NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation625 Broadway, 12th Floor, Albany, New York 12233-7011
P: (518) 402-9706 | F: (518) 402-9020
www.dec.ny.gov

August 19, 2021

Mr. George Meyers, Supervisor Town of New Windsor 555 Union Avenue New Windsor, New York 12553

Re: New Windsor Public Water Supply Well Sample Results Kroll Well, New Windsor (T), Orange County

Dear Supervisor George Meyers:

The New York State Department of Environmental Conservation (DEC) is providing you with a copy of analytical results derived from the August 3, 2021 sampling of the granular activated carbon (GAC) water treatment system by DEC representatives that was installed on the Town of New Windsor (Town) Kroll Well located at 354 Mount Airy Road.

No PFOS or PFOA was detected in the Kroll Well GAC-treated water. The NYS maximum contaminant levels (MCLs) are 10 ppt for PFOS and 10 ppt for PFOA.

Specifically, the samples were analyzed for a total of twenty-one per- and polyfluoroalkyl substances (PFAS), including Perfluorooctanoic acid (PFOA) and Perfluorooctanesulfonic acid (PFOS). Data received for the 21 PFAS list analysis has been attached. During this event, sampling for the 21 PFAS list was conducted at 9 locations:

- pre-treatment (raw untreated water), which has a "RAW WATER" identifier in the Client Sample ID;
- 25 % treatment lead tank (A-25 identifier);
- 50 % treatment lead tank (A-50 identifier);
- 75 % treatment lead tank (A-75 identifier);
- mid-treatment (after the first GAC canister and prior to the second GAC canister), which has a "MID POINT" identifier in the Client Sample ID;
- 25 % treatment lag tank (B-25 identifier);
- 50 % treatment lag tank (B-50 identifier);
- 75 % treatment lag tank (B-75_identifier); and
- post-treatment (after the entire treatment system), which has a "EFFLUENT" identifier in the Client Sample ID.

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The 9 locations sampled (and their associated identifiers) are depicted in Figure 1. Please note that the next sampling event will be scheduled around November 2021.

If you have any technical questions regarding the analytical results or on the operation and performance of the GAC treatment system, please feel free to contact me or Jim Hayward, EA Science and Technology (DEC's Project Engineer) at (315) 431-4610 (ext.1857) or ihayward@eaest.com. For weekday or off hour / weekend emergency repair issues, please call DEC's contractor, Brian Neumann of Precision Environmental Services at (518) 441-1520 (cell). For questions regarding site-related health concerns, please contact Steve Gagnon of the Orange County DOH at (845) 291-2331 or Dr. Min-Sook Kim of the NYSDOH Bureau of Water Supply Protection at (518) 402-7650; email: min-sook.kim@health.ny.gov.

Sincerely,

David J. Chiusano

Environmental Engineer/Project Manager Remedial Section A, Remedial Bureau E Division of Environmental Remediation

Javiel Chusa

Enclosures

ec: w/enclosures

- D. Zagon, Town of New Windsor
- J. Marina, Town of New Windsor
- J. Egitto, Town of New Windsor
- S. Bedetti, Town of New Windsor
- A. Regenbaum, Town of New Windsor
- K. Rea, Town of New Windsor
- J. Conrad, PVE LLC
- C. Brown, PVE LLC
- M. Weeks. MHE
- Dr. Kim, NYSDOH
- S. Gladding, NYSDOH
- S. Gagnon, OCDOH
- M. Andersen, OCDOH
- J. Hayward, EA Engineering
- B. Neumann, PES
- M. Cruden, NYSDEC
- D. Bendell, Region 3 RHWRE

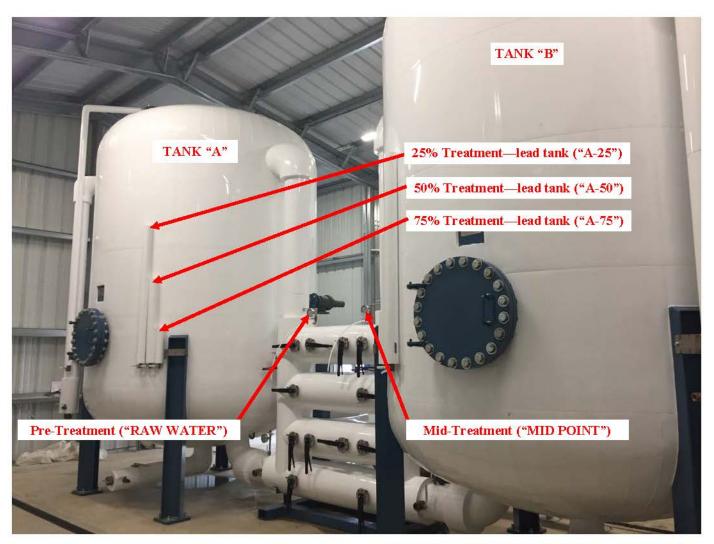






Figure 1—Kroll Well GAC Treatment System Sampling Locations

Town of New Windsor

Kroll Well GAC Operation and Maintenance PFOA and PFOS Sampling Results ** (Parts Per Trillion (PPT))

