

STATE OF LOUISIANA DEPARTMENT OF HEALTH AND HOSPITALS



September 30, 2002

ON THE EFFICACY AND PROGRESS OF THE CAPACITY DEVELOPMENT STRATEGY FOR DRINKING WATER SYSTEMS IN THE STATE OF LOUISIANA Department of



STATE OF LOUISIANA DEPARTMENT OF HEALTH AND HOSPITALS



September 30, 2002

The Honorable M. J. "Mike" Foster, Jr. Governor, State of Louisiana P.O. Box 94004

Baton Rouge, LA 70804-9004

Dear Governor,

I am pleased to submit to you the enclosed "Report on the Efficacy and Progress of the Capacity Development Strategy for Drinking Water Systems in the State of Louisiana", dated September 30, 2002. Submission of this report is a requirement of the Federal Safe Drinking Water Act as amended in 1996; further, we are required to make the report available to the public. Accordingly, we have made arrangements for the report, once approved, to be listed on the Louisiana Office of Public Health website home page at: www.oph.dhh.state.la.us in the OPH reports section, and on the Drinking Water Revolving Loan Fund home page.

Sincerely,

Original signed by Sec. David Hood David W. Hood Secretary

DWH:MS:blg

cc: Jenny Bielanski, US EPA Washington

David Reazin, US EPA Region 6

Madeline McAndrew, OPH Assistant Secretary

Bobby Savoie, OPH Director of Environmental Health Services

REPORT ON THE EFFICACY AND PROGRESS OF THE CAPACITY DEVELOPMENT STRATEGY FOR DRINKING WATER SYSTEMS IN THE STATE OF LOUISIANA

I. INTRODUCTION

The 1996 amendments to the Safe Drinking Water Act (SDWA) added a new dimension to federal/state drinking water legislation. It authorized annual federal grant money to the states for creation of a low interest loan program to public water systems that qualify. It also made provisions for a percentage of that grant money to be set aside to assist water systems in improving their technical, financial, or managerial operations. In accordance with the latter provisions, Louisiana, along with all other states, devised a Capacity Development Program and began implementing it for new water systems in January 1999, and for existing water systems in October 2000.

This report to the Governor of the State of Louisiana is submitted as a statutory requirement of the SDWA Amendments of 1996. As cited in Section 1420(c)(3) of the Act: "REPORT – not later than 2 years after the date on which a State first adopts a Capacity Development Strategy under the subsection, and every 3 years thereafter, the head of the state agency that has primary responsibility to carry out this title in the State shall submit to the Governor a report that shall also be available to the public on the efficacy of the strategy and progress made toward improving the technical, managerial, and financial capacity of public water systems in the State." It is further stipulated in Section 1420 that failure to submit this report by September 30, 2002, will result in a twenty percent Drinking Water State Revolving Fund grant withholding in fiscal year 2003.

Although this report is submitted as a statutory requirement, the intrinsic value of the report is the opportunity to present to the Governor and the public a comprehensive evaluation of the Drinking Water Capacity Development Program in Louisiana. Since all organizational and functional elements of the Louisiana Safe Drinking Water Program are housed in the Department of Health and Hospitals, Office of Public Health, Center For Environmental Health Services, this report is respectfully submitted by that agency to the Governor of Louisiana this September 30, 2002.

II. BACKGROUND

- A. One of the provisions of the Safe Drinking Water Act Amendments of 1996 created a new Section 1420 titled "Capacity Development". This provision called for the State to obtain legal authority to ensure that all new community water systems and new non-transient, non-community water systems commencing operation after October 1, 1999, demonstrate technical, managerial, and financial capacity to meet National Primary Drinking Water Regulations. A State will receive only 80% of the federal grant allotment that the State is otherwise entitled to receive for the Drinking Water Revolving Loan Fund (DWRLF) unless the State has obtained such legal authority.
- B. Section 1420 further requires the State to develop and implement a Capacity Development Strategy to assist public water systems in acquiring and maintaining technical, financial, and managerial capacity. Failure to develop and implement s strategy will also result in withholding a portion of federal grant money for the DWRLF. Withholding for all Capacity Development purposes is capped at 20% total.

III. LOUISIANA'S AUTHORITY

- A. In response to the requirement for legal authority stated in II-A above, Act 814 of the 1997 Regular Session of the Louisiana Legislature, R.S. 40:4(a)(8) and 5.8, was enacted. It authorizes the State Health Officer to "prepare and promulgate rules and regulations necessary to develop and implement a Capacity Development Strategy----".
- B. With the above-cited authority, the Office of Public Health proceeded with rulemaking, and the Public Water System Capacity Development Rule (LAC 48:7707-7719) became effective September 20, 1998. This rule enabled the development and implementation of a Capacity Development Strategy which had been stipulated as required (II-B above) and has been approved by EPA.

