



**Department
of Health**



**Department of
Environmental
Conservation**

Newburgh, NY

PFOS Water Contamination and Blood Testing Information

October 2016

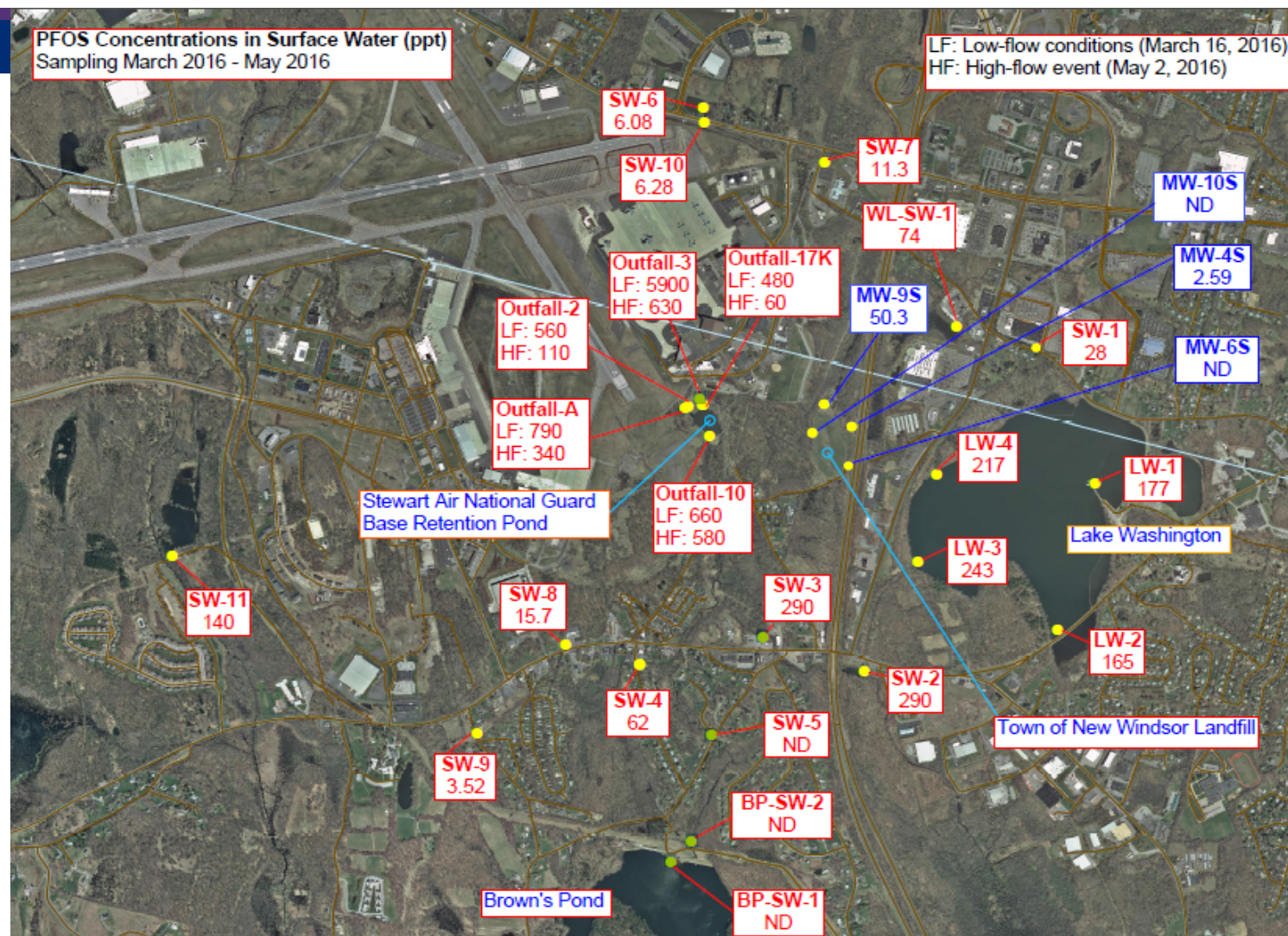
What is PFOS?

