



Overview of Testing Results for Perfluorinated Compounds (PFCs) and Follow-On Actions for

Naval Weapons Station Earle, Colts Neck, NJ

The safety and health of our military and civilian personal at Naval Weapons Station Earle are a top priority. The Navy has proactively developed a requirement to sample the drinking water at the Military Sealift Command Fire Training School and other select installations for perfluorinated compounds (PFCs). PFCs are unregulated or “emerging” contaminants, which have no Safe Drinking Water Act regulatory standards or routine water quality testing requirements. PFCs are currently being studied by the U.S. Environmental Protection Agency to determine if regulation is needed. Until a decision on regulating PFCs is made, the Navy has proactively developed a policy to ensure on-base drinking water has not been impacted by PFC contamination at installations where there has been a nearby known or suspected release of PFCs to the environment.

PFCs have been used in a variety of products and substances; the most common historical Navy use of the substances has been as a fire extinguishing surfactant in Aqueous Film-Forming Foam (AFFF). Testing results are provided for the MSC Fire Training School because AFFF was released to the ground surface during training exercises in past years.

Navy environmental personnel tested the drinking water produced by the onsite potable wells on 29 Dec. 2015. Samples were collected from each well at a faucet on the well supply line with a second sample collected inside the main building at a sink. All samples were sent to a DoD-certified laboratory for analysis. On 25 Nov. 2015, the New Jersey Dept. of Environmental Protection (DEP) issued a new Groundwater Quality Standard (GWQS) for a specific PFC termed perfluorononanoic acid (PFNA). Testing for this compound was included in the Navy’s analyses.

The results of analyses of the potable water samples indicate that the PFC parameters, Perfluorooctane Sulfonate (PFOS) and Perfluorooctanoic Acid (PFOA), were not detected above the U. S. Environmental Protection Agency Provisional Health Advisory (PHA) levels, the health based concentrations above which action should be taken to reduce exposure to PFOA and PFOS. The EPA’s Office of Water established a PHA of 0.2 parts per billion (ppb) for PFOS and 0.4 ppb for PFOA. In addition, the analysis for PFNA indicated this compound was not detected above the NJ DEP GWQS of 0.01 parts per billion.

A copy of test results is enclosed for your information and presented in Table 1.

Table 1 provides the Initial Sampling Results and additional information for each parameter using the following columns; Parameter, Drinking Water, EPA PHA or NJ DEP GWQS Level, Exceeds EPA PHA or NJ DEP GWQS Level, Units and Corrective Actions. The Parameter column lists the name and acronym of the parameter tested. The Drinking Water column shows the result of the finished water sampling location. The EPA PHA or NJ DEP GWQS Level column and the Exceeds EPA PHA or NJ DEP GWQS Level column confirm whether the results exceeded the parameter’s PHA or GWQS level and if any corrective actions are required. The Corrective Actions column describes immediate actions to reduce exposure, and additional actions to remediate and ensure levels in the drinking water system

will remain below the PHAs. In the event that additional follow-on sampling is required, follow-on drinking water sampling results will be provided separately at:
http://www.cnmc.navy.mil/regions/cnrma/om/environmental_support/water_quality_information/perfluorinated_compounds_sampling_program/NWS_Earle-MSF_Firefighting_School.html

To learn more about the emerging contaminants, PFOS and PFOA, please see this EPA fact sheet at:
http://www2.epa.gov/sites/production/files/2014-04/documents/factsheet_contaminant_pfos_pfoa_march2014.pdf

To answer any questions you may have on the sampling program contact the NWS Earle Public Affairs Officer at 732-866-2171.

If you have any health questions or concerns, we encourage you to contact your health care provider or our medical representative, Pamela Krahl, at 410-293-1152.

Table 1. Initial Sampling Results (2015)

Parameter	Drinking Water	EPA PHA Level or NJ DEP GWQS	Exceeds EPA PHA Level or NJ DEP GWQS	Unit	Corrective Actions
Perfluorooctane Sulfonate (PFOS)	0.0017	0.2	No	ppb*	As PFOA, PFOS, and PFNA were not detected at concentrations greater than the PHA level or NJ DEP GWQS, no corrective actions are necessary. Due to detections of these compounds in area groundwater, the Navy will monitor drinking water on a routine basis.
Perfluorooctanoic Acid (PFOA)	0.0023	0.4	No	ppb*	
Perfluorononanoic Acid (PFNA)	0.0024	0.01	No	ppb*	

***1 part per billion (ppb) = 1 microgram per liter (ug/L)**