceed for AML projects; prepare environmental assessments for projects as needed; coordinated cultural resource and conducted ecological surveys. Projects often focused on preservation of bat habitat and required surveys for bats. AML Projects completed with Real West's responsibility in parentheses:

- Project 6A–9, Rock Springs Subsidence (EA)
- Project 8-Site 1, IMC Uranium Mill Site in the Gas Hills of Wyoming (EA)
- Project 10-VI, Albany County Shale Pit near Laramie, WY (EA and T&E)
- Project 12D, Bentonite Mines in Northeast Wyoming (EA)
- Project 16L, Sunset E near Guernsey, Wyoming (EA)
- Project 16M, Sagebrush Tablestakes in the Gas Hills of Central Wyoming (EA)
- Project 17B–II, Leefe Phosphate, Carlisle Pit near Kemmerer, Wyoming (EA)
- Project 17B–III, Top of the World Mine near Kemmerer, Wyoming (EA and T&E)
- Project 17F- Site 6, Seahorn/Ramsey near Saratoga, WY (EA)
- Project 17F-Site 5c, Kemmerer Shaft near Kemmerer, WY (EA)
- Project 17H, Statewide Coal Site near Kemmerer, WY (EA and T&E)
- Project 44-II, Lander Water Plant for the Town of Lander (EA and T&E)
- Project 48, Hudson School in the Town of Hudson (EA)
- Project 52, City of Riverton Water Treatment Plant (EA and T&E)
- Project 10B-II, Horse Creek Limestone Mine near Cheyenne, WY (EA and T&E)
- Project 17I, Statewide Non-Coal Sites in the Sierra Madre Mountains and Snowy Range of Southeast Wyoming (EA and T&E)

Environmental Compliance Monitor, Sinclair Oil (Subcontractor to Terracon). Monitored and documented compliance of environmental requirements for a 102-mile oil pipeline constructed in central Wyoming. Reporting was to the Bureau of Land Management and focused on wildlife stipulations, special plant area mitigation measures, and storm water run-off practices.



Baseline Wildlife Surveys for Oftedal Construction Mule Shoe Gravel Pit. Conducted baseline wildlife and vegetation surveys, including T&E, raptor nest and songbird surveys, for a proposed sand and gravel mine.

Sheep Mountain Uranium Mine with Titan Uranium, Inc. Conducted wildlife surveys including Threatened and Endangered species, sage-grouse leks, passerine bird point count surveys, raptor nest surveys and general wildlife observations for Wyoming Department of Environmental Quality permitting and permitting through the Nuclear Regulatory Commission.

North Butte ISL Uranium Project for Cameco Resources. Conducted vegetation and wetland delineation surveys for a proposed in-situ uranium mine in Campbell County, Wyoming.

Annual Raptor Monitoring and Limestone Quarry Permitting for Mountain Cement Company. Conducted annual raptor nest surveys, raptor nest mitigation measures and conducted baseline wildlife surveys for mine permit updates and amendments.

Baggs Cemetery Pathway Project with Aspen Banner Engineering. Conducted wetland surveys and delineations for a proposed pedestrian pathway one mile north of Baggs, Wyoming.

Wetland Delineations and Environmental Evaluations at various construction and waterline projects located in various Wyoming locations – Subcontractor to HKM Engineering. Conducted site assessments for Threatened and Endangered Species and wildlife habitats of concern as well as wetland determinations and delineations for various projects including a creek bridge crossing, waterline corridor, and road construction projects.

Baseline Wildlife Surveys for Gorge Rock Products in the Green River Basin of Wyoming. Conducted wetland delineations and wildlife baseline surveys, including T&E and sage-grouse lek surveys, for proposed gravel mines.

Communication Tower Environmental Assessments, Land Recyclers, Inc. Conducted site surveys for Threatened and Endangered Species and Wetlands for proposed communication tower locations in Wyoming, Kansas, Colorado, Montana, Minnesota, South Dakota, and North Dakota.

Species Assessments for the Bald Eagle, Ferruginous Hawk, Trumpeter Swan, Midget Faded Rattlesnake, and Whooping Cranes for the Wyoming Natural Diversity Database and State Office of the BLM. Prepared Species Assessments on natural history, occurrences in Wyoming, limiting factors, and legal designations.

