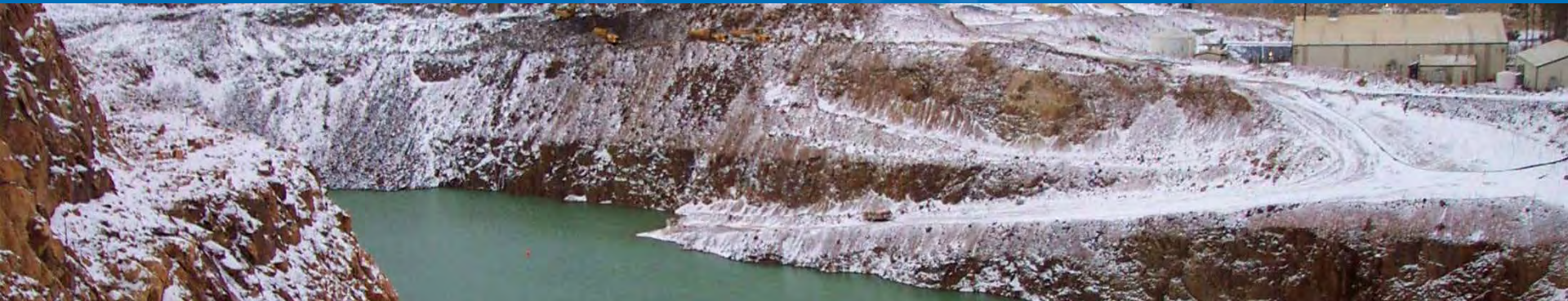


Overview of USEPA's ORD Technical Outreach and Support Activities

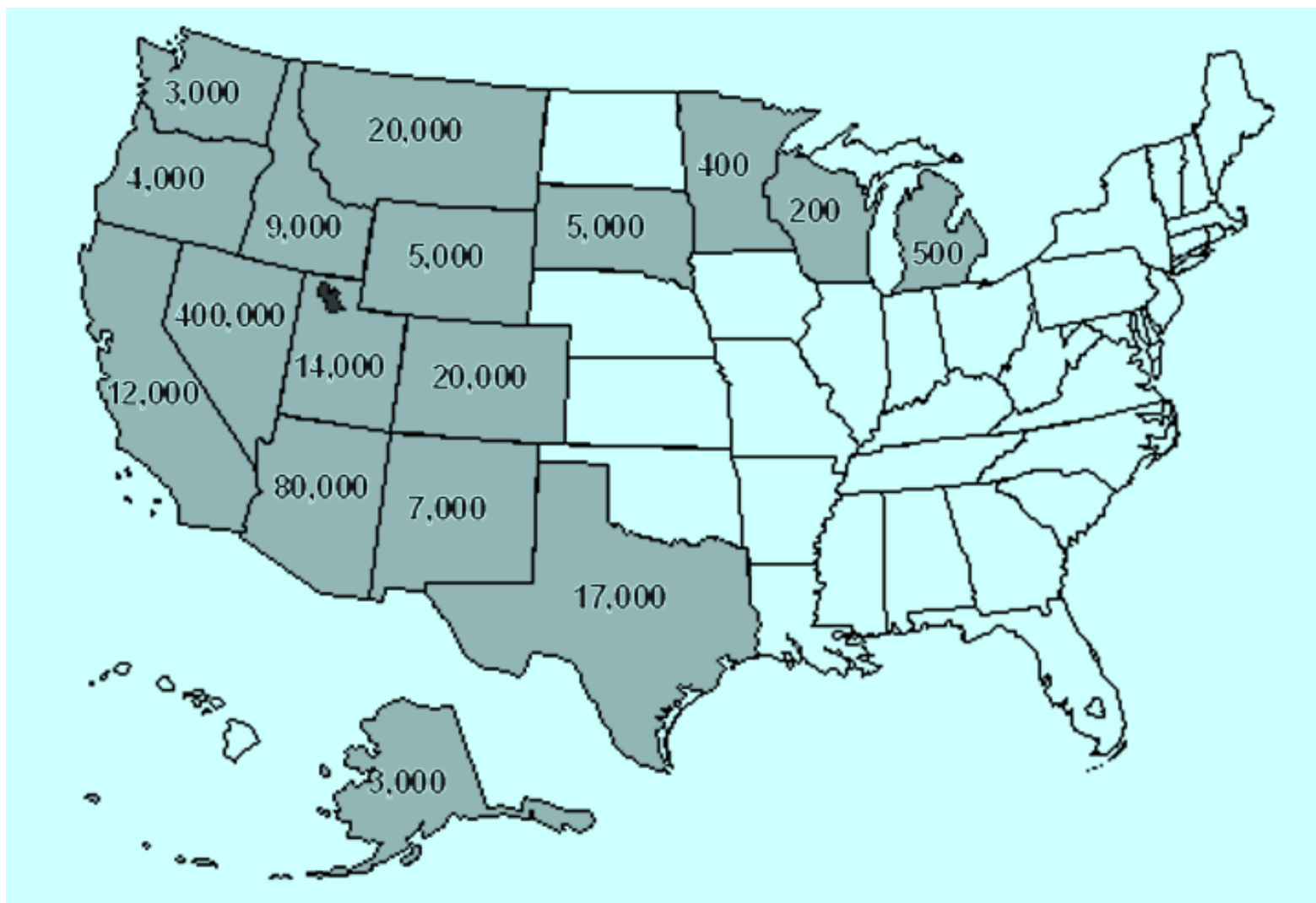
*August 12, 2014
Albuquerque, New Mexico*



