



# ADTI Research Programs

**11th ANNUAL BRITISH COLUMBIA METAL  
LEACHING/ACID ROCK DRAINAGE WORKSHOP**

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# Statement of Mutual Intent 11/2004

- The goal will be in protecting and improving water quality that may be adversely impacted by acid mine drainage in the United States. Through this *Statement of Mutual Intent* we agree to increase the cooperation and partnership among us to develop cost-effective controls for acid mine drainage from coal and metal mining operations to protect and restore streams and watersheds.



# Sponsored and Agreed to By

- Interstate Mining Compact Commission
- Mining Life Cycle Center, Mackay School of Mines, University of Nevada - Reno
- National Mine Land Reclamation Center, West Virginia University
- National Mining Association
- US Department of the Interior
- US Environmental Protection Agency
- Great Basin Mine Watch



# ADTI-CMS Programs

- National Mine Land Reclamation Center - WVU
- Cooperative Agreements and Technology Transfer – OSM
- Kinetic Testing Standardization – USEPA
- Selenium Study
- White Papers



# ADTI-CMS White Paper Topics

- Treatment Issues
  - Manganese Standard, Non-Conventional Constituents, Large Volume Underground Drainage Methods
- Prediction
  - Method concentration relationships, Infiltration, recharge and discharge.
- Long Term AMD Generation
  - Flooded, above drainage underground and surface mines



# White Paper Topics Continued

- **Passive Treatment**
  - Performance metrics, success/failure criteria and improved methods.
- **CCB Mine Fills**
  - Risk assessment, documented benefits/impacts and field validation
- **In-Situ Mine Treatment**
  - Treat and pump, alkaline amendment, foundation drains and reactive barriers
- **Refuse Capping and Barriers**



# ADTI-MMS Programs

- Rock Pile Stability Research (Molycorp)
  - U of U Research Team
  - ADTI-MMS Technical Review Team
- Duluth Complex Weathering (USACOE)
  - Pile Post Mortem Completed
- Long-Term Humidity Cell Testing Continues (BLM, etc.)



# ASTM Standardization

- Humidity Cell Revision- Humidity Chamber
- MWMP Completed/SPLP Planned
- Carbon-Sulfur – Reruns on sulfur methods
- ANPA “fizzless” titration ruggedness tested, will follow carbon-sulfur completion
- ICPMS As-Sb Interlab test Nevada ground and treated mine dewatering completed
- Aquatic Free Cyanide method drafted





# ADTI-MMS Workbooks

- Consensus Review Pending
- Editorial Review Completed
  - Introduction and Mitigation
- Drafting Funded
  - Prediction and Modeling
- Drafting Unfunded
  - Sampling and Monitoring, and Pit Lakes



# ICARD 7 Call for Papers!

- Abstracts should be submitted electronically, if at all possible,
  - as an attached file in either Word or WordPerfect format to:
    - [asmr2@insightbb.com](mailto:asmr2@insightbb.com)
    - SME Annual Meeting
    - March 27-29, 2006
    - St. Louis, Missouri
- Leadership: Gateway to the Future



# Co-Sponsoring Organizations

- ADTI – Acid Drainage Technology Initiative
- ASMR – American Society for Mining and Reclamation
- IMWA – International Mine Water Association
- INAP – International Network for Acid Prevention
- RMHSRC – Rock Mountain Hazardous Substance Research Center
- SME – Society for Mining, Metallurgy and Exploration, Inc.



# Draft Session Track I

- Plenary-International Scope and Programs and Neutral Drainage
- Social – Governmental - Sustainability Issues
- Mining Legacy/Abandoned Mine Lands
- Management
- Closure/Land Use Issues
- Plenary-Emerging Technologies and ICARD 8 Bids

# Draft Session Track II

- Formation/Generation Processes
- Characterization
- Prediction and Modeling
- Prevention and Control
- Treatment



# Draft Session Track III

- Pit Lakes/Backfill Issues
- Impacts I - Surficial Impacts
- Impacts II - Subsurface Impacts
- Case Studies – Lessons Learned I
- Case Studies – Lessons Learned II



Acid Drainage

ADTI

Technology Initiative

