



DEPARTMENT OF THE ARMY
OFFICE OF THE ADMINISTRATIVE ASSISTANT TO THE SECRETARY OF THE ARMY
9301 CHAPEK ROAD
FORT BELVOIR VA 22060-5527

August 9, 2019

SAAA-LS

Melanie Benesh
Environmental Working Group (EWG)
Sent via email: mbenesh@ewg.org

Dear Ms. Benesh:

This letter is a rolling release in response to amended Freedom of Information Act (FOIA) request dated 26 April 2019. You are seeking records pertaining to your enclosed FOIA. Your request was assigned our office tracking number FA-19-0044.

We are releasing (133) pages to you in full referred to us by the Office of the Assistant Secretary of the Army (Installations, Energy and Environment) (ASA IE&E). Be advised, ASA IE&E provided additional information pertaining to your request listed below:

Attached are two tables of the PFAS sampling results from the sampling of Army owned drinking water systems. One table covers Active and Army Reserve installations and the other table covers Army National Guard installations. The tables covers installations subject to UCMR3 requirements and subsequent sampling of all Army owned and operated drinking water systems through April 25, 2019. Additional information on the UCMR3 sampling can be found on the EPA Web site: <https://www.epa.gov/dwucmr/third-unregulated-contaminant-monitoring-rule>.

The Army is not the owner of sampling results from public and private drinking water systems. We cannot validate the accuracies of the information for those systems and the data is owned by public sector or private party. EWG needs to contact them directly for this information.

Army used EPA identified qualified laboratories for the drinking water analysis. The table below is a list of the Laboratories with their address used by the Army.

Laboratory Name	Address
Eurofins Eaton Analytical	110 South Hill Street, South Bend, Indiana 46617
Eurofins Lancaster Laboratories	2425 New Holland Pike, Lancaster, Pennsylvania 17601
TestAmerica Laboratories, Inc.	880 Riverside Parkway, West Sacramento, California 95605

SGS ACCUTEST Southeast	4405 Vineland Road, Suite C, Orlando, Florida 32811
Alpha Analytical	Eight Walkup Drive, Westborough, Massachusetts 01581
Consulting Analytical Services International	3378 S. Scenic Ave., Suite A, Springfield, Missouri 65807
Northern Lake Services, Inc.	400 North Lake Ave, Crandon, Wisconsin 54520
Pace Analytical Services	8 East Tower Circle, Ormond Beach, Florida 32174
Vista Analytical Laboratory	1104 Windfeld Way, El Dorado Hills, California 95762
Southern Nevada Water Authority Water Quality Laboratory	P.O. Box 99954, Las Vegas, Nevada 89193
Endyne Inc, Environmental Laboratories/ Performed by subcontracted laboratory South Central Connecticut Regional Water Authority	160 James Brown Dr., Williston, Vermont 05495

The Army is committed to protecting human health and ensuring the supply of safe drinking water to its Soldiers, Family Members, and Civilians. As part of this commitment, we will continue our comprehensive efforts to investigate, mitigate, and clean up Army releases of PFOS/PFOA as appropriate to ensure continued protection of human health.

The Army proactively tested its drinking water systems and mitigated where PFOS/PFOA levels in drinking water systems were above the EPA LHA of 70ppt. There are currently no Army personnel or families drinking water with levels of PFOS/PFOA above the LHA. We will continue working with Department of Defense Energy Installations and Environment to review historical documents and collect soil and groundwater samples to identify areas that may have been impacted by PFOS/PFOA.

For any further assistance and to discuss any aspect of your request, you have the right to contact the Army FOIA Public Liaison Officer, Alecia Bolling, by email at us.army.hqda-oaa-ahs.mbx.rmda-foia-public-liaison@mail.mil or by phone at (571) 515-0306. Additionally, you may contact the Office of Government Information Services (OGIS) at the national Archives and Records Administration (NARA) to inquire about the FOIA mediation services they offer. The contact information for OGIS is as follows: NARA-OGIS, 8601 Adelphi Road-OGIS, College Park, MD 20740-6001, email at ogis@nara.gov, telephone number (202) 741-5770 toll free at (877) 684-6448 or by facsimile at (202) 741-5769.

If you have any questions regarding this letter or the information furnished, please contact this office at (703) 614-5871 or email at usarmy.belvoir.hqda-oaa.rpa.mbx.oaa-cals-mailbox-foia@mail.mil. In all correspondence please refer to FOIA number FA-19-0044.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul V. DeAgostino".

