

Wednesday, 1 September 2004, 14:15-17:15 — Salon International I-II

Workshop:
**BIOREACTOR LANDFILL vs. INDUSTRIAL ANAEROBIC DIGESTER
FOR MUNICIPAL SOLID WASTE (MSW)**

Chair: **Bruce E. Holbein, Eastern Power/SUBBOR Ltd., Canada**

Panel Members: **Morton Barlaz, North Carolina University, USA**
Hubert Bourque, CH4+3R Inc., Canada
Luc De Baere, Organic Waste Systems, Belgium
Murray Haight, University of Waterloo, Canada

14:15 – 14:20 Introduction (Bruce E. Holbein).



14:20 – 14:35 Current practice in North America (NA) vs. European Union (EU); comparative scales and economics of industrial anaerobic digester (AD) vs. landfill (Bruce E. Holbein).

14:35 – 14:50 Technical performance of bioreactor landfill (Morton Barlaz).

14:50 – 15:05 Landfill industry perspective, economic, sustainability, stakeholder aspects of bioreactor landfill (Hubert Bourque).

15:05 – 15:20 Technical and economic performance of AD – EU perspective primarily with comparison to NA (Luc De Baere).

15:20 – 15:35 Environmental aspects of landfill vs. AD: LCA basis, GHG emissions ... (Murray Haight).

15:35 – 16:00 Networking break

16:00 – 17:00 **Open Forum among audience and panel members.**

Example points for discussion/debate:

- Are bioreactor landfills as 'contained' as estimated/projected?
- What is overall degree of digestion for waste with landfill or AD?
- What are fugitive emission rates for volatiles over life of landfill (CH₄, other)?
- What are the fates of final solid residues; landfill and AD?
- Why are landfills considered economic only at large scale or large capacity/long life?
- What are the overall energy yields of landfill vs. in-vessel AD
- How would AD look at similar scale to landfill (e.g. 1000 tpd), i.e. economics?
- What about insuring contingent future liabilities of landfills; industry self-insuring?

17:00 – 17:15 Wrap-up