CHAPTER 5. ENVIRONMENTAL MANAGEMENT

5.1 INTRODUCTION

Environmental matters are governed by the National Environmental Management Act (No. 107 of 1998) or NEMA. Section 24 of the Act details the processes required for implementation of actions and Section 28 the duty of care and the need to take reasonable measures to protect the environment.

The Act recognises the right of all inhabitants of South Africa to live in an environment that is not harmful to their health or well-being and to have the environment protected for the benefit of present and future generations. Accordingly, the Act expressly states that any person undertaking activities with the potential to damage the environment has a duty to take all reasonable measures to prevent such damage from occurring. It follows that all actions undertaken during road maintenance operations should be approached in an environmentally sound and sustainable manner.

In terms of both the National Environment Management Act and Environment Conservation Act (No. 73 of 1989) the term “environment” includes the natural environment (plants and animals) as well as the social environment (surrounding communities), and therefore consideration needs to be taken of both these aspects during maintenance activities.

On routine maintenance contracts, the aim is to ensure that the need to provide a safe, efficient road network is balanced against ensuring environmental protection in terms of the legislation. Thus maintenance actions, be these for road safety, preserving the road asset or aesthetic reasons, must take account of the need to protect the environment.

5.2 ENVIRONMENTAL MANAGEMENT PLAN (EMP)

The contract documentation normally includes an EMP which could be generic or contract-specific. The provisions of the EMP are binding on the Contractor during the life of a contract. The Plan normally includes:

- The identification of environmental aspects and impacts
- Construction activities and the Contractor's duties and responsibilities in terms of environmental management.
- Record keeping
- Compliance and penalties.
In terms of the generic EMP, the Contractor provides a Designated Environmental Officer (DEO) who is approved by the Engineer and should be suitably skilled and trained for the duties to be performed. The DEO is required to identify the environmental aspects and impacts of each construction activity and set out procedures for impact prevention or containment which must then be monitored.

The Site Management Team must be fully aware of the contents of the EMP and ensure that this is applied to the contract.

5.3 OTHER ENVIRONMENTAL INFORMATION

Other sections in the Manual contain information relating to environmental management. In particular, attention is drawn to:

- Chapter 10 Drainage
  Information is provided on stormwater management, drains and erosion control.
- Chapter 11 Geotechnical
  Information is provided on slope management and dealing with instabilities.
- Chapter 12 Road Reserve Management.
  Road reserve and environmental management go hand in hand, especially as outlined in the following paragraphs:

Paragraph 12.1 deals with litter collection.
Paragraph 12.4 deals with management of rest areas.
Paragraph 12.5 deals with control of vegetation in particular:
  - Invasive weed management
  - Protected plants
  - Grass cutting
  - Pruning of trees and shrubs
  - Burning of vegetation
Paragraph 12.6 deals with site disturbance
Paragraph 12.7 deals with the importation of soil.