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WATER DISINFECTION

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PREFACE

The World Health Organization (WHO) and the United States Environmental Protection Agency (USEPA) have been working together for several decades in the area of environmental health. A product of this longstanding and fruitful relationship has been the series of *Guidelines for drinking water quality* put out by WHO.

The joint efforts of USEPA and the Pan American Health Organization (PAHO), the WHO Regional Office for the Americas, have also yielded productive results in the regional sphere. In the aftermath of Hurricane Mitch, in Central America, agreements were signed to upgrade, set up and accredit laboratories; evaluate water treatment plants and improve sources; and offer training in sanitary inspection, source protection and the promotion of plans to improve the quality of water for human consumption.

In 2001, the project “Improvement of the quality of drinking water in Central America” was launched with USEPA support under the direct execution of the Pan American Center for Sanitary Engineering and Environmental Sciences, PAHO/CEPIS. This project is broken down into six components that are being implemented in El Salvador, Honduras and Nicaragua: 1) Water quality surveillance and control programs; 2) Epidemiological studies linking health risks and waterborne diseases; 3) Water quality legislation and standards; 4) Analysis of the sanitary behavior of school children with regard to water quality; 5) Establishment of an electronic library and 6) Transfer of disinfection technologies and their implementation in the rural area.

The final component called for the preparation of a suitable tool to contribute to the desired transfer: a comprehensive manual that, while scientific, would also be realistic and attractive. What was sought was a document that would summarize the vast store of data available in similar works and present it didactically for the use of both engineers and technicians who seek concrete data and suggestions for implementing, operating and maintaining water disinfection systems in the treatment plants of medium-sized and small towns.

The efforts of sanitary engineers Felipe Solsona, PAHO/CEPIS regional advisor on water quality, and Juan Pablo Méndez, sanitation consultant in Peru, have produced the desired document. The scope, initially confined to the subregion, has been broadened to allow for its implementation under different local conditions. It is with great satisfaction that we make this work available to experts and organizations that are dedicated to producing drinking water, in the assurance that it will help to improve the quality of life and health of rural dwellers in developing countries.

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