Paul V. DeAgostino
Senior Counsel

Enclosure: Amended FOIA Request
(133) pages



Know your environment.
Protect your health.

FREEDOM OF INFORMATION ACT REQUEST

REVISED: April 26, 2019

VIA ELECTRONIC MAIL

Paul V. DeAgostino
Senior Counsel
Chief Attorney and Legal Services
Office of the Administrative Assistant to the
Secretary of the Army

Re: Freedom of Information Act Request

Dear Mr. DeAgostino,

Per to our conversation today, April 25, 2019, I am narrowing the scope of request EWG submitted to the Secretary of the Army on November 15, 2018, pursuant to the Freedom of Information Act (FOIA), 5 U.S.C. § 552 *et seq.* and the implementing regulations of the U.S. Department of Defense (DoD), 32 C.F.R. Part 286.

Please find below an amended request that:

- Removes the parts of the FOIA being processed by other branches of the DoD
- Limits the scope of the request to detections in the continental U.S. plus Alaska and Hawaii
- Includes a search end date of records up to April 25, 2019.

PFAS Chemicals

Highly fluorinated toxic chemicals, better known as PFAS, have been linked to cancer, thyroid disease, weakened immunity, and other health problems. While the full extent of contamination is unknown, EWG estimates that up to 110 million people are affected by PFAS pollution in tap water supplies,¹ including residents around (and servicemembers on) military installations.² State officials impacted by

¹ David Andrews, *Report: Up to 110 Million Americans Could Have PFAS-Contaminated Drinking Water*, ENVIRONMENTAL WORKING GROUP (May 22, 2018), <https://www.ewg.org/research/report-110-million-americans-could-have-pfas-contaminated-drinking-water#.W6u-F5NKi1s>; Bill Walker, *Update: Mapping the Expanding PFAS Crisis*, ENVIRONMENTAL WORKING GROUP (April 18, 2018), <https://www.ewg.org/research/update-mapping-expanding-pfas-crisis#.WvxdddMvwWo>.

² Tara Copp, *DoD: At Least 126 Bases Report Water Contaminants Linked to Cancer, Birth Defects*, MILITARY TIMES (April 26, 2018), <https://www.militarytimes.com/news/your-military/2018/04/26/dod-126-bases-report-water-contaminants-harmful-to-infant-development-tied-to-cancers/>. See also *A Toxic Threat: Government Must Act Now on PFAS Contamination at Military Bases*, UNION OF CONCERNED SCIENTISTS (Sept. 2018), <https://www.ucsusa.org/center-science-and-democracy/preserving-science-based-safeguards/toxic-threat-pfas-contamination-military-bases#.W6vPcX4pBEJ>.

the contamination have called it the “stuff health department nightmares are made of.”³ PFAS chemicals are very persistent in the environment and can bioaccumulate in the human body.⁴

Regulation of these chemicals in drinking water is an issue of significant public interest. The U.S. does not currently have a limit on the amount of PFAS chemicals that can be in drinking water supplies. However, in 2016, the EPA set a health advisory level of 70 ppt (individually or combined) for perfluoro-octanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA), two of the best-known PFAS chemicals.⁵

PFAS chemicals are the basis of aqueous film forming foam (AFFF), which is used as a fire suppressant. DoD started using AFFF in the 1970s because AFFF is an efficient method to extinguish aircraft fuel fires.⁶ AFFF has been used on military bases for emergencies, for training exercises, and for equipment testing; in nearly all uses, PFAS chemicals were released into the environment. PFOS was originally the main component of AFFF, but its manufacturer announced it would cease production in 2000.⁷ Legacy stocks of AFFF with PFOS remain on some military installations.⁸ Moreover, some AFFFs contain PFOA.⁹ The Military Performance Specification (MILSPEC) for AFFF was amended in 2017 to set a maximum concentration of PFOS and PFOA in AFFF.¹⁰ But use of fluorocarbon surfactants is still mandated by the MILSPEC, and the 8-carbon-chain PFAS chemicals PFOA and PFOS are being replaced by shorter-chain PFAS chemicals in AFFF formulations.¹¹ These shorter-chain replacement PFAS are not as well-studied as PFOA and PFOS.¹²

PFAS Chemicals were included in UCMR3

Pursuant to section 1445 of the Safe Drinking Water Act, 42 U.S.C. § 300j-4, every five years the Administrator of the EPA issues a list of up to thirty contaminants which are not currently regulated under the Act, but about which information must be collected by public water systems (PWSs).¹³ The results obtained from monitoring these unregulated contaminants are provided to the “primary

³ Garret Ellison, *Belmont Woman’s Blood is 750 Times National PFAS Average*, GRAND RAPIDS NEWS (Jan. 9, 2018), http://www.mlive.com/news/grand-rapids/index.ssf/2018/01/pfas_blood_test_ppt.html.

