



10th WORKSHOP

Mercury emissions from coal

22-25 April 2014, Clearwater, FL, USA

DAY 1

Wednesday, 23 April 2014

08:30 **Lobby 2**

Registration and breakfast sponsored by Great Lakes

Please join us for breakfast while you register. Those presenting this week are requested to deliver their ppt files during this time.

All sessions will take place in the Beach room.



09:30 **Welcome to MEC, Florida**

- Welcome to MEC10. *Lesley Sloss, IEA CCC, UK*
- Welcome and Brief Overview of U.S. Mercury and Air Toxics Standards. *Ms Gail Lacy - United States Environmental Protection Agency [United States]*

09:50 **Session 1 - Legislation**
Chair: Gail Lacy, US EPA, USA

- Update on the Minamata Convention. *Gunnar Futsaeter, UNEP (Switzerland)*
- On the Implementation of Minamata Convention in SE Asia. *Dr Wojciech Jozewicz - ARCADIS [United States]*
- Discussion

10:45 **Lobby 2 – Coffee Break**

11:15 **Session 2 - Compliance**

Chair: Connie Senior, ADA, USA

- Control Techniques for Mercury from Coal Combustion in the United States. *Ms Gail Lacy - United States Environmental Protection Agency [United States]*
- Big Bend Power Station MATS Compliance Plan. *Byron Burrows - Tampa Electric Co [United States]*
- Mercury as a coal combustion pollutant - Polish industrial and environmental projects. *Prof Janusz Golas - AGH University of Science and Technology/ Department of Coal Chemistry and Environmental Sciences [Poland]*
- Discussion

12:30 - **Pool deck – Lunch sponsored by Arcadis**



14:00 **Session 3 - Monitoring**

Chair: Peter Nelson, MacQuarie University, Australia

- Assessment of Bias in Measurement of Mercury Emissions from Coal Fired Power Plants – Comparison of Electronic CEMS and Sorbent Traps. *James Staudt - Andover Technology Partners [United States]*
- Mercury and HCL at Coal – Fired Power, Cement producing Plants and Industrial Boilers. *Mr. Joseph*

Siperstein - OhioLumex [United States]

- Mercury Control Technology Development in the Laboratory: International HgCEM Research and Development Applications. *Eric Prestbo - Tekran Instruments R&D [United States]*
- Overcoming the Challenges of Mercury, Arsenic and Selenium Determination in FGD Wastewater. *Dr Warren Corns - PS Analytical [United Kingdom]*
- Discussion

15:30 Lobby 2 – Coffee break

16:00 Session 4 – Coal and combustion

Chair: Jon Miller, Albemarle, USA

- UNEP-sponsored mercury studies of South African feed coals: A project update. *Allan Kolker - U.S. Geological Survey [United States]*
- Mercury and other trace metals in the gas from an oxy-combustion demonstration plant. *Peter Nelson - Macquarie University [Australia]*
- Breakthrough Technology in Coal Firing. *Mr. Mark Becker - ClearStack Power, LLC [United States]*
- Discussion

7-8pm Beach Poolside Lawn

Reception sponsored by ICL Industrial



DAY 2

Thursday. 24 April 2014

08:30 Lobby 2

Breakfast sponsored by Cabot Norit Activated Carbon



09:30 Session 5 – FGD and co-benefit issues

Chair: John Pavlish, EERC, USA

- Removal of mercury in wet FGD by desulphurisation products. *Ermira Begu - Jozef Stefan Institute [Slovenia]*
- Mercury control using FGF scrubbers: review of recent findings. *Dr Connie Senior - ADA-ES [US]*
- Improving Mercury Removal Efficiency by wFGDs. *Mr. John Meier - Nalco [US]*
- Discussion

10:50 Lobby 2 – Coffee break

11:20 Session 6 – Sorbents I

Chair: Eric Prestbo, Tekran, USA

- Mercury control with PAC in high sulphur and high temperature flue gas. *Jon Miller - Albemarle Corp [United States]*
- Capturing mechanisms of gaseous elemental mercury on sorbents. *Dr Ryo Yoshiie - Nagoya University [Japan]*
- Application of Non-carbon Mercury Sorbent in a Coal-fired Power Plant in China. *Dr. Yuqun ZHUO - Tsinghua University [China]*
- Discussion

12:30 Pool deck – Lunch sponsored by Ohio



14:00 Session 7 – Sorbents II

Chair: Allan Kolker, USGS, USA

- *Activated Carbon Injection Technology, Today and Tomorrow. William Krents - Cabot Norit Activated Carbon [United States]*
- *Guiding Principles for Coal-Fired Mercury Control: The State of the Art in Sorbent Applications. Sheila Glesmann - ADA Carbon Solutions [United States]*
- *Experimental Study on Mercury Removal with Sorbents Injection in Simulated Flue Gas and Coal-Fired Flue Gas Atmospheres. Mr. Yufeng Duan - Southeast University [China]*
- *Performance Advantages of Wood-Based Activated Carbon for Mercury Control. Erin Heupel - Biogenic Reagents [United States]*
- *Discussion*

15:30 Lobby 2 – Coffee Break

16:00 Session 8 – Sorbents and solid wastes

Chair: Doug Campbell, Nova Scotia Power, Canada

- *Regenerable sorbents for mercury capture from coal combustion gas. Dr Malgorzata Wiatros - Motyka - The University of Nottingham [United Kingdom]*
- *Novel methodologies for mercury removal in coal Combustors: (1) Injection of High Temperature nanostructured vanadium pentoxide (V2O5) and (2) mercury oxidation in an electrostatic precipitator enhanced with in-situ soft X-rays. Dr He Jing - Washington University in St. Louis [United States]*
- *Open discussion and end of meeting*

19:30 Beach

Gala dinner sponsored by Tekran



DAY 3 – MEC AND UNEP COAL PARTNERSHIP MEETING

Friday, 25 April 2014

08:30 Lobby 2
Breakfast sponsored by Albemarle



09:30 UNEP Coal Partnership update

Report from UNEP and the coal partnership on work to date and proposed new projects

10:30 Lobby 2 – Coffee break

11:00 Defining BAT/BEP under Minamata

Open discussion on the proposed format of the BAT/BEP guidance document being prepared by the WG in support of the convention. Comments and suggestions appreciated.

12:30 Pool deck
Lunch sponsored by IEA Clean Coal Centre



14:00 Case studies – format and peer review

A look at the template for case studies and a first look at any case studies produced to date. Open discussion of how best to continue with the gathering of case studies.

Discussion and initiation of a Steering Group to peer-review the case studies to be included in the BAT/BEP guidance document. Comments, suggestions and volunteers appreciated.

15:30 Lobby 2 – Coffee break

16:00 Next meeting and future plans