Baseline wildlife surveys for a proposed coal mine, Chevron, Inc. with Trihydro, Inc. Prepared wildlife section (Appendix D9) for a proposed coal mine permit on a site in southwestern Wyoming. Surveys included sage-grouse lek surveys, seasonal big game surveys, as well as raptor, T&E and other wildlife use documentation.

Wildlife and Vegetation Baseline Sampling for Proposed Bentonite Mine Sites, U.S. Bentonite Processing, Inc., Arminto, Wyoming. Conducted baseline wildlife and vegetation surveys for several proposed bentonite mine sites. Surveys included raptor nesting surveys, sage-grouse lek surveys, and general wildlife use documentation as well aas vegetation surveys. Results were reported in the Appendix D8 and D9 of the mine permits submitted to the Wyoming Department of Environmental Quality.

Preble's Meadow Jumping Mouse, Pygmy Rabbit, and Whooping Crane Biological Assessments, Bureau of Land Management, Cheyenne, Wyoming. Prepared biological assessments for programmatic application for conducting Section 7 consultation with the U.S. Fish and Wildlife Service.

Big Game Surveys for Three Regions of Wyoming, Animal Damage Management Board, Wyoming Department of Agriculture - 2000 through 2007. Conducted pronghorn and mule deer surveys on three sites in Wyoming using ground and aerial techniques. Contract was renewed annually for seven years.



Linc Energy Underground Coal Gasification Demonstration Project – Wyoming DEQ Permit Review. Reviewed wildlife, vegetation and wetland sections of the permit application for Wyoming Department of Environmental Quality as a subcontractor to Lidstone and Associates.

Vegetation Bond Release Surveys, American Colloid Company, Northeast Wyoming (Upton Area). Conducted vegetation sampling to determine bond release status for reclaimed bentonite mine sites.

Threatened, Endangered and Candidate Species Surveys, Wetland Delineation, and Wetland Mitigation Plan, City of Laramie Greenbelt Pathway. Conducted T&E species surveys for a proposed pathway adjacent to the Laramie River. Also conducted wetland determination and prepared wetland mitigation plan that was accepted by the U.S. Army Corps of Engineers. Monitored the wetland mitigation site until it was deemed "successful" by the Corps.

Wildlife, Wetlands, and Vegetation Analysis for a Proposed Bentonite Mine Permit, Bentonite Performance Minerals. Conducted field surveys for wildlife, wetlands and vegetation for several proposed bentonite mine permits in northeastern Wyoming. Prepared Appendix D8 (Vegetation) and D9 (Wildlife) for the Wyoming Department of Environmental Quality permit.

Amphibian and Reptile Surveys at Camp Guernsey and on three Wyoming Army National Guard Military Installations. Conducted amphibian and reptile surveys at the Camp Guernsey Training Area and on three Wyoming locations near Sheridan, Lander, and Lovell. Flushing surveys were used to census amphibian species.

Wyoming Leaking Underground and Aboveground Storage Tank Remediation Projects, Wyoming Department of Environmental Quality. Conducted T&E plant and wildlife surveys as well as cultural resource inventories at various sites. Clients and locations (all in Wyoming) include the following:

- Inberg-Miller Engineers Table Rock
- · Trihydro Corporation Rock Springs, Greybull, Mountain Home, and Basin
- o Delta Environmental Consultants, Inc. Buffalo, Saratoga, Kemmerer, Laramie, Platte County and Southeast Wyoming
- · Respec, Inc. Hulett
- Seacor International, Inc. Grand Teton National Park
- · Fremont Environmental Gillette, Ten Sleep, Lovell, Casper, Sweetwater and Big Horn counties
- URS, Inc. Riverton
- Antea Group Rock Springs, Evanston
- Stantec Lincoln and Sublette counties

Oftedahl Seminoe Road Project Mountain Plover Surveys. Conducted mountain plover nesting surveys along a road construction corridor. Mountain plovers were present in the vicinity, requiring follow-up surveys and consultation with the USFWS and BLM biologists.

Gas Hills In-Situ Leach Uranium Mining Permit. Conducted baseline wildlife surveys and provided responses to comments from the Wyoming Department of Environmental Quality and Nuclear Regulatory Commission for a proposed in-situ uranium mine in the Gas Hills near Riverton, Wyoming.

