

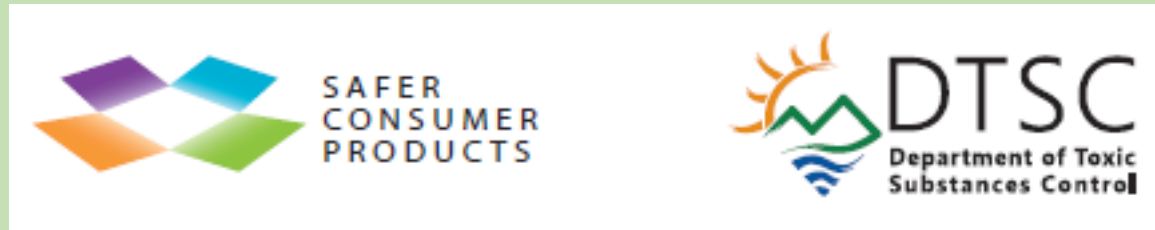
CalEPA Activities on Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS)

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Safer Consumer Products Program
California Department of Toxic Substances Control (DTSC)
November 8, 2021



Disclosures

- I have no financial conflict of interests.
- I am the Deputy Director of DTSC's Safer Consumer Products Program.



CalEPA PFAS Working Group



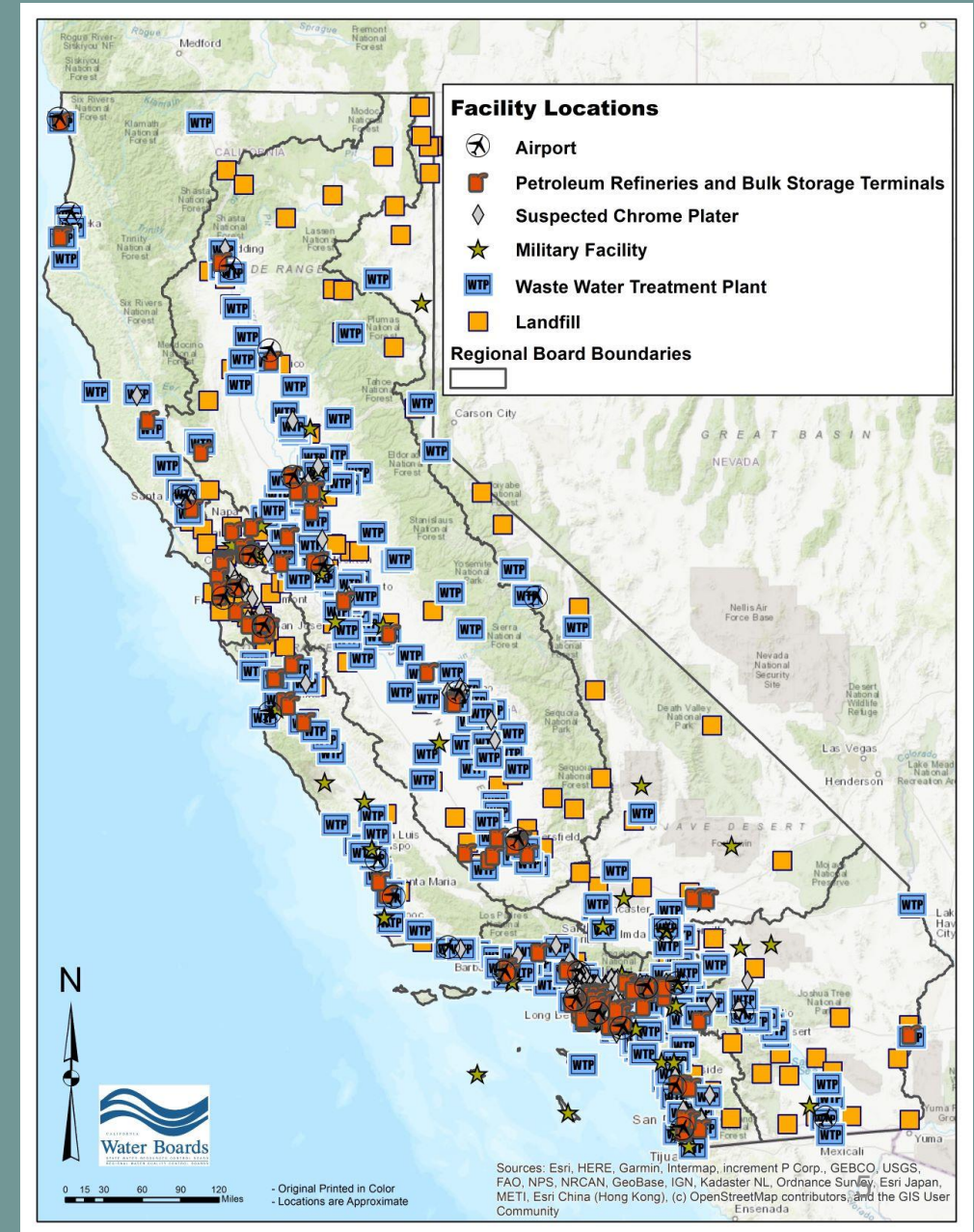


State-wide PFAS Investigative Orders



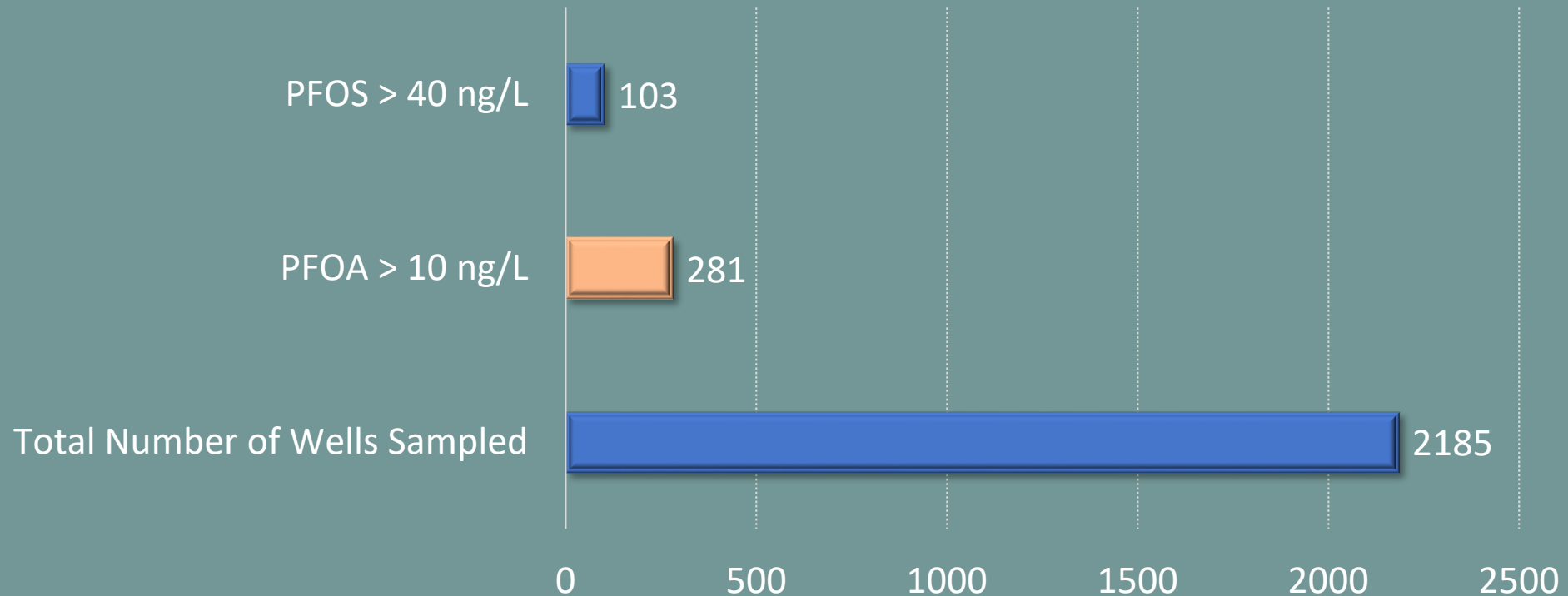
PFAS Investigatory Objectives

- Evaluate data to:
 - Identify impacted **public water supply wells**
 - Inform **additional areas** where watershed specific source identification efforts are needed
- Inform additional public water supply well sampling
- Inform future investigations
- Inform consideration of Public Health Goals (PHGs) and MCLs



