



January 3, 2019

Ms. Jan Matuszko  
U.S. Environmental Protection Agency  
William Jefferson Clinton Building  
1200 Pennsylvania Avenue, N. W.  
**Mail Code:** 4303T  
Washington, DC 20460

**Re: U.S. Environmental Protection Agency Study of Oil and Gas Extraction Wastewater Management: Docket ID No. EPA-HQ-OW-2018-0618**

Dear Ms. Matuszko:

The Marcellus Shale Coalition (MSC) was formed in 2008 and is comprised of approximately 200 producing, midstream, transmission and supply chain members who are fully committed to working with local, county, state and federal government officials and regulators to facilitate the safe development of natural gas resources in the Marcellus, Utica and related geological formations. Our members represent many of the largest and most active companies in natural gas production, gathering, processing and transmission in the country, as well as the suppliers and contractors who service the industry.

MSC appreciates the opportunity to comment on the U.S. Environmental Protection Agency's ("EPA" or "the Agency") Study of Oil and Gas Extraction Wastewater Management ("Study"): Docket ID No. EPA-HQ-OW-2018-0618. MSC and its members recognize and support EPA's decision to examine its regulatory approach to produced water from the onshore oil and natural gas industry and supports potential changes to EPA's regulatory approach that could increase reuse of, and management flexibility for, produced water.

Exploration and Production (E&P) companies in Pennsylvania are reusing produced water, either by utilizing storage and managing the timing of their completions projects to fully implement the use of their own water or by sharing produced water with other local E&P companies. Most E&P companies in Pennsylvania are recycling nearly 100% of produced water; however, when activity slows, the ability to recycle produced water becomes difficult, which necessitates other options.

Class II Underground Injection Control (UIC) disposal wells are a regional option, mostly available only to E&P Companies in western Pennsylvania and Ohio. UIC wells are not an option in northeast Pennsylvania to-date, due to geologic constraints. UIC wells require deep, confined formations that have hydrogeologic properties of transmissivity and storativity that allow the formation to receive injected fluids. UIC disposal wells also are limited in total receiving capacity, and as such, the Agency's reliance on them for disposal does not work well

for all of Pennsylvania. Rather, they are a limited option that is economically viable only for those E&P companies that are regionally positioned near existing permitted UIC disposal wells.

The water treatment industry has demonstrated that produced water can be treated to water quality concentrations that would be acceptable for discharge into surface waters. If a thermal or evaporative technology is utilized, the products are a dissipate, or dischargeable water, and a concentrated brine slurry. The more extensive the separation process, the less liquid is in the resultant slurry and the higher quality of the recoverable constituents. In most cases, this slurry is disposed of as a waste in landfills. However, the recoverable constituents are valuable and could be marketed to and reused in other industries. To-date produced water may only be discharged to surface waters utilizing a NPDES permit through a centralized waste treatment (CWT) facility, and CWT facilities are limited in number in Pennsylvania due to permitting and regulatory uncertainty.

MSC encourages the Agency and the Pennsylvania Department of Environmental Protection to provide the natural gas industry additional regulatory flexibility through the permitting of facilities that allow for the discharge of treated produced water, as well as to identify reasonable effluent limit guidelines (ELGs) for those potential discharges. Produced water should be treated as a commodity, not as a waste, until reuse options are no longer economically viable. The natural gas industry and our water treatment partners understand the available and effective water treatment technologies that are in existence. The Agency needs to set reasonable ELGs for the industry and allow science and economics to determine the best reuse or water treatment options for the natural gas industry to utilize.

Thank you for your consideration of these comments.

Sincerely,



Loren Anderson  
Director, Technical Affairs