

MINING DIESEL
mdec
EMISSIONS CONFERENCE

HILTON SUITES, TORONTO/MARKHAM, ONTARIO

OCTOBER 13 – 15, 2004

TUESDAY, OCTOBER 12, 2004

18:00 - 20:00 PRE-REGISTRATION (Markham Ballroom Foyer)
EXHIBT ROOM SET UP (Markham Ballroom A)

WEDNESDAY, OCTOBER 13, 2004 (Markham Ballroom B/C)

07:00 REGISTRATION

08:00 CONFERENCE OPENING CEREMONIES:

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

Official Conference Opening, *Andrew King, United Steelworkers of America - Canadian National Office*

Organization, *Mahe Gangal (NRCAN/CANMET-MMSL), Co-chair MDEC*

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

DEEP – Where We Have Been, *Bruce Conard (INCO)*

INCO/DEEP Diesel Particulate Trap Project - Update, *Joe Stachulak (INCO)*

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

Sharing What We Learned – The Diesel Emissions Evaluation Program Technology Transfer Initiatives, *Michel Grenier (NRCAN/CANMET-MMSL)*

10:15 BREAK

10:30 SESSION 2: FIELD STUDIES
CHAIRPERSON: Robert Hart (Cummins)

Diesel Emission Control Technology Studies at Stillwater Mine, *Richard Anderson (Stillwater Mining Company)*

Preliminary Results from Isolated Zone Testing of Diesel Emission Control Technologies, *George Schnakenberg and Aleksandar Bugarski (NIOSH-Pittsburgh)*

Demonstration of Hydrogen as a Viable Fuel at an Underground Metal Mine, *Richard Anderson (Stillwater Mining Co.), Chelsea Woodward and Floyd Varley (NIOSH, Spokane Research Laboratory)*

12:00 LUNCH - Keynote Speaker- Karl Simon, Assistant Director of the Office of Transportation and Air Quality at the U.S. EPA

13:30 SESSION 3: DPM MANAGEMENT - I
CHAIRPERSON: Joe Stachulak (INCO)

Eliminating Particle Emissions from Diesel Engines in Construction and Underground – Experience based on 7000 Trap-Retrofits in Switzerland, *Andreas Mayer (TTM Switzerland)*

Emission Control System for Diesel Engines, *Hiroshi Matuoka (Apex Co.,Ltd) and Hidetoshi Sakai (Tanaka Kikinzo K.K)*

Controlling Diesel Particulate Exposures in Underground Mines, *Robert A. Haney (MSHA)*

The Effect of Simulated Engine Faults on the Emissions of Mechanically- and Electronically- Controlled Diesel Engines, *Brent Rubeli, Mahe Gangal and David Young (NRCan/CANMET-MMSL)*

15:15 BREAK

15:30 SESSION 4: REGULATORY COMPLIANCE STUDIES
CHAIRPERSON: John Vergunst (Ontario of Ministry of Labour)

Sampling of DPM Exposures in Metal and Nonmetal Mines in the United States: Update of Baseline Sampling and First Year Enforcement Experience, *Doris Ann Cash and William Baughman (MSHA)*

Update on MSHA's Technical Support Work, *George Saseen (Mine Safety and Health Administration)*

16:30 ADJOURNMENT

16:30 – 18:30 CASH BAR, RECEPTION & NETWORKING (Markham Ballroom Foyer)

THURSDAY, OCTOBER 14, 2004 (Markham Ballroom B/C)

08:00 SESSION 5: FUEL CELL
CHAIRPERSON: Marc Bétournay (CANMET-MMSL)

Current Developments and Future Opportunities of the Fuel Cell Mining Program, *Marc C. Bétournay (NRCan/CANMET-MMSL), Arnold R. Miller and David L. Barnes (Fuelcell Propulsion Institute)*

Risk, Regulatory and Implementation Associated with Underground Mining Applications of Hydrogen Fuelcells, *Fred C. Delabbio, Doug Eastick and Chris Graves (HATCH), and Marc C. Bétournay (NRCan/CANMET-MMSL)*

Refuelling of Hydrogen Fuelcell Vehicles in Underground Mining Applications, *Fred C. Delabbio, and Doug Eastick (HATCH), Marc C. Bétournay and G. Desrivières (NRCan/CANMET-MMSL)*

Fuel Cell Powered Light Duty Mining Vehicle, *Hydrogenics Corporation, Krystal Williams (John Deere ePower Technologies), G. Desrivières and M.C. Bétournay (NRCan/CANMET-MMSL), F. Delabbio and D. Eastick (HATCH)*

10:00 BREAK

10:15 SESSION 6: CONTROL TECHNOLOGIES - I
CHAIRPERSON: John Stekar (Catalytic Exhaust Products)

Update on Diesel Exhaust Control Technology and Regulations - Part I, *Tim Johnson (Corning)*

Update on Diesel Exhaust Control Technology and Regulations - Part II, *Tim Johnson (Corning)*

Low NO2 CRT® Particulate Filter Systems for Diesel Engine Exhaust in Mining Applications,
Richard O'Sullivan, Joe Stevenson, Andy Walker, Peter Werth (Johnson Matthey Environmental Catalysts and Technologies)

11:45 LUNCH - introduction of sponsors, award of draw prizes

13:00 SESSION 7: CONTROL TECHNOLOGIES - II
CHAIRPERSON: Sean McGinn (McGinn Integration)

The Effect of Valve Coating on Diesel Engine Emissions, *Lionel Gillston (Diesel Engine Transformations, LLP)*

Destructive/Non-destructive Inspection and Failure Analysis of Diesel Particulate Filters and Catalytic Converters, *David Young, Brent Rubeli and Mahe Gangal (NRCan/CANMET-MMSL)*

Optimisation of an Electrically Regenerated Diesel Particulate Filter System for North American Mining Applications, *Don A Malgast (Lubrizol Engine Control Systems)*

14:30 BREAK

14:45 SESSION 8: DPM Management - II
CHAIRPERSON: Doris Cash (MSHA)

Ventilation Design Strategy for Trackless Deep Underground Mines, *Alex Rawlins (University of the Witwatersrand, South Africa)*

Swedish Strategy and "Know How" to Curtail Diesel Soot in Mining Industry, *Tommy Eriksson (Boliden Mines, Sweden)*

15:45 SESSION 9: FINAL PLENARY CONSULTATION
CHAIRPERSON: Mahe Gangal (NRCan/CANMET-MMSL)

Summary of comments from MDEC 2003
 Review of MDEC 2004
 Plan for next MDEC
 Final remarks

16:15 ADJOURNMENT

FRIDAY, OCTOBER 15, 2004

ROUNDTABLE FORUM

	Violet Room	Orchid Room
08:30	Field Experience on the Implementation of Control Technologies Facilitator: Tim Johnson (Corning)	DPM Exposure Levels and Monitoring Methods Facilitator: Michel Grenier (CANMET-MMSL)
10:00	COFFEE BREAK	COFFEE BREAK
10:30	Ventilation Planning and Training Facilitator: William Pomroy (MSHA)	Low Sulphur and Alternate Fuels Facilitator: Addy Majewski (Ecopoint)
12:00	ADJOURNMENT	ADJOURNMENT