⁴ Environmental Protection Agency, Basic Information on PFAS, <https://www.epa.gov/pfas/basic-information-pfas> (last visited Nov. 8, 2018).

⁵ Environmental Protection Agency, Drinking Water Health Advisories for PFOA and PFOS, <https://www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos> (last visited May 16, 2018).

⁶ Maureen Sullivan, FY18 HASC brief on PFOS-PFOA, at slide 4 (March 2018). <http://www.oea.gov/resource/addressing-perfluorooctane-sulfonate-pfos-and-perfluorooctanoic-acid-pfoa>.

⁷ *Id.*

⁸ Maureen Sullivan, Statement before the Committee on Homeland Security and Governmental Affairs, at 2 (Sept. 26, 2018).

⁹ *Id.*

¹⁰ Naval Sea Systems Command, Performance Specification – Fire Extinguishing Agent, Aqueous Film-Forming Foam (AFFF) Liquid Concentrate, For Fresh and Sea Water (MIL-PRF-24385F(SH)) (Sept. 7, 2017), http://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=17270.

¹¹ Sharon Lerner, *The U.S. Military is Spending Millions to Replace Toxic Firefighting Foam with Toxic Firefighting Foam*, THE INTERCEPT (Feb. 10, 2018), <https://theintercept.com/2018/02/10/firefighting-foam-afff-pfos-pfoa-epa/>; State of Alaska Department of Environmental Conservation, Risk of Aqueous Film Forming Foam (AFFF), <https://dec.alaska.gov/spar/csp/aqueous-film-forming-foam/> (last visited Nov. 8, 2018).

¹² Environmental Protection Agency, Basic Information on PFAS, <https://www.epa.gov/pfas/basic-information-pfas> (last visited Nov. 8, 2018).

¹³ 42 U.S.C. §§ 300j-4(a)(2)(A), (B).

enforcement authority for the system.”¹⁴ The data are entered into a “national drinking water contaminant data base,” and become “available to the public in readily accessible form.”¹⁵

In 2012, EPA issued the Final Rule for the Unregulated Contaminant Monitoring Rule 3 (UCMR3).¹⁶ All PWSs serving more than 10,000 people, and a sample of 800 small PWSs serving fewer than 10,000 people, were required to monitor about twenty contaminants on “List 1.”¹⁷ Six PFAS chemicals were on List 1: perfluorooctanesulfonic acid (PFOS); perfluorooctanoic acid (PFOA); perfluorononanoic acid (PFNA); perfluorohexanesulfonic acid (PFHxS); perfluoroheptanoic acid (PFHpA); perfluorobutanesulfonic acid (PFBS).¹⁸ Assessment and monitoring occurred between 2013 and 2015.¹⁹

Where the DoD acts as a supplier of drinking water for military installations, it falls under the jurisdiction of the Safe Drinking Water Act. Depending on the number of people served by each water system, DoD may have been required to collect water samples and test for these PFAS contaminants. DoD tested between sixty-three²⁰ and seventy-seven²¹ community water systems under UCMR3.

DoD conducted additional testing of military installations

In response to EPA’s issuance of a health advisory for PFOS and PFOA in 2016, DoD ordered additional water testing.²² “The Department began testing DoD-operated drinking water systems worldwide in June 2016 to identify drinking water that exceeded EPA’s [health advisory level].”²³ DoD has completed the testing of at least 524 DoD drinking water systems.²⁴ If DoD is not the supplier of drinking water, then the installation is supposed to inquire, from the supplier, whether the drinking water has been tested for PFAS.²⁵

Recognizing that PFAS from Aircraft Rescue and Firefighting activities could persist in and migrate through the environment, DoD is monitoring suspected releases through additional PFAS sampling. “As of August 2017, DoD has identified 401 active or closed military installations with known or suspected released of PFOS or PFOA.”²⁶ “The Components also sampled private drinking water wells if there was a suspected or known release that migrated off base.”²⁷ As of August 2017, 2445 off-base

¹⁴ *Id.* § 300j-4(a)(2)(D).

¹⁵ *Id.* §§ 300j-4(g)(1), (5), (7).

