AEA Recommendations On PFAS Chemicals

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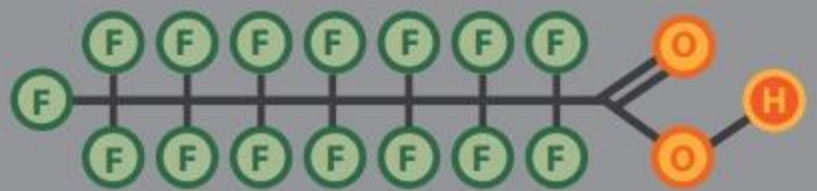
WHAT ARE PFAS CHEMICALS?

Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals that includes PFOA, PFOS and GenX chemicals. Since the 1940s, PFAS have been manufactured and used in a variety of industries around the globe, including in the United States. PFOA and PFOS have been the most extensively produced and studied of these chemicals. Both are very persistent in the environment and in the human body. Exposure to certain PFAS can lead to adverse human health effects.

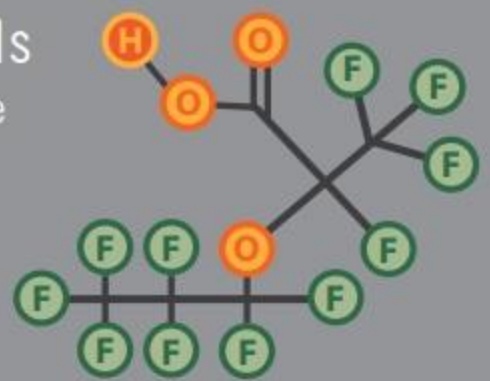
PFOA & PFOS

U.S. manufacturers voluntarily phased out PFOA and PFOS, two specific PFAS chemicals.



GenX Chemicals

GenX chemicals are a replacement for PFOA.



Analytical Method for Drinking Water

29 Per- and Polyfluoroalkyl Substances (PFAS)

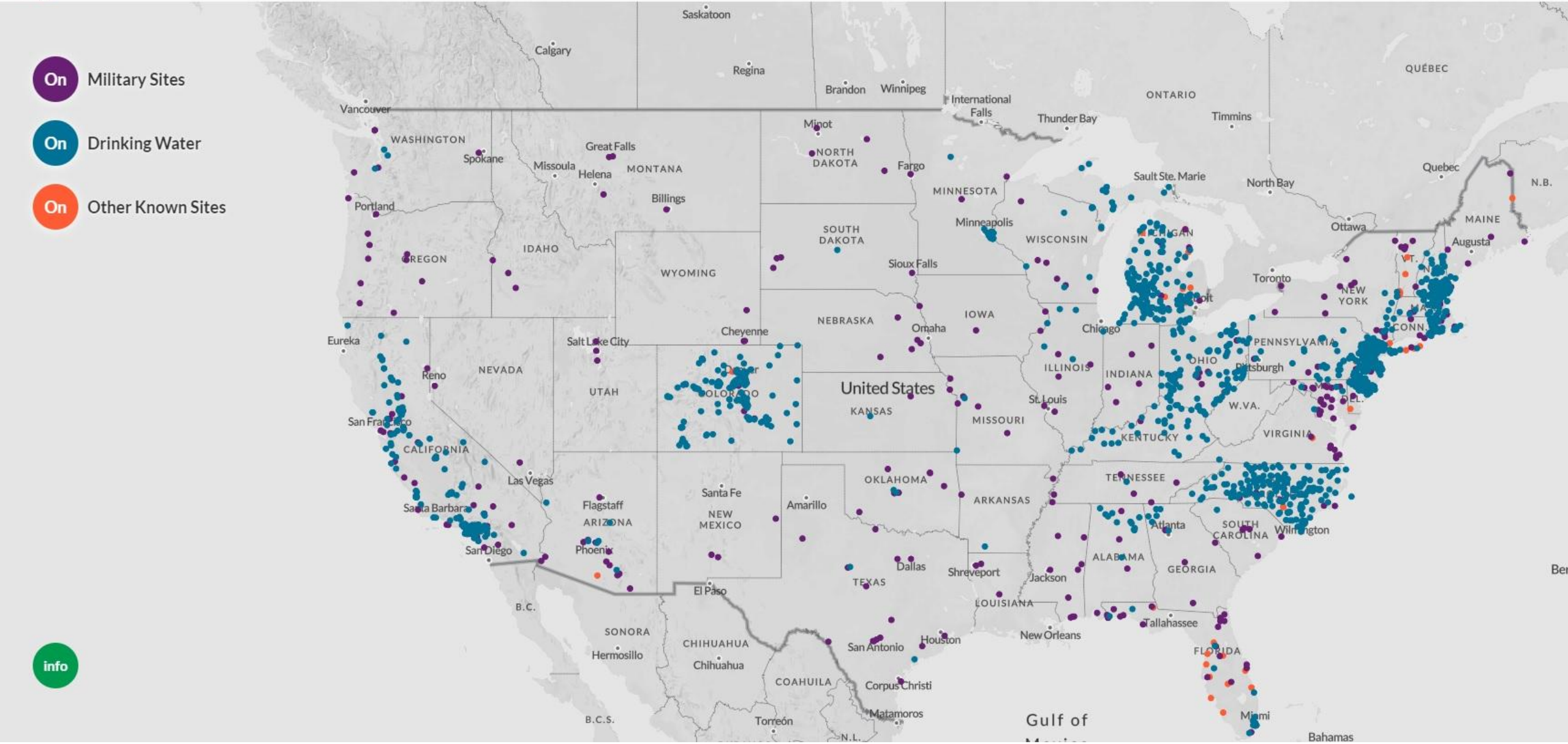
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	perfluoro-4-methoxybutanoic acid (PFMBA)	perfluorooctanesulfonic acid (PFOS) *
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	perfluorobutanesulfonic acid (PFBS)	perfluorooctanoic acid (PFOA) *
1H, 1H, 2H, 2H-perfluorohexane sulfonic acid (4:2 FTS)	perfluorobutanoic acid (PFBA) *	perfluoropentanesulfonic acid (PFPeS)
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	perfluorodecanoic acid (PFDA)	perfluoropentanoic acid (PFPeA)
4,8-dioxa-3H-perfluorononanoic acid (ADONA)[1]	perfluorododecanoic acid (PFDoA)	perfluoroundecanoic acid (PFUnA)
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS)	perfluoroheptanesulfonic acid (PFHpS)	n-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)
hexafluoropropylene oxide dimer acid (HFPO-DA) (GenX)	perfluoroheptanoic acid (PFHpA) *	n-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)
nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	perfluorohexanesulfonic acid (PFHxS) *	perfluorotetradecanoic acid (PFTA)
perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	perfluorohexanoic acid (PFHxA)	perfluorotridecanoic acid (PFTrDA)
perfluoro-3-methoxypropanoic acid (PFMPA)	perfluorononanoic acid (PFNA) *	