(Last updated: August 2021)

Date	Analyte	Result ¹ Raw Water	Result A25	Result ² A50	Result A75	Result Mid- Point	Result B25	Result B50	Result B75	Treated Effluent	USEPA Drinking Water Health Advisory Guidance Value	Proposed NYS MCLs
September 2019 (Based on 21 PFAS Analysis Data only)	PFOA	8.4	ND	6.1	ND	ND	ND	ND	ND	ND	704	10 ⁵
	PFOS	14	ND	7.8	ND	ND	ND	ND	ND	ND	70 ⁴	10 ⁵
October 2019 (Based on 21 PFAS Analysis Data only)	PFOA	7.9	6.5	ND	ND	ND	ND	ND	ND	ND	704	10 ⁵
	PFOS	13	8.7	ND	ND	ND	ND	ND	ND	ND	70 ⁴	10 ⁵
November 2019 (Based on 21 PFAS Analysis	PFOA	12	10	ND	ND	ND	ND	ND	ND	ND	70 ⁴	10 ⁵
	PFOS	10	8.4	ND	ND	ND	ND	ND	ND	ND	70 ⁴	10 ⁵
Data only)		1										
December 2019 (Based on 21 PFAS Analysis Data only)	PFOA	12	10	ND	ND	ND	ND	ND	ND	ND	704	10 ⁵
	PFOS	10	8.7	ND	ND	ND	ND	ND	ND	ND	704	10 ⁵
January 2020 (Based on 21 PFAS Analysis Data only)	PFOA	11	10	2.2	ND	ND	ND	ND	ND	ND	70 ⁴	10 ⁵
	PFOS	10	8.7	ND	ND	ND	ND	ND	ND	ND	70 ⁴	10 ⁵
February 2020 (Based on 21 PFAS Analysis Data only)	PFOA	11	9.9	3.3	ND	ND	ND	ND	ND	ND	704	10 ⁵
	PFOS	9.7	8.4	ND	ND	ND	ND	ND	ND	ND	70 ⁴	10 ⁵

Notes:

- ** 21 PFAS List Analysis.
- 1. PFOS and PFOA results and comparison values are reported in parts per trillion (ppt, nanograms per liter, ng/l).
- 2. "ND" means non-detect. The analyte was not detected in the sample.
- 3. MCL (Maximum Contaminant Level, mg/l) is the maximum permissible level of a contaminant in water delivered by a public water system.
- 4. Guidance: USEPA Drinking Water Health Advisory guidance value is currently 70 ppt.
- 5. The proposed NYS maximum contaminant levels (MCLs) are 10 ppt for PFOS and 10 ppt for PFOA.

Town of New Windsor

Kroll Well GAC Operation and Maintenance PFOA and PFOS Sampling Results ** (Parts Per Trillion (PPT)) Continued

(Last updated: August 2021)

Date	Analyte	Result ¹ Raw Water	Result A25	Result ² A50	Result A75	Result Mid- Point	Result B25	Result B50	Result B75	Treated Effluent	USEPA Drinking Water Health Advisory Guidance Value	NYS MCLs
March 2020 (Based on 21 PFAS Analysis Data only)	PFOA	9.3	9.2	4.2	ND	ND	ND	ND	ND	ND	70 ⁴	10 ⁵
	PFOS	9.6	11	ND	ND	ND	ND	ND	ND	ND	704	10 ⁵
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April 2020 (Based on 21 PFAS Analysis Data only)	PFOA	8.7	8.4	4.3	ND	ND	ND	ND	ND	ND	70 ⁴	10 ⁵
	PFOS	8.9	7.7	1.9	ND	ND	ND	ND	ND	ND	70 ⁴	10 ⁵
May 2020 (Based	PFOA	ND	7.9	4.8	ND	ND	ND	ND	ND	ND	70 ⁴	10 ⁵
on 21 PFAS Analysis Data	PFOS	11.0	7.7	2.0	ND	ND	ND	ND	ND	ND	70 ⁴	10 ⁵
only)												
August 2020	PFOA	9.4	9.2	6.8	ND	ND	ND	ND	ND	ND	70 ⁴	10 ⁵
(Based on 21 PFAS Analysis Data only)	PFOS	11.0	11.0	4.5	ND	ND	ND	ND	ND	ND	704	10 ⁵
	GAC CHANGE COMPLETED BY NYSDEC IN NOVEMBER 2020											
February 2021 (Based on 21 PFAS Analysis Data only)	PFOA	7.5	ND	ND	ND	ND	ND	ND	ND	ND	70 ⁴	10 ⁵
	PFOS	6.7	ND	ND	ND	ND	ND	ND	ND	ND	70 ⁴	10 ⁵
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May 2021 (Based on 21 PFAS Analysis Data only)	PFOA	9.1	5.7	ND	ND	ND	ND	ND	ND	ND	70 ⁴	10 ⁵
	PFOS	7.4	2.6	ND	ND	ND	ND	ND	ND	ND	70 ⁴	10 ⁵

