Thermal Treatment of Municipal Waste
Monday 17 – Tuesday 18 September 2018

Provisional Programme

MONDAY 17 SEPTEMBER 2018

08.30 Registration and coffee

09.00 Introduction
Professor Paul Williams, University of Leeds
Introduction to the course. Review of the waste disposal options in the UK, the economic and environmental advantages and disadvantages, waste composition, types of thermal treatment, overview of thermal treatment technologies, pollution and energy recovery.

09.45 Emissions from incinerators
Professor Paul Williams, University of Leeds
Formation of solid, liquid and gaseous pollutants, dioxins, furans and polycyclic aromatic compounds, heavy metals, health hazards.

10.30 Coffee

10.45 Regulation of incineration plants under Environmental Permitting Regulations
Ben Freeman, Environment Agency
Regulation of incineration and other thermal treatment technologies by the Environment Agency under the Environmental Permitting Regulations regime. Including an overview of incineration processes, BAT and IED considerations.

11.30 Flue gas emissions control
John Wade, MVV Environment Limited
Flue gas clean-up systems to meet the Waste Incineration Directive emission requirements, including fabric filters, electrostatic precipitators, wet and dry scrubbers, combined and DeNOx systems.

12.30 Lunch

13.30 Sampling and analysis of emissions
Dr Brian Moyle, Servomex Group Ltd
Sampling and analysis systems for monitoring emissions from MSW incinerator and other waste thermal treatment technologies.

14.15 Operational aspects of incineration
Neil Brothers, Veolia
Practical, day to day issues of running an incinerator, covering economics, throughput technological problems, commissioning.

15.15 Tea

15.30 Large scale MSW treatment technologies
Dr Kevin Whiting, WSP
A review of currently used combustion technologies for the recovery of energy from MSW

16.30 CFD modelling of incinerators, gasifiers and pyrolysis
Gerard Carroll, Director, Ace Furnace Consulting Ltd
An overview of CFD and its use in modelling.

17.15 End of day one

19.00 Course Dinner
08.30 Coffee

08.45 Health effects of waste incineration
Dr Stephen Burnley, Department of Engineering and Innovation, The Open University
Review of literature relating to the health effects of waste incineration.

09.30 Pyrolysis and gasification of MSW
Dr Kevin Whiting, WSP
An overview of processes currently under development and an assessment of the commercial status of the technology.

10.30 Coffee

10.45 Energy recovery
Dr Kevin Whiting, WSP
A review of equipment used to recover energy from waste incineration, and an outline of the options and systems available for generating and using heat and power.

11.45 Opportunities for bottom ash recycling
David York, Ballast Phoenix Ltd
Getting the best from an Energy from Waste plant must include the processing and marketing of the IBA to get the best from this useful resource.

12.30 Lunch

13.30 Stakeholder and community consultation for energy from waste
John Twitchen, env23
How to conduct effective and meaningful pre-planning consultation for thermal treatment.

14.15 The option of solid recovered fuel/refuse derived fuel (SRF/RDF)
Stuart Hayward-Higham, SUEZ Recycling and Recovery UK

15.00 Tea

15.15 Thermal Technologies – procurement, markets and deliverability
Brian Mayne, Ricardo Energy & Environment
High level overview of the procurement process for thermal technologies, the current UK market and matters affecting deliverability.

16.00 Economic and commercial issues in waste management
Dr Egan Archer, Equitix
Comparative costs of landfill, incineration and other treatment technologies; impact of the landfill tax; the role of incineration in integrated waste management; the challenges of commercial development and financing.

16.45 End of course