1. Although the abbreviation used is ADONA, indicating the ammonium salt, 4,8-dioxa-3H-perfluorononanoic acid is the parent acid.

WWW.EPA.GOV/PFAS

SOURCE: U.S.EPA

PFAS Contamination in the U.S. (January 6, 2021)



PFAS Regulations for Drinking Water

Federal Health Advisory

- PFOS and PFOA combined
- 70 ppt, effective 2016

NJ Max Contaminant Levels

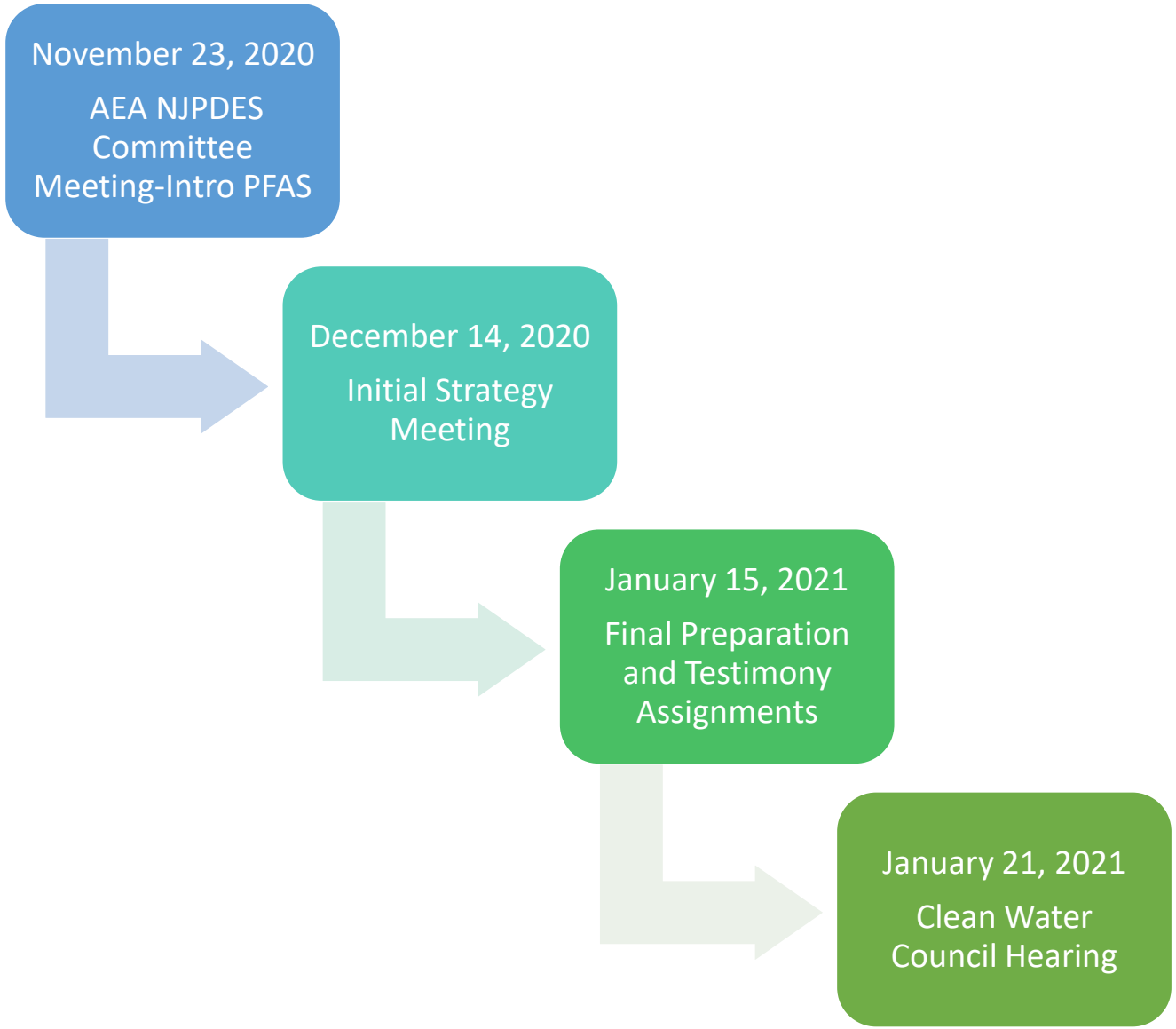
- PFNA 13 ppt, effective 1/1/20
- PFOS 13 ppt, effective 1/1/21
- PFOA 14 ppt, effective 1/1/21

STATE OF NEW JERSEY
CLEAN WATER COUNCIL

REQUEST FOR TESTIMONY

The Council seeks recommendations regarding how **best to control the discharge of PFAS to surface waters** of the State.

Timeline


November 23, 2020
AEA NJPDES Committee Meeting-Intro PFAS
December 14, 2020
Initial Strategy Meeting
January 15, 2021
Final Preparation and Testimony Assignments
January 21, 2021
Clean Water Council Hearing

STATE OF NEW JERSEY
CLEAN WATER COUNCIL

REQUEST FOR TESTIMONY

The Council seeks recommendations regarding how **best to control the discharge of PFAS to surface waters** of the State. Testimony should consider:

- The Department is currently requiring sampling for specific dischargers. How should the Department expand and prioritize its efforts to **establish monitoring requirements** for other dischargers?
- Since publicly owned treatment works (POTWs) are designed only to treat sanitary waste, should there be a short period of time to focus on the identification and elimination of the source through a track-down method before **compelling treatment at a POTW** for wastewater facilities? If so, what period of time?
- If a track down approach is taken, what information should be collected to identify priority dischargers (e.g., specific agents industries may use in their process)?
- What specific technologies are potentially available to treat wastewater from large sanitary dischargers for PFAS removal? For these technologies, what is the effectiveness and cost, as well as what secondary impacts, such as residuals management and air emissions, resulting from their use?
- Until **limits are established at the treatment plant**, are there factors that should be considered in the management of generated sludge and the land application of biosolids?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TMSA


OCEAN COUNTY UTILITIES AUTHORITY

CWC Testimony

- Collect data
- No test method for streams or wastewater
- Remove PFAS at drinking water plants
- Consider having POTWs identify hot spots/develop PMP
- Treatment technologies and limitations with respect to wastewater
- Cost

Did We Meet Our Goals?

Informative Testimony

Educate Clean Water Council

Educate NJDEP

Showcase Expertise of AEA Members

Use Science

Don’t Waste Our Limited Resources

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