

## **Minimal National Standards : Pharmaceutical Manufacturing and Formulation Industry**

### **Foreword**

Drug and Pharmaceutical Industry is engaged in manufacture of life-saving items. However, production of drugs is also associated with generation of pollutants in the effluents which pollute receiving water bodies if not adequately treated. In this publication, an attempt has been made to evolve the desired level of pollution control.

Minimal National Standards (MINAS) for effluent discharged from Drug and Pharmaceutical Industry have been developed taking due care that they would be achievable. The document also deals with characterisation of the wastewaters discharged by bulk pharmaceutical manufacturing and large formulation units, unit processes for treatment and performance of a few operating treatment plants.

It is hoped that the document would be useful to the industries, regulatory agencies, consultants and others interested in pollution control activities.

**Paritosh C. Tyagi**  
**Chairman, CPCB**