



March 9, 2017

The Honorable David B. Borge
Village of Hoosick Falls
Municipal Building
24 Main Street
Hoosick Falls, NY 12090

Dear Mayor Borge:

The New York State Department of Health (Department) has been collecting water samples from the Village of Hoosick Falls's public water system interim granulated activated carbon (GAC) filters almost weekly since November 17, 2016 for analysis of perfluorinated compounds. This letter is providing the perfluorooctanoic acid (PFOA) results from samples collected between December 15, 2016 and February 23, 2017. During this time frame the water treatment system went from the interim GAC system to a hybrid with both the full capacity and interim capacity systems working in tandem, and finally to just the full capacity system. Samples were collected to evaluate the on-going effectiveness of the interim GAC filters for the removal of PFOA and to provide information on the switch to the full-capacity GAC filters. The results in Table 1 show that during this time period the interim GAC filters and /or the full capacity GAC filters removed PFOA to non-detect levels in the finished water.

On December 22, 2016 and December 29, 2016, no samples were collected from the full capacity GAC filters because that system was not operational. Similarly, no samples were collected from the interim capacity GAC system on February 14 and February 23 for it had been removed from operation. The switch to just the full capacity system was completed prior to the February 14, 2017 sampling. The full capacity GAC and the interim capacity GAC systems were both working at the time of the January 5, 2017 sampling through the sampling on February 2, 2017. During the switch from the interim capacity GAC to the full capacity GAC, there was a concern that the clear well could be a reservoir for PFOAs. For this reason, the interim capacity GAC was kept in operation until it was determined that the clear well which receives water from the full capacity system had non-detect levels. This was confirmed by the results of the January 5 and January 10 sampling events. From that time on, no samples were collected from the clear well for they are in essence a repeat of the full capacity GAC effluent.

The Department has conducted extensive sampling of the water produced by the interim capacity GAC treatment plant beginning in February 2016. Now that the full capacity system has been sampled twice since it has been in operation by itself, and the results confirm non-detect levels, our sampling effort is no longer needed given that the responsible parties are required to do monitoring to confirm performance and to identify the need to change the carbon. The Department will review the monitoring results from the responsible party and be ready to do additional sampling, if needed. The extensive sampling over the last year demonstrates that non-detect levels of PFOA and other PFCs will be produced by the full capacity GAC system.

In summary, the results show that the interim capacity system was very effective, and that the initial sampling shows the same for the full capacity GAC filters. If you have any questions, please feel free to contact me at (518) 402-7650.

Sincerely,

A handwritten signature in black ink, appearing to read "Lloyd R. Wilson". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Lloyd R. Wilson, Ph.D.
Bureau of Water Supply Protection

cc: R. Swider -CDRO
R. Elder – Rensselaer County Health
M. Surdam – Town of Hoosick



Table 1. Summary of PFOA Results from NYSDOH Sampling Done on December 22, December 29, January 5, and January 10. All results are in parts per trillion (PPT).

Sample Location	December 22, 2016	December 29, 2016	January 5, 2017	January 10, 2017	January 19, 2017	January 26, 2017	February 2, 2017	February 14, 2017	February 23, 2017
Full capacity GAC influent, pre-GAC Filter (untreated water) *	Not in operation	Not in operation	406	452	Not collected	472	484	458	424
Full capacity GAC – Between Filters	Not in operation	Not in operation	<2	<2	Not collected	<2	Not collected	<2	<2
Full capacity GAC—Between Filters Duplicate	Not in operation	Not in operation	<2	<2	Not collected	Not collected	Not collected	Not collected	Not collected
Full Capacity GAC Effluent (after both filters)	Not in operation	Not in operation	<2	<2	Lab accident	<2	Not collected	<2**	<2**
Clear well	Not collected	Not collected	<2	<2	Not collected	Not collected	Not collected	Not collected	Not collected
Clear Well duplicate	Not collected	Not collected	<2	<2	Not collected	Not collected	Not collected	Not collected	Not collected
Interim /Temporary GAC Filter influent	477	467	<2	<2	<2	<2	<2	Not in operation	Not in operation

Interim/Temporary GAC – Between Filters	9.02	9.24	7.69	5.99	5.57	5.59	6.03	Not in operation	Not in operation
Interim/Temporary GAC—Between Filters Duplicate	11.0	9.25	Not collected	Not collected	Not collected	Not collected	Not collected	Not in operation	Not in operation
Interim GAC Effluent (after both filters) **	2.41***	<2	<2	<2	<2	<2	<2	Not in operation	Not in operation
11 Water Works Road - DPW/Village Garage	<2	<2	Not collected	Not collected	Not collected	Not collected	Not collected	Not collected	Not collected
24 Main Street - Village Hall	<2	<2	Not collected	Not collected	Not collected	Not collected	Not collected	Not collected	Not collected
Field Reagent Blank	<2	<2	<2	<2	<2	<2	<2	<2	<2
Laboratory Reagent Blank	<2	2.04***	<2	<2	<2	<2	<2	<2	<2

*The first sampling of the full capacity GAC system in operation was January 5, 2017. Once the full capacity system became operational it discharged water to the clear well. Upon confirmation that the clear well contained non-detect levels (January 5 and January 10 samples) sampling of the clear well and the full capacity GAC system were redundant. Sampling of the clear well was discontinued.

** These samples represent the water leaving the treatment plant for the water system distribution system.

*** The December 22, 2016 sample of the effluent from the interim GAC filters and the laboratory reagent blank were both found to have levels of PFOA just above the detection limit, 2.41 ppt and 2.04 ppt, respectively. Both of these results are questionable as evidenced by the other results. For example, the December 22 result is in question considering that non-detect levels were found on the same day in the two downstream samples (Village Hall and DPW Garage), as well as the non-detect levels in the samples of the interim GAC filter effluent from the following six sampling events. When there is extensive sampling such as that done for this water system, typically there are a few



Department of Health

ANDREW M. CUOMO
Governor

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Commissioner

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Executive Deputy Commissioner

results that cannot be explained, considering all of the information. This is especially true with results very close to the method reporting limit. Further evidence of unexplainable results near the detection limit is the finding a week later of 2.04 ppt in the December 29, 2016 laboratory blank, which is a quality control sample that never leaves the laboratory and should have non-detect levels. All of the other blanks were found to be non-detect. For all of these reasons we believe these two results are anomalies. In summary, when many tests are performed a finding like this may occur by chance, particularly when close to the detection limit.