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September 2, 2014

Honorable Robert J. Bentley
Governor of the State of Alabama
State Capitol, 600 Dexter Avenue
Montgomery, Alabama 36130

Re: Triennial Capacity Development Report

Dear Governor Bentley:

Enclosed is the triennial report on Alabama's Capacity Development program as required by the Federal Safe Drinking Water Act. The report summarizes ADEM's progress toward improving the capacity development capabilities of the state's public water systems.

Capacity development is an essential element in ensuring all public water systems have sufficient resources to provide safe drinking water and to maintain adequate service for their customers. ADEM's Capacity Development strategy includes assisting viable public water systems in maintaining technical, managerial and financial capacity and encouraging the consolidation of non-viable public water systems with other viable public water systems. Implementation of the state's Capacity Development strategy has resulted in the overall improvement of the state's public water systems, including very high compliance rates.

Outreach and education is provided by the ADEM Drinking Water Branch staff and through contracts with various non-profit organizations that work directly with water systems to provide "hands on" assistance, such as the Alabama Rural Water Association. Development of viable systems has also been accomplished through the ADEM's cooperation with the USDA Rural Development Agency and the Alabama Department of Economic and Community Affairs (two agencies that provide funding for most of the water system facilities in Alabama).

The enclosed triennial report contains information detailing the efforts of the state's public drinking water program to address the federal capacity development requirements. This is just one of a variety of environmental programs dedicated to ensuring the protection of the environment and public health of the citizens of Alabama. Should you or your staff have questions regarding this report, please do not hesitate to contact me or Drinking Water Branch Chief Dennis Harrison at 334-271-7774.

Sincerely,

Lance R. LeFleur
Director

Enclosure

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Alabama's 2014 Triennial Capacity Development Report

In accordance with Section 14-20(b)(2) of the Safe Drinking Water Act, the following Capacity Development Report summarizes Alabama's efforts to address the capacity development capabilities of the state's public drinking water systems, both new and existing, through FY 2014.

The Drinking Water Program in Alabama has a long history of working with the state's public drinking water systems to improve overall operation. Despite these efforts, some systems continue to have difficulties maintaining compliance with State and Federal regulations. In most cases, non-viable water systems are those systems with insufficient resources to maintain adequate service to their customers and/or to comply with State and Federal requirements. When necessary, ADEM has encouraged the consolidation of these non-viable water systems with other viable water systems. Alabama realized long ago that a water system with inadequate resources will have difficulty meeting its obligations. EPA has reached the same conclusion, resulting in Federal requirements that all states develop criteria to evaluate a water system's capacity development capabilities.

For existing water systems, Alabama meets the Federal capacity development requirements by evaluating a non-compliant water system's technical, managerial and financial capabilities. The ultimate goal is to either improve the system's operation or to inactivate the system (i.e., merge the system into another viable system). All water systems are inspected every three years. When problems arise, additional inspections are conducted to evaluate viability of the system. Assessing the technical and operational capability of water systems on a regular basis, identifying potential problems, providing assistance and conducting follow-up inspections are the first steps in a chain of events that ultimately leads to either improving the operation or inactivation of marginally maintained water systems.

The same criteria are also used when evaluating the capacity development capabilities of proposed new water systems. Preliminary engineering reports for new water systems must be submitted by the proposed system's engineer for review and concurrence by ADEM. These reports must address and confirm the proposed system's technical, managerial, and financial ability to provide and sustain adequate service to its customers. Those facilities that cannot demonstrate this capability are denied issuance of a permit.

As a result of this approach, the number of non-viable water systems in Alabama continues to decrease. Since the last triennial report in 2011, a total of seventeen public drinking water systems in Alabama have been inactivated. Ten of these inactivated systems were community water systems and seven were non-community water systems.

The EPA's Office of Enforcement and Compliance Assistance (OECA) released the Drinking Water Enforcement Response Policy (ERP) in December 2009. The new enforcement approach replaces the existing contaminant-by-contaminant compliance strategy, often referred to as "Significant Non-Compliance" (SNC), with a system-wide approach using the Enforcement Targeting Tool (ETT). The ETT assigns a point value to specific violations for each system to bring attention to drinking water systems with the most serious and unaddressed violations. If a

water system exceeds a score of 11 on the ETT, they are considered a priority system for enforcement response and the state is required to take formal enforcement action within 2 quarters unless the system returns to compliance. Seventeen of Alabama's public drinking water systems have exceeded 11 on the ETT since the 2011 triennial report; this is a significant improvement from 31 systems exceeding 11 on the ETT three years ago. Sixteen of these compliance issues were related to disinfection byproducts, which is also an improvement from 24 systems in the 2011 report. Seven water systems did not meet the state's sampling and monitoring requirements. Only three of these systems remain above 11 on the ETT. However, all of these systems have returned to compliance or the violation has been addressed through formal enforcement action. Alabama's capacity development program assures better water quality, improves customer service and increases revenues, thus allowing expansion of services to customers needing (or desiring) public water. It is important to note that the reduction in the number of non-viable water systems has not curtailed the expansion of water service.

