The Auditor State of Hawaii

OVERVIEW

Audit of the Department of Health's Oversight of Public Water Systems

Report No. 00-15, November 2000

Summary

The Department of Health is designated as the state agency with overall responsibility for ensuring that the public is provided safe drinking water. The federal Safe Drinking Water Act of 1974 required all public water systems to meet national standards that would protect consumers from harmful contaminants in drinking water. A public water system provides drinking water to at least 25 people or serves 15 or more service connections for at least 60 days per year. Under federal law, a public water system may be publicly or privately owned. As of February 2000, there were 134 public water systems in Hawaii. Public water systems treat source water if necessary, to ensure that contaminants in tap water do not exceed federal or state standards.

The Safe Drinking Water Branch of the Department of Health maintains a program of statewide public water system supervision that includes surveillance, monitoring, technical assistance, engineering review, and enforcement. During FY1998-99, the branch was appropriated 38 positions. The branch coordinates statewide water sampling between staff of water systems on neighbor islands and Oahu and the department's State Laboratories Division. The five-member Board of Certification of Operating Personnel in Water Treatment Plants, placed in the department for administrative purposes, is responsible for ensuring that qualified individuals operate the treatment plants.

Our audit was limited to assessing the department's activities related to drinking water that is distributed by public water systems (either publicly or privately owned) for human consumption. We did not assess the department's efforts with regard to ground water protection.

We found that overall, the Department of Health has effectively monitored public water systems to ensure that safe drinking water is distributed to the public. However, further improvements would enhance the State's safe drinking water program.

Our review of the department's monitoring efforts included calendar year 1999 chemical and microbiological monitoring requirements for 29 randomly selected public water systems on Oahu, Hawaii, Maui, Kauai, and Molokai. We found that all *chemical* monitoring requirements were satisfied for the 29 systems. However, one water system collected fewer coliform (*microbiological*) samples than required. We also found that the department, through the Board of Certification of Operating Personnel in Water Treatment Plants, has adequately managed its certification program.

We found that chain of custody and sampling procedures require clarification to ensure the full integrity of all water samples collected by the Safe Drinking Water

Report No. 00-15 November 2000

Branch and public water systems. We also found that sanitary surveys performed by the branch have not been timely, and follow-up on survey recommendations is uneven. (Sanitary surveys are onsite reviews of water systems to evaluate the adequacy of their sources, facilities, equipment, operation, and maintenance for producing and distributing safe drinking water.) In addition, we found that the branch's inadequate data management system causes inefficiencies.

We also found that microbiological violations are effectively addressed, and that the department has ensured that Hawaii consumers are informed of safe drinking water violations. Enforcement actions against "significant noncompliers"—violators who pose the greatest risk to health—are appropriate but sometimes untimely.

Moreover, we found that available resources have not been maximized. A new loan program to assist public water systems in protecting safe drinking water under federal grants from the Environmental Protection Agency has had a slow start. Also, "set-aside" moneys available to the department from the loan fund are underutilized. Finally, inadequate staffing levels of the loan fund program have hampered progress.

Recommendations and Response

We made a number of recommendations designed to address our findings in the areas of monitoring, certification, violations, enforcement, and maximizing resources.

Responding to a draft of our report, the Department of Health commented that it generally concurred with our conclusions and recommendations. It said that the Safe Drinking Water Branch was in agreement with and committed to implementing our recommendations pertaining to: improving sample security, executing timely enforcement, implementing a usable data management system, increasing the number of sanitary surveys conducted, and making effective use of available resources. The department offered additional comments in the interest of accuracy and clarity.