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February 22, 2019

Jeff Lape
Deputy Director
Office of Science and Technology
U.S. Environmental Protection Agency
1200 Pennsylvania Ave, N.W.
Mail Code: 4301T
Washington, DC 20460-0001

Re: NACWA Arid State and Water Reuse Workgroup Comments on EPA Draft Water Reuse Action Plan

Dear Mr. Lape,

The National Association of Clean Water Agencies (NACWA) appreciates the opportunity to review and provide comments on EPA's draft Water Reuse Action Plan (v1.4 December 2018). NACWA represents the interests of over 300 public clean water utilities, many of which also engage in water reuse and recycling, that provide an essential service of managing billions of gallons of wastewater every day to ensure the continued protection of public health and the environment.

NACWA formed an Arid State and Water Reuse Workgroup within its membership to ensure our advocacy initiatives align with the unique perspectives and water resource challenges in the southwest and southeast, as well as to promote beneficial reuse policies. These regions, perhaps more acutely in the southwest, face significant water quantity and water quality challenges that are predicted to intensify with climate change and growing demands over freshwater.

NACWA's Arid State and Water Reuse Workgroup helps ensure these challenges can be addressed effectively through its national policy agenda and collaboration with other local, state, and regional partners. NACWA shared EPA's draft Water Reuse Action Plan with the Arid State and Water Reuse Workgroup and received the following general comments.

Background Comments

Traditionally, water reuse and recycling efforts have been driven by state policy and regulated by state regulatory authorities. NACWA advocates that water reuse and recycling initiatives continue to be part of state regulatory frameworks without federal intervention.

There is a concern that federal guidance documents can be inappropriately used to influence permit writers or can be incorporated into federal or state regulatory frameworks. NACWA strongly advocates that guidance documents, including EPA's Action Plan on Water Reuse, when finalized, remains voluntary in nature and is used for assistance only.

EPA should work closely with other federal agencies, including the Bureau of Reclamation, when drafting and implementing EPA's Action Plan for Water Reuse. The Bureau of Reclamation

plays an important role in water reuse and recycling initiatives. Further, municipal clean water utilities in the western United States have worked with the Bureau for a very long time—especially in the context of Title XVI funding. If there is success in authorizing new or additional funding for water reuse initiatives through Title XVI, there will be a greater need for utilities to collaborate with the Bureau as well as an incentive for EPA to foster a relationship with the utilities using innovative technology for water reuse projects.

EPA can also assist local governments with source control efforts using their authority under the Clean Water Act, the Toxic Release Inventory under the Emergency Planning and Community Right-to-Know Act (EPCRA), the Toxic Substances Control Act (TSCA), the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), and other environmental statutes that may be applicable.

To the extent that municipal clean water utilities do not have the authority to identify or control chemicals released to the sewer, the statutes identified above can help address a variety of these instances and would more generally help prevent the release of contaminants which can be highly problematic for reuse efforts.

Lastly, when drafting and implementing the EPA Action Plan, it is important to be careful when using direct and indirect potable reuse terminology because each are used in a specific manner in the reuse field. NACWA's Workgroup recommends the definitions be clear and concise, so that they are not misconstrued in practice or in regulatory policy.

Specific Comments on Action Plan

Our workgroup also had some specific comments on the Action Plan. Please see comments below:

I. Vision

NACWA's Workgroup advises that the vision should also include wastewater and stormwater to accurately characterize the truly integrated, "one-water" approach. In addition, the vision should include water affordability. Affordability is not mentioned once throughout EPA's Action Plan. Acting Administrator Wheeler's quote should be revised to read "... providing *affordable* access to clean, safe, and secure water."

We also suggest broadening out the water reuse vision to include the benefits of indirect potable water reuse. The focus of direct water reuse makes sense to meet multiple water needs. But reuse is much broader than direct reuse. Should the framework include a discussion on indirect water reuse that is discharged into a Water of the United States or Water of the State and is available for aquatic use before diverted for additional use?

II. Business Case – Impetus for Action

No comments in this section.

III. Examples of Types and Fit-for-Purpose Applications of Water Reuse and Alternative Water Sources

The examples of types and fit-for-purpose applications of water reuse and alternative water sources are broad (see table). The Arid State and Water Reuse workgroup was pleased to see EPA focused on Fit-for-Purpose applications of water reuse. As this draft moves forward it is critical that EPA and state regulators continue to consider Fit-for-Purpose and the importance of reuse and recycled water "As a Drinking Water Source" among other categories and applications.

When looking at reuse “As a Drinking Water Source” there are well known challenges with brine management, especially in inland areas. Even in California, there are significant challenges to implementing any sort of direct or indirect potable reuse in areas that do not have access to ocean discharge. California requires the use of reverse osmosis as a part of reuse treatment. Reverse osmosis can be cost prohibitive and an energy intensive treatment. Outside of coastal areas, there is simply no way to dispose of the brine waste streams that are generated.

California does, however, provide an opportunity for alternative treatment, but the proponent must demonstrate that the alternative treatment method is equivalent to reverse osmosis. Cities, such as Roseville, California, are working on an alternative treatment process, but it is extremely time consuming and a fairly significant cost investment to conduct the appropriate research and pilot testing to prove reverse osmosis equivalency. The City of Roseville does not expect that they will be able to rely heavily on similar studies conducted elsewhere to demonstrate equivalence.

The table used to highlight the “Examples of Types and Fit-for-Purpose Applications of Water Reuse and Alternative Water Sources” is limited. The table should include oil and gas as an additional “Category.” In the “Use Application” section of the table, EPA should include agriculture, wildlife, oil and gas, other energy, industrial source water.

