



DEPARTMENT OF THE NAVY
BUREAU OF MEDICINE AND SURGERY
7700 ARLINGTON BOULEVARD
FALLS CHURCH, VA 22042

IN REPLY REFER TO

6280

Ser M3B7/15UM30462

DEC 24 2015

MEMORANDUM FOR COMMANDER, NAVY MEDICINE EAST
COMMANDER, NAVY MEDICINE WEST

Subj: TESTING FOR PERFLUOROCHEMICALS (PFCs) IN DRINKING WATER

Ref: (a) BUMEDINST 6240.10B, Water Quality Standards

- Encl: (1) OPNAV Ltr 5090 N45 Ser/15U132432 of 14 Sep 2015, Navy Drinking Water Sampling Policy for Perfluorochemicals Perfluorooctane Sulfonate and Perfluorooctanoic Acid
- (2) Marine Corps Memo of 24 Dec 2014, Sampling and Testing for Perfluorinated Compounds (PFCs) in Drinking Water
- (3) Additional Resources and Communication Tools

1. The Navy and Marine Corps have begun testing for PFCs in drinking water systems at certain installations per enclosures (1) and (2). The specific PFCs for which testing is being performed are perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA).

2. Background. PFOS and PFOA are man-made chemicals that are of increasing concern to the United States (U.S.) Environmental Protection Agency (EPA) and state regulators. They have been used in fire extinguishing foam, waterproof fabrics, non-stick cookware, stain resistant carpets, and other products. These substances are very stable and persistent in the environment; they can migrate to drinking water sources because they are not adsorbed well in soil. These substances are considered "emerging contaminants" for which there are no Safe Drinking Water Act (SDWA) regulatory standards (e.g., Maximum Contaminant Levels (MCLs)).

a. The EPA developed Provisional Health Advisory (PHA) values for PFOA and PFOA. They reflect health-based concentrations above which action should be taken to reduce exposure to these unregulated contaminants in drinking water. The EPA PHA for PFOS is 0.2 micrograms per liter ($\mu\text{g/L}$), and the PHA for PFOA is 0.4 $\mu\text{g/L}$.

b. In 2012, the EPA added a requirement to sample for PFOS/PFOA by the end of 2015 under the SDWA Third Unregulated Contaminant Monitoring Rule. This was intended to identify the extent of PFOS/PFOA in U.S. drinking water systems and help the EPA determine whether a drinking water standard should be established. Based on sampling conducted throughout the Department of Defense to date, we do not expect a significant number of samples to exceed the EPA PHAs for PFOS or PFOA.

c. Per enclosure (1), if a PFOS or PFOA sample exceeds the EPA PHA at any Navy drinking water system, consultation with the Navy and Marine Corps Public Health Center (NMCPHC) should be initiated to determine allowable uses for the water in accordance with reference (a).

3. Action. In preparation for addressing potentially high PFOS/PFOA sampling results, Navy Medicine Regions and medical treatment facilities (MTFs) must take the following steps:

a. Ahead of drinking water sampling, Regions must ensure each MTF identifies a point of contact (POC) who is knowledgeable of this program, is experienced in risk communication, and can answer questions regarding health risks and the significance of testing results. The POC should generally be a specialist in public health, occupational medicine, or environmental health. The POC should coordinate with the regional or installation Drinking Water Manager prior to initiation of sampling and testing. Navy Medicine Regions should also identify a regional POC if they have not already done so.

b. If PFOS or PFOA sampling results are above the EPA PHA, then MTFs should anticipate medical inquiries and use appropriate risk communication practices. The medical POCs should also prepare to visit the affected facilities to address any concerns. These visits should be done in coordination with installation staff, who will then deliver notification letters with sampling results to affected individuals.

(1) The medical POCs should be prepared to discuss the potential health risks due to PFOS/PFOA exposure, reasons why PFOS/PFOA blood testing is not recommended, as well as when and how to obtain a medical evaluation.

(2) The medical POCs can find additional resources and communication tools in enclosure (3).

4. Blood testing for PFOS/PFOA is not medically necessary. While blood tests can measure the level of PFCs in a person's body at the time of the test, the blood tests cannot:

(1) tell a person where or how they were exposed to PFCs, since there are many other sources of PFC exposure in a person's living and working environment;

(2) tell a person what, if any, health problems might occur or have occurred because of PFC exposure;

(3) be used by a health care provider to guide individual treatment decisions or additional medical tests. There are no medically approved "treatments" or methods to remove PFCs from a person's body other than to decrease total exposure in order to reduce body burden over time.

Healthcare providers should perform any routine diagnostic or screening tests as medically indicated based on their patient's history, physical examination, and assessment, but not based on PFOS/PFOA levels.

5. The NMCPHC will provide further information and support. They may be reached by phone at (757) 953-0700 or DSN (312) 377- 0700.

6. My point of contact is LCDR Jaime Vega, MC, USN, Occupational Medicine, who may be reached via phone at (703) 681-5467 or by email at Jaime.Vega2.mil@mail.mil.

A handwritten signature in cursive script, appearing to read "E. C. Wagner".

E. C. WAGNER
Director, Healthcare Operations



DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
2000 NAVY PENTAGON
WASHINGTON, DC 20350-2000

5090
N45 Ser/15U132432
14 SEP 15

From: Director, Energy and Environmental Readiness (OPNAV N45)
To: Commander, Navy Installations Command (N4)

Subj: NAVY DRINKING WATER SAMPLING POLICY FOR
PERFLUORO CHEMICALS PERFLUORO OCTANE SULFONATE AND
PERFLUORO CATANOIC ACID

Ref: (a) CNICINST 5090.3
(b) EPA Office of Water Provisional Health Advisories for Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS) dated January 8, 2009
(c) BUMEDINST 6240.1B

Encl: (1) 21 October 2014 ASN (EI&E) Memo
(2) EPA Approved Laboratories for UCMR 3
(3) Field Sampling Protocols to Avoid Cross Contamination

1. Effective the date of this letter, this policy supports enclosure (1) in providing requirements for sampling and testing for the emerging contaminants Perfluorooctane Sulfonate (PFOS) and Perfluorooctanoic Acid (PFOA) in certain Navy public water systems (PWS) in the United States and Navy overseas drinking water (ODW) systems as defined in reference (a).

