



# 11th Mercury emissions from coal and Energy efficiency workshops

GRT Grand Hotel , Chennai, Tamil Nadu, India

16 – 20 November 2015



## Monday, 16 November 2015

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09:00 – 09:15 **Session A – Welcome** (Marigold Hall)  
Welcome introduction to the meeting and to the Clean Coal Centre  
– Lesley Sloss

Opening remarks – Kenneth McBride, US Department of State

09:15 – 10:45 **Session B – CCC Reports on behalf of the US State Department**  
India – the balance of energy and emissions  
– Lesley Sloss

Open discussion in roundtable

10:45 – 11:15 **Coffee break** (Foyer)

11:15 – 12:30 **Session C – Efficiency in Indian coal-fired power-plants**  
Plant efficiency improvements in India – Colin Henderson  
Open discussion in roundtable

12:30 – 14:00 **Lunch in Restaurant**

14:00 – 15:30 **Session D – Tools for predicting and controlling emissions**  
Predicting emissions and control options for coal-fired plants – Steve Niksa  
Open discussion in roundtable

15:30 – 16:00 **Coffee break** (Foyer)

16:00 – 17:30 **Session E – Toolkit for monitoring emissions**  
Monitoring emissions – Wojciech Jozewicz  
Open discussion in roundtable

19:00 – 22:00 **Networking evening** (Marigold Room)

## Tuesday, 17 November 2015

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08:30 – 09:00 **Registration** (Marigold room)

09:00 – 09:30 **Session 1 – Welcome to India** (Marigold Hall)  
Welcome introduction to the meeting and to the Clean Coal Centre  
– Lesley Sloss

Welcome to India – Mr P Sivaprakasam

09:30 – 10:30 **Session 2 – The Challenge for India**  
The Indian Power Sector  
– Mr M Muthukrishnan, General Manager, Coal Research, BHEL, India  
Questions and open discussion

10:30 - 11:00 **Coffee break** (Foyer)

11:00 – 12:00

**Session 2 continued**

Mercury emissions from coal based power in India: issues and challenges  
– Mr Sanjeev Kumar Kanchan

Mass balance of trace elements at Indian coal based thermal power plant – Dr Satendra K JAIN

12:00 – 14:00

**Lunch in Restaurant**

14:00 – 15:00

**Session 3 – Emissions from coal combustion**

Results of investigations on mercury in Polish steam hard coals - the scale of potential environmental risks – Ireneusz PYKA

Estimating regional deposition and environmental impacts of mercury emissions from a coal power plant – Dr Asif Qureshi

15:00 – 15:30

**Coffee break (Foyer)**

15:30 – 17:30

**Session 3 continued**

Development of mercury material flow toolkit – Prof Hiroshi Moritomi

Predicting emissions and control options for coal-fired plants – Steve Niksa

Microwave assisted liquefaction of coals – Mr Rajasekhara Reddy Busigari

19:00 – 22:00

**Gala dinner (Marigold Room)**

## Wednesday, 18 November 2015

09:00 – 10:30

**Session 4 – Monitoring and measurement**

Continuous measurement of mercury emissions in combustion plants

– Ms Deborah Lynne Padwater

Measurement of mercury emissions from coal-fired power plant in Vietnam

– Dr Wojciech Jozewicz

Remarks on analytical challenges in mercury emission measurements in Polish energy sector – Prof Janusz Golas

10:30 – 11:00

**Coffee break**

11:00 – 12:00

**Session 4 continued**

Mercury thermospecies in coal

– Dr Nikolay Mashyanov

Continuous monitoring of mercury in a stack application – Salim Hiouel

12:00 – 14:00

**Lunch in Restaurant**

14:00 – 15:00

**Session 5 – Emissions control**

Advanced coal characterisation and mercury content in Indian coals

– Mrs Hema Latha Prabhakaran

Research on mercury emission and control during coal combustion in HUST-SKLCC – Dr Yongchun Zhao

15:00 – 15:30 **Coffee break (Foyer)**

15:30 – 17:30 **Session 5 continued**

Performance of hybrid filter for removal of mercury and fine particulates in a coal-fired power plant

– Prof Yong-Chil SEO

Climate forcing potential of mercury sorbents emitted into the atmosphere: Optical properties of fly ash and fly ash-activated carbon mixtures compared to combustion soot

– Dr Herek Clack

Mechanism research and pilot application on mercury control using new modified fly ash – Rui Zhao

## Thursday, 19 November 2015

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09:00 – 10:30 **Session 5 continued**

Stability of mercury in fly ash, gypsum, and bottom ash from coal power plants using a sequential extraction test

– Prof Yong-Chil SEO

Bromide technique for cost effective mercury abatement

– Mr Kasturirangan Kannah

Mercury and other major and trace elements in gypsum samples from WFGD plants of the coal burning power plants – Prof Dr Milena Horvat

10:30 – 11:00 **Coffee break (Foyer)**

11:00 – 12:00 **Session 5 continued**

The problem of mercury emission from burning coal waste dumps in Poland

– Ireneusz PYKA

Questions, discussion and close of MEC conference – Lesley Sloss

12:00 – 14:00 **Lunch in Restaurant**

14:00 – 15:00 **UNEP Coal Combustion Partnership Meeting**

15:00 – 15:30 **Coffee break (Foyer)**

15:30 – 17:30 **UNEP Coal Combustion Partnership Meeting**

## Friday, 20 November 2015

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08:00 – 14:30 **Site visit to local Indian coal-fired power plant – Hosted by BHEL**

The visit will be to the 600 MW North Chennai plant. The plant has a total installed capacity of 1830 MW (3x210 MW and 2x600 MW) and is near to the Ennore Port in Chennai, 30 km from the GRT Hotel.

08:00 **Leave hotel in bus** (Please have breakfast at the hotel before departing)

13:30 **Return to hotel**