



cooperative  
governance

Department:  
Cooperative Governance  
REPUBLIC OF SOUTH AFRICA

MUNICIPAL INFRASTRUCTURE  
SUPPORT AGENT (MISA)



MUNICIPAL INFRASTRUCTURE  
SUPPORT AGENT

Today, Creating a Better Tomorrow

CPD 2 credits (ECSA)

# Understanding the technical implications of developing and operating a landfill

The Municipal Infrastructure Support Agent (MISA) in partnership with SAICE Professional Development & Projects (SAICE-PDP) invites you to attend this 2-day course which covers the complexities associated with developing and operating 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 SCHEDULE

Venue: Online via Zoom

Dates: 10 – 11 February 2025

Time: 08:30 for 09:00 to 16:30

## REGISTRATION

To register, visit [www.saicepdp.org](http://www.saicepdp.org)

For more details contact Phathi Masimirembwa:

Email [phathi@saicepdp.org](mailto:phathi@saicepdp.org) / Tel: 011 476 4100

## WHO SHOULD ATTEND

The course helps attendees understand the complexities of landfill planning, design, operations and management, and is recommended for:

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

## COURSE OUTLINE

## WHAT TO BRING TO THE COURSE

### 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



SAICE-PDP's Municipal Academy was established to support practitioners employed in local government with applying theoretical knowledge and relevant legislation in practice.

municipal  
academy  
the road to service delivery



MISA's mandate is to provide technical support and advice to municipalities, whilst strengthening their capacity, for effective infrastructure planning, delivery, operations and maintenance.