Notes:

- ** 21 PFAS List Analysis.
- . PFOS and PFOA results and comparison values are reported in parts per trillion (ppt, nanograms per liter, ng/l).
- 2. "ND" means non-detect. The analyte was not detected in the sample.
- 3. MCL (Maximum Contaminant Level, mg/l) is the maximum permissible level of a contaminant in water delivered by a public water system.
- 4. Guidance: USEPA Drinking Water Health Advisory guidance value is 70 ppt.
- 5. Effective August 2020 the NYS maximum contaminant levels (MCLs) are 10 ppt for PFOS and 10 ppt for PFOA.

Town of New Windsor

Kroll Well GAC Operation and Maintenance PFOA and PFOS Sampling Results ** (Parts Per Trillion (PPT)) Continued

(Last updated: August 2021)

Date	Analyte	Result ¹ Raw Water	Result A25	Result ² A50	Result A75	Result Mid- Point	Result B25	Result B50	Result B75	Treated Effluent	USEPA Drinking Water Health Advisory Guidance Value	NYS MCLs
August 2021 (Based on 21 PFAS Analysis Data only)	PFOA	7.0	4.9	ND	ND	ND	ND	ND	ND	ND	704	10 ⁵
	PFOS	8.0	4.3	ND	ND	ND	ND	ND	ND	ND	704	10 ⁵

Notes:

- ** 21 PFAS List Analysis.
- 1. PFOS and PFOA results and comparison values are reported in parts per trillion (ppt, nanograms per liter, ng/l).
- 2. "ND" means non-detect. The analyte was not detected in the sample.
- 3. MCL (Maximum Contaminant Level, mg/l) is the maximum permissible level of a contaminant in water delivered by a public water system.
- 4. Guidance: USEPA Drinking Water Health Advisory guidance value is 70 ppt.
- 5. Effective August 2020 the NYS maximum contaminant levels (MCLs) are 10 ppt for PFOS and 10 ppt for PFOA.

How to Read Your Laboratory Reports

PFOA and PFOS Results:

- Analyte is the term used to describe what the laboratory was testing for, in this case PFOS and PFOA.
- <u>Conc. (ng/l)</u> is your result for PFOS and PFOA. In your case, no PFOS and PFOA were detected, thus ND or "non-detect" or <2.0 ng/l was reported. (ng/l = ppt)
- <u>RL = reporting limit</u> or RDL = <u>reportable detection limit</u> is the lowest level at which this specific testing protocol and laboratory has confidence in measuring the given analyte.
- Qualifiers are added information to help understand the quality of the data. Often, if something about the results or the calibration of the testing equipment was irregular, it would be reported here.

All other columns represent laboratory quality control information. The laboratory calibrates its equipment against a precise quantity of the chemical in order to ensure that the equipment is functioning properly. Some laboratory reports may not have all this information.

- <u>Labeled Standard or Surrogate</u> is the lab's specific name for an individual control sample.
- <u>%R</u> is the percent of the control sample that was detected by the equipment. A 100% reading represents perfect equipment alignment.
- <u>LCL-UCL</u> is the lower concentration limit (LCL) and upper concentration limit (UCL). The LCL represents the lowest acceptable %R value and the UCL represent the highest acceptable %R value required to ensure your result is accurate.
- Qualifiers: If a result quality control variance is noted or I the %R value of any of the control samples were outside the allowable range that would have been noted in this last column. This gives the analyst less confidence in the measured value.

The analysis for PFOS and PFOA is performed using modified EPA Method 537. The laboratory may report a detection of PFOS and PFOA down to approximately 2.0 nanograms per liter (ng/l) or parts per trillion (ppt).

Inorganic Results:

- Parameter is the same as "analyte" above it is the chemical being tested.
- Result is the concentration of that chemical detected.
- <u>RL/PQL</u> is the lowest level at which the specific laboratory test can reliably quantify the concentration. Below that number, the result is considered unreliable.
- <u>DIL</u> is the number of times the sample was diluted (necessary because the test has a certain range that it is accurate for).
- <u>Units</u>: mg/l is milligrams per liter or parts per million; ug/l is micrograms per liter or parts per billion.
- <u>DW MCL</u> stands for drinking water (DW) and "maximum contaminant level" (MCL). All chemicals that have a "maximum contaminant level" (MCL) established for drinking water (DW) have a level reported in this column.

- <u>Sec Goal</u> is the EPA nomenclature for all contaminants that have regulatory levels set based on aesthetics (for example, taste or color). DOH recognizes these EPA secondary goals as primary standards and enforces its drinking water quality program accordingly.
- <u>Date/Time</u> represents the date and time of the analysis at the lab.
- By refers to the technician who ran the test.
- Reference indicates the EPA method used in the test.