

Understanding the technical implications of developing and operating a landfill

Attend this two-day course and understand the challenges and how to handle the complexities associated with the **planning, design, operations and management of a landfill**.



Attend this course and learn about:

- The essential infrastructure in a landfill
- How to optimise airspace
- Good practice in landfill management
- How to manage risk
- What should be covered when scoping the design of a new site

Benefits include:

- Participation in an interactive workshop
- Various practical activities and discussions
- A comprehensive manual including internal audit templates
- 2 CPD credits (ECSA)

Presenter:

Ken Bromfield Pr Eng, Pr CPM

COURSE DATES & VENUES

Courses are offered based on demand. In-house and dedicated online courses are also available to suit individual company needs.

Please contact Lizéle du Preez for more information on upcoming courses: Lizelle@saicepdp.org / 011 476 4100

TIMES: 08:00 for 08:30 to 16:30

REGISTRATION

To register, visit www.candidateacademy.co.za
OR email Academy@saicepdp.org

WHO SHOULD ATTEND

This course is recommended for:

- Landfill managers and supervisors
- Environmental and financial managers in waste
- Employees responsible for daily landfill operation
- Engineers, technicians and technologists responsible for design or landfill oversight
- Waste Audit Committee members
- Anyone else interested in or involved in developing and operating a landfill

COURSE CONTENT

SESSION 0: LANDFILL 101

- Understanding waste
- Why landfills?
- Understanding the basic elements of a landfill

SESSION 1: WASTE MANAGEMENT HISTORY, LEGISLATION AND CLASSIFICATION

- Waste management history
- The South African context
- Engineered landfill sites
- RSA legislation
- Classification of waste and landfills

SESSION 2: CHOOSING THE WASTE DISPOSAL SYSTEM

- Waste disposal options

SESSION 3: MAXIMISING AIRSPACE

- What is airspace?
- Calculating airspace
- How to optimise airspace

SESSION 4: OUTSIDE AND AROUND A LANDFILL

- Site appearance and infrastructure
- Screening and landscaping
- Access routes and control
- Managing nuisances

SESSION 5: INSIDE A LANDFILL

- The Site Operational Plan
- Buildings and structures
- The weighbridge
- The laboratory
- Cells, cover and capping
- Machines, equipment and people
- Recycling
- Water balance
- Leachate and gas
- Managing nuisances
- Health and safety
- The Environmental Management Plan
- The Emergency Management Plan

SESSION 6: THE PRACTISE OF GOOD LANDFILL MANAGEMENT

- Acceptable wastes
- Staffing
- Access control
- Routing
- Recycling and salvaging
- Stormwater management
- Leachate management
- Landfill gas management
- Rehabilitation and landscaping
- Stakeholder engagement

SESSION 7: RISK MANAGEMENT, EMERGENCY MANAGEMENT PLAN AND CRISIS RESPONSE AND COMMUNICATION PLAN

- Determining and rating risks
- The Risk Management Plan
- Emergency and crisis response
- The Crisis Communication Plan

SESSION 8: TECHNICAL CONSIDERATIONS FOR SCOPING, DESIGNING AND LICENCING LANDFILLS

- Integrated planning
- Detailed site investigation
- Detailed design
- Containment barriers
- The leachate management system
- Gas control systems

ABOUT YOUR FACILITATOR

Ken Bromfield is a registered professional engineer with ECSA and a registered professional construction project manager with SACPCMP. He has had extensive experience in the waste management field, having managed various waste management companies and worked as a consultant on tailings and waste projects for several years.



The Candidate Academy's philosophy is to support candidates on their road to registration with ECSA and SACPCMP, by helping them through the transition from theoretical training to the 'how' of engineering projects and processes. The Academy offers practical, hands-on training relevant to experiences in the workplace.

**candidate
academy**
the road to registration – tower above the rest