2. Background. PFOS and PFOA are perfluorochemicals (PFCs), man-made chemicals that are of increasing concern to the U.S. Environmental Protection Agency (EPA) and state regulators. These substances are very stable and persistent in the environment and because they are not adsorbed well in soil, they can migrate to drinking water sources. At present, these substances are considered "emerging contaminants" for which there are no Safe Drinking Water Act (SDWA) regulatory standards. While 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).

3. In 2012, EPA added a requirement to sample for PFOS/PFOA under the SDWA Third Unregulated Contaminant Monitoring Rule (UCMR 3). As a result, all large and 800 small public water systems (PWS) in the United States must sample and test for these chemicals between 2013 and 2015. The purpose of UCMR 3 sampling and testing is to determine the extent that PFOS/PFOA occurs in U.S. drinking water systems and whether drinking water standards should be established.

4. On 8 January 2009, EPA's Office of Water released a Provisional Health Advisory (PHA) establishing health-based screening levels for PFOS and PFOA. Reference (b) sets the PHA for PFOS at 0.2 micrograms per liter ($\mu\text{g/L}$); the PHA for PFOA was set at 0.4 $\mu\text{g/L}$. The 2009 PHA is under review, and if EPA revises the levels, the revised figures will be used for all Navy PFOS/PFOA actions unless the U.S. state in which the installation is located has established more stringent standards.

Enclosure (1)

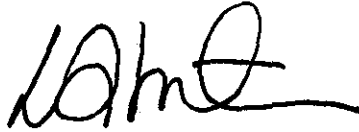
Subj: NAVY DRINKING WATER SAMPLING POLICY FOR PERFLUOROCHEMICALS
PERFLUOROOCTANE SULFONATE AND PERFLUOROOCATONOIC ACID

5. Policy. This letter establishes policy for the sampling and testing of PFOS and PFOA in drinking water at certain Navy installations worldwide. When federal, state, or DoD standards are promulgated, the more protective requirement will be used for Navy PFOS and PFOA actions.
6. All Navy PWSs in the United States that produce drinking water from on installation sources where PFCs are known or suspected to have been released within approximately 1-mile up-gradient to the drinking water source must sample and test for PFOS/PFOA in finished drinking water. Navy PWSs that have completed sampling and testing for PFOS/PFOA under the Federal UCMR 3 or any state UCMR that has requirements at least as stringent as Federal requirements are not required to repeat sampling and testing for the purpose of this policy. All ODW Systems must also sample and test for PFOS/PFOA in finished drinking water, unless the installation can document that there is no potential PFOS/PFOA exposure pathway.
7. Drinking water managers should work with Environmental Restoration managers to determine if PFCs are known or suspected to have been released within approximately 1-mile up-gradient to the drinking water source.
8. Navy Public Water Systems in the United States subject to this policy must complete sampling and testing by December 31, 2015. Navy ODW systems must complete sampling by March 31, 2016. One sample per drinking water system is required and EPA Method 537 Rev 1.1 must be used for analyzing all samples. Samples must be processed in a laboratory accredited for EPA Method 537 Rev 1.1. Enclosure (2) provides a list of laboratories approved for EPA Method 537. Navy ODW systems must also use a U.S. laboratory approved for EPA Method 537. Given the low detection limits associated with PFC analysis and the many potential sources of trace levels of PFCs, personnel are advised to follow the protocols in Enclosure (3).
9. If a PFOS or PFOA sample exceeds the PHA at any Navy drinking water system, alternative drinking water must be supplied until these levels can be reduced below the PHAs. Exceedances and corrective actions shall be reported to the chain of command and consultation with the Navy Marine Corps Public Health Center should be initiated to determine allowable uses for the water in accordance with reference (c).
10. If a PFOS or PFOA sample is below the PHA, but is detected above the Minimum Reporting Level (0.04 ug/l and 0.02 ug/l respectively), the Navy drinking water system should coordinate possible follow-up actions with the chain of command. This may include additional sampling and monitoring to ensure the PFOS and PFOA levels in the drinking water system remain below the PHAs.
11. Funding for sampling and testing shall be programmed as an emergent project in Navy's Environmental Portal, Environmental Program Requirements Web (EPR Web) Guidebook number 05999 using Environmental Readiness Level 4 to ensure projects receive the highest priority for funding. Funding for implementation of corrective actions is the responsibility of the installation Public Works Officer.

Subj: NAVY DRINKING WATER SAMPLING POLICY FOR PERFLUOROCHEMICALS
PERFLUOROOCTANE SULFONATE AND PERFLUOROOCTANOIC ACID

12. All results of UCMR 3 PFOS/PFOA sampling, and Navy Public Water System sampling under this policy shall be submitted to OPNAV N45 by 15 February 2016. ODW System sampling shall be submitted to OPNAV N45 no later than 15 May 2016.

13. My point of contact is Ms. Lindsay R. Nehm, N452E, at (703) 695-5179, DSN 225-5179, or e-mail Lindsay.nehm@navy.mil.



D. G. MORTON
Rear Admiral, U.S. Navy
Director, Energy and Environmental
Readiness Division

Copy to:
DASN(E)
OPNAV N4
OPNAV N46
NAVFAC ENV
BUMED
NAVSEA 04X



DEPARTMENT OF THE NAVY
THE ASSISTANT SECRETARY OF THE NAVY
(ENERGY, INSTALLATIONS AND ENVIRONMENT)
1000 NAVY PENTAGON
WASHINGTON DC 20350-1000

October 21, 2014

**MEMORANDUM FOR DEPUTY CHIEF OF NAVAL OPERATIONS (FLEET
READINESS AND LOGISTICS) (N4)
DEPUTY COMMANDANT OF THE MARINE CORPS
(INSTALLATIONS AND LOGISTICS)**

SUBJECT: Perfluorinated Compounds (PFCs) – An Emerging Environmental Issue

References: (a) OPNAVINST 5090.1D
(b) MCO P5090.2A
(c) DoDI 4715.18
(d) SECNAV Info Memo, 29 Jul 2014

The Department of the Navy (DON) is committed to ensuring all men, women, and children who live or work on DON installations and facilities are protected from environmental contaminants and receive safe drinking water. Navy and Marine Corps maintain comprehensive environmental instructions (references (a) and (b)) detailing procedures to meet and exceed requirements found in statute, regulation, and policy. Reference (c) established Department of Defense (DoD) policy relative to emerging contaminants, such as PFCs.

