

# RESUME

## MARK A. REINSEL

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### HIGHEST DEGREE:

Ph.D. Chemical Engineering, Montana State University, 1995

### PROFESSIONAL EXPERIENCE:

2010 – Present President, Apex Engineering, PLLC, Missoula, MT

2002 – 2010 President, Apex Engineering, PLLC, Helena, MT

2004 – 2008 Adjunct Professor, Department of Environmental Engineering, Montana Tech, Butte, MT

2001 – 2004 Adjunct Professor, Department of Chemical Engineering, Montana State University, Bozeman, MT

1999 – 2002 Project Engineer, Hydrometrics, Inc., Helena, MT

1995 – 1999 Senior Chemical Engineer, Hydrometrics, Inc., Helena, MT

1991 – 1995 Graduate Research Assistant, Center for Biofilm Engineering, Montana State University

1989 – 1991 Senior Process Engineer, 3M Company, Hutchinson, MN

1987 – 1989 Advanced Product Engineer, 3M Company, Hutchinson, MN

1984 – 1987 Product Engineer, 3M Company, Hutchinson, MN

### AREAS OF EXPERTISE:

- Analysis of treatment alternatives for industrial wastewater, groundwater, stormwater and drinking water
- Process design and budgetary cost estimates
- Bench and pilot testing
- Innovative technology investigation and development
- Field installation and start-up
- Process analysis and trouble-shooting
- Hazardous waste treatment
- Technical writing

### RELEVANT PROJECTS:

Nearly 100 consulting projects, with over 60 related to mine water treatment including:

1. Jerritt Canyon Mine, Veris Gold Corp. – Elko, Nevada
2. Kensington Mine, Coeur Alaska – Juneau, Alaska
3. Buckhorn Mountain Mine, Kinross Gold Corp. – Republic, Washington
4. Idaho Cobalt Project, Formation Capital Corp. – Salmon, Idaho
5. Mount Emmons Mine, U.S. Energy Corp. – Crested Butte, CO

6. Central Treatment Plant Operations, U.S. Army Corps of Engineers – Kellogg, Idaho
7. *In Situ* Bioremediation of Nitrate and Perchlorate, Alpha Explosives – Lincoln, California
8. Anoxic Biotreatment Cell (ABC) for Nitrate Removal, Stillwater Mining Company – Nye, Montana
9. Anoxic Biotreatment Cell (ABC) for Nitrate Removal, Minera Yanacocha – Peru
10. Montanore Mine, Montanore Minerals Corp. – Libby, Montana

**PROFESSIONAL LICENSES AND MEMBERSHIPS:**

Registered Professional Engineer – Montana and Nevada  
Lifetime Member - American Institute of Chemical Engineers (AIChE)

**PATENTS:**

Anoxic Biotreatment Cell - 1999

**PEER-REVIEWED PUBLICATIONS:**

1. Reinsel, M.A., J.T. Sears, P.S. Stewart and M.J. McInerney, 1997. Control of Microbial Souring by Nitrate, Nitrite or Glutaraldehyde Injection in a Sandstone Column. *Journal of Industrial Microbiology*, 17:128-136.
2. Chen, C.-I. and M.A. Reinsel, 1996. Characterization of Microbial Souring in Berea-Sand Porous Medium with a North Sea Oil Field Inoculum. *Biofouling*. 9(3):175-186.
3. Chen, C.-I., M.A. Reinsel and R.F. Mueller, 1994. Kinetic Investigation of Microbial Souring in Porous Media Using Microbial Consortia from Oil Reservoirs. *Biotechnol. Bioeng.* 44:263-269.
4. Reinsel, M.A., J.J. Borkowski and J.T. Sears, 1994. Partition Coefficients for Acetic, Propionic, and Butyric Acids in a Crude Oil/Water System. *Journal of Chemical & Engineering Data*, Vol. 39, No. 3, 513-516.

**TECHNICAL TRAINING:**

- Reverse Osmosis
- Biological Nutrient Removal
- Project Management
- Advanced Waste Water Treatment
- Design of Alternative On-Site Wastewater Systems

**AWARDS:**

1. W.G. Characklis Award, 1994. Presented to the outstanding graduate student in the Center for Biofilm Engineering, Montana State University.
2. Dropout Reduction Project, 1990. Presented to a quality improvement team at 3M Company.
3. 3P Award of Excellence, 1985. Presented for pollution prevention results at 3M Company.