

MINING DIESEL
mdec
EMISSIONS CONFERENCE

HILTON SUITES, TORONTO/MARKHAM, ONTARIO

OCTOBER 28 – 31, 2002

MONDAY, OCTOBER 28, 2002

08:15 – 16:30 WORKSHOP – Diesel Emission Control in Mines (Butternut Room)

18:00 - 20:00 PRE-REGISTRATION (Markham Ballroom Foyer)

TUESDAY, OCTOBER 29, 2002 (Markham Ballroom)

07:00 REGISTRATION

08:00 CONFERENCE OPENING CEREMONIES:

Welcome and Introduction, *Edward Richards (Lubrizol - ECS), Co-Chair MDEC*

Keynote Address, *Dr. Lewis Wade, Associate Director – Mining, NIOSH*

Organization, *Mahe Gangal (NRCan -CANMET), Co-chair MDEC*

Conference arrangements, *Melody Edwards (Lubrizol-ECS), Conference Manager*

08:30 SESSION 1: DIESEL EMISSIONS EVALUATION PROGRAM (DEEP) REVIEW
CHAIRPERSON: Bruce Conard (INCO)

Diesel Particulate Filter Study at INCO's Stobie Mine, *Joe Stachulak (INCO)*

Evaluation of Diesel Particulate Filter Systems at INCO's Stobie Mine, *Aleksandar Bugarski and George Schnakenberg (NIOSH)*

Light Duty Vehicle Project Update, *Brent Rubeli (NRCan –CANMET)*

10:00 BREAK

10:30 SESSION 1: DEEP REVIEW - *continued*

Concluding the Field Test of Diesel Particulate Filters at Noranda – Brunswick Mine, *Sean McGinn (Noranda), Michel Grenier and Mahe Gangal (NRCan-CANMET), Aleksandar Bugarski and George Schnakenberg (NIOSH), Dale Petrie, Ralph Johnson and Mike Kingston (Noranda- Brunswick Mine)*

Post-Field Evaluation of DEEP/Noranda Filter Traps, *Mahe Gangal, Brent Rubeli, Dave Young & Vince Feres (NRCan-CANMET) and Sean McGinn (Noranda)*

Technology Transfer of the DEEP Maintenance Project, *Sean McGinn (Noranda), Bob Huzij (Cambrian College) and David Cisyk (IMC Potash)*

12:00 LUNCH - introduction of all sponsors

13:00 SESSION 2: FIELD STUDIES - I

CHAIRPERSON: Gary Allen (HBMS)

Results of Two High Altitude Isolated Zone Studies Involving Diesel Powered Coal Mine Equipment and Exhaust Filters, G. Schnakenberg & A. Bugarski (NIOSH)

Canyon Fuel Company's Diesel Emission Reduction Program, Steve Forbush (Canyon Fuel Company)

Determination of Effective Operating Diesel Engine Power on Ventilation, Kuda R. Mutama (Barrick Goldstrike Mines) and Darren Campbell (Queens University)

Diesel Emulsion Fuel Reduces Diesel Particular Matter in the Mines, Ron O. Dunfee (Lubrizol)

15:00 BREAK

15:30 SESSION 3: POWERTRAIN TECHNOLOGIES

CHAIRPERSON: John Vergunst (Ontario Ministry of Labour)

The Fuel Cell Mining Vehicles Development Program: An Update, Marc C. Bétournay (NRCan-CANMET)

Development of a Hybrid Scooptram, Sylvain Ouellette and D. A. Young (NRCan-CANMET)

Detroit Diesel Emissions Perspective, Robin Ungar (Detroit Diesel)

17:00 ADJOURNMENT

17:00-19:00 CASH BAR, RECEPTION & NETWORKING at Displays

WEDNESDAY, OCTOBER 30, 2002 (Markham Ballroom)

8:00 SESSION 4: CONTROL TECHNOLOGIES

CHAIRPERSON: Brian Davies (AEHS/Victoria University of Technology)

MSHA Investigation of NO₂ Generation by Platinum-based Catalyzed Ceramic Diesel Particulate Traps, Bob Setren (MSHA)

Passive and Actively Regenerated Particulate Filter Systems for Mining Applications, Kevin Brown (ECS)

Retrofit of Mining Equipment with Diesel Particulate Filter Systems: The Challenges and the Solutions, Karen Schirmer and Beat Wälti (DCL International)

Application of Non-Thermal Plasma to Diesel Particulate Control, Hannu Jääskeläinen and James S. Wallace (University of Toronto)

10:00 BREAK

10:30 SESSION 5: FIELD STUDIES - II

CHAIRPERSON: Nicole Goyer (IRSST)

Diesel Particulate – The Australian Experience, Brian Davies (AEHS Pty Ltd/Victoria University of Technology)

Impact of Low-Emission Diesel Engines on Underground Mine Air Quality: Physical Measurements, W. F. Watts (University of Minnesota), S. T. Bagley (Michigan Technological University) and D. B. Kittelson (University of Minnesota)

Impact of Low-Emission Diesel Engines on Underground Mine Air Quality: Chemical and Biological Measurements, *S. T. Bagley (Michigan Technological University), W. F. Watts (University of Minnesota), J. J. Schauer (University of Wisconsin-Madison) and J. H. Johnson (Michigan Technological University)*

12:00 LUNCH - award of draw prizes

13:00 PANEL: DIESEL EMISSIONS EVALUATION PROGRAM (DEEP) – Where do we go from here?

Moderator – Charles Graham (CAMIRO)

Panellists: **Dave Cisyk (IMC Kallium)** **Bernie Deck Ontario Ministry of Labour)**
 Ray Ellington (Morton Salt) **Michel Grenier (NRCAN-CANMET)**
 Sean McGinn (Noranda) **Jennifer Penny (USWA)**

14:00 SESSION 6: REGULATORY UPDATES

CHAIRPERSON: Kuda Mutama (Barrick Goldstrike Mines)

MSHA's DPM Standard: Sampling and Compliance Strategies for Metal and Non-metal Mines, *William Pomroy (MSHA)*

Diesel Particulate Filters: Regulations and Status of Technology, *W. Addy Majewski (Ecopoint)*

15:00 BREAK

15:30 SESSION 7: DPM INSTRUMENTATION

CHAIRPERSON: John Petherick (MASHA, Ontario)

Tapered Element Oscillating Microbalance Technology, *H. Patashnick, M. Meyer, B. Rogers and B. Anderson (Rupprecht & Patashnick)*

Development of an On-Board Diesel Particulate Sampling System with Proportional Flow, *B. Rubeli and K. Butler (NRCAN-CANMET)*

Quantitative Characterization of Diesel Particulates: Development of the Self-Calibrating Laser-Induced Incandescence Technique, *W. Stuart Neill, Gregory J. Smallwood and David R. Snelling (National Research Council, Canada), William D. Bachalo (Artium Technologies)*

17:00 ADJOURNMENT

THURSDAY, OCTOBER 31, 2002

ROUNDTABLE FORUM

	JASMINE ROOM	MAPLE ROOM
08:30	Application of Low Emission Engines and Fuels FACILITATOR: Win Watts (University of Minnesota)	Implementation of Emission Regulations FACILITATOR: Michel Grenier (NRCAN-CANMET)
10:00	COFFEE BREAK	COFFEE BREAK
10:30	Practical Considerations for Emission Control Technologies FACILITATOR: Joe Stachulak (INCO)	Techniques for DPM Monitoring FACILITATOR: Kevin Brown (Lubrizol-ECS)
12:00	ADJOURNMENT	ADJOURNMENT