Ruby Ranch and Luenberger In-Situ Leach Uranium Mining Permit. Conducted wetland surveys and baseline wildlife surveys for big game, game birds, raptors, migratory birds of high federal interest, and threatened and endangered wildlife species for two proposed in-situ uranium mines in the Powder River Basin of Wyoming.

Least Tern, Piping Plover, Arkansas Darter, and Preble's Meadow Jumping Mouse Biological Assessments for the Colorado Bureau of Land Management. Prepared biological assessments for programmatic application for conducting Section 7 consultation with the U.S. Fish and Wildlife Service.

Feasibility Study for the Medicine Bow Rail-Trail in the Medicine Bow National Forest. Conducted wildlife and wetland surveys for a feasibility study to convert a former railway corridor to a trail for use by non-motorized users.



## MICHAEL J. EVERS, P.G. PRINCIPAL

### REGISTRATIONS

**Professional Geologist** 

Wyoming No. 91

### **EDUCATION**

M.S., Geology, Wright State University. 1991

B.S., Geology, University of Wyoming. 1984

### PROFESSIONAL MEMBERSHIPS

Wyoming Geological Association

National Groundwater Association

### **HONORS AND AWARDS**

Sigma Xi Excellence in Research Award, Wright State University. May 1991 for Master's Thesis entitled "The Hydrogeochemistry and Hydrology of the Yellow Spring, Miami Township Greene County, Ohio".

### SPECIALIZED TRAINING

MSHA Mine Safety Trained.

National Groundwater Association Analysis and Design of Aquifer Tests, March 2010. Mike Evers has 28 years of experience in geology and hydrogeology, 26 years of which have been in water-related and environmental issues within the Powder River Basin of Wyoming and Montana. Mr. Evers has conducted numerous hydrogeologic investigations related to NEPA analysis for mining, oil and gas projects. In addition to NEPA analysis, Mike has extensive mine permitting experience with WDEQ/LQD. Mr. Evers has additional expertise in groundwater investigations, dewatering system design, well design, geochemical evaluations, groundwater modeling, and pumping test analysis.

### PROFESSIONAL EXPERIENCE

Principal, WWC Engineering, Sheridan, Wyoming. 2008 - Present

Energy/Environmental Department Manager, WWC Engineering, Sheridan Wyoming. 2002 - Present

<u>Project Manager/Senior Geologist</u>, *WWC Engineering*, Sheridan, Wyoming. 1991 - 2002

Hydrogeologist, Panterra Corporation, Huber Heights, Ohio. 1989 - 1991

Geologist, Baccari and Associates, Sheridan, Wyoming. 1986 - 1989

Wellsite Geologist, Decollement Consulting, Inc., Denver, Colorado. 1984 - 1986

### PROJECT EXPERIENCE

Hydrologic baseline studies and impact analysis for recently submitted *In-Situ* mine permit application for uranium operation in Powder River Basin of Wyoming.

Siting, design and construction of numerous flowing wells in the Madison Formation.

Preparation of dozens of mineral evaluations under IRS significance criteria for conservation easement donations.

Project Manager on major surface coal mine permit applications.

Preparation of EISs and EAs for various mining and oil and gas projects.

Expert testimony before the Wyoming Oil and Gas Commission.

Preparation of State and Federal APDs.

Drawdown modeling for mining and coal bed natural gas production.

Numerous Phase I ESAs and due diligence studies for oil and gas and mining property transfers.

Project manager for alluvial valley floor investigations for major Powder River Basin coal mine.

In charge of all hydrogeologic studies for the mine permit application for a proposed surface coal mine in Campbell County, Wyoming.

Project manager for third party Environmental Impact Statements prepared by the Bureau of Land Management for Lease-by-Application tracts added to major Powder River Basin mines.

Design of dewatering systems for surface coal mines in Powder River Basin.

Wetland delineations and mitigation plans.

In charge of water supply and yield analysis, and supply well design for a 385-MW coal-fired power plant.



# MURRAY SCHROEDER, P.E. LARAMIE BRANCH MANAGER/SENIOR CIVIL ENGINEER

### REGISTRATIONS

**Professional Engineer** 

Wyoming No. 6320

Nebraska No. 12582

### **EDUCATION**

M.S., Civil Engineering (Sanitary), University of Wisconsin, 1988

B.S., Civil Engineering, Washington State University. 1986

### PROFESSIONAL MEMBERSHIPS

ACEC of Wyoming Board 2008

American Society of Civil Engineers, Wyoming State Section President 2003. Newsletter Editor 2007.