¹⁶ *Revisions to the Unregulated Contaminant Monitoring Regulation (UCMR 3) for Public Water Systems*, 77 Fed. Reg. 26,072 (May 2, 2012).

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ Maureen Sullivan, FY18 HASC brief on PFOS-PFOA, at slide 7.

²¹ Department of Defense, Water Safety on Military Bases, at 4 (May 2018).

²² Government Accountability Office, Drinking Water: Status of DOD Efforts to Address Drinking Water Contaminants Used in Firefighting Foam, at 0 (GAO-18-700T, Sept. 26, 2018); Maureen Sullivan, FY18 HASC brief on PFOS-PFOA, at slide 7.

²³ Maureen Sullivan, Statement before the Committee on Homeland Security and Governmental Affairs, at 3 (Sept. 26, 2018).

²⁴ Maureen Sullivan, FY18 HASC brief on PFOS-PFOA, at slide 7.

²⁵ *Id.*

²⁶ Government Accountability Office, Drinking Water: Status of DOD Efforts to Address Drinking Water Contaminants Used in Firefighting Foam, at 0; Maureen Sullivan, FY18 HASC brief on PFOS-PFOA, at slide 9.

²⁷ Maureen Sullivan, FY18 HASC brief on PFOS-PFOA, at slide 8.

drinking water systems were tested.²⁸ Where a release is suspected, DoD is also sampling groundwater to test for PFAS.²⁹

RECORDS REQUEST – DEPARTMENT OF THE ARMY

“The Army had identified 61 [or 64] installations with known or suspected releases of PFOS and PFOA . . .”³⁰

A memorandum from June 2016 states that “The Army will sample for PFOS and PFOA in Army-owned or operated water systems located on Army installations that have not previously sampled for PFOS and PFOA.”³¹ All sizes, even single well systems, were required to be sampled.³² Sampling was to be completed by the end of 2016.³³ An EPA approved method was to be used in the analysis.³⁴

The Army tested 255 drinking water systems where DoD is the purveyor of water.³⁵ One thousand five hundred eighty-nine (1589) drinking water systems that have a non-DoD purveyor also conducted water testing.³⁶ Sixteen drinking water systems had PFOS and PFOA results above the EPA health advisory level.³⁷ The Army also tested 258 groundwater wells.³⁸ One hundred four (104) groundwater wells tested above the health advisory.³⁹

RECORDS REQUEST

From the Department of the Army, EWG requests the following records:

- 1) All water testing data sampled on or before April 25, 2019 from the UCMR3 for all installations required to comply with UCMR3 within the continental United States, plus Hawaii and Alaska. These data should include the six PFAS required under the UCMR3, and any other PFAS data if additional analyses were performed (EPA-approved Method 537 can detect 14 PFAS chemicals,⁴⁰ but only six had to be monitored to comply with UCMR3). EWG requests all results for each sample, including the original results report as received from the water testing lab with the concentration of each PFAS, the detection limit and the quantification limit. We also are requesting the location information for each sample.
- 2) All testing data within the continental United States plus Hawaii and Alaska from any subsequent monitoring since UCMR3, but on or before April 25th, 2019. This should include all PFAS chemicals tested for, not just PFOS and PFOA. All results for each water sample should be included, including the original results report as received from the water testing lab with the concentration of each PFAS, the detection limit and the quantification limit. We also are requesting the location information for each sample.

²⁸ *Id.*

²⁹ *Id.* at 9.

³⁰ Government Accountability Office, Drinking Water: Status of DOD Efforts to Address Drinking Water Contaminants Used in Firefighting Foam, at 6; Maureen Sullivan, FY18 HASC brief on PFOS-PFOA, at slide 10.

³¹ Memorandum from Dept. of the Army for Commander, Army Materiel Command, et al., at 2 (Jun. 10, 2016), <https://www.denix.osd.mil/army-pfas/the-army-addresses-pfos-pfoa/the-army-addresses-pfos-and-pfoa/perfluorinated-compound-pfc-contamination-assessment1/>.

³² *Id.*

³³ *Id.*

³⁴ *Id.*

³⁵ Maureen Sullivan, FY18 HASC brief on PFOS-PFOA, at slide 18.

³⁶ *Id.*

³⁷ *Id.*

³⁸ *Id.* at 10.

³⁹ *Id.*

⁴⁰ See n.42, above.

