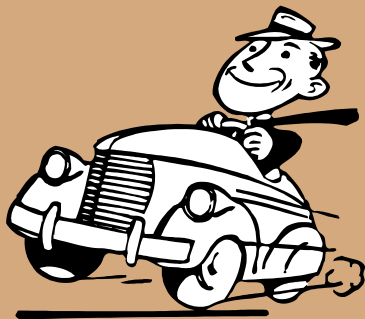




# **ROUTINE ROAD MAINTENANCE**

**Version 2008**



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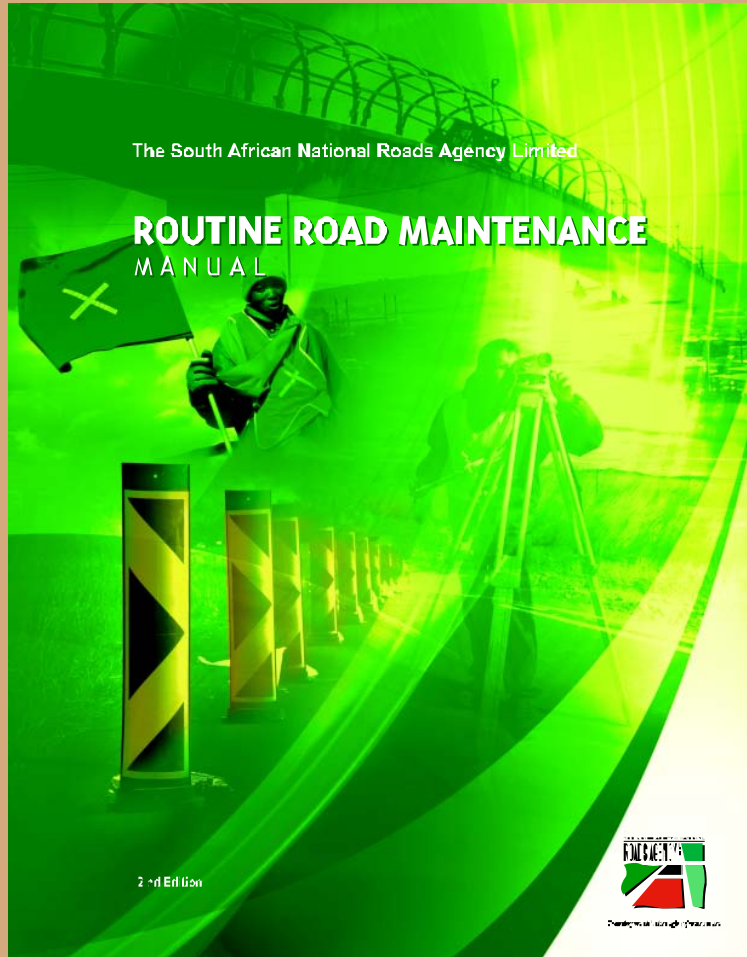
# APPENDICES: NEW VERSION (2008)



- A. TYPICAL CROSS SECTIONS AND ROAD NOMENCLATURE**
- B. EXTRACTS FROM CHAPTER 13, VOLUME 2 OF THE SOUTH AFRICAN ROAD TRAFFIC SIGNS MANUAL**
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- H. MAINTENANCE OF STRUCTURES**
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# CHAPTER 1: Introduction



- Intention of the Manual
- Other Manuals and Information



# CHAPTER 2: Road Management

- Management Duties and Inspections
- Pavement Information
- SANRAL's Management Strategy
- Contract Rates and Quantities
- Availability of Materials
- Maintenance of Problems
- Methods for Addressing Problem Areas
- Special Circumstances
- Capacity Building





# CHAPTER 3: Priorities



- Provide a safe and acceptable level of service for the travelling public
- Maintain the condition of the road such that maximum life is obtained from the road/asset preservation
- Ensure that the road environment is attractive (*aesthetically pleasing*)