IV. <u>SIGNIFICANT HISTORY</u>

When Congress included Capacity Development requirements in the SDWA Amendments of 1996, it provided a list of factors to be considered and included as appropriate, but generally allowed wide latitude for the states to develop their individual strategies. Though EPA issued guidance, had meetings, and sponsored workshops on Capacity Development, there was (predictably so) a wide diversity of approaches for the Capacity Development Programs among the States. Some were simple, others more complex;

ultimately, many have been revised because of what may be generally summarized as unrealistic approaches or goals.

In Louisiana, the Office of Public Health proceeded to produce a Capacity Development Strategy for <u>new</u> water systems. It was approved by EPA and began implementation in January 1999. The new system strategy ensures that, prior to commencing operations, the system has the technical, managerial, and financial capacity to properly operate the water system. The approval process for new systems includes several elements:

- 1. Review and approval of plans and specifications for the water system by an OPH registered professional engineer
- 2. Review and approval of a Business Plan compiled according to OPH-issued guidelines
- 3. System conformance with applicable operator certification requirements
- 4. System management personnel attendance at state-sponsored management training
- 5. A financial audit conducted by OPH staff to determine if the system meets financial capacity requirements
- 6. Technical assistance provided as necessary to assist the system in meeting Capacity Development requirements

Subsequently, OPH developed and adopted a Capacity Development Strategy for existing water systems, including a prioritization rationale for selecting the systems to be assessed. This prioritization rationale is based upon the systems' past compliance record with regulations. As in the Capacity Development Strategy for New Public Water Systems, a very comprehensive Business Plan was one of the required submissions by the system. The Business Plan, in conjunction with sanitary surveys, mandatory management training, and provision of technical assistance by staff and contract personnel, provided the essential elements of the existing systems Capacity Development Strategy. As required by the SDWA, Louisiana's Capacity Development Program for existing systems began in October 2000.

After several months into the existing system program, areas for improvement were identified. The Office of Public Health addressed those areas through a revision of the Capacity Development Program for existing systems. This was accomplished through rulemaking and the design and use of a "shortened and simplified" Business Plan (for existing systems). Procedural changes regarding interacting with other agencies were also made. The shorter/simpler business plan has now taken the form of a Capacity Assessment Package (CAP) for existing public water systems. It was developed over the next several months after the legislation was passed, along with new operating procedures for the OPH Capacity Development Program for existing systems. The revised concept and

procedures were coordinated with stakeholder agencies, including USEPA, and have been accepted enthusiastically. They have also been presented at EPA/State Capacity Development meetings.

Changeover from the old business plan to the new capacity assessment methods has been effected during calendar year 2002, and has been well received by the water systems which have been selected for Capacity Development.

V. <u>PERSPECTIVE</u>

The foregoing background and significant history represents what the Office of Public Health has done toward the establishment and implementation of a formal Capacity Development Program in response to the SDWA Amendments of 1996, utilizing specified set-aside monies from the federal grant for the Louisiana Drinking Water Revolving Loan Fund. It is important to note, however, that these recently initiated Capacity Development activities, however significant, represent only a part of the total Capacity Development efforts which are part of the Office of Public Health Safe Drinking Water Program. Therefore, in making this report on the efficacy and progress of the capacity development strategy for drinking water systems in the State of Louisiana, the following summaries are presented as individual reports on other recognized capacity development elements of the Safe Drinking Water Program in Louisiana.

VI. <u>REPORT</u>

A. Sanitary Surveys

Sanitary Survey means an onsite review of the water source, facilities, equipment, operation and maintenance of a public water system for the purpose of evaluating the adequacy of such source, facilities, equipment, operation and maintenance for producing and distributing safe drinking water.

Current regulations require that a sanitary survey be performed on every water system at least every 3 years. The Office of Public Health has been routinely scheduling and performing this traditional assessment method through its regional offices for decades. Sanitary surveys are also performed in conjunction with enforcement actions as described in VI B below, and with the capacity assessment process described in IV, preceding. Following the survey, a letter summarizing the violations of the Louisiana Sanitary Code and prescribing required corrective actions is sent to the water system. Follow-up on corrective actions is performed by regional offices. The sanitary survey report format has recently undergone

revision and expansion to make it even more comprehensive for today's needs.

In 2001, a total of 836 sanitary surveys were performed for routine, enforcement, and capacity assessment purposes.

B. Enforcement

Although Louisiana has had primary enforcement responsibility for SDWA provisions since 1977, it was not until 1991 that ACT 537 (LSA-R.S.40:5.8 and 5.9) was passed giving the State Health Officer authority to issue administrative orders to public water systems, to provide for penalties for violations of administrative orders issued by the State Health Officer, and to provide recourse through civil actions. Rules to implement this authority became final in 1992.