PFCs are a suite of chemicals of emerging public health concern to the U.S. Environmental Protection Agency (EPA) and state regulators, primarily in drinking water systems. One of the major DoD uses of PFCs is as a fire extinguishing agent in aqueous film forming foam (AFFF). EPA added new PFC sampling requirements under the Safe Drinking Water Act (SDWA) Unregulated Contaminant Monitoring Rule 3 (UCMR 3), requiring all large and 800 small public water systems to test for these chemical between 2013-2015. This testing is being conducted to determine the extent of PFCs in drinking water systems nationwide and whether drinking water standards should be established.

Per reference (d), my staff coordinated a meeting with the DoD Component subject matter experts to evaluate these emerging contaminants and identify paths forward regarding the future use, cleanup, and protection of DON drinking water systems. To date, only two PFCs (perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA)) have sufficient toxicological information to make cleanup and drinking water safety decisions. DoD is taking the lead and will be conducting a study of AFFF formulations to determine whether safer alternatives are available that meet our firefighting requirements. After coordinating with your Navy and Marine Corps staff, I am directing the following actions be taken regarding PFOS and PFOA cleanup sites and drinking water systems:

- Defense Environmental Restoration Program (DERP) – identify all known and suspected sites where PFOS and/or PFOA may have been released on active and Base Realignment and Closure (BRAC) installations. As appropriate, address these contaminant releases including migration off-site, under DERP and in accordance with reference (c).
- DON drinking water systems in the United States – Ensure all applicable UCMR 3 testing and reporting requirements are met by December 2015. If exceedances of Provisional Health Advisory (PHA) values are identified, supply alternative drinking water until these levels can be reduced below the PHAs. For installations not required to test under the UCMR 3, and where the installation produces drinking water from on-installation sources, by December 2015, sample finished drinking water from all DON systems for PFOS and PFOA where there is an identified or suspected PFC release within approximately 1-mile upgradient to the drinking water source. Address any PHA value exceedances per above.
- DON overseas drinking water systems – DERP does not apply overseas, so PFC release site information may not be available. Therefore, all DON overseas drinking water systems shall be sampled for PFOS and PFOA by December 2015 and any PHA value exceedances addressed per above.
- Drinking water systems with detections above the Method Reporting Limit (MRL), but below the PHA value shall determine appropriate follow-up actions, in coordination with the chain of command, which may include additional sampling to ensure levels in drinking water, remain below the PHA value.
- Report all drinking water PHA value and MRL exceedances and corrective actions to my office.

My point of contact is Mr. Richard Mach at (703) 614-5463 or richard.mach@navy.mil.



Donald R. Schregardus

EPA Approved Laboratories for UCMR 3

These laboratories met the Unregulated Contaminant Monitoring Rule 3 (UCMR 3) Laboratory Approval Program application and Proficiency Testing (PT) criteria for the methods indicated. These laboratories can only analyze samples using those methods marked with "X" next to their names. This approved laboratory list is subject to change. Laboratories that withdraw or fail to maintain the method and program quality control requirements will be permanently removed from the list.



| Laboratory Name | Assessment Monitoring List 1 | | | | | | Screening Survey List 2 |
|--|---------------------------------|-----------|-----------|---------|-----------|---------|----------------------------|
| | EPA 200.8 | EPA 218.7 | EPA 300.1 | EPA 522 | EPA 524.3 | EPA 537 | EPA 539 |
| Arkansas DoH Public Health Lab 201 South Monroe St. Little Rock, AR 72205 (501)661-2220 | X | X | X | | X | | |
| City of Phoenix Laboratory Services 2474 South 22nd Avenue Phoenix, AZ 85009 (602)534-2960 | X | X | X | | X | | |
| City of Tempe Water Quality Laboratory PO Box 5002 Tempe, AZ 85280 (480)350-8255 www.tempe.gov/waterquality | X | | | | | | |
| Orange Co. Water District Advanced Water Quality Assurance Lab 18700 Ward Street Fountain Valley, CA 92708 (714)378-3347 www.ocwd.com | X | X | X | X | X | X | X |
| BSK Associates 1414 Stanislaus Street Fresno, CA 93706 (559)497-2888 www.bskinc.com | X | X | X | X | X | X | X |
| Weck Laboratories, Inc. 14859 E. Clark Avenue Industry, CA 91745 (626)336-2139 www.wecklabs.com | X | X | X | X | X | X | X |
| TestAmerica - Irvine 17461 Derian Ave. Suite 100 Irvine, CA 92614 (949)261-1022 www.testamericainc.com | | X | X | X | X | | |

These laboratories met the Unregulated Contaminant Monitoring Rule 3 (UCMR 3) Laboratory Approval Program application and Proficiency Testing (PT) criteria for the methods indicated. These laboratories can only analyze samples using those methods marked with "X" next to their names. This approved laboratory list is subject to change. Laboratories that withdraw or fail to maintain the method and program quality control requirements will be permanently removed from the list.



| Laboratory Name | Assessment Monitoring | | | | | | Screening Survey |
|---|-----------------------|-----------|-----------|---------|-----------|---------|------------------|
| | EPA 200.8 | EPA 218.7 | EPA 300.1 | EPA 522 | EPA 524.3 | EPA 537 | EPA 539 |
| Eurofins Eaton Analytical Inc, formerly known as MWH Labs 750 Royal Oaks Drive Monrovia, CA 91016 (626)386-1100 www.eatonanalytical.com | X | X | X | X | X | X | X |
| Los Angeles DWP, Water Quality Laboratory 555 E Walnut St Pasadena, CA 91101 (213)367-8546 | X | X | X | X | X | | |
| McCampbell Analytical, Inc. 1534 Willow Pass Road Pittsburg, CA 94565 (925)252-9262 www.mccampbell.com | X | X | X | X | X | X | X |
| Basic Laboratory, Inc. 2218 Railroad Ave. Redding, CA 96001 (530)243-7234 www.basiclab.com | X | X | X | X | X | | |
| Edward S. Babcock and Sons, Inc. 6100 Quail Valley Court Riverside, CA 92507 (951)653-3351 www.babcocklabs.com | X | X | X | X | X | X | X |
| Test America - West Sacramento 880 Riverside Parkway West Sacramento, CA 95605 (916)373-5600 www.testamericainc.com | | | | | | X | |
| Regional Water Authority 90 Sargent Dr. New Haven, CT 06511 (203)562-4020 www.rwater.com | | | X | | X | X | X |

These laboratories met the Unregulated Contaminant Monitoring Rule 3 (UCMR 3) Laboratory Approval Program application and Proficiency Testing (PT) criteria for the methods indicated. These laboratories can only analyze samples using those methods marked with "X" next to their names. This approved laboratory list is subject to change. Laboratories that withdraw or fail to maintain the method and program quality control requirements will be permanently removed from the list.



