

MINING DIESEL
mdec
EMISSIONS CONFERENCE

HILTON SUITES, TORONTO/MARKHAM, ONTARIO
NOVEMBER 4 – 6, 2003

MONDAY, NOVEMBER 3, 2003

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

TUESDAY, NOVEMBER 4, 2003 (Markham Ballroom B/C)

07:00 REGISTRATION

08:00 CONFERENCE OPENING CEREMONIES:

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

Official Opening of the Conference, *Paavo Kivisto, Deputy Minister, Ontario Ministry of Labour*

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: Charles Graham (CAMIRO)

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

Brunswick Mine DPF Project – Final Results and Recommendations, *Sean McGinn (McGinn Integration Inc.)*

Light Duty Vehicle Project – Final Results and Recommendations, *Brent Rubelj, Mahe Gangal, Kevin Butler (NRCan-CANMET), and W. Aldred (Kidd Mining Division)*

10:00 BREAK

10:30 SESSION 2: FIELD STUDIES – I
CHAIRPERSON: Joe Stachulak (INCO)

Testing of Diesel Emissions Control Technologies in Isolated Zone – Part I, *Aleksandar Bugarski and George Schnakenberg (NIOSH)*

Testing of Diesel Emissions Control Technologies in Isolated Zone – Part II, *Aleksandar Bugarski and George Schnakenberg (NIOSH)*

Diesel Emissions Reduction Program (DERP) at Falconbridge Ltd. – Sudbury Mines, *Mike Cousins (Falconbridge Ltd.) and Sean McGinn (McGinn Integration Inc.)*

12:00 LUNCH - introduction of sponsors

13:00 SESSION 3: MONITORING AND SIMULATION

CHAIRPERSON: Kevin Brown (ECS)

Advances in Emissions Measurement Technology for use In-use, Heavy-duty Off-road Equipment, *Carl Ensfield and Atul Shah (Sensors Inc.)*

The Effect of Altitude (Elevation) on Engine Emissions, *Robert Setren (MSHA)*

The Development of an Engine/Filter Monitoring System, *Wayne Borean (Nett Technologies)*

14:30 BREAK

15:00 SESSION 4: CONTROL TECHNOLOGIES - I

CHAIRPERSON: Ron Dunfee (Lubrizol)

NO₂ Behaviour in Diesel Exhaust Gas Purifier for Mines, *Arno Amberla, Seppo I, Keränen, Per-Arne Wiklund (FinnKatalyst Ltd)*

MSHA's Laboratory Investigations of Diesel Engine Emission Control Devices, *Robert Setren (MSHA)*

Influence of Catalytically Active Particulate Trap on the Chemical Composition of Diesel Exhaust Gas, *Thierry Leprince, Mojghan Naseri and Shazam Williams (DCL International)*

Diesel Emissions Reduction using Dry System Technology, *Terry McDonald (Dry Systems® Technologies)*

17:00 ADJOURNMENT

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

WEDNESDAY, NOVEMBER 5, 2003 (Markham Ballroom B/C)

8:00 SESSION 5: FIELD STUDIES - II

CHAIRPERSON: John Vergunst (Ontario Ministry of Labour)

DPM Results Using Various Blends of Bio-Diesel Fuel Mixtures in a Stone Mine, *M. J. Schultz, R.A. Haney and D.J. Atchison (MSHA)*

Baseline Sampling of DPM Exposures in Metal and Nonmetal Mines in the United States, *Doris Ann Cash, William Baughman, William Pomroy and Robert Haney (MSHA)*

Study to Assess the Performance of Ceramic Diesel Particulate Filters for Reducing Diesel Emissions, *Kenneth Fields, William Pomroy, George Saseen and Robert Haney (MSHA)*

Diesel Particulate Filter Used in Underground Coal Mines, *Steve Forbush (Canyon Fuel Company)*

10:00 BREAK

10:30 SESSION 6: POWER TRAIN TECHNOLOGIES

CHAIRPERSON: Prasad Tumati (ArvinMeritor)

Fuel Economy with Significant Reduction in Unwanted Emissions, *Lionel Gillston (Diesel Engine Transformations, LLP)*

Comparison of Diesel Emissions from a Conventional LHD Engine and a Proposed Hybrid Version, *David Young, Brent Rubeli and Mahe Gangal (NRCan-CANMET)*

Fuelcell Versus Diesel Loader Operation – Mine Ventilation Cost Benefit Study, Charles Kocsis and Stephen Hardcastle (NRCan–CANMET)

12:00 LUNCH - award of draw prizes

13:00 SESSION 7: CONTROL TECHNOLOGIES - II
CHAIRPERSON: George Hedge (Detroit Diesel)

Thermal Regeneration System Performance – Inter-Laboratory Data Comparison, Mahe Gangal, Brent Rubeli, David Young (NRCan–CANMET), Prasad Tumatj and Nik Birkby (ArvinMeritor)

Significant Reduction in NO₂ and PM Emissions through the Careful Design of DPF System, Paul Richards (Associated Octel Company) and John Chadderton (Aadastra)

Diesel Reformers for On-board Hydrogen Application in Exhaust Aftertreatment Systems, Mark Mauss and Wayne Wnuck (HydrogenSource)

14:30 BREAK

15:00 SESSION 8: REGULATORY COMPLIANCE ISSUES
CHAIRPERSON: Michel Grenier (NRCan-CANMET)

Status of US PM Regulations and Compliance Efforts in Underground Mines, John Head (MACTEC Engineering & Consulting Inc.)

Ontario Underground Diesel Survey – 2002, John Vergunst (Ontario Ministry of Labour)

A Comprehensive Compliance Strategy for the Reduction of DPM, Daniel Stinnette (Mine Ventilation Services)

16:30 FINAL PLENARY CONSULTATION
CHAIRPERSON: Mahe Gangal (NRCan-CANMET)

Summary of comments from MDEC 2002
 Review of MDEC 2003
 Plan for next MDEC
 Final remarks

17:00 ADJOURNMENT

THURSDAY, November 6, 2003

ROUNDTABLE FORUM

	Markham Ballroom A	Markham Ballroom B
08:30	Selection and Application of DPFs Facilitator: George Schnakenberg (NIOSH)	Engine/Equipment Maintenance & Emissions Facilitator: Sean McGinn (McGinn Integration Inc)
10:00	COFFEE BREAK	COFFEE BREAK
10:30	Control Technologies Maintenance & Performance Facilitator: Brent Rubeli (CANMET-MMSL)	NO ₂ Generation and Control Facilitator: Addy Majewski (Ecopoint)
12:00	ADJOURNMENT	ADJOURNMENT