This authority, together with the creation of an enforcement unit at that time, gave the Office of Public Health the long-needed tools to help bring systems with violations into compliance. Since 1992, approximately 354 Administrative Orders have been issued. Of these, approximately 214 have been released, with another 40 being processed for release. The important trend is that the number of Administrative Orders issued continues to decrease from highs of 63 in 1995 and 82 in 1996 to present levels of 6, 18, and 10 in 2000, 2001, and 2002, respectively. Correspondingly, bacteriological violations from monthly sampling of all 1820 (approximately) water systems in Louisiana have been on the decline from a high of 416 in 1994 to just over 200 in the last two years (2000 and 2001).

Enforcement activities have been augmented since 1992 by a program which has been titled the Louisiana Compliance Initiative. The program is directed toward water systems which have been issued an Administrative Order and toward others which have had violations potentially leading to an Administrative Order. The Louisiana Compliance Initiative provides specialized compliance training schools and on-site technical assistance visits by an experienced field technician. This on-site technical assistance which has been given to systems having first-time bacteriological violations is regarded as a primary contributor to the previously cited reduction in bacteriological violations.

It is interesting to note that the format of the Louisiana Compliance Initiative Program, initially piloted in 1992 for systems having an Administrative Order, bears a strong resemblance to today's capacity assessment process outlined in the last paragraphs of IV above.

C. Operator Certification

Water system operator certification requirements have been in effect in Louisiana since 1972, which was prior to the Safe Drinking Water Act of 1974. However, recently enacted federal and state legislation have resulted in stricter educational and training requirements for operators of all water systems in Louisiana. The result is a greatly increased need for new operators and a temporary suspension of hundreds of current operator certifications for lack of adequate training.

The lack of a properly trained and certified operator is considered to be a significant contributing factor to compliance problems, particularly with small systems. Consequently, operator certification is always addressed in the various capacity assessment processes. More and new operator training programs are currently in development.

To meet the expanding need for operator training, the Louisiana Department of Health and Hospitals plans to train and certify 2,000 operators in the next year for very small drinking water systems, and has applied for a federal grant to administer a training expense reimbursement program for operators.

D. Technical Assistance and Training

Set-aside monies from the Drinking Water Revolving Loan Fund Program are utilized to contract with Technical Assistance Providers for water system Capacity Development purposes. The Office of Public Health presently has contracts with Louisiana Rural Water Association and Community Resource Group, two non-profit organizations whose purpose is to provide assistance to rural and small communities' water and wastewater systems. These contractors provide on-site assistance to water systems throughout the assessment process, including help in technical, financial, and management matters. This assistance is in addition to that provided by Louisiana Rural Water Association under the Louisiana Compliance Initiative Program (described in VI B, above). The Louisiana Compliance Initiative also includes periodic one-day training sessions which are specially designed for the types of violations incurred by the attending systems. The Office of Public Health staff also provides 3 twoday training sessions annually for very small water systems. This program targets systems under 500 population, such as mobile home parks, subdivisions, etc.

E. Area-Wide Optimization Program

The goal of the program is to optimize the efficiency of particle removal at existing surface water treatment plants for the purpose of maximizing public health protection from waterborne diseases caused by microbial contaminants. This program, under EPA advocacy, has been in development since the mid 90's, with Louisiana having been prominent in the pilot program and in continuing efforts to date.

One of the most important components of the Area-Wide Optimization Program process is the Comprehensive Performance Evaluation. The evaluation consists of an in-depth investigation and assessment of the unit treatment process capabilities and the impact which the design, operation, maintenance, and administration practices have on performance of the facility. Thirty evaluations have been conducted at surface water plants in Louisiana since 1995.

The next major component of the Area-Wide Optimization Program is to provide comprehensive technical assistance. Office of Public Health personnel are presently participating in this component through provision of Performance-Based Training, utilizing group classroom and on-site training over a 12-15 month period of time. After the training is completed, an assessment of the effectiveness of the Area-Wide Optimization Program on individual plants will be made.

Louisiana is a state which has 84 water systems utilizing surface water. These systems serve in excess of 2 million people (nearly half the State's population). Success of the Area-Wide Optimization Program will therefore constitute a major stride in providing safe drinking water to the people of Louisiana.

F. Regionalization

Regionalization of water systems continues to be a program objective. In Louisiana there is no law which mandates regionalization, but stricter Capacity Development requirements for new systems has been effective in directing the attention of potential new small systems toward the advantages of consolidation with another water system. Also, existing systems which are having difficulties are encouraged and assisted in merging with another system.

G. Management Training

Eight management training sessions are rotated around the State each year. These are tailored specifically for water system management, and are available to responsible management personnel of all water system sizes. There have been 1,721 attendees at management training sessions since it was started in 1999. In addition, state-approved management training is also provided to management personnel of individual water systems by Technical Assistance Providers who are qualified trainers.

VII. REPORT AVAILABILITY

This report will be displayed on the Louisiana Office of Public Health website home page at: www.oph.dhh.state.la.us in the OPH Reports Section, and at: www.oph.dhh/dwrlf/index.html.

It is also available for copying and public viewing at the Office of Public Health, Center for Environmental Health Services, 6867 Bluebonnet Blvd., Baton Rouge, LA 70821-0629.