



INTERNATIONAL MINE WATER ASSOCIATION

2013 Annual Conference Golden, Colorado USA



Short Course #3

Mine Water Treatment: Approaches and Applications

Water is an increasingly challenging concern and risk facing mine operators. This workshop will provide a broad overview of all of the processes applicable for treating impacted mine water including contaminant identification, treatability testing, and how they relate to selecting a treatment process. Focusing on proven water treatment approaches and methods this workshop teaches participants how to combine these with water balance and strategic water management tools for the best outcomes at their mine. In addition, “adaptive” treatment strategies for meeting changing operational and regulatory conditions will be discussed.

The second half of the workshop is dedicated to case studies that allow participants insight into a multitude of ‘lessons learned’ from water treatment project at mines around the world.

Presenters in this workshop include Karla Kinser – a world-recognized membrane expert; Dan Dupon – a mine water treatment specialist who has spent the majority of his career treating acidic and mining impacted waters; and John Chahbandour – an expert in strategic water management. Andrew Watson – a mine closure expert who understands the importance of water treatment solutions will facilitate the workshop.

This is a dynamic workshop that provides participants an interactive forum to learn, interact, and discuss water issues with the experts. The workshop will explore the following topics:

- Mine Water Management – challenges, trends and perspectives
- Water and Mass Balance – the starting point for water treatment
- Mine Water Pollutants, Treatment Approaches and Treatability Testing
- Advanced and New Approaches to Mine Water Treatment
- Case Studies
 - o Physical / Chemical
 - o Membranes
 - o Ion Exchange
 - o Biological Treatment
 - o Technology Limitations and Regulatory Negotiations
- Ask the experts: bring your mine water treatment questions and issues

This workshop has been presented in the US and Latin America to rave reviews.

Instructors

Karla Kinser currently serves as the Global Mine Water Treatment Practice Leader for MWH where she supports major mine water treatment projects around the world. She has worked on more than 50 membrane projects worldwide, including membrane filters, ultra filtration, nano-filtration and reverse osmosis. Karla is a world-recognized membrane expert.

Dan Dupon as extensive experience with water treatment process development, process modification, and process design. He has particular experience with the treatment of acidic and mining-impacted waters, understanding the broad field of advanced treatment technologies and associated chemical controls necessary to address a wide variety of contaminants.

Andrew Watson Andrew Watson is a Civil Engineer with 20 years of experience in mine closure as well as the design and construction of roads, dams, tailing storage facilities, waste containment facilities, and other civil works. He is an excellent speaker and provides provocative questions and commentaries that spark the interest of all.

John Chahbandour has more than 20 years of experience, specializing in mining hydrology including: closure, site-wide water management, water supply, dewatering, numerical modeling, water balance modeling, solid/ hazardous waste management, environmental permitting/regulatory negotiation, and remedial design.