- Perfluorooctanesulfonic acid (PFOS or perfluorooctane sulfonate) is a chemical manufactured in the U.S. between 1949 – 2000.
- A key ingredient in firefighting foam.
- Other perfluorocarbons are often found along with PFOS.

What is the source of the PFOS contamination in Newburgh?

- NYS DEC identified Stewart Air National Guard Base as a significant source of the PFOS contamination found in Lake Washington.
- State continues to investigate other areas at and near the Stewart property for other possible sources of PFOS contamination.

Newburgh areas being investigated for PFOS contamination



How did we find out PFOS was in the drinking water?

- PFOS contamination was first detected and reported to the U.S. EPA in 2014 as part of the EPA Unregulated Contaminant Monitoring Rule requiring large water supplies to test for select unregulated contaminants.
- From December 2013 to October 2014, the City collected four samples that had detections of PFOS ranging from 140 to 170 ppt and reported these results to EPA and to the public in Annual Water Quality Reports.

How did we find out PFOS was in the drinking water?

- As part of Governor Cuomo's Water Quality Rapid Response Team launched in February 2016, DOH and DEC analyzed the EPA data in an effort to identify possible threats to drinking water quality across the state.
- All samples reported to the EPA were below the EPA's drinking water health advisory level of 200 ppt for PFOS in place until May 2016.
- However, out of an abundance of caution, the state engaged the City and sampled Newburgh's water system to confirm the presence of PFOS in March 2016.

What actions have been taken by the State to address contamination?

- Swiftly transitioned the City to a clean, alternative drinking water supply (Brown's Pond in May and Catskill Aqueduct in June);
- Committed to fund all Catskill Aqueduct water payments and advanced the first \$2.4 million payment to the City in September;
- Committed to fund and started to design a Granular Activated Carbon (GAC) system at the City of Newburgh water plant to remove PFOS from Lake Washington water that will be completed by the fall of 2017;

Cont. – Response to PFOS contamination in Newburgh:

- Committed to fund and started to design upgrades to the Catskill Aqueduct connection at the City of Newburgh's alternate water source pump station that will be completed by winter 2016/2017;
- Conducted a comprehensive site investigation that identified Stewart Air National Guard Base as the likely source of PFOS contamination in the area;
- Listed Stewart Air National Guard Base as a state Superfund site in August to hold the U.S. Department of Defense responsible for full site clean-up;



Cont. – Response to PFOS contamination in Newburgh:

- Began sampling private wells near the Town of New Windsor/Town of Newburgh line—all results to date are below the EPA health advisory level of 70 ppt;
- Started to draw down Lake Washington—by pumping it, filtering it, and discharging clean water into the watershed—to ensure the integrity of the dam;
- Launched a fish sampling program to better understand the extent of contamination in the watershed; and
- Initiated an updated source water assessment for the watershed.





Blood Testing



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Blood testing for Newburgh residents

- DOH recently announced a blood testing program in the City of Newburgh, along with federal, state, and local officials, including:
 - Congressman Sean Patrick Maloney
 - Senator Bill Larkin
 - Assemblyman Frank Skartados
 - Orange County Executive Steve Neuhaus
 - Mayor Judy Kennedy

When will blood testing begin in Newburgh?

- In coordination with CDC and ATSDR, the blood testing program will serve as a national model.
- Testing will begin November 1 at Cornerstone Family Healthcare facilities.

147 Lake Street, Newburgh

- Tuesday November 1
- Wednesday, November 2
- Thursday, November 3
- Saturday, November 12
- Saturday, November 19

290 Broadway, Newburgh

- Monday, November 7
- Thursday, November 10



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Who will be tested as part of the program?

- DOH plans to test every Newburgh resident who requests blood testing.
- If demand creates capacity issues, we will call upon our federal partners for technical and financial assistance.
- DOH wants to ensure participation from a statistically significant cross-section of the population to capture an accurate snapshot of exposure levels throughout the community.

