

Industrial Minerals Association – North America
Industrial Minerals Technology Workshop
Buena Vista Palace Hotel
Orlando, FL
March 9 - 11, 2015

DRAFT PROGRAM

Monday, March 9

12:00 PM – 4:00 PM Volunteer Event with Clean the World – **Depart from Hotel Lobby**

3:00 PM – 5:00 PM Workshop Registration – **Events Center Foyer**

5:00 PM – 7:00 PM Opening Reception, Exhibits Open – **Events Center**

Tuesday, March 10

7:00 AM Workshop Registration – **Events Center Foyer**

7:00 AM – 8:00 AM Breakfast – **Events Center**

Morning Session East/West Ballroom

8:00 AM – 9:00 AM *The Total Worker Health Approach: Advancing Healthier, Safer Work* – **Dr. Casey Chosewood, MD MPH, (NIOSH)**

Today's employers and organizations face many challenges – including the important task of safeguarding the health of their workers as emerging challenges appear. An aging workforce, a changing global economy and epidemic levels of workplace stress, obesity and chronic diseases all threaten worker safety, health and well-being. This presentation takes these risks head on, examining proven solutions used by successful workplace health and well-being programs that lead to a people-centered culture and unprecedented opportunities for health – on and off the job. It will focus on the power of organizational, policy and built-environment levers in advancing health and provide real-life examples of integrated worker protection and health promotion programs for engaging and sustaining a thriving workforce.

This presentation introduces participants to the concepts of Total Worker Health™ as envisioned by NIOSH. This is a research-to-practice effort that integrates the principles of **traditional occupational health and worker protection programs** with **proven, innovative health promotion and well-being interventions**. This session also introduces the audience to the vast worker protection, health promotion, and prevention resources now available from NIOSH, CDC and our partners.

9:00 AM – 9:50 AM *Asset Reliability in the Minerals and Mining Industry* – **Bob Goughnour (Imerys)**

9:50 AM – 10:05 AM Break – **Events Center**

10:05 AM – 10:50 AM *We Love Our Lawyers But We Don't Want to See Them Quite So Much – Willa Perlmutter (Crowell & Moring)*

We know that pretty much every mining operation has its favorite mine safety lawyer or law firm. We know that you love to work with us and that there's nobody you'd rather have in your corner when you're facing a serious enforcement docket or even just an over-enthusiastic Conference and Litigation Representative. But we also know that legal bills can add up and that you have better things to spend your money on. In this presentation, we will share with you some of our techniques and tools for researching the various sources of law that you can use in defense of your enforcement cases. We will also help you figure out how you can use the law you find to argue your case in the strongest way possible. Since we don't want to lose you altogether, we will also talk about which cases you can and should handle on your own, and how to know when it's time to pick up the phone to call your lawyers.

10:50 AM – 11:30 AM *Explore a Better Alternative Conveyor vs. Traditional Belt and Screw Conveyors – Jim Hughes, (Hapman)*

This presentation will focus around a deeper understanding of what opportunities there are in a more efficient conveyor. We will be addressing how **This Conveyor** can help in: **Safety** (Dust and weather tight, totally enclosed); **Efficiency** (Low-energy consumption); **Demands on Increased Production** (Utilizing conveying space); **Dependability** (Less downtime)

11:30 AM – 12:00 PM *Introduction to Low Velocity Dust Control Systems – Matt Campbell, (Unimin Corporation)*

The session discussion will show comparisons between conventional high velocity and our low velocity systems, as well as the advantages and disadvantages of each. Basic methods of design for low velocity hoods and ductwork will be presented, including discussions on the orifice plate method of controlling hood airflow.