IV. Examples of Particularly Relevant Efforts

EPA should include its work on Integrated Planning, including the recently passed legislation codifying the concept into the Clean Water Act, as a particularly relevant federal effort.

V. Potential Framework of a National Water Reuse Action Plan

I. Technical Improvements

b. Monitoring and Sensors: Establishing industry best practices in this area of monitoring - What to monitor (surrogates and constituents), where to monitor and how often would be helpful particularly within the Potable Reuse area. Because a user cannot feasibly monitor for all potential constituents of concern, establishing the appropriate list of constituents and surrogates for groups or types of constituents is needed.

d. Concentrate and Brine Management: This is an area for continued emphasis in research and exploration of environmentally acceptable alternatives is needed. In many areas this can be a significant barrier to reuse, particularly potable reuse.

e. Research Coordination and Critical Gaps: Many of the areas of critical research and research gaps have been identified by the California potable reuse effort and by the Water Research Foundation. The challenge is providing adequate research funding.

II. Regulatory Aspects at All Levels of Government

a. Public Health Protection: Establishing industry standards—not regulations—in this area would facilitate other entities developing potable reuse frameworks. Many of the Constituents of Emerging Concern do not have health guidance to provide a basis for regulations and/or permitting. Some national guidance would be helpful. EPA should continue its collaboration with NACWA, WRF, AWWA, WEF, and the WateReuse Association.

b. Regulatory and Policy Incentives, Barriers, and Facilitation: Many forms of reuse overlap the present wastewater and potable water regulatory frameworks within the states and federal level. There needs to be a unified regulatory/permitting framework so that there are not conflicting or duplicative requirements resulting from potential reuse entities having to deal with two or more different regulatory frameworks.

c. Workforce and Operator Training Certification Programs: There is not presently consensus among reuse entities on the best approach to training and certifying operators, particularly of potable reuse facilities. Again, there is overlap of wastewater and water knowledge and skills required in a number of instances.

The Workgroup recommends adding an additional subsection (d) for Source Control. This subsection could promote the consideration of reuse or recycled water by other federal programs that have authority over chemical usage and could also recognize that initial source control efforts can be far less costly than treatment.

Also, NACWA's workgroup recommends adding an additional subsection (e) for Regulatory Prohibitions. This subsection could support the development of produced water treatment technologies by eliminating the regulatory prohibitions on discharge and indirect discharge (in some cases) of produced water. The prohibitions in place currently ignore the fact that produced water can be treated to a quality such that its continued presence in they hydrological cycle is beneficial to the environment, including to wildlife and agriculture. Deep well injection of produced water is not available or appropriate in some areas nor will it always be an option.

III. Financial Initiatives

a. Financing and Funding Eligibility: The financial incentives aspect of EPA's Action Plan is unclear. Providing additional funding opportunities is the single most helpful thing the federal government can do to promote water recycling.

IV. Fit for Purpose

a. Establishing Baselines: Establishing consistency and consensus on baselines across the industry would facilitate more reuse and would assist in developing public acceptance.

V. Outreach Opportunities

a. Public Outreach: Public outreach and acceptance is the most critical factor to successful implementation of many reuse projects. More messaging on a national level of the benefits and successes in tandem with discussion of the public health and environmental protection safeguards and benefits is necessary.

VII. Likely Collaborators (who is missing?)

NACWA recommends public health officials from the Association of State and Territorial Health Officials (ASTHO) as collaborators.

NACWA also recommends you add the Western Coalition of Arid States (WESTCAS). Steve Bigley with the Coachella Valley Water District is their current President and can be reached at sbigley@Cvwd.org and 760-396-2651.

VIII. EPA Water Reuse Team (ad-hoc)

No comments in this section.

IX. Questions for Development of the Plan

By your vantage, what are the specific actions – big and small – that could be taken to best achieve the water reuse vision, both broadly and in particular use application or scenario?

- The most valuable and specific action that could be taken is to educate the public regarding the level of protection and risk associated with current water quality standards for drinking water and the environment so that the public can understand what is provided versus what may be necessary.

What are the most valuable actions the Federal Family and the sector can undertake? E.g., do the thematic areas listed in Section V resonate with existing roadmaps, plans, and real needs?

- See above comment.

In the near term, what are the critical venues (conferences, events, meetings, etc.) where ideas on reuse could be discussed and refined?

- Please consider adding the Ground Water Protection Council (GWPC) events.
 - UIC Conference, Fort Worth, TX February 24-27, 2019
 - Annual Forum, Location TBD, September 15-17, 2019
 - Permian Basin Water in Energy Conference, Midland, TX, February 19-22, 2019

X. Literature Reviewed During Initial Brainstorming (what is missing?)

We propose that the following be added to the literature:

- Environmental Protection Agency. 2018. *Detailed Study of the Centralized Waste Treatment Point Source Category for Facilities managing Oil and Gas Extraction Wastes*. EPA/821/R-18/004
- Environmental Protection Agency. 2018. Public Meeting EPA Oil and Gas Extraction Study Effluent Guidelines Program. October 9, 2018. Washington, DC.
https://www.epa.gov/sites/production/files/2018-10/documents/epa_oil-gas-study_public-meeting_10-09-2018.pdf.

NACWA appreciates the opportunity to provide these comments. If you have any questions or would like to discuss further, please contact Emily Rimmel, NACWA's Director of Regulatory Affairs, at erimmel@nacwa.org or 202-533-1839.

Sincerely,



Emily Rimmel