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Foreword

The main issues involved in drinking water safety are water quality management, surveillance and control mechanism. In order to safeguard the health of the people, drinking water must meet quality standards. Levels of physical, chemical and microbial contaminants have to be ascertained according to standard procedures.

Each agency involved in water supply in India has its own laboratory test practices. Considering the demand for a comprehensive manual by various water quality testing laboratories at Central, State, District, Block and Gram Panchayat levels, Guidance Manual for Drinking Water Quality Monitoring and Assessment was jointly prepared by USEPA, WHO, NICD and NEERI and other selected experts in October 2007. The manual includes the methods for physico-chemical, microbiological and biological parameters, which can be adopted by all laboratories. It outlines various aspects of organizational structure of laboratories, roles and responsibilities, staff management and training. The recommendations on organizational matters given in this manual are suggestive, with a view to easing the extensive water quality problems in the country. The manual was submitted to the experts for peer review and perusal. Comments and suggestions received from the various experts associated in this area were discussed in the workshop organized at NEERI Nagpur in June 2009 before incorporating in the revised edition of the manual.

The manual was updated by incorporating suggestions made by experts in the workshop and the latest developments in the field of drinking water quality monitoring and analysis methods. Analytical methods for some additional parameters and the method for the detection of MS2 bacteriophage are included in this revised edition of the manual. Efforts have been made to prepare a common laboratory guidance manual providing uniformity in laboratory techniques adopted by various laboratories and thus help to adhere to strict quality assurance practices. The revised manual will provide latest water quality monitoring and analysis methods to the water supply agencies in India for better precision and accuracy of the water quality data.

We also acknowledge with thanks the sponsorship and participation of WHO in the revision of the manual.

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