| Laboratory Name | Assessment Monitoring List 1 | | | | | | Screening Survey List 2 |
|---|---------------------------------|-----------|-----------|---------|-----------|---------|----------------------------|
| | EPA 200.8 | EPA 218.7 | EPA 300.1 | EPA 522 | EPA 524.3 | EPA 537 | EPA 539 |
| Orange County Utilities Laboratory 9124 Curry Ford Road Orlando, FL 32825 (407)254-9550 | X | X | X | X | X | X | X |
| Pace Analytical Services, Inc. - Florida 8 East Tower Circle Ormond Beach, FL 32174 (386)672-5668 www.pacelabs.com | X | X | X | X | X | X | X |
| State Hygienic Laboratory - Ankeny 2220 S. Ankeny Blvd. Ankeny, IA 500239093 (515)725-1600 www.shl.uiowa.edu | X | X | X | | | | |
| State Hygienic Laboratory - Coralville 2490 Crosspark Road Coralville, IA 522414792 (319)335-4500 www.shl.uiowa.edu | | | | X | X | X | X |
| Anatek Labs, Inc. 1282 Alturas Drive Moscow, ID 83843 (208)883-2839 www.anateklabs.com | X | | X | X | X | X | X |
| American Water Central Laboratory 1115 S. Illinois Street Belleville, IL 62220 (618)235-3600 www.amwater.com | X | X | X | X | X | X | X |
| PDC Laboratories PO Box 9071 Peoria, IL 616129071 | | | | | X | | |

These laboratories met the Unregulated Contaminant Monitoring Rule 3 (UCMR 3) Laboratory Approval Program application and Proficiency Testing (PT) criteria for the methods indicated. These laboratories can only analyze samples using those methods marked with "X" next to their names. This approved laboratory list is subject to change. Laboratories that withdraw or fail to maintain the method and program quality control requirements will be permanently removed from the list.



| Laboratory Name | Assessment Monitoring List 1 | | | | | | Screening Survey List 2 |
|--|---------------------------------|-----------|-----------|---------|-----------|---------|----------------------------|
| | EPA 200.8 | EPA 218.7 | EPA 300.1 | EPA 522 | EPA 524.3 | EPA 537 | EPA 539 |
| Heritage Environmental Services, LLC 7901 W. Morris St. Indianapolis, IN 46231 (317)243-8304 www.heritage-enviro.com | | | | | | X | |
| UL LLC 110 South Hill Street South Bend, IN 46617 (574)233-4777 www.ul.com/water/waterlab | X | X | X | X | X | X | X |
| McCoy & McCoy Laboratories, Inc. P.O. Box 907 Madisonville, KY 42431 (270)821-7375 www.mccoylabs.com | X | X | X | X | X | | |
| Barnstable County Dept. of Health and Environment Lab 3195 Main Street Barnstable, MA 02630 (508)375-6606 | | | X | | X | | |
| Enviro-Chem Laboratories, Inc. 47 Loveton Circle, STE K Sparks, MD 21152 (410)472-1112 www.enviro-chem.net | X | X | | | | | |
| ALS Environmental Division - Holland 3352 128th Ave Holland, MI 49424 (616)399-6070 www.alsglobal.com | X | | X | X | X | | |
| National Testing Laboratories, Ltd. 556 South Mansfield St. Ypsilanti, MI 48197 | X | | X | | | | |

These laboratories met the Unregulated Contaminant Monitoring Rule 3 (UCMR 3) Laboratory Approval Program application and Proficiency Testing (PT) criteria for the methods indicated. These laboratories can only analyze samples using those methods marked with "X" next to their names. This approved laboratory list is subject to change. Laboratories that withdraw or fail to maintain the method and program quality control requirements will be permanently removed from the list.



| Laboratory Name | Assessment Monitoring List 1 | | | | | | Screening Survey List 2 |
|--|---------------------------------|-----------|-----------|---------|-----------|---------|----------------------------|
| | EPA 200.8 | EPA 218.7 | EPA 300.1 | EPA 522 | EPA 524.3 | EPA 537 | EPA 539 |
| MO DNR Environmental Laboratory 2710 West Main St Jefferson City, MO 65109 (573)526-6971 | X | | X | | | | |
| Microbac Laboratories, Inc. - Wilson Division 3809 Airport Drive NW Wilson, NC 27896 (252)237-4175 www.microbac.com | | | X | | | | |
| EMSL Analytical, Inc. 200 Route 130 North Cinnaminson, NJ 08077 (800)220-3675 www.emsl.com | | | X | | | | |
| Suffolk County Water Authority Laboratory 260 Motor Parkway Hauppauge, NY 11788 (631)563-0259 scwa.com | X | X | X | X | X | X | X |
| H2M Labs, Inc. 575 Broad Hollow Rd Melville, NY 11747 (631)694-3040 www.h2mlabs.com | | | X | X | X | | |
| Columbia Analytical Services - NY 1565 Jefferson Rd, Building 300, Ste 360 Rochester, NY 14623 (585)288-5380 www.caslab.com | | X | | X | | | |
| Westchester County Dept. of Lab and Research 10 Dana Road Valhalla, NY 10595 (914)231-1620 labs.westchestergov.com | | | | X | X | | |

These laboratories met the Unregulated Contaminant Monitoring Rule 3 (UCMR 3) Laboratory Approval Program application and Proficiency Testing (PT) criteria for the methods indicated. These laboratories can only analyze samples using those methods marked with "X" next to their names. This approved laboratory list is subject to change. Laboratories that withdraw or fail to maintain the method and program quality control requirements will be permanently removed from the list.