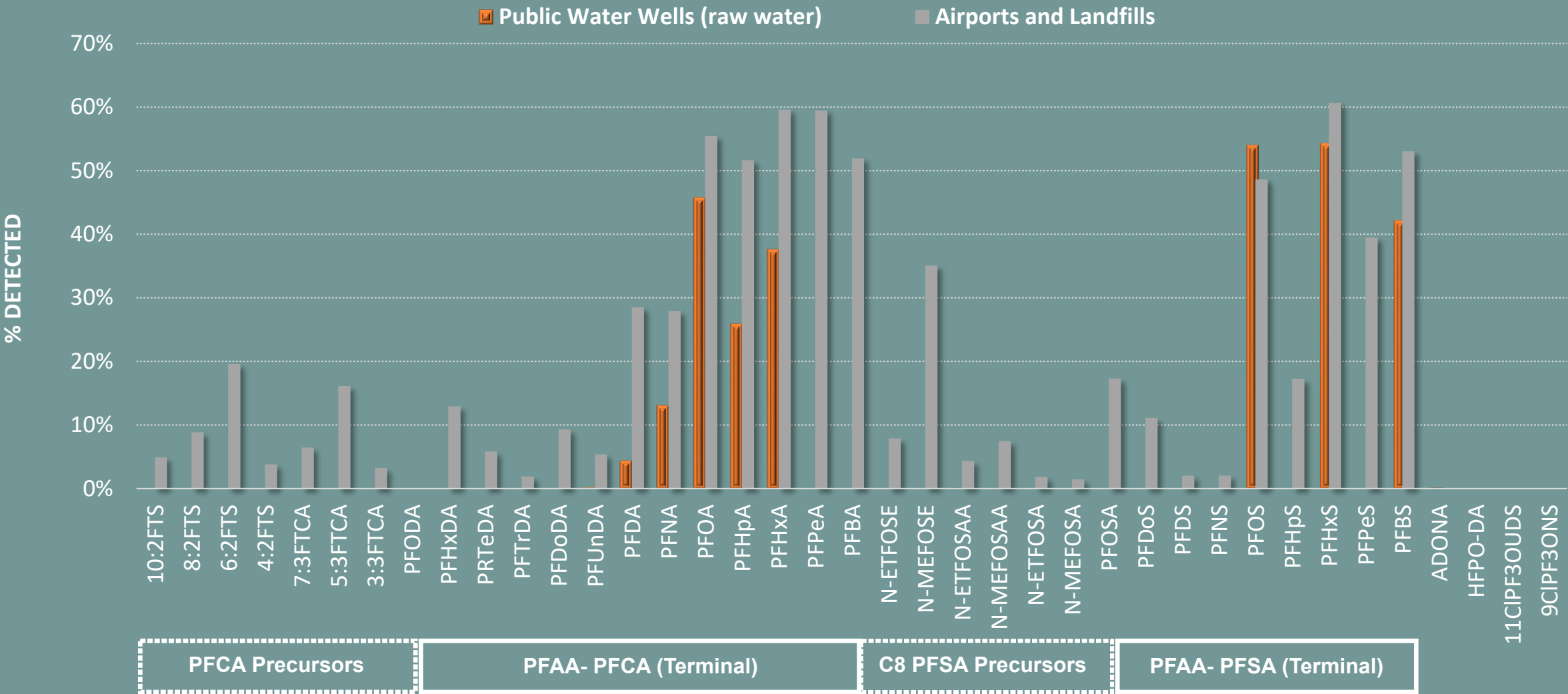
PFAS Public Water Systems – Raw Water

Only 13% of the wells sampled have an RL exceedance

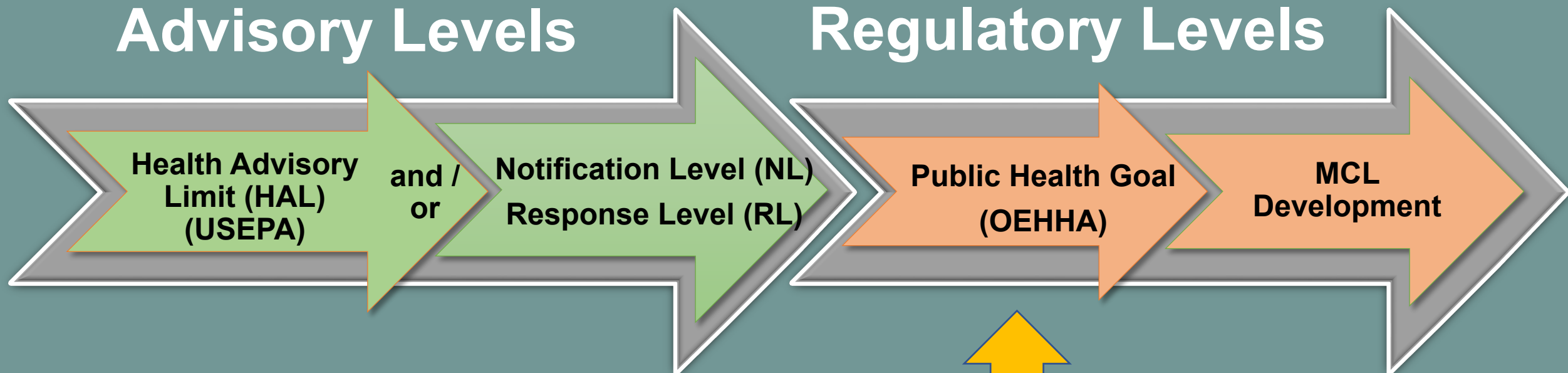


as of 9/20/2021 n=2,185

Results



Path to a Drinking Water MCL



PFOA (C8)	70 ppt combined	NL 5.1 ppt; RL 10 ppt	0.007 ppt*	2025
PFOS (C8)		NL 6.5 ppt; RL 40 ppt	1 ppt*	
PFBS (C4)		NL 0.5 ppb; RL 5 ppb	*Proposed	

Water Board PFAS Links



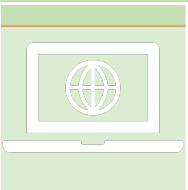
Water Board's website:

<https://www.waterboards.ca.gov/pfas/>



Water Board's Division of Drinking Water PFOA/PFOS website:

https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/PFOA_PFOS.html

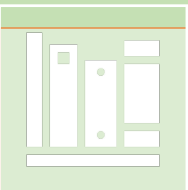


Water Board's GAMA website:

<https://www.waterboards.ca.gov/gama/>



Email: PFAS@waterboards.ca.gov



Subscribe to Receive Notifications:

https://www.waterboards.ca.gov/resources/email_subscriptions/swrcb_subscribe.htm



Oct 7, 2020 State Water Board Informational Item #7 - Source Investigations and PWS Data Summaries

https://www.waterboards.ca.gov/board_info/video.html



PFAS in Drinking Water

- Completed Notification Level recommendations for several PFAS
 - 5.1 ppt for PFOA and 6.5 ppt for PFOS
 - Levels set based on detectability in water
 - Reference levels of 0.1 ppt for PFOA and 0.4 ppt for PFOS were derived, based on cancer
 - 500 ppt for PFBS, based on thyroid toxicity
- Proposed Public Health Goals for PFOA and PFOS – first public draft
 - **PFOA**: 0.007 ppt based on kidney cancer in humans
 - Non-cancer health protective concentration (HPC) of 3 ppt based on liver toxicity in humans
 - **PFOS**: 1 ppt based on liver and pancreatic cancer in rats
 - Non-cancer HPC of 2 ppt based on increased cholesterol in humans



