

Alaska Department of Environmental Conservation Spill Prevention and Response Division Contaminated Sites Program

PFAS Drinking Water Action Levels Technical Memorandum

Frequently Asked Questions

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What is this technical memorandum and what does it mean to me?

The Alaska Department of Environmental Conservation (DEC) issued the *Technical Memorandum:* Action Levels for PFAS in Water and Guidance on Sampling Groundwater and Drinking Water (tech memo) in August 2018 to provide clear, consistent guidance on responding to per- and polyfluoroalkyl substances (PFAS) in drinking water. The memo is written in technical language for use by regulators and the regulated community. These Frequently Asked Questions (FAQs)

address questions you may have, and may be helpful in understanding what the information in the tech memo means to you.

The August 2018 tech memo addresses six PFAS that have been identified under the Safe Drinking Water Act as having public health concerns for public drinking water supplies across the country. These contaminants have also been found in some drinking water supplies in Alaska. Based on available science regarding these compounds, the state has determined that six PFAS are hazardous substances under state law. This tech memo provides action levels for these PFAS to determine when treatment, or an alternative water supply, should be provided to protect human health.

What are PFAS?

PFAS are man-made chemicals that have been used in industry and consumer products worldwide since the 1950s. PFAS are manufactured for their heat, water, and stain-resistant properties. These properties make PFAS beneficial for a wide variety of industrial, commercial, and residential applications, such as non-stick cookware, water-repellent clothing, stain-resistant fabrics, and firefighting foams.

Why is DEC setting these action levels?

DEC has set action levels for six PFAS to determine when treatment of water or an alternative water supply (such as bottled water, treatment system, or a bulk water tank) is needed to protect human health. Because the scientific research on these compounds is still evolving, there has not been enough information for EPA to set a maximum contaminant level (MCL) for drinking water. Therefore, until we know more about these compounds, DEC is using currently available science to set protective levels, which, if exceeded, trigger the need to provide treatment or alternative water. Drinking water at a level above DEC's action levels does not necessarily mean that health effects are anticipated. Once more is known about these contaminants, the department may revise the action levels or set new cleanup levels in regulation.

What are the action levels?

DEC has set action levels for the following six individual PFAS:

- perfluorooctane sulfonic acid (PFOS)
- perfluorooctanoic acid (PFOA)
- perfluorononanoic acid (PFNA)
- perfluorohexanesulfonic acid (PFHxS)
- perfluoroheptanoic acid (PFHpA)
- perfluorobutanesulfonic acid (PFBS)

The action level is 70 parts per trillion (ppt) – also referred to as 0.07 parts per billion (ppb) – for the sum of PFOS, PFOA, PFNA, PFHxS, and PFHpA. This means that the sum of the concentrations of all these contaminants, or those that are present, cannot exceed the action level. The action level for PFBS differs, and is set at 2,000 ppt.

What are the UCMR3 compounds and why are they addressed in this tech memo?

The Unregulated Contaminant Monitoring Rule (UCMR) is a nationwide monitoring program under the Safe Drinking Water Act to track chemicals without health-based standards that may be found in drinking water. EPA uses information from this monitoring to decide if the contaminants occur at frequencies and concentrations high enough to be regulated in the future.

The third UCMR (UCMR3) was published on May 2, 2012. UCMR3 required monitoring for 30 contaminants between 2013 and 2015. The contaminant list was identified by an agency and state working group, based on considerations such as potential adverse health effects and occurrence. Public comment was solicited and considered in creating the final list. The final UCMR3 list included the six PFAS addressed in DEC's tech memo: PFOS, PFOA, PFHxS, PFNA, PFHpA, and PFBS. One or more of these six PFAS were detected in 194 public water supplies across the nation.

How will I know if there are PFAS contamination in my area?

- You can always call DEC's Contaminated Sites Program at 907-465-5250 (Juneau); 907-269-7503 (Anchorage); or 907-451-2143 (Fairbanks) and ask to speak to the project manager for information on contamination in your area.
- You may first hear about PFAS contamination near your area on the news or through neighbors. You may also be contacted directly by someone from DEC or a contractor hired to take samples of your well water.
- Because DEC has recently begun requiring responsible parties (the people or agencies who
 have property or facilities where PFAS contamination may be present) to sample
 groundwater, you may be contacted by one of these parties.
- If you are a resident in a neighboring area, you may not be directly notified unless sampling indicates there might be a problem with your drinking water. However, you are always encouraged to contact DEC if you are concerned or have questions.
- Visit DEC's website to learn more about PFAS contamination at http://dec.alaska.gov/spar/csp/pfas-contaminants/. At the bottom of the web page there are links to other specific web pages on current PFAS responses. If the contamination has been discovered recently, information may be limited or not yet be posted. If you have questions and cannot find answers, call DEC. Some sites may have site-specific project web pages which are a good place to look for the latest information, including maps, reports and other items of interest.

What steps will DEC implement if there are PFAS near my water well?

In general, DEC will require the responsible party to sample groundwater multiple times for a year or more to determine the concentration and depth of the contamination, and to track how far it has moved and where it has spread. Results from the first round of sampling will be analyzed to determine if a following round of sampling is required. This may seem like a tedious part of the process because sampling and analysis take time.