| Laboratory Name | Assessment Monitoring List 1 | | | | | | Screening Survey List 2 |
|--|---------------------------------|-----------|-----------|---------|-----------|---------|----------------------------|
| | EPA 200.8 | EPA 218.7 | EPA 300.1 | EPA 522 | EPA 524.3 | EPA 537 | EPA 539 |
| Summit Environmental Technologies, Inc. 3310 Win Street Cuyahoga Falls, OH 44223 (330)253-8211 www.Settek.com | X | X | X | X | X | | |
| Alloway Testing 1776 Marion-Waldo Road Marion, OH 43302 (740)389-5991 www.alloway.com | X | X | X | X | X | | |
| Accurate Environmental Labs 505 S. Lowry Stillwater, OK 74074 (405)372-5300 www.accuratelabs.com | X | X | X | X | X | X | X |
| Aqua Pennsylvania, Inc. 762 W. Lancaster Ave Bryn Mawr, PA 190103489 (610)645-1145 | X | X | X | | X | | |
| Microbac Laboratories, Inc. Central Pennsylvania Division 4359 Linglestown Road Harrisburg, PA 17112 (717)651-9700 www.microbac.com | X | | | X | X | | |
| ALS - Middletown 34 Dogwood Lane Middletown, PA 17057 (717)944-5541 www.alsglobal.com | X | X | X | X | X | | |
| Suburban Water Testing Labs 1037F MacArthur Rd Reading, PA 19605 h2otest.com | X | X | X | X | X | | |

These laboratories met the Unregulated Contaminant Monitoring Rule 3 (UCMR 3) Laboratory Approval Program application and Proficiency Testing (PT) criteria for the methods indicated. These laboratories can only analyze samples using those methods marked with "X" next to their names. This approved laboratory list is subject to change. Laboratories that withdraw or fail to maintain the method and program quality control requirements will be permanently removed from the list.



| Laboratory Name | Assessment Monitoring List 1 | | | | | | Screening Survey List 2 |
|---|---------------------------------|-----------|-----------|---------|-----------|---------|----------------------------|
| | EPA 200.8 | EPA 218.7 | EPA 300.1 | EPA 522 | EPA 524.3 | EPA 537 | EPA 539 |
| M.J. Reider Associates, Inc. 107 Angelica Street Reading, PA 19611 (610)374-5129 mjreider.com | | X | X | | | | |
| Kirby Memorial Health Center 71 North Franklin St Wilkes-Barre, PA 18701 (570)823-5450 www.kirbyhealthcenter.org | X | | | | | | |
| Environmental Quality Laboratories, Inc (EQLab) P.O. Box 11458 Santurce, PR 009101458 (787)288-6420 www.eqlab.com | | | X | X | X | | |
| Rogers and Callcott Engineers, Inc. PO Box 5655 Greenville, SC 29606 (864)232-1556 www.rogersandcallcott.com | | | | | X | | |
| LCRA - Environmental Laboratory Services 3505 Montopolis Dr, MS: EL-101 Austin, TX 78744 (512)356-6022 https://els.lcra.org | X | | X | X | X | X | X |
| City of Houston Drinking Water Operations Laboratory 2300 Federal Rd Houston, TX 77015 (832)395-6039 http://www.publicworks.houstontx.gov/utilities/drinking | | X | X | X | | | |
| Unified State Laboratories: UT DoH 4431 South 2700 West Taylorsville, UT 84129 (801)965-2400 | X | X | X | X | X | X | |

These laboratories met the Unregulated Contaminant Monitoring Rule 3 (UCMR 3) Laboratory Approval Program application and Proficiency Testing (PT) criteria for the methods indicated. These laboratories can only analyze samples using those methods marked with "X" next to their names. This approved laboratory list is subject to change. Laboratories that withdraw or fail to maintain the method and program quality control requirements will be permanently removed from the list.



| Laboratory Name | Assessment Monitoring List 1 | | | | | | Screening Survey List 2 |
|---|---------------------------------|-----------|-----------|---------|-----------|---------|----------------------------|
| | EPA 200.8 | EPA 218.7 | EPA 300.1 | EPA 522 | EPA 524.3 | EPA 537 | EPA 539 |
| Edge Analytical, Inc. 1620 S. Walnut St. Burlington, WA 98233 (360)757-1400 www.edgeanalytical.com | X | X | X | X | X | | |
| Columbia Analytical Services, Inc. 1317 South 13th Avenue Kelso, WA 98626 (360)577-7222 www.caslab.com | | | | | | X | X |
| Water Management Laboratories, Inc. 1515 80th Street East Tacoma, WA 98404 (253)531-3121 | X | | X | X | | | |
| Northern Lake Service, Inc. 400 N. Lake Ave. Crandon, WI 54520 (800)278-1254 www.nlsilab.com | X | X | X | X | X | X | X |

End of List

The Laboratory Approval Program is voluntary, and is specific to laboratories analyzing samples for UCMR 3. The laboratories' approval status indicates they have demonstrated specific capabilities using the method(s).

Public water systems (PWSs) are responsible for their laboratories, and must ensure they are following the methods and meeting the quality control (QC) criteria specified in UCMR 3. Laboratories must post sample analytical results and required QC data electronically via the Safe Drinking Water Accession and Review System (SDWARS) within 120 days of the sample collection date. EPA may revoke a laboratory's approval status if the laboratory does not adhere to quality assurance/quality control (QA/QC) procedures and criteria, or fails to post data to SDWARS. If EPA revokes approval, the laboratory's name will no longer appear on this list. Once approval has been revoked, the laboratory cannot be re-approved during the UCMR 3 monitoring period.

Questions: UCMR Message Center (800) 949-1581

FIELD SAMPLING PROTOCOLS TO AVOID CROSS-CONTAMINATION DURING WATER SAMPLING FOR PERFLUORINATED COMPOUNDS (PFCs)

1.0 PURPOSE

While EPA method 537 provides basic guidance on sampling for PFC's in drinking water, due to the potential for cross contamination this Standard Operating Procedure (SOP) addendum describes additional precautionary procedures/considerations when collecting groundwater or drinking water samples. Sampling specific SOPs should also be reviewed prior to conducting field sampling activities at PFC sites.

2.0 SCOPE

This procedure applies to all qualified personnel and subcontractors who collect or otherwise handle water samples for analysis of PFCs. This SOP should be reviewed by all on-site personnel prior to implementation of field activities.

3.0 GENERAL

Given the low detection limits associated with PFC analysis and the many potential sources of trace levels of PFCs, field personnel are advised to act on the side of caution by strictly following these protocols, frequently replacing nitrile gloves, and rinsing field equipment to help mitigate the potential for background contamination detections of PFCs. Specific items related to field sampling are discussed below.

4.0 PROCEDURES/CONSIDERATIONS

The following are procedures/considerations to be made during field activities at potential PFC release sites.

