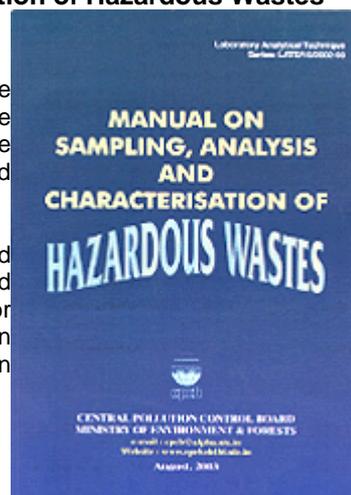


Manual on Sampling, Analysis and Characterisation of Hazardous Wastes Foreword

The hazardous wastes generated from industrial processes need to be properly treated and disposed to avoid contamination of soil, surface and ground water. For ascertaining the nature and extent of mitigative measures, the hazardous wastes are required to be analysed and characterised.

The Ministry of Environment & Forests, Govt. of India has promulgated the Hazardous Waste (Management & Handling) Rules, 1989 and subsequently, amended the Rules in January 2000. The major amendments to these Rules include classification of wastes based on processes & waste streams (industry sector-wise) and also based on concentration limits and characteristics of the wastes.



According to the schedule 4, one of the responsibilities of the Central Pollution Control Board (CPCB) is to recommend procedures for analysis and characterisation of hazardous wastes. Accordingly, CPCB has brought out a laboratory manual on "Analysis and Characterisation of Hazardous Wastes", through a collaborative project with Environment Protection Training and Research Institute (EPTRI), Hyderabad and with input from the State Pollution Control Boards (SPCBs) during the interaction meet-cum-training programme sponsored by CPCB at EPTRI. The manual contains aspects related to standard sampling procedures, analytical procedures for inorganic & organic parameters, methods for determining hazard characteristics of waste and listing of instruments required thereof.

My colleagues Sh. S.S. Pal, Scientist 'B', Dr. Inamul Haq, Senior Scientist and Shri N.K. Verma, Additional Director from Pollution Control Implementation Division and Shri V. Gangal, Scientist 'B', Shri A. Manoharan, Scientist 'C' and Dr. S.D. Makhijani, Additional Director from Laboratory Division were involved in evaluation and finalisation of the manual under the guidance of Dr. B. Sengupta, Member Secretary. Efforts of EPTRI, Hyderabad is acknowledged for organising the interaction meet and hands-on training programme.

We hope, this manual on "Analysis and Characterisation of Hazardous Waste" will be useful to the hazardous waste generators, operators of facilities, regulatory bodies and others involved in hazardous waste management activities.

Dilip Biswas
Chairman, CPCB