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Director

## MEMORANDUM

TO: Board of County Commissioners  
County Administration

FROM: WES Staff

DATE: 22 October 2019

SUBJECT: PFAS Briefing & Information

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National and state health and environmental agencies, including U.S. EPA and Oregon DEQ, are starting efforts to address concerns over per- and polyfluoroalkyl substances (PFAS) in the environment. PFAS are a family of chemicals designed to be water-resistant/repellant and have been used in a wide variety of products since the 1950s, including in non-stick pans, water-resistant jackets and tents, firefighting foam, and various manufacturing processes. This emerging contaminant of concern is something that staff is tracking, and WES staff wanted to make sure the BCC was aware of the issue and had an opportunity to discuss as desired.

Recent improvements in detection, coupled with new claims suggesting that these highly persistent chemicals might increase risks for certain health conditions, has caused heightened concern over PFAS chemicals in our bodies and environment. Currently, PFAS contamination is an unknown risk with unclear health and environmental impacts, especially in Oregon. WES, in partnership with other clean water agencies throughout the state, has agreed to become informed and to share what we learn with the Board, the clean water community and DEQ to assist in making decisions and communicating with officials and the public.

Contamination of groundwater supplies has been a concern particularly in the Eastern United States, especially near airports and military bases. There is also growing concern about PFAS in wastewater effluent and biosolids across the nation. Accordingly, it has become increasingly important for WES to understand,

communicate, and be prepared to mitigate any found risk to customers and stakeholders. The issue of PFAS chemicals has been the subject of ~70 different federal bills of various types, ranging from additional science funding to short-circuiting the scientific process and designating PFAS as a hazardous chemical.

WES is engaging with The National Association of Clean Water Agencies (NACWA) and the Water Environment Foundation (WEF), which have taken the lead on involvement in national discussions regarding industry response and action. Attached is a short fact sheet assembled by NACWA and WEF on the PFAS issue for your information.

To best understand whether or not WES in particular even have sufficient PFAS levels to warrant concern at a local level, we have undertaken a sampling plan to test the influent, mid-treatment, effluent, and biosolids portions of the wastewater treatment stream for PFAS, as well as select industrial discharges to WES' system. WES wanted the Board to be aware that we are proactively engaging on this issue and will report back to the BCC regarding findings and any national or state regulatory changes regarding PFAS.

If a Board member desires additional information, WES staff are happy to provide a more in-depth briefing on the above, and would commend as additional resources:

- EPA PFAS home: <https://www.epa.gov/pfas>
- US Food and Drug Administration: <https://www.fda.gov/food/chemicals-and-polyfluoroalkyl-substances-pfas>
- NACWA resources: <https://www.nacwa.org/advocacy-analysis/campaigns/pfas>

# PFAS Issue Background and Advocacy Asks

by NACWA & WEF

## Issue

Per- and polyfluoroalkyl substances (PFAS) have been detected in high concentrations in some water resources throughout the country, especially in groundwater drinking wells near airports, military bases, and manufacturing sites. These synthetic substances, of which there are more than 3,000 known chemical varieties, are found in numerous products used in everyday life such as paper food packaging, non-stick coating materials, and stain resistant fabrics. They are also found in aqueous film forming foam (AFFF) products that are used to suppress high-intensity fuel fires. Because of their strong chemical bonds, PFAS are persistent and stable in the environment, making these chemicals extremely difficult to remove even if they were to be completely eliminated from production and use.

## Current Advisories

Analytical monitoring techniques have advanced over the years, allowing PFAS compounds to be detected at extremely small concentrations. To date, the US Environmental Protection Agency (EPA) has issued drinking water health advisories (HAs) for two of the more prominently found PFAS constituents—polyfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) at 70 parts per trillion (ppt) or 70 ng/L. HAs provide information on potential public health effects and offer a benchmark for evaluating when exposure to PFOA and PFOS in drinking water may present a risk. HAs are, however, non-regulatory and are not enforceable.

Some states, concerned with the absence of federal regulatory action, are moving forward with establishing state-specific regulations, including maximum contaminant levels (MCLs) for drinking water that are more stringent than EPA's HAs.

