

Closed Landfill Management: Managing the Past and Present into the Future

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ready for the resource revolution



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Assessment**

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1993 HARWELL WASTE MANAGEMENT SYMPOSIUM

Options for Landfill Containment

PRE-PRINTS

Registration and Coffee

Introduction and Welcome to Delegates
Dr Terry Butland, Director, AEA Consultancy Services

MORNING SESSION

David Campbell, Environmental Safety Centre

Landfill Containment. The Policy Argument

Dr Peter Hinchliffe, Wastes Technical Division, Department of the Environment

Risk Assessment, Risk Management and Containment Landfill

Judith Petts, Hazardous Waste Management Group, Loughborough University of Technology

Managing Leachate

Terry Walker, National Rivers Authority, North West Region

Confined to Containment Or is There a Place for Engineered Leakage?

Dr Nick Blakey, Water Research Centre

DISCUSSION

LUNCH

AFTERNOON SESSION

Professor John Mather, Royal Holloway University of London

The Effectiveness of Liners in Inhibiting Landfill Gas Migration

Peter Parsons, Environmental Safety Centre

Engineered Design of Contained Landfills. An Overview

Andy Street, MRM Partnership

Containment from the Landfill Operators' Point of View

Ralph Keeble, Director, Gent Fairhead Environmental Services Ltd

TEA

Concentrate and Contain v Dilute and Attenuate: A Case Study

Robert Reid, Managing Director, County Environmental Services (Cornwall)

DISCUSSION

Concluding Remarks, Chair

Critical Factor Risk Assessment



- Moving from Operational to Post Operational Management
- Is this Higher Risk or Lower Risk?
- Short Term Environmental Protection and Long Term Risk Management
- What do we need to achieve?
- Do we have the right infrastructure?
- How have closed sites performed both pre and post LFD?
- Have we seen the end of active “landfill”?

Critical Factor Risk Assessment

- Scale of Risk
 - Global
 - National
 - Regional
 - Area
 - Local
 - Site Boundary
- Residual impacts are not new
- Context of past and future



The Effects of Old Landfill Sites on Groundwater Quality - Phase I

Goraghty & Miller International, Inc.

R&D Note 415

Further copies of this report are available from:



Foundation for Water Research, Allen House, The Lickers,
Lisson Rd, Merlow, Bucks SL7 1FD. Tel: 01428-891589, Fax: 01428-427211



Critical Factor Finance and Resource



- A common challenge to all
- Action or distraction with new initiatives
- Need to avoid duplication of effort
- Small changes or major industry implications
- The challenge of change and associated investment
- Our “greatest asset” is declining

Critical Factor Data and Information



- > 20 years of data across 100's of sites
- Technology enables data mining
- Ability to convert data to information is declining
- Industry working groups established
- Need to create a common language / understanding of the fundamentals

Managing Change and the Future Supporting the Debate



- Commitment to improved compliance
 - Industry leadership of standards / practices
 - Recognition of time on events, activities and pace of change
 - Recognition of need for controlled innovation / change
 - Recognition of constraints
-
- Development of meaningful strategic goals / aims
 - Realistic foresight, realistic hindsight

Observations / Conclusions



- Harwell 1993 ... LANDSS 2018 ... Aftercare 2043?
- “Do nothing” is not an option
- Learning from successes and failures
- Develop residual risk management strategies with common goals
- Zero risk can never be achieved
- Adaptation of management practices and legal interpretation
- Making the best of our resource. Management to reduce risk – reduce unnecessary cost.
- End game within 21st Century
- Watch for the “law of unintended consequences”?

A Common Direction on Travel?

What is our Destination of Choice? Left Turn? Right Turn? Straight On? Broken down on the Hard Shoulder? Or Just Round in Circles until we reach the year 2043?



Image c/o: Highways Agency/wikipedia