

Notes and Facts on PFOS/PFOA Perfluorooctane sulfonic acid (PFOS)

Perfluorooctanoic acid (PFOA)

PFOS/PFOA are included in the fourth Unregulated Contaminant Monitoring Rule (UCMR 4) that was published on 12/20/16. It requires monitoring for 30 chemical contaminants, including PFOS/PFOA, between 2018 and 2020. This is an EPA requirement

“EPA’s assessment indicates that drinking water with individual or combined concentrations of PFOA and PFOS below 70 parts per trillion is not expected to result in adverse health **effects over a lifetime of exposure**” For more info from the EPA and its statement on PFOS and PFOA, visit this link <https://blog.epa.gov/blog/2016/05/protection-for-drinking-water/>

Important to note: The groundwater results all came back lower than the HAL for drinking water. Regarding the EPA standards issue - As a benchmark, the Environmental Protection Agency has established a provisional health advisory level (HAL) for drinking water regarding these compounds, which is 70 parts per trillion (ppt).

Additional testing/monitoring information can be found by visiting <https://www.epa.gov/dwucmr/fourth-unregulated-contaminant-monitoring-rule> or <https://www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos> or contact EPA’s contractor Great Lakes Environmental Center, Inc. at 800-949-1581 or UCMR4@glec.com.

Understanding HAL is important PFOA and PFOS drinking water HAL = 70 parts per trillion. HAL = “Health advisories provide information on contaminants that can cause human health effects and are known or anticipated to occur in drinking water. EPA's health advisories are non-enforceable and non-regulatory and provide technical information to states agencies and other public health officials on health effects, analytical methodologies, and treatment technologies associated with drinking water contamination. EPA’s health advisory level for PFOA and PFOS offers a margin of protection for all Americans throughout their life from adverse health effects resulting from exposure to PFOA and PFOS in drinking water.”

IFAS information

<http://edis.ifas.ufl.edu/pdf/files/SS/SS63100.pdf>

PFASs comprise a group of highly resistant manmade chemicals that can have deleterious effects on the environment and possibly on humans. The production of PFASs in the United States has been reduced, but they are still present in many domestic and industrial applications. **For humans, main routes of PFAS exposure are diets containing fish and prepared food** (packaging material). Water can also be an important source in areas with high concentration of PFASs in drinking water. Among all PFASs, PFOS is the most common and represents the greatest concern to human health and environment. Toxicity to liver and lipid metabolism alteration are the most frequently reported toxic outcomes from experimental tests. Cancer

(tumor growth) has been observed in experimental animals chronically exposed to PFASs. Recent immunotoxic and neurotoxic findings in laboratory animals call for further epidemiological research in humans. Most of the current research is from laboratory animals exposed to single PFASs (mainly PFOS). **Thus, a complete assessment of current risk considering mixtures of PFASs is not yet possible.** In the meantime, to reduce self-exposure and reduce your PFASs contribution to the environment, avoid use of products containing PFASs in households and avoid the consumption of food that has been in contact with PFASs via their packaging (e.g., microwave popcorn and pizza)

Department of Health Information

How likely are PFOS and PFOA to cause cancer?

The U.S. EPA has determined that there is some evidence that PFOA can cause cancer in humans. Animal and human studies indicate that PFOA may cause liver, pancreatic, testicular, or kidney cancer. The International Agency for Research on Cancer has determined that **PFOA is possibly carcinogenic** to humans. There is very limited information on the ability of PFOS to cause cancer.

<http://www.floridahealth.gov/environmental-health/drinking-water/documents/pfoa-pfos-fs-20161.pdf>

Additional Contacts

EPA Technical Contacts

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Office: 407-897-2914

Department of Health

<http://www.floridahealth.gov/> AskEH@flhealth.gov

Barry Inman, Phone: 321-454-7106

Florida Elected Officials

<u>United States Senators</u>	<u>United States Representative</u>	<u>Office of the Governor</u>
Office: 1-202-224-3014	Office: 1-202-225-3671	Office: 1-850-488-4441
District: 1-407-254-2573	District: 1-321-632-1776	
Office: 1-202-224-5273		
District: 1-407-872-7161		