- 3) All water testing data from installations which were not required to test under UCMR3, whether DoD is a purveyor of the drinking water or not. These data should include all PFAS chemicals tested for, not just PFOS and PFOA. All results for each water sample should be included, including the original results report as received from the water testing lab with the concentration of each PFAS, the detection limit and the quantification limit. We also are requesting location information for each sample.
- 4) All water testing data from off-base public and private drinking water systems within the continental U.S. plus Hawaii and Alaska taken on or before April 25, 2019. This should include all PFAS chemicals tested for, not just PFOS and PFOA. All results for each water sample should be included, including the original results report as received from the water testing lab with the concentration of each PFAS, the detection limit and the quantification limit. We also are requesting location information for each sample.
- 5) All water testing data from any of the 258 groundwater wells located within the continental United States plus Hawaii and Alaska, whether the wells were on-base or off-base. This should include all PFAS chemicals tested for, not just PFOS and PFOA. All results for each water sample should be included, including the original results report as received from the water testing lab with the concentration of each PFAS, the detection limit and the quantification limit. We also are requesting location information for each sample. If further groundwater monitoring has been completed since 2017, we would like those results as well for any samples taken on or before April 25, 2019.
- 6) Any correspondence with the water testing laboratories concerning the PFAS testing capabilities of the laboratory. "Testing capabilities" can signify the number and type of PFAS analytes that can be tested for and for each analyte the respective "method detection limit" and "method quantification limit," and can include results from the laboratories' demonstrations of capability and method performance at and below the MRL during registration with the EPA (if the laboratory was approved for UCMR3), as well as their own internal controls.

In addition to the records requested above, we also request records describing the processing of this request, including records sufficient to identify search terms used and locations and custodians searched and any tracking sheets used to track the processing of this request. If DoD uses FOIA questionnaires or certifications completed by individual custodians or components to determine whether they possess responsive materials or to describe how they conducted searches, we also request any such records prepared in connection with the processing of this request.

EWG seeks all responsive records regardless of format, medium, or physical characteristics. In conducting your search, please understand the terms "record," "document," "data," "results," and "information" in their broadest sense, to include any written, typed, recorded, graphic, printed, or audio material of any kind. We seek records of any kind, including electronic records, audiotapes, videotapes, and photographs, as well as letters, emails, facsimiles, telephone messages, voice mail messages and transcripts, notes, or minutes of any meetings, telephone conversations or discussions. Our request includes any attachments to these records. **No category of material should be omitted from search, collection, and production.**

You may not exclude searches of files or emails in the personal custody of your officials, such as personal email accounts. Records of official business conducted using unofficial systems or stored outside of official files is subject to the Federal Records Act and FOIA.⁴¹ **It is not adequate to rely on policies and procedures that require officials to move such information to official systems**

⁴¹ See *Competitive Enter. Inst. v. Office of Sci. & Tech. Policy*, 827 F.3d 145, 149—50 (D.C. Cir. 2016); cf. *Judicial Watch, Inc. v. Kerry*, 844 F.3d 952, 955—56 (D.C. Cir. 2016).

within a certain period of time; we have a right to records contained in those files even if material has not yet been moved to official systems or if officials have, through negligence or willfulness, failed to meet their obligations.⁴²

To ensure that this request is properly construed, that searches are conducted in an adequate but efficient manner, and that extraneous costs are not incurred, we welcome an opportunity to discuss this request with you before you undertake your search or incur search or duplication costs. By working together at the outset, we can decrease the likelihood of costly and time-consuming litigation in the future.

Per our conversation on April 25, 2019, EWG expects a response to this request within 90 days. Where possible, please provide responsive material in electronic format, preferably as an Excel spreadsheet, by email to mbenesh@ewg.org or on a USB drive. Please send any responsive material being sent by postal mail to Environmental Working Group, 1436 U St. NW, Suite 100, Washington, DC 20009.

Fee Waiver Request

EWG's fee waiver request was granted by the Office of the Army General Counsel on March 25, 2019.

Conclusion

EWG looks forward to continuing to work with the Secretary of the Army on this request. If you have any questions, or foresee any problems in fully releasing the requested records, please contact Melanie Benesh at mbenesh@ewg.org or 202.939.0120.

⁴² See *Competitive Enter. Inst. v. Office of Sci. & Tech. Policy*, No. 14-cv-765, slip op. at 8 (D.D.C. Dec. 12, 2016) ("At this stage of the case, the Court cannot assume that each and every work related email in the [personal] account was duplicated in [the official's] work email account." (citations omitted)).