DEC will notify you promptly with the results of the samples taken from your well. Please contact DEC if you have any questions regarding your results.

What actions will DEC take if PFAS are found above action levels in my well?

- You will be notified promptly of your sample results once they are available.
- If PFAS concentrations in your well exceed the tech memo's action levels, DEC or a

responsible party will take immediate action to provide you with an alternative water source or water treatment. Initially, this may be bottled water. The DEC will work with the party responsible for the contamination to determine appropriate long-term solutions. Options may include connection to a piped water system or use of a home treatment system.

- To limit the spread of contamination, DEC may require the responsible party to work with you to limit the use of your well. Measures taken by DEC or the responsible party may include any of the following:
 - making sure that any water you may be pumping and/or discharging is treated to concentrations below the action levels,
 - disconnecting your well, which can include disconnecting power, capping water lines, and labeling, or
 - permanently decommissioning your well.

What actions should I take if PFAS are found above action levels in my well?

- Use the treated or alternative water provided to you for drinking, preparing baby formula, washing food, and cooking.
- Use treated or an alternative water source for pets/animals.
- It is okay to shower and bathe in your tap water.
- It is okay to clean your clothes and dishes with your tap water.

Once you have a permanent alternative water source, you should stop use of your well unless a treatment system is in place.

What actions will DEC require if PFAS are found below action levels in my well?

- If PFAS concentrations in your well are above 50% of the action level, DEC will require your well to be sampled four times a year.
- If PFAS concentrations in your well are between 25% and 50% of the action levels, DEC will require your well to be sampled once a year.
- The monitoring frequency of your well may be modified if concentrations are shown to be stable or decreasing.

What actions should I take if PFAS are found below action levels in my well?

No action is required, but because you may become exposed to PFAS by other means (such as personal care products or consumer goods), you may exercise personal choice to obtain a different water source.

Can I use my well if PFAS are detected above action levels?

- You should not drink water with PFAS above action levels without treatment.
- Use of the well for nonpotable purposes should be reduced or stopped, as soon as practical, to prevent the spread of contamination.
- If PFAS concentrations in your well exceed the tech memo's action levels, DEC may require the party responsible for the contamination to work with you to limit the use of your well in order to restrict the spread of contamination. The responsible party may;

- make sure that the water pumped and discharged is treated to concentrations below the action levels,
- disconnect the wells, which can include disconnecting power, capping water lines, and labeling, or
- permanently decommission the wells.

Once you have a permanent alternative water source, you should stop use of the well unless a treatment system is in place.

Should I water my vegetable garden with my well water if it is above the action levels?

• Use of the well, including the watering of gardens and feeding pets or livestock, should be reduced or stopped, as soon as practical, to prevent the spread of contamination.

Can I eat produce from my garden and eggs from my chickens?

- There are a number of different factors impacting the uptake of PFAS into produce or eggs. We do not have enough information at this time regarding your garden produce or eggs to determine PFAS concentration in your produce or eggs.
- Use a clean water source for watering gardens, washing food, cooking, and giving to pets and animals.

How long can I expect this contamination to be here?

 PFAS chemicals do not easily break down in the environment and can last for a very long time. If your well is contaminated with PFAS, the levels or concentrations of these chemicals may vary from season to season, but your well will likely remain contaminated for many years.

How can I learn more?

- DEC's website has information about PFAS contamination:
 http://dec.alaska.gov/spar/csp/pfas-contaminants/
 At the bottom of the web page, there are links to other specific web pages on current PFAS responses. If the contamination has been recently discovered, information may be limited or not yet be posted.
- Maps showing levels of PFAS in groundwater wells appear on several DEC's web pages regarding specific sites.
- You can always call DEC's Contaminated Sites Program at 907-465-5250 (Juneau); 907-269-7503 (Anchorage); or 907-451-2143 (Fairbanks) and ask to speak to the project manager for information on contamination in your area.

Who can I talk to about health-related questions?

- DEC recommends you talk with your health care provider if you have questions regarding your health and PFAS.
- DHSS can also help answer health-related questions, and provide recommendations on how to reduce your exposure to PFAS compounds.
- Visit: http://epibulletins.dhss.alaska.gov/Bulletin/DisplayClassificationBulletins/465
- Visit: http://dhss.alaska.gov/dph/Epi/eph/Pages/default.aspx

Contact us with questions:

Alaska Department of Environmental Conservation DEC's Spill Prevention and Response Division Contaminated Sites Program

John Halverson Environmental Program Manager 907-269-7545, john.halverson@alaska.gov

You can also speak to the DEC project manager for information on contamination in your area by calling:

907-465-5250 (Juneau) 907-269-7503 (Anchorage) 907-451-2143 (Fairbanks)

DEC's Division of Environmental Health Drinking Water Program

Cindy Christian
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Health Related Information: Alaska Department of Health and Social Services DHSS's Division of Public Health Environmental Public Health Program

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For more information about PFAS contamination, please see DEC's website at: http://dec.alaska.gov/spar/csp/pfas-contaminants/.