Over the last three years, ADEM has worked with the Alabama Rural Water Association (ARWA) to evaluate the technical, managerial, and financial capabilities of 22 of the state's public drinking water systems. Those water systems are:

- Bellwood Water and Fire Protection Authority (AL0001533)
- Cherokee Water Works and Gas Board (AL0000311)
- Choctaw/Edna Water Authority (AL0000233)
- Copeland Ferry/Pumpkin Center Water System (AL0001327)
- CWM Water Authority (AL0001764)
- Forkland Water System (AL0001428)
- Frankville Water and Fire Protection Authority (AL0001357)
- Glenwood Water Works (AL0000388)
- Highland Water Authority (AL0000580)
- Hobson City Water System (AL0000149)
- Midway Water Works (AL0000116)
- Millerville Water Authority (AL0000270)
- Mount Andrew Water Authority (AL0000089)
- New Brockton Water and Sewer Board (AL0000302)
- New Hope Water System, Inc. (AL0000893)
- Town of Newville Water System (AL0000666)
- Old Suggsville Water and Fire Protection Authority (AL0001722)
- Randolph County Water and Sewer Authority (AL0001537)
- Town of River Falls Water System (AL0000379)
- Roanoke Utilities (AL0001127)
- Sellers Station Water System (AL0001077)
- City of York Water System (AL0001223)

These evaluations have uncovered problems such as: excessive water loss, delinquent accounts, poorly organized or missing records and plans required by regulation, and source water issues such as potential contamination or insufficient capacity. The contractors worked closely with the systems to correct the deficiencies which included attending board meetings, setting up

notebooks which contain all required records and plans, developing source water assessments and sampling plans, and conducting rate studies and extensive leak surveys. The results of their efforts included increased compliance rates, mergers with neighboring systems, reduction in water loss, greater financial stability, and more reliable sources of water.

In the past, the most significant challenges for water systems in Alabama with capacity development issues have been funding and management training. Whether it is unfunded mandates of increasingly complex regulations or maintenance and upgrading of aging infrastructure, many of these water systems have constantly struggled to generate the revenue required to operate and maintain their water systems. Water system managers for these systems often lack the experience needed to properly operate their water systems. They often use water system revenues to subsidize other programs such as sewer or public safety and they are often unwilling to adjust water rates to produce the revenue required to operate and maintain their water system. ADEM has partnered with ARWA to provide board member training for water board members in an effort to meet these challenges. All water systems are strongly encouraged to send their board members to training, especially newly elected or appointed board members.

Another program that is instrumental to capacity development is the Drinking Water Branch's Area Wide Optimization Program (AWOP). ADEM continued to be an active participant in the EPA Region 4 Area Wide Optimization Multi-State Pilot Program. The AWOP-MSPP is a cooperative effort to optimize performance of existing surface water treatment plants and distribution systems. The main goal of the program is to maximize public health protection from microbial contaminants and disinfection byproducts by coordinating existing system resources with proven performance improvement tools. Other States participating in the program include Kentucky, South Carolina, North Carolina and Florida. The AWOP tools focus on things a water system can do to improve performance with little or no cost. AWOP also offers Performance Based Training which educates operators regarding AWOP tools and how to apply the tools to their plant or distribution system. Therefore, AWOP tools can improve the technical, managerial, and financial capacity of a water system.

Several members of the Drinking Water Branch's Surface Water Section participated in and conducted activities associated with AWOP-MSPP. For the period of FY 2012, FY 2013, and FY 2014 the activities included the following:

- ADEM staff attended 6 Region 4 AWOP planning meetings and workshops and 1 National AWOP Planning Meeting
- ADEM staff participated with EPA Technical Support Center in a project to develop Performance Based Training for Distribution Systems with various water systems in Cullman County
- ADEM staff conducted 3 Annual Surface Water Meetings
- ADEM staff provided Performance Based Training for water plants and distribution systems
- ADEM staff made presentations at conferences held by Alabama Rural Water Association (ARWA) and Alabama Water Pollution Control Association (AWPCA)

- ADEM staff conducted 3 "Purchase System Meetings" at the annual ARWA conferences
- ADEM staff conducted and/ or participated in 4 Comprehensive Performance Evaluations
- ADEM staff regularly provide technical assistance through phone calls, inspections, and special visits to water systems

ADEM's Drinking Water Branch continues to meet regularly with representatives from the USDA Rural Development Agency, the Alabama Department of Economic and Community Affairs, the Rural Community Assistance Program, and the ARWA. During these routine meetings, the technical, managerial or financial capacity of proposed new water systems and proposed expansions of existing water systems are discussed. Communication with these groups has discouraged the construction of non-viable new water systems and the expansion of marginally operated existing water systems. Also over the last three years, in cooperation with the ARWA, ADEM has participated in training sessions for board members, certified operators, and other personnel of Alabama's public drinking water systems. Topics in these training sessions included: establishment of water system legal policies, legal liabilities of board members, operation and maintenance of water distribution systems, computer training, regulatory updates, water system security, and water conservation. These training sessions have significantly contributed to the improvement of many of the state's public drinking water systems with respect to capacity development.

In conclusion, over the last 30 years, Alabama has diligently pursued efforts to improve the capacity development capabilities of the state's public drinking water systems. As a result, the number of non-viable water systems in the state has been reduced with a corresponding reduction in the number of regulatory violations reported each year. ADEM is committed to continue to promote and implement programs to address the capacity development capabilities of the state's public water systems.