12:00 PM – 1:00 PM Lunch – **Events Center**

Afternoon Session **East/West Ballroom**

1:00 PM – 1:40 PM *The Effective Use of Technical Experts in Safety and Health Compliance and as Expert Witnesses in MSHA and OSHA Litigation – Adele Abrams and Justin Winter (Law Office of Adele Abrams)*

1:40 PM – 2:10 PM *Status of Helmet –CAM Respirable Dust Assessment Technology and The Future Direction of this Research Area to Include Multiple Containment Assessment (EVADE v 2.0) and to Improve Organizational Communication and Behavior – Andy Cecala (NIOSH), Emily Haas (NIOSH)*

2:10 PM – 2:40 PM *Development of Midstream Infrastructure - Steve Broker (Rangeland Energy)*

Rangeland Energy is involved in the development of midstream infrastructure to support the development of oil and gas production. Our first venture was in the Bakken where we developed a terminal and pipeline network to load crude oil unit trains out of the Bakken and the COLT facility, now owned by Crestwood, has just celebrated loading its 1,000th unit train in 28 months of operations.

We are now developing a terminal near Loving NM, that will manage frac sand as well as crude oil. The handling of frac sand is new for us and we plan on using some of the elements of the COLT facility applied to frac sand. We will use a unique automation system to the typical frac sand terminal model to reduce the intense labor requirements we observed at several sand terminals we have visited over the last year.

2:40 PM – 3:00 PM *Design and Performance of a New Environmentally Controlled Filtration and Pressurization System at a Primary Crusher Operator Booth* – **John Organiscak (NIOSH), Andy Cecala (NIOSH), Brian Holen (3M), and Joe Baregi (3M)**

3:00 PM – 3:20 PM *EHS Management Software System* – **Kevin Mooney (US Silica)**

3:20 PM – 3:40 PM *Dustless Loading Spouts – Features, Health & Safety, Compliance and Profitability* – **Jon Jasinski (Vortex Loading Solutions)**

3:40 PM – 4:00 PM **Break, Exhibits Open Events Center Foyer**

4:00 PM – 4:20 PM *New Sensor Technology Enables Ore Sorter to “See” Invisible Rock Features–*
Harold Cline (TOMRA Sorting), A.J. DeCenso (Preferred Process Solutions, LLC)

Sensor based sorters have been used for years to upgrade ore based on various mineral characteristics. While traditional methods such as optical sorting or X-ray sorting are quite effective, in certain applications, such as the sorting of quartz or rock salt, these methods cannot reliably discriminate between “good” and “bad” rocks. TOMRA Sorting has recently introduced an all new sorter that uses a revolutionary laser scattering technology to scan each individual rock and determine if the rock meets product grade criteria. The presentation will provide an overview of the technology behind this new sorter and demonstrate its capabilities in some common industrial minerals applications.

4:20 PM – 4:40 PM *Comparison of HEPA versus MERV 16 Quality Filters and the Use of In-Cab Pressurize Monitoring System to Indication Soundness of Filtration and Pressurization Systems* – **Andy Cecala (NIOSH), John Organiscak (NIOSH), Jim Noll (NIOSH), and Jim Rider (NIOSH)**

4:40 PM – 5:00 PM *Conveyor Guarding: Standards and Practices* – **Andy Marti (Martin Engineering)**

This presentation looks at the dangers of belt conveyors, and what can be done to mitigate those hazards for those who must work on or around conveyors. It will focus on conveyor guarding, and review the differences between OSHA and MSHA requirements. It will show typical applications, and suggest best practices for panel guards and return roller guards.

5:00 PM – 5:20 PM *A Case Study of Using the Helmet-CAM Assessment Technology to Lower Workers' Respirable Dust Exposures During Screen Cleanings and Changes at Badger Mining Company's Taylor Facility – **Andy Cecala (NIOSH), Jim Noll (NIOSH), Marty Lehman (Badger Mining Company), Linda Arzt (Badger Mining Company), Brian Breaman (Badger Mining Company) and Nick McClurg (Rotex)***

5:20 PM – 5:40 PM *Case Study: A Performance Turnaround at a Ground Calcium Carbonate Plant **Joe Roettle (Ecutec, a business unit of M-I SWACO)***

The focus of this presentation is a South American ground calcium carbonate facility that has been in operation for many years, producing products as fine as $d_{50} = 2.5\mu\text{m}$. But high production costs have hindered the plant's ability to remain competitive. In an effort to improve operations and reduce costs, a comprehensive process audit was performed on the milling and classification circuit. As a result of this audit, numerous process changes were made leading to a 50% reduction in energy consumption and a 36% increase in capacity, all without the need to install new equipment. This presentation will provide an overview of the audit process and the improvements that resulted.