## Impacts on Clean Water Agencies

Public clean water utilities receive and treat a broad range of influent from heterogeneous sources including domestic, industrial, and commercial sources. This influent, which is not generated by the utility, but which the utility is responsible for treating, may contain PFAS constituents ranging from trace to higher concentrations based on the nature of the dischargers connected to the sewer system. NACWA and WEF's members are the primary implementers of the National Pretreatment Program, charged with controlling commercial and industrial discharges to the sewer, and have been involved in EPA and state efforts to address PFAS contamination. NACWA and WEF have both submitted comment letters urging the EPA to develop a federal response that appropriately reflects the risks posed by PFAS, close the unresolved scientific gaps—including fate, transport, and toxicity of PFAS using a science based approach—and evaluate the appropriate regulatory response to target the sources of PFAS and the responsible disposal of contaminated concentrate.

## EPA Action Plan

On February 14, 2019, EPA published its Action Plan on PFAS. Relevant to the water sector, below are the most immediate and long-term aspects of EPA's Action Plan:

### Immediate Initiatives Pertinent to Clean Water:

- Initiate the regulatory rulemaking process for developing MCLs for two of the most common PFAS substances, PFOA and PFOS (*expected 2019*)
- Designate PFOA/PFOS as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (*expected 2019*)
- Expand analytical methods to test for PFAS (*expected 2019*)
- Develop cleanup recommendations to address groundwater contamination of PFOA/PFOS (*anticipated 2019*)

## Ongoing/Long-Term Initiatives Pertinent to Clean Water:

- Expand knowledge on PFAS chemicals entering commerce under the Toxic Substances Control Act (TSCA) (*ongoing*)
- Explore industrial sources that may warrant regulation through effluent limitation guidelines (ELGs) (*start 2019*)
- Develop and validate methods for testing PFAS in sources other than drinking water (e.g., wastewater, biosolids, fish tissue, stack emissions) (*expected 2019-2021*)
- Reduce PFAS releases into ambient waters and sources of drinking water by establishing ambient water quality criteria under the Clean Water Act, if data permits (*expected 2021*)

## Potential for Unintended Consequences from the Response to PFAS

EPA's actions to designate PFOA and PFOS as hazardous substances under CERCLA provides a mechanism for leveraging federal remediation dollars for existing contamination. The US House and Senate (H.R. 535/S. 638) have also introduced companion bills requiring EPA to designate *all* PFAS chemicals—not limited to PFOA and PFOS—as hazardous substances under CERCLA. With a CERCLA hazardous substance designation, there could be *unintended consequences* that hold public utilities potentially liable for cleanup costs, particularly where biosolids from the treatment process containing low levels of PFAS have been beneficially land applied for their fertilizer value. Removing these chemicals from wastewater influent/effluent requires advanced treatment techniques such as granular activated carbon (GAC), ion exchange (IX) or reverse osmosis (RO). These treatment methods are prohibitively expensive for the volume that needs to be treated, and it remains unanswered how and where to dispose of the PFAS contaminated concentrate generated from these processes.

## Asks

- **Support adding protections against PFAS contamination to TSCA requirements.** Develop better source control strategies and better use existing statutory authority to control PFAS at its source. Municipal wastewater treatment systems and biosolids land application are *not* sources of PFAS contamination, and clean water utilities should not bear the cost of removal alone.
- **Empower the CWA pretreatment program.** Identify and address high-priority PFAS discharges to municipal wastewater facilities and provide utilities with any additional authorities necessary to prevent the pass-through of these constituents and interference with the treatment process.
- **Consider unintended consequences.** Based on toxicity information and relative risk, clearly exclude wastewater effluent and biosolids containing low levels of PFAS from CERCLA liability. While low levels of PFAS can be detected with advanced analytical techniques, the amounts may be well below background levels or amounts found in everyday household items.
- **Close the scientific gaps.** Give EPA the resources it needs to address PFAS chemicals. There is limited laboratory capacity to conduct adequate sampling and analysis. It is imperative to gain a better understanding of the concentrations of these chemicals, either individually or aggregated, that pose an *actual risk* to public health and the environment as well as understand the fate and transport pathways by which these chemicals move in the environment.



If you have questions, please contact Emily Rimmel, NACWA's Director of Regulatory Affairs at [erimmel@nacwa.org](mailto:erimmel@nacwa.org) or 202.533.1839 or Patrick Dube, WEF's Technical Program Manager at [pdube@wef.org](mailto:pdube@wef.org) or 703.684.2418