



February 22, 2016

File No. 14-08015

Tina M. O'Rourke, Business Manager
Horsham Water & Sewer Authority
617 Horsham Road
Horsham, PA 19044

Reference: Navy Remedial Investigation of PFCs
Questions to address through USGS Model

Dear Ms. O'Rourke:

On behalf of the Horsham Water and Sewer Authority (HWSA), we appreciate the opportunity to provide the following questions pertaining to the USGS model being developed for the Navy as part of their investigation of perfluorinated compounds (PFCs) in groundwater. The request for this input was made by the Navy and USGS on January 26, 2016 at a technical meeting held at the Horsham Township building. We appreciate the fact that the potential for development of the USGS model to make predictions and assist with remedial efforts is vast. The questions below relate specifically to groundwater sources and facilities affected by HWSA. We request consideration of these questions as the model is developed, calibrated and utilized going forward.

Recommended modeling questions.

1. HWSA is currently planning to construct treatment systems at HWSA Wells 26 and 40 to remove PFCs detected in these wells. Would other remediation strategies, such as source treatment or groundwater containment, effectively remove PFCs from the affected groundwater, reduce the area affected, and ultimately eliminate the need for treatment of off-site wells?
2. HWSA Wells 26 and 40 have been out of service since detection of PFC's above the EPA provisional Health Advisory Level in August 2014. What affect will returning these wells to service have on groundwater flows and PFC concentrations?
3. Many HWSA wells currently operate at less than permitted capacity. If pumping is increased in one or more wells to their permitted capacity, how could this affect groundwater flow and PFC concentrations in area public or private wells?
4. HWSA's Wastewater Treatment Plant (WWTP) is currently receiving flow from wells known to contain PFC's. If PFC's are removed from these wells and, as a result, removed from the receiving waste stream, how would PFC concentrations in surface and groundwater near the WWTP be affected?

Should you have any questions please do not hesitate to contact me.

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Sincerely,



Toby J. Kessler, P.G.
Hydrogeologist
Gilmore & Associates, Inc.

TJK/dmk

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