5:40 PM – 6:00 PM *A Dust Suppression Hopper (DSH) Reduces Airborne Respirable Dust During the Bulk Loading of an Open-bed Haul Truck – **Jay Colinet (NIOSH), Andy Cecala (NIOSH), Jim Noll (NIOSH), and Becky Kuykendall (U.S. Silica Co.) Jamie Robinson (Unimin Corporation)***

6:00 PM – 7:00 PM Reception, Exhibits Open – **Events Center**

Wednesday, March 11, 2015

7:00 AM – 8:00 AM Breakfast, Exhibits Open – **Events Center**

8:00 AM – 8:50 AM *New Directions in Conveyor Belt Cleaning – **Andy Marti (Martin Engineering)***

This presentation will look at recent developments in keeping conveyor belts clean. It will discuss methods to select belt cleaners, including the impact of the applications duty-rating methodology in the new CEMA 576 Belt Cleaner Standard, and what how it affects belt cleaner selection and performance. The presentation will discuss a recent series of belt cleaner carryback testing and what the analysis of these tests can tell an operation to improve the performance of both conveyors and cleaners. And it will discuss new systems for safely installing and maintaining cleaners, and for handling the materials removed from the belt.

8:50 AM – 9:40 AM *An Introduction to the Behavioral, Leadership, and Organizational Culture (BLOC) Program: Key Factors to Promote Safety Performance and Production – **Dr. Lori Guasta (Safety Solutions International, Inc.)***

Behavior, Leadership, and Organizational Culture are key factors in promoting positive safety and production performance in the workplace. An overview of the four topic areas comprising the BLOC program will be highlighted and attention given to the process of delivering the BLOC program and assessing a company's health and safety maturity through the use of a maturity model that considers

seven health and safety dimensions: Leadership Commitment, Strategic Importance, Safety Management System, Organizational Buy-In, Safety Resources, Training, and Technology Tools.

Participants will be engaged in a combination of lecture, video, individual and small-group activities as a preview of the BLOC training that provides a unique opportunity to connect with the material and directly apply lessons to ones' everyday work experience.

The intended audience includes safety professionals, supervisors, foremen, mid- to senior-level site and corporate managers. The BLOC Program is typically delivered in 3- or 4-day format, but can be customized for 1- or 2day short course versions.

9:40 AM – 10:00 AM Break, Exhibits Open – **Events Center**

10:00 AM – 12:00 PM *Basic Industrial Hygiene Sampling Workshop* – **Bill Walsh, CIH (Galson Laboratories), Ed Stuber. CIH, SGS (Galson Laboratories)**

This workshop will go into the specifics of planning a survey; selection and calibration of sampling equipment; communicating with employees; placing sampling equipment; and interpretation of sampling results.

Outline:

- 1) Planning Your Survey
- 2) Selection of Sampling Equipment
 - a) Dusts
 - b) Metals
 - c) Vapors
 - d) Asbestos
- 3) Calibration of Sampling Equipment
- 4) Placement of Sampling Equipment
- 5) Documentation of Sampling
- 6) Shipping Samples
- 7) Understanding Reports

Upon successful completion of this module the attendee should be able to: 1) Develop sampling strategy; 2) choose proper equipment for assessment; 3) calibrate and hang sampling activities; 4) document sampling activities; 5) properly fill out chain of custody forms; 6) properly ship equipment; 7) equate laboratory results to occupational exposure limits.