Field Equipment

- **Do not use Teflon®-containing materials** (e.g., Teflon® tubing, bailers, tape, plumbing paste, or other Teflon® materials) since Teflon® contains fluorinated compounds.
- High-density polyethylene (HDPE), low-density polyethylene (LDPE), and silicon materials are acceptable for sampling. Samples should not be stored in containers made of LDPE materials.
- To avoid plastic coating or glue materials, **do not use waterproof field books**. Field reports should be documented on loose paper on masonite or aluminum clipboards (i.e. plastic clipboards, binders, or spiral hard cover notebooks are not acceptable). Sharpies®/markers should be avoided.
- **Post-It Notes are not allowed** on project sites.

- **Do not use markers.** Pens should be used when documenting field activities in the field log and on field forms as well as labeling sample containers and preparing the Chain of Custody.
- **Do not use chemical (blue) ice packs** during the sampling program. This includes the use of ice packs for the storage of food and/or samples.

Field Clothing and Personal Protective Equipment

- **Do not wear water resistant, waterproof, or stain-treated clothing** during the field program. Field clothing made of synthetic and natural fibers (preferably cotton) are acceptable. Field clothing should be laundered avoiding the use of fabric softener. Preferably, field gear should be cotton construction and well laundered (a minimum of 6 times from time of purchase). New clothing may contain PFC related treatments. **Do not use new clothing** while sampling or sample handling.
- **Do not wear clothing or boots containing Gore-Tex™** during the sampling program as it consists of a PFC membrane.
- All safety footwear will consist of steel-toed boots made with polyurethane and polyvinyl chloride (PVC).
- **Do not wear Tyvek® clothing** on-site since it contains fluorinated compounds.
- Disposable nitrile gloves must be worn at all times. Further, a new pair of nitrile gloves should be donned prior to the following activities at each sample location:
 - Decontamination of re-usable sampling equipment;
 - Prior to contact with sample bottles or water containers;
 - Insertion of anything into the well (e.g. HDPE tubing, HydraSleeve bailer, etc.);
 - Insertion of silicon tubing into the peristaltic pump;
 - Completion of monitor well purging, prior to sample collection;
 - Handling of any quality assurance/quality control samples including field blanks and equipment blanks; and,
 - After the handling of any non-dedicated sampling equipment, contact with non-decontaminated surfaces, or when judged necessary by field personnel.

Sample Containers

- Samples should be collected in polypropylene or HDPE bottles fitted with an unlined (no Teflon®), polypropylene HDPE screw cap. This is an especially important point as many laboratories utilize Teflon-lined bottles.
- Container labels will be completed using pen (**NO MARKERS**) after the caps have been placed back on each bottle.

- Glass containers should also be avoided due to potential loss of analyte through adsorption.

Wet Weather

- Field sampling occurring during wet weather (e.g., rainfall and snowfall) should be conducted while wearing appropriate clothing that will not pose a risk for cross-contamination. Teams should avoid synthetic gear that has been treated with water-repellant finishes containing PFCs. Use rain gear made from polyurethane and wax-coated materials.

Equipment Decontamination

For GW sampling, it is highly recommended that disposable equipment be utilized. However, if equipment re-use is performed, field sampling equipment, including oil/water interface meters and water level indicators, that are utilized at each sample location will require cleaning between uses. Alconox® and Liquinox® soap is acceptable for use since the Material Safety Data Sheets do not list fluoro-surfactants as an ingredient. However, **Decon 90 must not be used** during decontamination activities. Water used for the decontamination of sampling equipment will be laboratory certified “PFC-free” water.

Personnel Hygiene

- Field personnel should not use cosmetics, moisturizers, hand cream, or other related products as part of their personal cleaning/showering routine on the morning of a sampling event, as these products may contain surfactants and represent a potential source of PFCs.
- Many manufactured sunblock and insect repellants contain PFCs and should not be brought or used on-site. Sunblock and insect repellants that are used on-site should consist of 100% natural ingredients.

Food Considerations

- No food or drink shall be brought on-site, with the exception of bottled water and hydration drinks (i.e., Gatorade® and Powerade®).

Blanks

- Utilization of blanks is a good quality check to monitor and control the effects of contamination. Trip blanks and field blanks are recommended.

REFERENCES

- Transport Canada, 2013. *Perfluorochemical (PFC) Field Sampling Protocol*. May.

- 99 • Delta Consultants, 2010. *Report of Investigation Activities at Select Firefighting Foam*
100 *Training Areas and Foam Discharge Sites in Minnesota*. February.
- 101 • MPCA, 2008. *Closed Landfill Program Sampling Protocol for Monitoring Wells*. October.
- 102 • Oregon State University, 2015. *COLLECTION AND HANDLING OF SAMPLES FOR*
103 *FLUORO-CHEMICAL ANALYSIS*. July.
- 104 • EPA, 2009. EPA Document #: EPA/600/R-08/092, *METHOD 537. DETERMINATION OF*
105 *SELECTED PERFLUORINATED ALKYL ACIDS IN DRINKING WATER BY SOLID PHASE*
106 *EXTRACTION AND LIQUID CHROMATOGRAPHY/TANDEM MASS SPECTROMETRY*
107 *(LC/MS/MS)*. Version 1.1. September

108
109

MCATS:

To: CG MCIEAST/MCB Camp Lejeune
CG MCIWEST/MCB Camp Pendleton
CG MCIPAC/MCB Camp Butler
CDR MCINCR/MCB Quantico
Cc: CG TECOM
CG MCRD Parris Island
CG MCRD San Diego
CG MCAGCC 29 Palms

Subj: Sampling and Testing for Perfluorinated Compounds (PFCs) in Drinking Water

Purpose: To comply with the requirements of the Deputy Assistant Secretary of the Navy (Environment) (DASN(E)) memorandum dated 21 October 2014, "Perfluorinated Compounds (PFCs) – An Emerging Environmental Issue." This policy supports efforts to ensure that all men, women, and children who live or work on Department of the Navy (DON) installations and facilities are protected from emerging environmental contaminants such as PFCs and receive safe drinking water.

Tabs: (A) DASN(E) memo of 21 Oct 14, Perfluorinated Compounds (PFCs) – An Emerging Environmental Issue
(B) Marine Corps Restoration Sites with Known or Suspected PFC Contamination
(C) DON Drinking Water Systems in the United States - Drinking Water Wells Near Environmental Restoration (ER) Sites
(D) EM Portal Instructions

Comments:

1. Installations subject to the Third Unregulated Contaminant Monitoring Rule (UCMR 3) must ensure all applicable testing and reporting requirements are met by December 2015. Per the memo in Tab (A), if exceedances of Provisional Health Advisory (PHA) values are identified, installations must inform HQMC/MCICOM and supply alternative drinking water until these levels can be reduced below the PHAs.