National Society of Professional Engineers, Wyoming State Delegate. 2005 - 2007

Wyoming Engineering Society

### SPECIALIZED TRAINING

Pipeline Hydraulic Transient Evaluation and Design

### PRESENTATIONS AND PUBLICATIONS

"Pipeline Design," Presentation to Wyoming Engineering Society. February 2002

"Condition Assessment and Performance of 50-year Old LCP", Ojdrovic, Zarghamee, Schroeder, Brooks. 2003

"Condition Assessment of Asbestos Cement Pipeline," Ojdrovic, Moody, Schroeder, Zarghamee. December 2006.

University of Wyoming CE 4900 Senior Design Instructor, 2011 Murray Schroeder has twenty five years of experience in engineering hydrologic investigations, hydraulic design, municipal engineering and structural design. Mr. Schroeder's broad technical experience includes drainage design, open channel flow measurements, hydraulic structures and water resources planning. With his current position of Branch Manager, Murray mentors junior staff, is responsible for business operations, and performs project work.

### PROFESSIONAL EXPERIENCE

Laramie Branch Manager, WWC Engineering, Laramie, Wyoming. 2004 - present

<u>Civil/Water Resources Department Manager</u>, WWC Engineering, Laramie, Wyoming. 1988 - 2004

### PROJECT EXPERIENCE

City of Laramie 2008 and 2009 Water Main Projects

City of Laramie East Side Groundwater Risk Assessment Project

Lance Creek Water Project, Level I

Expert Testimony on various issues including irrigation, flood damage, an earth structure and utility issues.

Permitting and design for Campbell County Phase II Landfill.

Design interstate and highway rest area sewage treatment lagoons in South Central and North Central Wyoming.

Design and construction administration for three fisheries habitat restoration projects.

Conceptual design for fisheries by-pass project in North Central Wyoming.

Design and construction administration for Lake Hattie Dam Rehabilitation and Supply Canal Improvement projects.

Design rock fill dam and pipeline distribution system for private owner.

Flood Hazard Mitigation Plans for Worland, Torrington, and Chevenne, Wyoming.

Design and construction administration for subsurface drains, Rock Springs, Wyoming.

Design for structural steel wind protection fences, Vermont and Montana.

Flood studies for residential developments, Albany County, Wyoming.

Design for industrial treatment lagoon, Worland, Wyoming.

Design for structural steel rock quarry crusher platform.

Water supply master plan, final design and construction administration, Lance Creek and Manville, Wyoming.

Design for water storage tank concrete rehabilitation, City of Laramie, Wyoming.

Design and construction administration for Soldier Well Pumping System and Spur Well Delivery, City of Laramie.

Design and construction administration, Hartville Water System.

North Platte Pipeline final design and construction administration, City of Rawlins, Wyoming.

Site work and utility designs for State highway maintenance facilities.

Well pumping facility rehabilitation design and construction and PCCP pipeline assessment project, City of Cheyenne Board of Public Utilities, Wyoming.

Site grading, utilities, and drainage designs for UW parking lots, City of Laramie Recreation Center and the City of Laramie Ice Arena.

Pipeline/hydraulic evaluations, Worland, Greybull and Cheyenne, Wyoming.

## MURRAY SCHROEDER, P.E. LARAMIE BRANCH MANAGER/SENIOR CIVIL ENGINEER

Glendo Well Project, Level II and Level III.

City of Laramie and Campbell County Recreation Facility Site Design

Green River Basin Water Plan, 2010

Laramie River Restoration Plan. Laramie, Wyoming

City of Laramie - Interim City Engineer Contract. Laramie, Wyoming

UW Business College Foundation Drainage System. Laramie, Wyoming

Reservoir operations modeling for Greybull Valley Irrigation District Hydropower Project

Glendo Business Park Infrastructure. Glendo, Wyoming

City of Laramie site specific investigations. Laramie, Wyoming

Reservoir Operations Evaluation to Support Greybull Valley Irrigation District Hydropower Permitting, Greybull, Wyoming