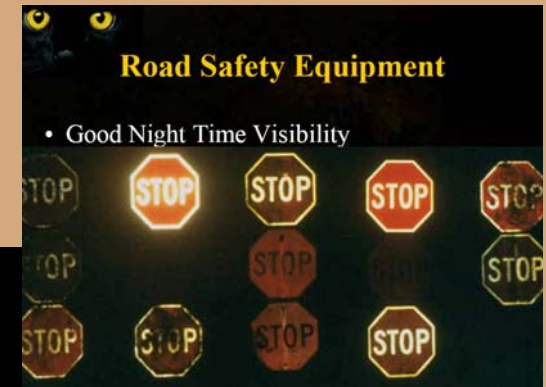




# CHAPTER 4: Road Safety



- Introduction
- Signs and Road Markings
- Hazardous Locations



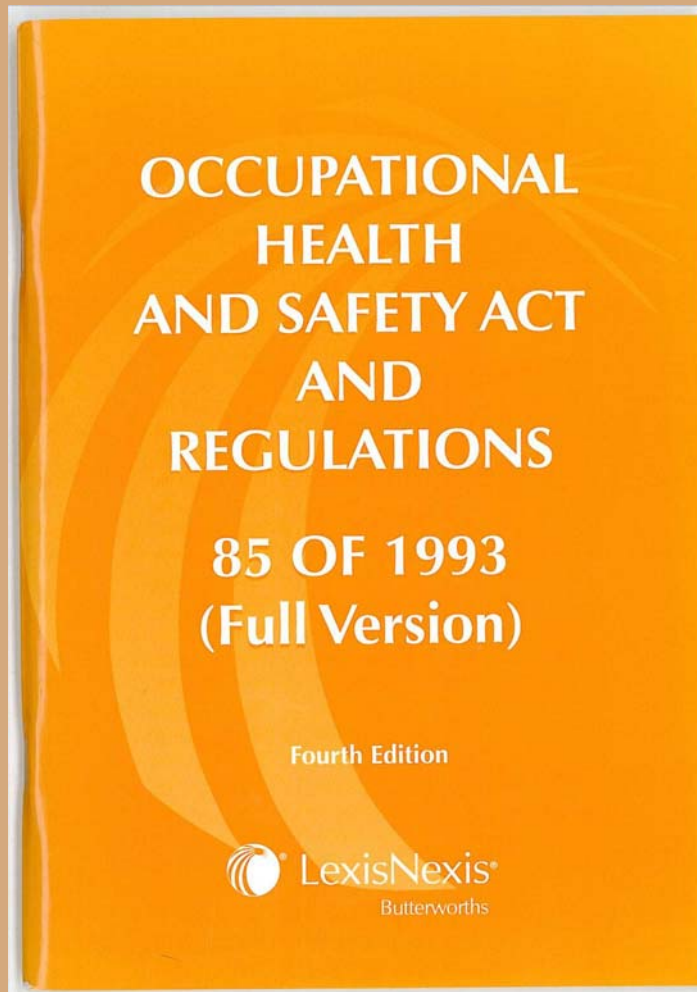
# CHAPTER 5: Environmental Management

- Introduction
- Environmental Management Plan (EMP)
- Other Environmental Information



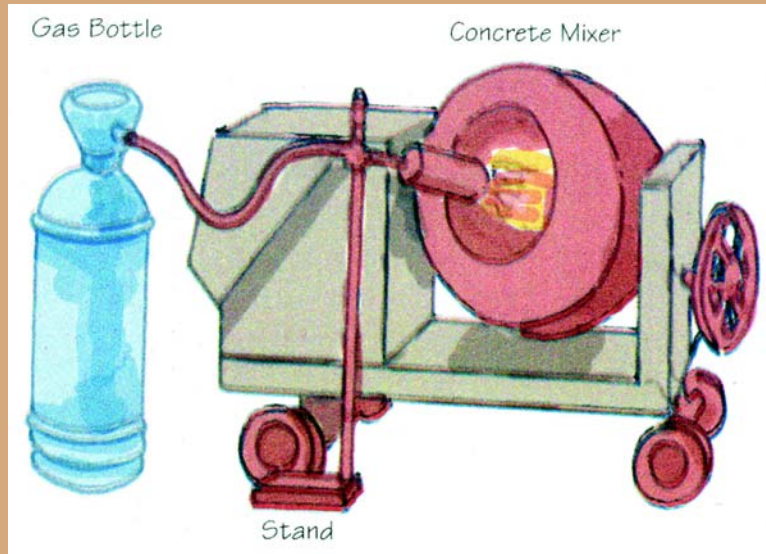


# CHAPTER 6: Occupational Health and Safety





# CHAPTER 7: Road Pavement Repairs - General



- Introduction
- Materials
- Asphalt Mixes and Mixing
- Equipment
- Repair of Road Failures