2. Per the memo in Tab (A), installations not already subject to the UCMR 3 requirements and that produce drinking water from on-installation sources must identify drinking water sources (wells or surface water) that are within approximately 1-mile downgradient of an ER site that is suspected to contain PFCs or an active firefighting training site. A list of installations with ER sites that may contain PFCs is provided in Tab (B).

Installations that identify drinking water sources in the vicinity of these sites (ER and Firefighting training) are then required to sample the drinking water system for PFOS/PFOA by 31 December 2015. If exceedances of PHA values are identified, installations must inform HQMC/MCICOM and supply alternative drinking water until these levels can be reduced below the PHAs.

3. MCICOM requests that installations fill in the required information in the spreadsheets contained in Tab (C) for their respective installation. Request that the addressees provide the information via EM Portal following the instructions provided in Tab (D).

4. If you have any questions, please contact Mr. Chris Gamache (christopher.gamache@usmc.mil) or Ms. Misha Turner (misha.turner@usmc.mil).

Due date: 12/31/2015



DEPARTMENT OF THE NAVY
THE ASSISTANT SECRETARY OF THE NAVY
(ENERGY, INSTALLATIONS AND ENVIRONMENT)
1000 NAVY PENTAGON
WASHINGTON DC 20350-1000

October 21, 2014

**MEMORANDUM FOR DEPUTY CHIEF OF NAVAL OPERATIONS (FLEET
READINESS AND LOGISTICS) (N4)
DEPUTY COMMANDANT OF THE MARINE CORPS
(INSTALLATIONS AND LOGISTICS)**

SUBJECT: Perfluorinated Compounds (PFCs) – An Emerging Environmental Issue

References: (a) OPNAVINST 5090.1D
(b) MCO P5090.2A
(c) DoDI 4715.18
(d) SECNAV Info Memo, 29 Jul 2014

The Department of the Navy (DON) is committed to ensuring all men, women, and children who live or work on DON installations and facilities are protected from environmental contaminants and receive safe drinking water. Navy and Marine Corps maintain comprehensive environmental instructions (references (a) and (b)) detailing procedures to meet and exceed requirements found in statute, regulation, and policy. Reference (c) established Department of Defense (DoD) policy relative to emerging contaminants, such as PFCs.

PFCs are a suite of chemicals of emerging public health concern to the U.S. Environmental Protection Agency (EPA) and state regulators, primarily in drinking water systems. One of the major DoD uses of PFCs is as a fire extinguishing agent in aqueous film forming foam (AFFF). EPA added new PFC sampling requirements under the Safe Drinking Water Act (SDWA) Unregulated Contaminant Monitoring Rule 3 (UCMR 3), requiring all large and 800 small public water systems to test for these chemical between 2013-2015. This testing is being conducted to determine the extent of PFCs in drinking water systems nationwide and whether drinking water standards should be established.

Per reference (d), my staff coordinated a meeting with the DoD Component subject matter experts to evaluate these emerging contaminants and identify paths forward regarding the future use, cleanup, and protection of DON drinking water systems. To date, only two PFCs (perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA)) have sufficient toxicological information to make cleanup and drinking water safety decisions. DoD is taking the lead and will be conducting a study of AFFF formulations to determine whether safer alternatives are available that meet our firefighting requirements. After coordinating with your Navy and Marine Corps staff, I am directing the following actions be taken regarding PFOS and PFOA cleanup sites and drinking water systems:

- Defense Environmental Restoration Program (DERP) – identify all known and suspected sites where PFOS and/or PFOA may have been released on active and Base Realignment and Closure (BRAC) installations. As appropriate, address these contaminant releases including migration off-site, under DERP and in accordance with reference (c).
- DON drinking water systems in the United States – Ensure all applicable UCMR 3 testing and reporting requirements are met by December 2015. If exceedances of Provisional Health Advisory (PHA) values are identified, supply alternative drinking water until these levels can be reduced below the PHAs. For installations not required to test under the UCMR 3, and where the installation produces drinking water from on-installation sources, by December 2015, sample finished drinking water from all DON systems for PFOS and PFOA where there is an identified or suspected PFC release within approximately 1-mile upgradient to the drinking water source. Address any PHA value exceedances per above.
- DON overseas drinking water systems – DERP does not apply overseas, so PFC release site information may not be available. Therefore, all DON overseas drinking water systems shall be sampled for PFOS and PFOA by December 2015 and any PHA value exceedances addressed per above.
- Drinking water systems with detections above the Method Reporting Limit (MRL), but below the PHA value shall determine appropriate follow-up actions, in coordination with the chain of command, which may include additional sampling to ensure levels in drinking water, remain below the PHA value.
- Report all drinking water PHA value and MRL exceedances and corrective actions to my office.

My point of contact is Mr. Richard Mach at (703) 614-5463 or richard.mach@navy.mil.







Donald R. Schregardus

| | | | | | | | | | | | | |
|------------|------|-----------------------|--|-----------------|-------------|----|----|----|---|----|---|------|
| Washington | ER,N | QUANTICO, MCB | Quantico Sanitary Landfill Burn Area (119) | Burn Pl | RC | No | No | No | Deferred during negotiations of FFA: deferred to the sanitary landfill portion of the Solid Waste Facility Permit (Number VAd11, Property Transferred | VA | 3 | NBRS |
| Southwest | BRAC | TUSTIN, MCAS | SITE 1 - CRASH CREW FIRE TRNG PITS | Burn Pl | Site Closed | | | | | CA | 9 | NORM |
| Southwest | BRAC | TUSTIN, MCAS | SITE 39 - BURR PITS | Burn Pl | Site Closed | | | | | CA | 9 | NORM |
| Southwest | BRAC | TUSTIN, MCAS | SITE 9 - HANGAR NO. 1 LINE SHACKS | Hangar | Site Closed | | | | | CA | 9 | NORM |
| Southwest | ER,N | TWENTYNINE PALMS CA M | Site 18 | FireCrash Trail | PASI | | | | | CA | 9 | NORM |
| Southwest | ER,N | TWENTYNINE PALMS CA M | Site 22 | FireCrash Trail | RA-C | | | | | CA | 9 | NORM |
| Southwest | ER,N | TWENTYNINE PALMS CA M | Site 7 | FireCrash Trail | RUPS | | | | | CA | 9 | NORM |
| Southwest | ER,N | TWENTYNINE PALMS CA M | Site 8 | FireCrash Trail | RA-C | | | | | CA | 9 | NORM |
| Southwest | ER,N | TWENTYNINE PALMS CA M | Site 2 | Burn Area | PASI | | | | | AZ | 9 | NORM |
| Southwest | ER,N | YUMA AZ MCAS | Site 25 | FireCrash Trail | PASI | | | | | AZ | 9 | NORM |
| Southwest | ER,N | YUMA AZ MCAS | Site 4 | Burn Area | PASI | | | | | AZ | 9 | NORM |
| Southwest | ER,N | YUMA AZ MCAS | Site 7 | FireCrash Trail | RA-C | | | | | AZ | 9 | NORM |