Acknowledgements

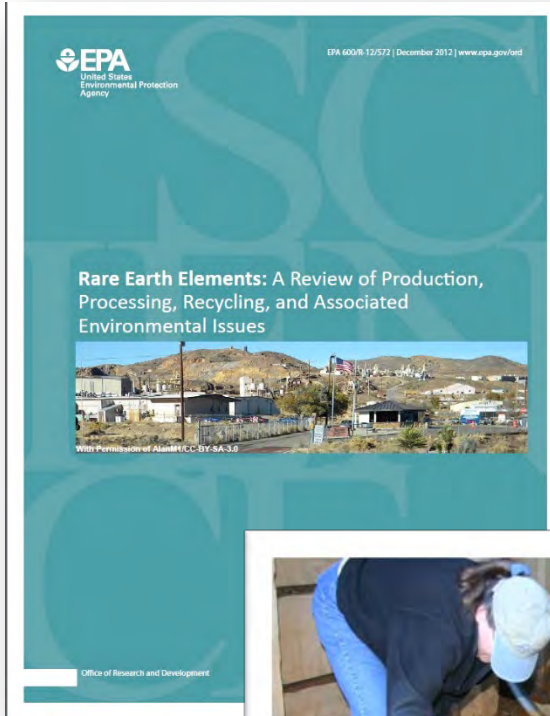
- Doug Grosse, ORD
- Diana Bless, ORD
- Shahid Mahmud, OSWER
- Michele Mahoney, OSWER
- Barbara Butler, ORD
- Steve Hoffman, OSWER
- Rob Weber, Region 7
- Carol Russell, Region 8
- Jim Hanley, Region 8
- Greg Gervais, OSWER
- John McKernan, ORD
- Jim Lazorchak, ORD
- John Hillenbrand, Region 9
- Mark Purcell, Region 6
- Steven McDonald, USDA Forest Service
- Roger Yeardley, ORD
- Alina Martin, Leidos
- Mark Doolan, Region 8

Estimate of Mining Sites in the USA



ORD's Mining Programs

- Mine Waste Technology Program (closed)
- Engineering Technical Support Center
- Technology Transfer Program



Collaboration



- EPA Program & Regional Offices
(focus: OSWER and the Regions)
- NRMRL/ORD
- Industry Partners
- States and Tribes
- Western Governors Association
- Academia
- BLM/Forest Service
- DOE/DOD
- USGS

NRMRL Engineering Technical Support Center (ETSC)

- Constructed Wetlands
- Bioremediation
- MIW Treatment Processes
- Liquid/Solid Partitioning
- Electrolytic Processes
- Sequestration
- Capping



ORD Technology Transfer and Outreach

- 1993-2006** Mine Operations, Design, and Closure Conferences, Various
- 1998** Heavy Metals Contamination Workshop – 150
- 1998** Mining Workshop, Denver, CO - 300
- 1999** Heavy Metals Contamination Workshop -180
- 1999** Pit Lakes Workshop, Reno, NV - 240
- 2000** Mercury Workshop, San Francisco, CA – 275
- 2001** Arsenic Workshop, Denver, CO – 70
- 2002** Hard Rock Mining Conference, Denver, CO – 375
- 2003** Mining Impacted Native American Lands, Reno, NV – 275
- 2004** Pit Lakes, Reno, NV – 250
- 2005** Abandoned Mine Lands Workshop – 100
- 2006** Hard Rock Mining Conference – 350
- 2007** Abandoned Mine Lands Workshop – Coeur d'Alene, Idaho - 100
- 2012** Hardrock Mining: Advancing Solutions New Legacy, Denver, CO - 420

