BURIED ASSET MANAGEMENT INSTITUTE – INTERNATIONAL
555 Gary Ave., Selma, AL 36701 * P. O. Box 568, Selma, AL 36702-0568
O (334) 872-1012 * F (334) 872-9500
www.bami-i.com

October 19, 2020

Andrew Wheeler, Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

RE: *Docket ID No. EPA-HQ-OW-2020-0426*

Dear EPA Administrator Wheeler:

The Buried Asset Management Institute – International (BAMI-I) is pleased to offer the following comments on the *Proposed 2020 Financial Capability Assessment for Clean Water Act Obligations*. The U.S. Environmental Protection Agency (EPA) announced the guidance on September 15, 2020 and published the guidance in the Federal Register for comment on September 18, 2020, with the comment period closing on October 19, 2020. Aside from the 2014 supplement of allowing asset management costs into the formula, this is the first major update to document since 1997.

Introduction

The Buried Asset Management Institute – International (BAMI-I) is a non-profit corporation whose main purpose is to educate and assist those who have an interest in applying best buried asset management practices to extend the life and efficiency of their assets. BAMI-I has been mainly focused on water and wastewater systems; the principles of asset management apply to all different types of buried assets.

Good buried asset management practices will:

- Maximize life-cycle value of assets
- Sustain economic development
- Protect public health
- Improve the environment
- Enhance the quality of life

The purpose of BAMI-I is to provide a center of excellence for owners of underground water infrastructure to join with industry and researchers, using sound science, to evaluate and/or develop buried asset management protocols for application worldwide.

BAMI-I's formation is tied to consent decrees. In 2003, as a result of the leadership and inspiration of Mayor Shirley Franklin and DWM Commissioner Jack Ravan, the Buried Asset Management Institute (BAMI) was established in the Department of Watershed Management (DWM) for the City of Atlanta. Mayor Franklin was passionate about developing the water program in Atlanta from one which had received the country's largest and most complex federal consent decree to date, into a proactive, forward-looking "first-in-class" organization. To help accomplish the Mayor's vision, in 2003 Commissioner Ravan invited Dr. Tom Iseley, present day BAMI-I Chairman, to lead a team focused on the development and implementation of best business practices for managing Atlanta's buried assets – often referred to by Mayor Franklin as "buried treasures". This team became known as the Buried Asset Management Group. After a 2-day working forum involving academic leaders from multiple universities the name was changed to the Buried Asset Management Institute. The realization was that the biggest challenge was not the treatment plants rather the conveyance systems, which represent about 75-80 per cent of the value of water program assets. There are greater challenges in managing these assets since they are buried. With rapidly growing interest in the US and other countries, BAMI transitioned to BAMI-International (BAMI-I) in 2004, and was established as a non-profit corporation whose main purpose is to educate and assist those who have an interest in applying best practices to manage and extend the life and efficiency of their buried assets.

Training for Utilities -Certificate of Training in Asset Management (CTAM): In 2006, BAMI-I was selected for U.S. EPA Cooperative Agreement (CP 83 282901-1), which was completed in 2008. As a result, BAMI-I launched the Certificate of Training in Asset Management courses (CTAM 100-400). This program consists of 4 online courses plus a 2-level certification program (Associate Water Asset Manager (AWAM) & Professional Water Asset Manager (PWAM)). So far, individuals from 16 countries have enrolled in the CTAM program. CTAM has been developed by BAMI-I (Buried Asset Management Institute - International) in conjunction with the Trenchless Technology Center at Louisiana Tech and Indiana University-Purdue University at Indianapolis, in partnership with UIM: Water Utility Infrastructure Management. CTAM is offered online and in classroom format. BAMI-I makes a special effort to emphasize that this material was developed with a commitment to provide value to the 93% of utilities that serve fewer than 10,000 customers.

Comments:

We are pleased the EPA is addressing the existing financial capability methodology outlined in its 1997 Guidance *(Combined Sewer Overflow Guidance for Financial Capability Assessment and Schedule Development)* and updating the scope and formulas which created the affordability metric of 4.5% of median household income as being the EPA threshold for water and sewer.