How will outreach to Newburgh residents be conducted?

- DOH is coordinating outreach with local partners to reach all Newburgh residents.
- Held multiple listening sessions and attended public meetings to raise awareness in the community.
- Federal, state, and local elected officials; community health and development organizations; faith-based groups; and local healthcare professionals are providing input on the best ways to reach residents, including through social service providers, schools, and places of worship.

How will outreach to Newburgh residents be conducted?

- On-going partnership with elected officials and community-based groups to gather input and disperse information.
- Targeted outreach to Spanish and Creole speaking residents.
- Development of Newburgh-specific webpage and availability of Water Quality Hotline and DOH staff to answer questions via phone and email.
- Continued presence at joint public meetings (next on October 25) and other community events.

What happens after the blood testing events?

- The lab processes the samples and DOH analyzes information about results, organized into sub-groups.
- Results are mailed to the participant and physician, if desired. Area healthcare professionals are being provided educational materials on PFOS exposure.
- A report will be issued detailing overall results after all samples are analyzed.

What will blood sampling tell residents?

- According to the CDC's Agency for Toxic Substances and Disease Registry, "The blood test will not provide information to pinpoint a health problem nor will it provide information for treatment. The blood test results will not predict or rule-out the development of future problems related to exposure."

What are the possible health effects of PFOS exposure?

Peer-reviewed studies of the effects of PFOA and PFOS on lab animals (rats and mice) and epidemiological studies of human populations indicate that exposure over certain levels may result in adverse health effects, including:

- developmental effects to fetuses during pregnancy or to breastfed infants (e.g., low birth weight, accelerated puberty, skeletal variations),
- cancer (e.g., testicular, kidney),
- liver effects (e.g., tissue damage),
- immune effects (e.g., antibody production and immunity),
- thyroid effects and other effects (e.g., cholesterol changes).



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For more information, visit www.EPA.gov



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What information will residents receive?

FINAL LABORATORY REPORT		Report Date
Wadsworth Center - Biggs Laboratory PO Box 509, Empire State Plaza Albany, New York 12201-0509 CLIA# 33D0654341 NYS ELAP ID: 10763		Bio-Organic Analytical Chemistry Laboratory Lab Director: Dr. K. Aldous 518-473-0030
Specimen Id: EHS1600032438-01 Submitter's Specimen Id: PB-2016-1234		Specimen Type: Serum
PFOS by HPLC-Electrospray/Tandem Mass Spectrometry Perfluorooctanesulfonic acid: 5.15 ug/L		
Population	50th percentile level	95th percentile level
General U.S. population	6.53 ug/L	21.7 ug/L
50th percentile: Half of the people had a result below and half had a result above this level. 95th percentile: 95 of every 100 people had results below this level.		
General U.S. population: National Health and Nutrition Examination Survey (NHANES), National Report on Human Exposure to Environmental Chemicals, U.S. Centers for Disease Control and Prevention (CDC), 2011-12.		
ND (None Detected) means that PFOS was not detected above the Limit of Quantitation (LOQ) which is 0.5 ug/L.		
This test was developed and its performance characteristics determined by the Wadsworth Center-Biggs Laboratory, Albany, N.Y. It has not been cleared or approved by the U.S. Food and Drug Administration (FDA). The FDA has determined that such clearance or approval is not necessary.		
The Laboratory Director authorizes the release of this report. The results in this report relate only to the sample submitted to the laboratory.		



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How can residents contact the NYS DOH?

Blood sampling questions:

Bureau of Environmental & Occupational Epidemiology

E-mail: beoe@health.ny.gov

Phone: 518-402-7950 (Mon - Fri: 8:30 am - 4:30 pm)

Drinking water questions:

Water Quality Hotline

1-800-801-8092 (Mon - Fri: 9 am - 8 pm; Sat: 9 am - 3 pm)



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