

Foreword

Being a water-scarce country, South Africa has to contend with surface waters concentrated in both natural and anthropogenic organic material. This is exacerbated by the fact that heavy thundershowers and flash floods result in high surface water turbidities during the summer months. In many catchment areas, low turbidity, eutrophic water is supplanted by high turbidity floods within minutes. Eutrophic conditions are frequently accompanied by turbidity. This, rather unwelcome, plethora of possible feed water qualities to take into account in the design of a water purification works, has caused many a designer considerable inconvenience in the past in terms of time, money and efficiency. Although excellent water works design textbooks are available internationally, these do not always cater for local conditions and requirements.

This textbook *Water Purification Works Design* is the proud product of a team of dedicated and talented engineers and water scientists in the South African water industry. It is the first true water purification design guideline to appear since the *Manual on Water Purification Technology*, which was produced by the CSIR in 1985. It is hoped that this guideline will not only be of some assistance to the designers of water purification works, but also to the designers-in-waiting, the water works operations personnel, and the many knowledge-hungry students of water purification technology and works design.

PE Odendaal
Executive Director
Water Research Commission

Dedication

To Dr G J Stander for his encouragement to the editor in this enterprise