

The Interstate Quarantine Regulations and the Public Health Service Drinking Water Standards were promulgated pursuant to such authorization. Under the Interstate and Foreign Quarantine Regulations, the Public Health Service is responsible for inspecting and certifying water supplies used by interstate and foreign public conveyances in the United States. Responsibility for certification of interstate water supplies involves sanitary engineering inspections and evaluations of approximately 780 public water supply systems serving some 92,000,000 local populace and over 2,000,000 interstate travelers daily. To assure compliance with the Public Health Service Drinking Water Standards surveys are made by our personnel in company with personnel of State health departments and local water purveyors of the source, treatment processes, storage, distribution system, and supporting laboratory services.

While the Drinking Water Standards were created to apply to water supplies used by interstate carriers they have also been generally used by State water supply sanitation agencies and by the American Water Works Association as the standards for other water supply systems.

With the enactment of the Water Quality Act of 1965 the Federal Water Pollution Control Act was amended to create within the Department of Health, Education, and Welfare the Federal Water Pollution Control Administration. Reorganization Plan No. 2 of 1966 transferred the Federal Water Pollution Control Administration from the Department of Health, Education, and Welfare to the Department of the Interior. Under the terms of the transfer, the Department of Health, Education, and Welfare retained the responsibility for advising the Department of the Interior on the public health aspects of water pollution.

An interdepartment agreement of September 1966 between the Department of the Interior and HEW, following the transfer, defined HEW responsibilities in the following broad areas: 1) public health aspects of water pollution related to man's drinking water; 2) man's contact with water in recreation and work; 3) contamination of food sources, particularly shellfish; and 4) to the breeding of specific vectors of disease.

In fulfillment of the Department of Health, Education, and Welfare responsibility for implementing this agreement between the two agencies, the Public Health Service where requested to do so has reviewed and commented on those State water quality standards as related to pollution control, submitted to the Department of the Interior before June 30, 1967. Such water quality standards proposals from 36 States have been reviewed by PHS field offices and comments have been made on the adequacy of these standards to protect drinking water supplies as well as waters to be used for water contact sports or shellfish production. Twelve States are now under review and two have not yet been received.

The Public Health Service has under preparation Health Guidelines for Water Quality as related to pollution control, in the following areas: Water to be used for Domestic Purposes and Food Processing; Recreation Use; Estuarial Waters and Vector Control. These guidelines are under intensive review by the Public Health Service and will be furnished to the Department of the Interior as soon as they are finally approved.

While the Public Health Service Drinking Water Standards and the proposed new Health Guidelines represent the best current knowledge in protecting the water and shellfish consumers from communicable disease or illness, we know that health aspects associated with pollution of water in relation to the various users are numerous, complex, and certainly to date have not been adequately studied. Technological progress continually creates new contaminants that must be evaluated. Restrictive limits for many of the new materials or for the existing low-level chemical contaminants found in drinking water supplies are, however, difficult to establish because of the gap in knowledge regarding acute and chronic physiological effects on humans. In some cases the analytical procedures and treatment technology need improvement.

Of equal concern is the need to determine whether or not the barriers guarding against biological contamination of drinking water supplies are being strained to the breaking point. To what degree time-tested supply safeguards and safety factors have been reduced to dangerous levels poses a vital question. Little is actually known of quantitative procedures for isolating pathogens from water, and of the infectious dose of many pathogens that reach our water intakes. Current extensive experimentation with, and the eventual need for, waste water re-use with resultant increase of biological hazards as well as build-up of chemi-