



July 1, 2019

Jesse Pritts
Office of Water
U.S. Environmental Protection Agency
1200 N. Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Re: Comments on Draft Study of Oil and Gas Extraction Wastewater Management Under the Clean Water Act (EPA-821-R19-001), May 2019.

Dear Mr. Pritts:

Thank you for the opportunity to comment on EPA's Draft Study of Oil and Gas Extraction Wastewater Management Under the Clean Water Act.

The WateReuse Association is a not-for-profit trade association for water utilities, businesses, industrial and commercial enterprises, not-for-profit organizations, and research entities that engage in and on water recycling. WateReuse and its state and regional sections represent nearly 250 water utilities serving over 60 million customers, and over 300 businesses and institutions across the country. WateReuse's mission is to engage our members in a movement for safe and sustainable water supplies, to promote acceptance and support of recycled water, and to advocate for policies and funding that increase water reuse.

We want to begin by thanking you for undertaking this important effort to examine the management of produced water. We believe that the study is of high quality. We offer the following responses to two of the questions posed by EPA on the webpage associated with the study.

Question 1: What non-regulatory steps should EPA take to encourage re-use/recycle of produced water?

Answer: There are several key non-regulatory actions the EPA can take to advance the reuse of produced water while protecting human health and the environment.

First, EPA, other federal agencies, industry, and the research and/or academic community should partner to (1) research unresolved technological issues related to recycling produced water, (2) facilitate the development of any treatment technologies that may be lacking for particular uses of produced water, and (3) develop informational fit-for-purpose guidelines to help facilitate the beneficial use of produced water.

There are many technology challenges in treatment of produced water outlined in the report. As with all applications of water reuse, advances in treatment technology for produced water should be based on a characterization of the water and the specific fit-for-purpose water quality needs of particular use applications. These technological advancements are also necessary to produce more cost-effective options for producing reuse-quality water.

In order for water to be reused in a particular application, it must be of suitable quality for that application. For example, in an industrial setting, the requirements for boiler feed water and cooling tower make-up

water are quite different. Similarly, in agriculture the requirements for dryland cotton may be different than that for an almond grove. There are several potential applications for reuse water for which the water quality requirements have not been studied. EPA should identify these applications, and support the development of technical requirements for each. Once these requirements are defined, a cost for treating to the “fit for use” level can be determined.

Second, EPA should use existing authorities to provide funding to the states to upgrade and improve their regulations to enable reuse of produced water. EPA could provide this funding through the Water Pollution Control (Section 106) Grant Program, which supports a variety of state activities, including the development of state-level standards. Any state-level regulatory actions related to enabling reuse of produced water must be focused first and foremost on protecting human health and the environment.

Question 2: What steps could EPA take that might incent re-use of produced water within and outside of the oilfield?

Answer: Before produced water can be reused for a particular purpose, state-level regulatory standards must be in place to ensure that treatment is sufficiently protecting the environment and public health. As mentioned above, EPA can use existing authorities to provide funding to the states to upgrade and improve their regulations to enable reuse of produced water.

EPA can also modify existing federal regulations to allow Publicly Owned Treatment Works (POTW) to treat produced water so long as the facility is specifically designed to do so, has the appropriate technology installed, has appropriate technology and water quality standards incorporated into its permit, and has a pre-treatment program in place.

A properly designed and operated treatment facility will produce high quality effluent regardless of ownership. WateReuse urges EPA to consider modification of 40 CFR 435 or 437 to allow POTWs that meet the requirements outlined above to accept and treat produced water for appropriate reuse application. The POTW’s permit would require appropriate discharge standards for the periods of low reuse water demand. The use of produced water in this manner provides a source of reuse water that would not reduce current environmental flows as this water is currently being injected into deep underground wells. With this authority, relevant POTWs would be able to include produced water reuse in their integrated planning activities.

Thank you for considering our recommendations.

Sincerely,



Pat Sinicropi
Executive Director
WateReuse Association