



Hilton Toronto Airport Hotel, Ontario, Canada
October 4 – 6, 2016

SUNDAY, OCTOBER 2, 2016

12:00 Field Trip to Kirkland Lake Gold, vehicle leaves conference hotel for Kirkland Lake, and returns on Monday, October 3 by 20:00

TUESDAY, OCTOBER 4, 2016

07:30 – 08:30 WORKSHOP REGISTRATION & BREAKFAST

08:30 – 16:30 WORKSHOP “MINE VENTILATION – DIESEL AND ALTERNATIVE EQUIPMENT”

17:00 - 19:00 CONFERENCE PRE-REGISTRATION & NETWORKING

18:00 – 22:00 EXHIBIT ROOM SET UP

WEDNESDAY, OCTOBER 5, 2016

07:30 CONFERENCE REGISTRATION AND BREAKFAST

08:30 SESSION 1: CONFERENCE OPENING CEREMONIES:

Welcome: *John Stekar (Catalytic Exhaust Products Ltd.), MDEC President*

Introduction of Keynote Speaker: *Jozef Stachulak (Mirarco), MDEC Director*

Keynote Address: Technology and Innovation Driving Mining Forward, *Mike MacFarlane, MDM Mining*

Organization: *David Young (Natural Resources Canada), Co-Chair MDEC Conference*

10:00 COFFEE BREAK

10:30 SESSION 2: EMISSION CONTROL TECHNOLOGIES

CHAIRPERSON: Cheryl Allen (Vale)

NO₂ formation and reduction from a Tier 4 final engine and aftertreatment system, *Nathan Ottinger, Carlos Sustaita, Jerry Z. Liu, and Evelyn Stirling (Cummins)*

Low NO₂ formation diesel oxidation catalysts, *John Stekar (Catalytic Exhaust Products Ltd.)*

Laboratory evaluation of diesel oxidation catalysts for NO₂ formation, *Mahe Gangal, David Young, Brent Rubeli, Vince Feres and Eric Leung (Natural Resources Canada)*

Controlling exposure of underground coal miners to diesel aerosols, *Aleksandar D. Bugarski and Teresa L. Barone (National Institute for Occupational Safety and Health (NIOSH))*

12:00 LUNCH

13:00 SESSION 3: ALTERNATIVE ENERGY

CHAIRPERSON: Glen Staskus (Ontario Ministry of Labour)

New mine development considerations, diesel versus electric operation of equipment, Glencore's Alain Landry (Glencore Sudbury)

The inevitable change to zero emission underground work environments, Mike Kasaba (*Artisan Vehicle Systems Inc.*)

~~Minecat UT150-eMV, from concept to reality, Dave Schmidt (*Industrial Fabrication Inc.*)~~ **(cancelled)**

Evaluation of the CanmetENERGY prototype catalyzed diesel particulate filter: determination of the balance point temperature, L. Nossova, G. Caravaggio, B. Rubeli and D.Young (Natural Resources Canada)

14:30 COFFEE BREAK

15:00 SESSION 4: UNDERGROUND MOBILE EQUIPMENT

CHAIRPERSON: Brent Rubeli (CanmetMINING)

Building capacity for mine occupational health expertise through DPM monitoring and abatement research, Z. Henderson and E. Sarver (Virginia Tech, Department of Mining and Minerals) **(not authorised for release)**

Future Emissions Regulations - EU, EPA, GLocal: Cummins Stage V Technology, Evelynn Stirling, Mark Helton and Shelly Knust (*Cummins*) **(not authorised for release)**

On-board monitoring of diesel emissions pilot project – June 2015 to May 2016 results, Paul Sheremeto (*Pattern Discovery Technologies Inc.*)

16:30 ADJOURNMENT

16:30 – 18:30 RECEPTION & NETWORKING

THURSDAY, OCTOBER 6, 2016

07:30 REGISTRATION AND BREAKFAST

08:30 SESSION 5: GOVERNMENT RESEARCH AND POLICY

CHAIRPERSON: David Young (Natural Resources Canada)

Keynote Address: The Importance of Science Enterprise, *Donna Kirkwood, Deputy Chief Scientist, Natural Resources Canada*

2014 Ontario underground mine survey outcomes, Glen Staskus (Ontario Ministry of labour)

10:00 COFFEE BREAK

10:30 SESSION 6: VENTILATION AND FUELS
CHAIRPERSON: Jozef Stachulak (Mirarco)

Ventilation system management – the balance between energy conservation and air quality,
Michelle Levesque (Natural Resources Canada)

Comparison of total mine airflow requirements determined utilizing a comprehensive new method
vs. a traditional approach, *Dan Stinnette (Virginia Tech)*

Diesel fuel properties, Don Munroe (Suncor)

12:00 LUNCH - introduction of sponsors and award of draw prizes

13:00 SESSION 7: DPM MONITORING & MDEC PLENARY CONSULTATION
CHAIRPERSON: Evelyn Stirling (Cummins)

A Review of NIOSH manual of analytical methods Chapter DL – Monitoring diesel particulate
exhaust in the workplace, *Robert Stoyanoff (Golder Associates Ltd.)*

CSA standards update: M424 mobile equipment, Priya Malik (Canadian Standards Association)

Diesel particulate matter measurement methodology, DPM emissions from mining equipment and
measurement of DPF filtration efficiency, *Erkki Lamminen and Ville Niemelä (Dekati Ltd.,
Kangasala, Finland)*

MDEC Plenary Consultation, David Young (Co-Chair MDEC Conference)

Summary of comments from MDEC 2015 survey
Review of MDEC 2016
Plans for MDEC 2017
Final remarks

14:30 COFFEE BREAK

15:00 SESSION 8: ROUNDTABLE FORUM

A – Current Status of Alternative Power Plants
Facilitator: TBA

B – GHG Standards and Regulations
Facilitator: Brent Rubeli (CanmetMINING)

16:00 ADJOURNMENT