# CHAPTER 8: Road Pavement Repairs – Flexible Pavements



- Surfacing Failures
  - Description
  - Causes
  - Extent
  - Response Time
  - Repair
  - Caution
- Potholes
- Pavement Failures
- Cracks
- Pumping
- Deformation
- Texture
- Shoulders – surfaced
- Shoulders – gravel







# CHAPTER 9: Road Pavement Repairs – Rigid Pavements



- Introduction
- Loose/ Spalled Concrete
  - Description
  - Causes
  - Extent
  - Response Time
  - Repair
  - Caution
- Joints/ Open Cracks
- Weeds



# CHAPTER 10: Drainage



- Introduction
- Drainage Maintenance
- Erosion Control





# CHAPTER 11: Geotechnical and Slope Stability

- Introduction
- Slope Management System
- Response
- Soil/ Rock Problems





# CHAPTER 12: Road Reserve Management



- Introduction
- Litter
- Barriers
- Fencing
- Rest Areas
- Control of Vegetation
- Site Disturbance
- Importation of Materials
- Arrestor Beds





# CHAPTER 13: Maintenance of Structures



- Introduction
- Inventory of Structures
- Routine Maintenance Inspections
- Retaining Structure
- Gantries
- Graffiti







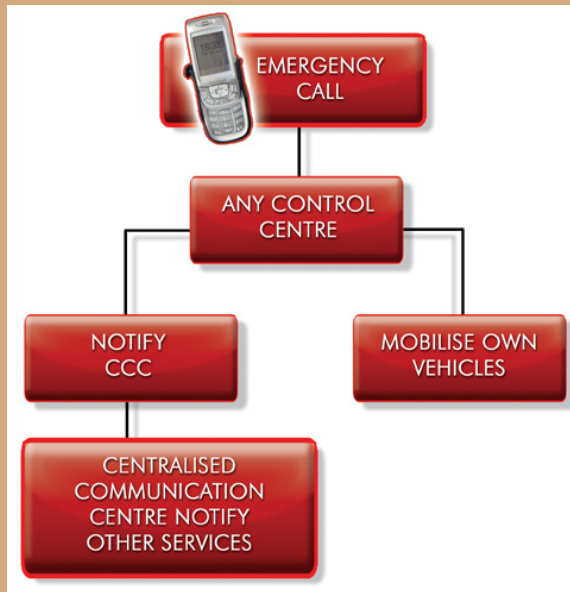
# CHAPTER 14: Statutory Control



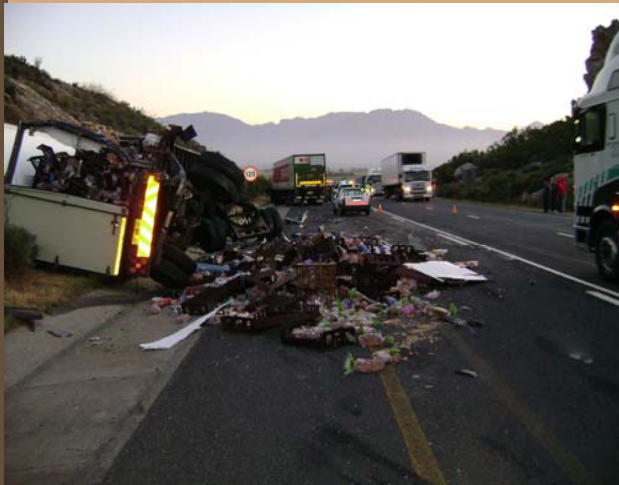
- Introduction
- Areas of Statutory Control



# CHAPTER 15: Incident Management Systems



- Introduction
- Incident Management Guideline Plan







# CHAPTER 16: Quality Control Systems



- Site Management Procedures
- Road Safety
- Material Control
- Financial Control







**THANK YOU**