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Phoslab Environmental Laboratories, Inc.	Phone: (863) 682-5897	http://www.phoslab.com/	<u>Address: 806 W Beacon Rd, Lakeland, FL 33803</u>
Alltech Water Co	Phone: (772) 664-4627	http://www.watertreatmentbrevard.com/	<u>Address: Sebastian, FL 32976</u>
Sanders Laboratories Inc	Phone: (941) 488-8103	https://sanderslabs.net/	<u>Address: 1050 Endeavor Ct, North Venice, FL 34275</u>
EMLab P&K Florida Mold, Legionella & Asbestos Laboratory	Phone: (856) 334-1002	https://www.emlab.com/	<u>Address: 6301 NW 5th Way #1410, Fort Lauderdale, FL 33309</u>
Benchmark EnviroAnalytical, Inc	Phone: (941) 625-3137 9417239986 benchmark in palmetto	https://www.benchmarkea.com/	<u>Address: 1001 Corporate Ave #102, North Port, FL 34289</u>
Inx Laboratories Inc.	Phone: (800) 786-6254	http://inxlab.com/	<u>Address: 655 FL-50 #105, Clermont, FL 34711</u>
Florida Environmental Laboratories	Phone: (239) 465-6313		<u>Address: 1852-A 40th Terrace SW, Naples, FL 34116</u>
Greenwater Laboratories	Phone: (386) 328-0882	http://greenwaterlab.com/	<u>Address: 205 Zeagler Dr, Palatka, FL 32177</u>
Tetra Tech	Phone: (321) 632-2503	http://www.tetrattech.com/	<u>Address: 1300 N Cocoa Blvd, Cocoa, FL 32922</u>
Universal Engineering	Phone: (321) 638-0808	http://universalengineering.com/	<u>Address: 820 Brevard Ave, Rockledge, FL 32955</u>
Elite Analysis	Phone: (407) 595-9844	http://eliteanalysis.com/	<u>Address: 3211 S Osceola Ave, Orlando, FL 32806</u>
Quality Analytical Laboratories	Phone: (850) 872-9595	http://www.qal.net/	<u>Address: 2814 W 15th St, Panama City, FL 32401</u>
Brevard soil and water conservation district	Phone: (321) 633-1702 ext. 232	https://brevardsoilandwater.org/	<u>Address: 3695 Lake Dr, Cocoa, FL 32926</u>
Partner ESI.	732.380.1700 <i>phone</i>	info@partneresi.com	800.419.4923 <i>phone</i>

A List of the Labs that have information on or do the testing of PFOS and PFOA

Name	number	website	location
University of Florida Soil and Water Sciences	Phone: (352) 294-3151	https://soils.ifas.ufl.edu/	Address: 1692 McCarty Dr, Gainesville, FL 32603
Water Shed Lab Inc	Phone: (386) 736-3397	http://www.watershedlab.com/	Address: 1692 McCarty Dr, Gainesville, FL 32603
Certified Water Technologies	Phone: (321) 222-3351		Address: Melbourne, FL
Aquatest Services, Inc.	Phone: (321) 728-5789		<u>Address: Palm Bay, FL</u>
Element Materials Technology	Phone: (321) 327-8985	https://www.element.com/	Address: 7780 Technology Dr, West Melbourne, FL 32904
Marion Soil and Water Conservation	Phone: (352) <u>622-3971</u>	http://marionsoilandwater.com/	Address: 2441 NE 3rd St #204, Ocala, FL 34470
Marion County Water Test Lab	Phone: (352) 694-6042	http://www.marioncountywaterestlab.com/	Address: 3940 SE 45th Ct, Ocala, FL 34480
Imanna Laboratory Inc	Phone: (321) 632-2008	https://www.imanna.com/	Address: 515, 4810, Gus Hipp Blvd, Rockledge, FL 32955
Diamond Systems LLC	Phone: (321) 223-7500	https://www.diamondsci.com/	Address: 625 Peachtree St Suite1, Cocoa, FL 32922
Any Lab Test Now	Phone: (321) 586-5227	https://www.anylabtestnow.com/franchises/west-melbourne-32904/?utm_source=google&utm_medium=organic&utm_campaign=gmb	Address: 145 Palm Bay Rd NE #102, West Melbourne, FL 32904
Blackwater Testing, Inc	Phone: (561) 508-2830	http://www.blackwatertestin.com/	Address: 7341 Westport Pl #1A, West Palm Beach, FL 33413