



NHDES State-wide Perfluorinated Chemicals (PFC) in Drinking Water Investigation

January 10, 2017

The New Hampshire Department of Environmental Services (NHDES) is engaged in an ongoing investigation into perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) and other PFCs in New Hampshire drinking water. This document identifies areas where samples have been collected.

SITE/INVESTIGATION AREA	SAMPLES	APPOINTMENTS SCHEDULED	RESULTS RECEIVED	PFOA & PFOS <10	PFOA & PFOS 10 - <45	PFOA & PFOS 45 - <70	PFOA & PFOS ≥70
1. Saint Gobain Investigation Area - Bedford, Litchfield, Londonderry, Manchester, Merrimack	843	13	774	223	286	82	183
2. TCI Investigation area - Amherst, Hollis	235	4	209	111	62	15	21
3. Merrimack Landfill	114		114	73	37	2	2
4. Rochester - Lydall Performance Materials, Inc.	11	3	7	3			4
5. LLS Landfill - Salem	44		44	41	3		
6. Souhegan Landfill - Amherst	30		30	30			

7. Coakley Landfill – Greenland, North Hampton, Portsmouth and Rye	81	2	44	39	5		
8. Bedford Landfill	28		28	18	8	2	
9. Meadowood Fire Training Facility- Fitzwilliam/Troy	6		6	5	1		
10. Rockingham County Complex/Fire Training Facility - Brentwood	21		9	6			3
11. Kingston Fire Department	41	2	18	4	9	1	4
12. New Boston Air Force Station Former Fire Department	17		14	11	2	1	
13. Trowbridge Drive - Merrimack	15		15	3	10		2
14. Mammoth Road - Londonderry	24	2	24	18	4		2
15. Amherst Road - Merrimack	9		9	6	2	1	
16. Hampstead Middle School	16		16	9	3	4	
17. Marlow Elementary School	4		4	3			1
18. Gilford Municipal Complex/Fire Department	5		5	4		1	
19. Pease - Newington	37		37	28	5	1	3
20. General Investigation	75		68	63	4	1	
TOTAL	1619	26	1438	670	436	110	222

Background information on site/investigation areas above:

1. The investigation was initiated in early March 2016, when Saint-Gobain Performance Plastics notified NHDES that perfluorooctanoic acid (PFOA) was detected at 30 parts per trillion (ppt) in samples taken from four water faucets within their Merrimack facility, which is served by the Merrimack Village District Water System. The investigation has included sampling both public and private wells in Bedford, Litchfield, Londonderry, Manchester and Merrimack.
2. Investigation of the former facility of Textiles Coated International, Inc. at 105 Route 101A in Amherst, NH. No test results above the 70 ppt state standard have been found outside of a half-mile radius of the site.
3. Merrimack landfill test results from samples taken from nearby residential drinking water wells. Two wells have tested above 70 ppt, - one residential drinking water well, which has received a treatment system, and a non-potable supply well located at the landfill property.
4. Test results at the Lydall Performance Materials, Inc. in Rochester obtained during a permit renewal facility inspection showed elevated levels of PFCs. Initial sampling included one groundwater source and three samples were associated with lagoons and/or effluent. The highest concentration identified in a residential drinking water wells as of January 10 is less than 10 ppt, but testing efforts are ongoing.
5. Former-LLS landfill in Salem – test results from samples taken from nearby residential drinking water wells and Hedgehog Pond. The highest concentration identified in a residential drinking water well was 14 ppt.
6. Souhegan landfill in Amherst – test results from samples taken from nearby residential drinking water wells. The highest concentration identified in a residential drinking water well was 2 ppt.
7. Coakley landfill –test results from Greenland, North Hampton, Portsmouth and Rye. No residential drinking water well test results above 45 ppt.
8. Bedford landfill – test results from samples taken from nearby residential drinking water wells. No residential wells have tested above 70 ppt.
9. Meadowood firefighting training facility on the border of Fitzwilliam and Troy. NHDES sampled residential drinking water wells near this facility related to the use of class B firefighting aqueous film-forming foam (AFFF), which has contained PFOS. The highest concentration identified in a residential drinking water well was 15 ppt.
10. Rockingham County Complex/Firefighting Training Facility - NHDES sampled residential drinking water wells near this facility related to the use of class B firefighting aqueous film-forming foam (AFFF), which has contained PFOS. Monitoring wells at the facility have exceeded 70 ppt and residential well testing is ongoing.
11. Kingston Fire Department. The Town of Kingston requested NHDES test the Fire Department’s well because the town was making water from the well available to residents in need due to current drought conditions. The two separate rounds of test results showed that the well contained 140 parts per trillion (ppt) of PFOA, as well as the presence of additional non-regulated perfluorochemicals (PFCs). Three residential wells have also tested above 70 ppt and are in the process of receiving treatment. The town immediately ceased use of the affected well for drinking water and is now offering water from the library which was tested and had no detectable levels of PFCs. Residential treatment is ongoing.
12. New Boston Air Force Station Former Fire Department. NHDES sampled residential drinking water wells near this facility related to the use of class B firefighting aqueous film-forming foam (AFFF), which has contained PFOS. No residential wells have tested above 70 ppt.

13. Trowbridge Drive, Merrimack. Residential drinking water wells were tested in this area based on elevated results in the area. Two residential drinking water wells that tested above 70 ppt have received treatment systems and will continued to be monitored. The source of the PFCs is unknown.
14. Mammoth Road, Londonderry. Residential drinking water wells were tested in this area based on elevated results in the area, the source of which is unknown. Municipal water connections are being sought for two properties with wells that tested above 70 ppt.
15. Amherst Road, Merrimack. Residential drinking water wells were tested in this area based on elevated results in the area, the source of which is unknown.
16. Hampstead Middle School. Independent PFC test results at the school above 45 ppt initiated further testing in the area. No school or residential drinking water wells have tested above 70 ppt.
17. Marlow Elementary School. Independent PFC test results for the school drinking water well showed levels above 70 ppt. NHDES working with the school facilitated the installation of a point-of-entry treatment system for the school which has removed PFCs to non-detect. NHDES tested several additional residential drinking water wells in the area, none of which tested above 70 ppt.
18. Gilford Municipal Complex/Fire Department. Independent PFC testing by the town of Gilford has shown PFOA and PFOS in the well serving the town complex between 45 ppt and 70 ppt.
19. Pease – Testing of private wells in Newington related to the PFC drinking water investigation at the Former Pease Air Force Base/Pease Tradeport Authority. Samples were collected by consultants for the Air Force during 2014 to 2016. Residents above 70 ppt received alternative water or point of entry treatment systems.
20. General Investigation category. NHDES has collected drinking water well samples at or nearby a number of other sites of interest. These include but are not limited to – An airport, businesses, car washes, childcare facilities, waste to energy facilities and schools. Based on test results the investigation of these specific facilities are considered closed.

Additional information for many of these sites is available on the NHDES website: www.des.nh.gov or the NHDES One-stop data website: <http://des.nh.gov/onestop/index.htm>

PFOA/PFOS Sampling Results for Public Water Systems in New Hampshire (Updated 12/27/2016) is available here: <http://des.nh.gov/organization/commissioner/documents/pfoa-public-water-results-20161227.pdf>

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