BAMI-I supports the affordability methodologies as proposed urging for the changes to be made as a new EPA FCA and not as a supplemental document. The new methodologies capture many of the concepts as found in the 2019 report, *Developing a New Framework for Household Affordability and Financial Capability Assessment in the Water Sector,* published by the American Water Works Association (AWWA), the Water Environment Federation (WEF) and The National Association of Clean Water Agencies (NACWA).

While we understand the EPA's original intention was not to set a national affordability standard, ultimately that is what really occurs and then all utilities end up benchmarking to a published metric. For this reason, we recommend a new 2020 FCA not reliant on the old 1997 model. Also, (like AWWA, WEF and NACWA) we have concerns that even in the 2020 proposed FCA (while greater resources and socio-economic sources can be used in considering "affordability") the old remnants and use of a "2%" is included which does not seem to have any real justification, analysis or explanation. Also, there does not seem to be any data correlation between the level of perceived affordability and the years offered for a project schedule and implementation.

BAMI-I also recommends that "cost of service" rate studies and cash flow models be required in order to determine 1) what the actual cost needs are for a utility to meet its current service level levels 2) what the future costs need to be to maintain the service level and then 3) what are the costs impacts overtime associated with unfunded and mandated regulatory compliance.

Considering the greater topic of sustainable water resources and affordability, the cost reviews (1-3) should also be conducted for all separate enterprise funds (water, sewer, and storm).

These costs also need to be evaluated using a life cycle infrastructure asset management approach where the maintenance of the asset is based on its condition and the change of the condition drives the timing of a repair intervention or renewal and replacement on the capital plan. Also, the remaining useful life of an asset needs to be integrated back into the accounting system for accurate financial reporting.

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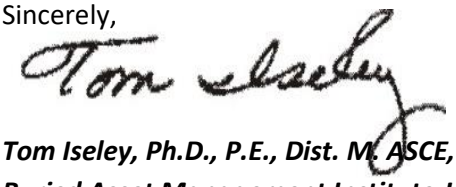
Asset management also provides the framework to support business continuity and cost improvement through developing unit costs for life cycle cost analysis and comparative analysis to evaluate ways to reduce the overall life cycle costs of an asset or treatment process. This effort extends to looking at new technologies, processes and materials like employing trenchless technologies over open cut, deploying sensors, IoT, GIS, data analytics, AI and machine learning and digital twins to increase operational awareness and efficiencies while driving down energy costs, extending asset life and managing capacity – all which increase cash flow, resiliency and achieves improved water affordability.

Next, following the EPA's new 2020 proposed methodologies of evaluating community socio-economic profiles, a community can start determining what sustainable and affordable water (drinking water and clean water) means. This really can't be imposed by a federal standard. The guidance provides a format to develop the materials, but every community will still need to work through the issue of equity and affordability. Every community has income challenged areas and water services is only one part of the critical services they need. Once a community can identify these costs and areas of need, then between the local, regional, state and federal levels of cooperation should the mix of funding and timing be decided. A strict 15, 20, 25-year implementation schedule could actually increase public and the environments health risks and cost more.

The answer may not be only in finding additional funding, private partnerships and even a potential change in the governance model of the utilities may be needed for the sustainability of services. Therefore, if the public health and a sustainable environment is the objective, then a review of privatization, consolidation, municipalization and regionalization also needs to be part of the check list of options.

BAMI-I recognizes and appreciates the complex nature of determining affordability in consideration of setting clean water project schedules and goals. BAMI-I also praises the EPA and their finance and infrastructure staff in their efforts to address these many pressing issues. If BAMI-I can be of service, please feel free to reach out to us.

Sincerely,



Tom Iseley, Ph.D., P.E., Dist. M. ASCE, PWAM
Buried Asset Management Institute-International (BAMI-I)
Chair, BAMI-I Board of Directors
Email: diseley@purdue.edu
CELL: (404) 386 - 5667