The Honorable Cynthia Giles, Assistant Administrator Office of Enforcement and Compliance Assurance U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, NW Washington, DC 20460

Dear Mrs. Giles:

Since December 2013, EPA's Environmental Financial Advisory Board (EFAB) has been working on a charge from EPA's Office of Enforcement and Compliance Assurance (OECA) to identify options for improving the environmental compliance status of 240+ small independent community water supply systems providing water to more than 103,000 people in Puerto Rico. These systems are also known as "systems not served by the Puerto Rico Aqueduct and Sewer Authority (PRASA)" or "non-PRASA" systems. Specifically, OECA is seeking innovative ideas for leveraging resources and information to influence the behavior of these systems in ways that move them toward compliance with environmental regulations. Approximately 95 of the non-PRASA systems currently have EPA Administrative Orders for non-compliance with water quality standards for total coliform and turbidity.

The physical and operational characteristics of the non-PRASA systems have been studied for years and are well documented; several representative studies dating back to 2004 and as recent as August 2014 have been provided to EFAB's working group. The non-PRASA systems are in remote/rural areas that rely on both surface water (42%) and groundwater (58%) for their water supply. Typically, these small water supply systems are neither organized nor do they have a management structure. Furthermore, there is little to no technical, managerial or financial capacity within the operators or users of the small systems. Most non-PRASA systems do not charge for water and those that do, charge customers between \$3 and \$5 per month. As such, these utilities do not have adequate (or any) funds to cover the costs of compliance, repairs, maintenance, or capital improvements. In part, the lack of revenues is tied to both an inability and an un-willingness of users to pay. With subsistence agriculture and farming as the main source of livelihood, the water users in these remote and impoverished areas and communities have limited or no ability to pay for "traditional" water services. In addition, there is a common cultural belief that water is a right and the users should not have to pay for it.

During the time that the EFAB working group was engaged in multiple conversations with OECA, EPA Region II, and Puerto Rico Department of Health personnel, the Governor of Puerto Rico passed an Executive Order in August 2014 that is directed at the non-PRASA systems. The Executive Order's stated objective is to develop and establish strategies to strengthen the operations of existing community aqueduct systems, improve their management capacity, organization, and performance, so that they comply with basic drinking water quality standards, promote the use and exploitation of the natural resource in a sustainable manner, and eliminate health risks that might endanger the lives of users.

Since the signing of the Governor's Executive Order, the Puerto Rico Department of State has developed a work plan for Sustainable Community Aqueducts (included as an Attachment to this

letter). The stated Mission is to "implement a program of support to communal drinking water systems, promoting the sustainable development of communities through self-management and training." The stated Vision is to "provide training to communities with communal water systems in order to improve the quality of drinking water and ensure an adequate organization, administration, and compliance through the model of sustainability." The work plan identifies two implementation phases, with the first being the creation of an Interagency Committee that will provide organizational resources for the actual efforts on the ground and phase 2 begins the creation and implementation of administrative and operational training that will occur in the following modules:

- Module 1 focuses on the organizational, legal, and administrative formalities for water systems;
- Module 2 focuses on the management/administrative functions for a water system;
- Module 3 focuses on the operational and compliance obligations for a water system; and
- An Incentives Plan, which focuses funding certain aspects of typical operational costs in order to initially establish an economically viable water system.

The EFAB working group has been informed by the Puerto Rico Department of Health that there are 17 non-PRASA systems which are co-located in one region (or municipality) and have been identified as an initial pilot test for the Phase 2 aspects of the work plan. We further understand that this initial effort will start as soon as practicable and will likely take place over the next one to two years; although, the work may be completed sooner, given that it is a focus of the Governor. Our expectation is that the results of this initial work will provide valuable information on what may be possible in creating a sustainable small water supply system as well as identifying key gaps in the work plan assumptions.

Prior to obtaining the Puerto Rico Department of State's work plan, the EFAB working group had multiple internal conversations about suggesting a program that would have been fundamentally similar to the one outlined in the Department of State's work plan. As such, the EFAB working group sees no need to duplicate the Department of State's work plan and we strongly believe that the initial pilot test results are needed before any refinement or modifications to the work plan can be suggested.

The EFAB offers the following items for consideration during the Department of State's work plan's Phase 2 implementation:

- Collect detailed demographics and physical/economic characteristics of the 17 pilot test systems and communities in order to understand how representative these initial study sites are to the rest of the non-PRASA systems.
- Consider the need for legislative changes that would mandate the establishment of formal organizations for non-PRASA systems, mandate billing and collection requirements, and provide local mechanisms for enforcing compliance with water quality standards.
- Consider the concept of implementing the training efforts, as well as the administrative organization of the non-PRASA systems on a regional basis. Improving non-PRASA systems on a "one-at-a-time" basis is neither efficient nor cost effective. Regional

- entities provide the added benefit of spreading administrative overhead costs for operating systems over a larger user base.
- Use local university students in both the implementation of phase 2 as well as the long-term operations of the non-PRASA systems. There is also an opportunity for students to assist in the creation of business plans for the systems, whether on an individual or regional basis.
- Consider the creation of associations of small systems, so that regionalized systems can leverage certain administrative costs and purchasing efforts (for example, it may be advantageous to purchase energy or chemicals on a broader basis).
- Incorporate the promotion of user education into the case for why the user needs to pay for water, given the history of receiving free water (regardless of the water quality and public health issues associated with its quality).
- Establish monthly user fees that would allow the water systems to be sustainable for the foreseeable future. Because these fees may be set at a level that is above the ability of some of the users to pay, a subsidy may be required.
- Consider how the use of subsidies, as discussed above, will be implemented (for example, at the user level or at the water system organization level) so that appropriate behaviors are incentivized and the funds are used solely for their stated purpose. For example, should there be performance obligations that must be met in order to sustain the subsidies?

Given the alignment between the Puerto Rico Department of State's work plan and the initial ideas contemplated by the EFAB working group, we believe that the EFAB working group could be a valuable resource to the Interagency Committee that is implementing the Puerto Rico Department of State's work plan. At any time during the implementation of either Phase 1 or Phase 2, we are willing and able to discuss our ideas as well as any other relevant topics with members of the Interagency Committee. Once the Phase 2 pilot test for the 17 systems is completed, we are willing to evaluate the results/lessons learned and provide our thoughts on possible next steps.

We appreciate the multiple conversations with staff from OECA, EPA Region II, and the Puerto Rico Department of Health and the generous sharing of information relevant to improving the environmental and public health performance of the non-PRASA systems. We look forward to our continued engagement as the Puerto Rico Department of State's work plan is implemented.

Sincerely,

Karen L. Massey, Chair

Environmental Financial Advisory Board

cc: Gina McCarthy, Administrator
Stan Meiburg, Acting Deputy Administrator
Mike Shapiro, EFAB Designated Federal Official
David Bloom, Acting Chief Financial Officer

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