1. Navigate to the EM Portal Water Quality Site at <https://em.usmc.mil/sites/hq/cleanwater/SitePages/Home.aspx>.

Click the "Sampling and Testing for Perfluorinated Compounds (PFCs) in Drinking Water" link

2. Upload your installation's PFC Sampling and Testing Results spreadsheet.

Site Actions      Woodbridge CTR Brian D.

Water Quality > Drinking Water Resources : Upload Document

HQ/MC/CLICOM Environmental and Conservation Management Air Quality Awards Budget CETEP Compliance Cultural Resource Earth Day ECE EHR Search this site...  2 Tags & Notes

EMS Environmental Restoration EO 13514/13423 EPCRA GPP HM HW MCO Natural Resources NEPA Noise PCB Pollution Prevention SPCC

Storage Tanks SW **Water Quality**

Libraries Upload Document
Browse to the document you intend to upload.

Lists
Announcements
Calendar
Tasks

Clean Water Resources
MCO 5090.2A
Policy
Guidance Documents
Reports

Destination Folder
Specify the folder in this document library where the document should be saved.

Folder: /Reports/

Name:






☒ Upload Multiple Files...
☒ Overwrite existing files

Click the "Browse" button


Leave the "Choose Folder" button as is →

Click the "OK" button →

3. Update the properties of your uploaded document.

Site Actions      Woodbridge CTR Brian D.

Water Quality > Drinking Water Resources : Upload Document

HQ/MC/CLICOM Environmental and Conservation Management Air Quality Awards Budget CETEP Compliance Cultural Resource Earth Day ECE EHR Search this site...  2 Tags & Notes

EMS Environmental Restoration EO 13514/13423 EPCRA GPP HM HW MCO Natural Resources NEPA Noise PCB Pollution Prevention SPCC

Storage Tanks SW **Water Quality**

Libraries Upload Document
Browse to the document you intend to upload.

Lists
Announcements
Calendar
Tasks

Clean Water Resources
MCO 5090.2A
Policy
Guidance Documents
Reports
Training
References

Destination Folder
Specify the folder in this document library where the document should be saved.

Folder: /Reports/

Name:

☒ Upload Multiple Files...
☒ Overwrite existing files

Click the "Browse" button

Leave the "Choose Folder" button as is →

Click the "OK" button →

The document was uploaded successfully. Use the form to update the properties of the document.

Name: PFC Sampling and Testing Results Spreadsheet.xlsx

Title:

Document Type: ☐ PFC Sampling and Testing Results ☐ Specify your own value:

Document Year: 2014

Installation:

Archive? ☐

FOR ADMINISTRATIVE USE ONLY -- Check the box to archive historical documents, removing them from the homepage view.

Click the "Save" button

4. **Locate your uploaded documents by using the shortcuts along the left-hand sidebar.**

Site Action • Browse Page

Water Quality

Program Area Template

Search this site...

Tags & Notes
2

Storage Tanks SW
Water Quality

HQMC/MCICOM Environmental and Conservation Management
Air Quality
Awards
Budget
CETEP
Compliance
Cultural Resource
Earth Day
ECE
ENR

EMS Environmental Restoration
EO 13514/13423
EPCRA
GPP
HM
HW
MCO
Natural Resources
NEPA
Noise
PCB
Pollution Prevention
SPPC

Libraries
[Lists](#)
[Announcements](#)
[Calendar](#)
[Tasks](#)

Water Quality

Announcements

☐
Title

Get Started with Microsoft SharePoint Foundation!

+ Add new announcement
Modified
5/10/2013 13:59 PM

Requests for Information

☐
URL

2013 Consumer Confidence Reports

Unregulated Contaminant Monitoring Rule 3 (UCMR3)

Sampling and Testing for Lead in Drinking Water in Priority Areas

FY2014 Non-NAVFAC Low Impact Development (LID) Projects Data Call

Sampling and Testing for Perfluorinated Compounds (PFCs) in Drinking Water

+ Add new link

Clean Water Resources

MCO 5090.2A

Policy

Guidance Documents

Reports

Training

References

Drinking Water Resources

MCO 5090.2A

Policy

Guidance Documents

Reports

Training

References

Calendar

December, 2014

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| 30 | 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |

Please provide a copy of your 2013 CCR(s) by COB 15 August

Please provide UCMR3 data by COB 15 August

Please provide your installation's Lead Sampling and Testing Results and Progress Update

Please note that this data call is for Non-NAVFAC designed projects only. NAVFAC designed projects are captured in NAVFAC's database called eProjects.

Please provide your installation's PFC Sampling and Testing Results.

Click "Reports" under the "Drinking Water Resources" library to view your successfully uploaded documents.

ADDITIONAL RESOURCES AND COMMUNICATION TOOLS

1. Emerging Contaminants Fact Sheet – PFOS and PFOA:
http://www2.epa.gov/sites/production/files/2014-04/documents/factsheet_contaminant_pfos_pfoa_march2014.pdf
2. Peer Review of Health Effects Documents for PFOA and PFOS:
<http://water.epa.gov/drink/standards/upload/Peer-Review-of-Health-Effects-Documents-for-PFOA-and-PFOS-Factsheet-February-2014.pdf>
3. New Hampshire Department of Health and Human Services Investigation into PFC Contaminant Found in Drinking Water at Pease Tradeport (formally Pease Air Force Base):
<http://www.dhhs.nh.gov/dphs/investigation-pease.htm>
4. Agency for Toxic Substances and Disease Registry: Toxicological Profile for Perfluoroalkyls - <http://www.atsdr.cdc.gov/toxprofiles/tp.asp?id=1117&tid=237>
5. Centers for Disease Control and Prevention: National Biomonitoring Program – Perfluorochemicals (PFCs) - http://www.cdc.gov/biomonitoring/PFCs_FactSheet.html