Current ETSC Activities

- Tri-State Mining District – Modeling Research with SWAT and Geospatial Tools, R7
- Bristol Bay Risk Assessment, the Pebble Deposit, NCEA, Under Review, R10
- Black Butte Mine, Cottage Grove, Hg Methylation in Reservoir Sampling, R10
- Formosa Mine, RARE Proposal Review on Biochar & Soil Remediation, R10
- Gegebic Taconite Mine Site, Tribal Area, WI, Sampling Plan and QAPP Review, R5
- Midnite Mine, Summary of Groundwater Treatment Technologies for Thallium, R10
- Lead Site in Southeastern NY, Size-Segregate Waste Rock to Limit Pb Leach, R2
- Federal Mine, Park Hills, MO, Review of Site Construction Plans, R8
- Bunker Hill, Smelterville, ID, Lime Slurry Treatment System On-site, R10
- Newtown County Mine Tailings, Remote Sensing and Geophysical Techniques, R7
- Anaconda Mine, Characterization of Uranium and Arsenic in Groundwater, R9
- Blue Ledge Mine, Construction and Piloting of BCRs for Treatment of MIW, R9
- Southwest Jefferson County Mining, Review of Design Drawings, R7

Potential ETSC Mining Technical Assistance:

- Upper Tenmile creek (PJK and Luttrell) near Helena, MT
- Barker-Hughesville (near Great Falls, MT)
- Carpenter Snow Creek (near Great Falls, MT)
- Crystal Mine near Basin, MT
- Callahan Mine, R1
- Buena Vista Mine Site, R9
- KBV Mines, R9



2014 Registration by Affiliation

Affiliation Type	No. of Registrations	Percentage
Academia	16	6%
Consultant	74	26%
Federal Agency	64	23%
Local Agency	3	1%
Non-Governmental	5	2%
Non-Profit Association	4	1%
Other	2	1%
Private Sector	53	19%
Regional Agency	0	0%
State Agency	46	16%
Trade Association	1	0%
Tribal	16	6%
Total:	284	100%



U.S. EPA MIW 2014 Conference Agenda

Tuesday, August 12th

- Plenary
- Characterization
- Source Control & Mine Closure
- Poster Session

Wednesday, August 13th

- Characterization (Continued)
- Water Treatment
- Source Control & Mine Closure (Continued)

Thursday, August 14th

- Beneficial Use
- Prediction & Modeling
- Panel Discussion
- Field Trip to the Nacimientos Copper Mine (Attendance limited)

Session Chairs

- Plenary Session – Doug Grosse, EPA/ORD (part 1) and Diana Bless, EPA/ORD (part 2)
- Session 1: Characterization – Carol Russell, EPA Region 8
- Session 2: Source Control/Mine Closure Approaches – Shahid Mahmud, EPA/OSWER
- Session 3: Characterization – Krista McKim, EPA Region 5
- Session 4: Source Control/Mine Closure Approaches – John Hillenbrand, EPA Region 9
- Session 5: Characterization – James Sickles, EPA Region 9
- Session 6: Water Treatment – James Hanley, EPA Region 8
- Session 7: Characterization – Mark Purcell, EPA Region 6
- Session 8: Water Treatment – Gary Riley, EPA Region 9
- Session 9: Source Control/Mine Closure Approaches – Stephen Hoffman, EPA/OSWER
- Session 10: Water Treatment – Joy Jenkins, EPA Region 8
- Session 11: Source Control/Mine Closure Approaches – Carter Jessup, EPA Region 9
- Session 12: Water Treatment – Michele Mahoney, EPA/OSWER
- Session 13: Beneficial Use – Scott Jacobs, EPA/ORD
- Session 14: Prediction and Modeling – Rob Weber, EPA/ORD
- Session 15: Panel Discussion – Doug Grosse, EPA/ORD

U.S. EPA Websites:

EPA's Abandoned Mine Lands Program:

www.cluin.org/mining

ORD's Engineering Technical Support Center

<http://www.epa.gov/nrmrl/lrpcd/etsc>

NRMRL:

www.epa.gov/nrmrl

