UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Wheeling Field Office
1060 Chapline Street
Wheeling, West Virginia 26003

August 16, 2018

Ms. Jamie Heisig-Mitchell, Chief of Technical Services
Hampton Roads Sanitation District
Water Quality Department
PO Box 5911
Virginia Beach, Virginia 23471

Re: SWIFT Research Center
Nansemond Pilot Project
Nitrite Primary MCL Exceedance

Dear Ms. Mitchell:

We have received correspondence from you dated August 8, 2018 detailing a primary Maximum Contaminant Level (MCL) exceedance for nitrite in SWIFT aquifer recharge water. We also spoke with you by telephone to discuss this matter on August 3. We appreciate the opportunity to offer this response.

The EPA Underground Injection Control (UIC) program utilizes MCLs as a ''first blush'' indicator of injectate water quality for shallow injection wells. A subsurface discharge through a well directly into or above an underground source of drinking water must not endanger ground water quality or the health of persons. A subsurface discharge which meets primary MCLs provides, in our opinion, a significant margin of safety to ensure the endangerment threshold described above is not compromised. We do not believe the MCL exceedance for nitrite detailed in your correspondence resulted in a UIC violation.

The EPA decision to ''rule authorize'' the SWIFT aquifer recharge project was premised upon, among other information, the pilot nature of the operation. We anticipated, and I am sure you

will agree, that the complexity of large scale advanced water treatment and aquifer recharge provides ample opportunities now and into the future to learn and implement adjustments throughout the treatment, aquifer recharge, monitoring and reporting processes. With specific regard to the nitrite MCL violation, the potential for incomplete nitrification in the biofilter during water treatment start-up was a topic of conversation during our compliance inspection on July 18, 2018.

We appreciate your timely notification to EPA of this matter and the opportunity to address these issues with you. We believe your immediate response upon learning of this situation was appropriate. We have reviewed the preliminary plan to modify monitoring and reporting protocols and are confident any future upsets will be immediately identified and addressed. Please contact me at (304) 234-0286 with any questions.

Sincerely,

Mark Nelson

Mark A. Nelson, Hydrologist
Water Protection Division