

## FOREWORD

The recycling of sewage sludge for certain agricultural and other beneficial uses is one alternative to incineration, landfilling and ocean disposal practices that is receiving increasing attention. The potential benefits from recycling the soil-building and nutrient resources in sewage sludge by land application have been well demonstrated and have led to the utilisation of sludge in agriculture in many areas. Sludge management projects that recycle sewage sludge for agricultural use can, in many cases, be designed and operated to be both cost-effective and environmentally acceptable. This is especially true for small communities which have high quality sludge in terms of the lower concentrations of chemical pollutants, and are located in areas where adequate farmland is readily available.

However, public doubts and officials' concerns about adding potentially toxic substances and pathogens found in the sludge to productive farmlands must always be carefully considered. Therefore, land application of sewage sludge to agricultural lands must still be examined closely and controlled effectively for the protection of human and animal health, crop quality and future land productivity.

The Sewage Sludge Discussion Forum was formed to address and study this multidisciplinary field of waste-water treatment in relation to beneficial uses of sludge that originates from sewage treatment plants. The Forum which evolved out of the Sludge Management Division (SMD) of the Water Institute of Southern Africa (WISA), consisted of thirteen concerned groups, including four government departments, research institutions, university academics, local authorities and consultants. The objective of this Forum was to produce a practical and workable document based on current national and international research data and regulatory strategies, ensuring that it will be acceptable to all parties involved. The Departments of Water Affairs and Forestry, Agriculture and of Health will formally refer and implement this document via several permitting procedures under current and new regulations.

This first edition of the guide "Permissible Utilisation and Disposal of Sewage Sludge" is indeed an example of co-operative government and collaboration with the private sector. The Water Research Commission and the CSIR developed a complementary and unique Sludge Land Application Decision Support software, "SLADS", based on the guide, which will further enhance the responsible utilisation of sewage sludge. We would like to take this opportunity to express the hope and expectation that this guide will be widely used by treatment plant operators, water practitioners, engineers, farmers and health workers alike, to the benefit of all people in South Africa.

The guide is also a consultative publication, seeking comments from all concerned parties on the current criteria and approaches adopted, thereby ensuring the updating and improvement of the guide. Comments should be addressed to The Director Environmental Health, Department of Health, Private Bag X828, Pretoria 0001.



Dr N C Dlamini Zuma, MP

**MINISTER OF HEALTH**



Mr D A Hanekom, MP

**MINISTER OF AGRICULTURE AND LAND AFFAIRS**



Prof Kader Asmal, MP

**MINISTER OF WATER AFFAIRS AND FORESTRY**