OEHHHA
California Office of Environmental
Health Hazard Assessment

PFAS in Drinking Water

- The State Water Resources Control Board has requested Notification Level recommendations for six additional PFAS (in process)
- PFHxS, PFHxA, PFHpA, PFNA, PFDA, and ADONA



OEHHA
California Office of Environmental
Health Hazard Assessment

PFAS under Proposition 65

- In 2017, PFOA and PFOS were listed as reproductive toxicants (developmental endpoint)
- In March 2021, OEHHA issued a Notice of Intent to List PFOA as a carcinogen
- On December 6, 2021, the Carcinogen Identification Committee will consider listing PFOS (and its salts and transformation and degradation precursors) as carcinogens
 - OEHHA released a hazard identification document in September 2021
- On December 14, 2021 the Developmental and Reproductive Toxicant Identification Committee will consider listing PFNA (and its salts) and PFDA (and its salts) as reproductive toxicants (male reproductive endpoint)
 - OEHHA released hazard identification document in October 2021



PFAS Activities

- Amending the Chrome Plating ATCM to reduce exposures from hexavalent chromium
- Evaluation of approaches to reduce the health and environmental impacts of PFAS-containing chemical fume suppressants used at chrome plating facilities
- UC Berkeley's Center for Environmental Research and Children's Health report; Assessment of Methods to Collect and Analyze PFAS in Air, Dust and Soil*

*<https://ww2.arb.ca.gov/sites/default/files/2021-05/040621%20--%20PFAS%20Final%20Report%20UCB%203%2018%2021%20%28002%29.pdf>



PFAS Activities

- Working with UC Davis to evaluate optimal conditions for biodegradation of compostable plastics and PFAS in plastic food service ware
- Adopted regulations to implement the **Sustainable Packaging for the State of California Act of 2018**.
 - Law requires food service facilities in state properties to use reusable, recyclable, or compostable food packaging.
 - Implementing regulations:
 - Prohibit PFAS in plastic or fiber items that are recyclable or compostable.
 - Use total fluorine as proxy for the presence of PFAS (total fluorine threshold <100 ppm).
 - Will be effective after review by the Office of Administrative Law later this year.

PFAS Activities

- Found that pesticide formulations registered in CA do not contain intentionally added PFAS (active or inert ingredients).
- Investigating the use of fluorinated containers (F-HDPE) that contribute to PFAS contamination of pesticide products.
- Working with US EPA and pesticide registrants to exchange fluorinated containers with non-fluorinated containers that do not leach PFAS into pesticide products.



DTSC Activities

- Cleanup Program
 - Evaluation and cleanup of contaminated properties throughout California, including PFAS in ground water
- Hazardous Waste Program
 - Considering if PFAS containing wastes should be regulated as hazardous
- Safer Consumer Products Program
 - Promotes and compels development of safer alternatives to consumer products that may cause harm to people or the environment
- Environmental Chemistry Laboratory
 - Monitors the presence and concentration of chemicals in biological samples (e.g., serum), other media, and consumer products

PFASs in Safer Consumer Products

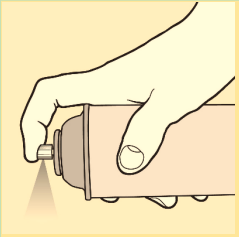
- In 2015, the Scientific Guidance Panel voted to include PFASs *as a class* on the list of priority chemicals
- This action updated DTSC's Safer Consumer Products Candidate Chemical list
- PFAS class now eligible for consideration for regulation in consumer products



PFAS “Priority Products”



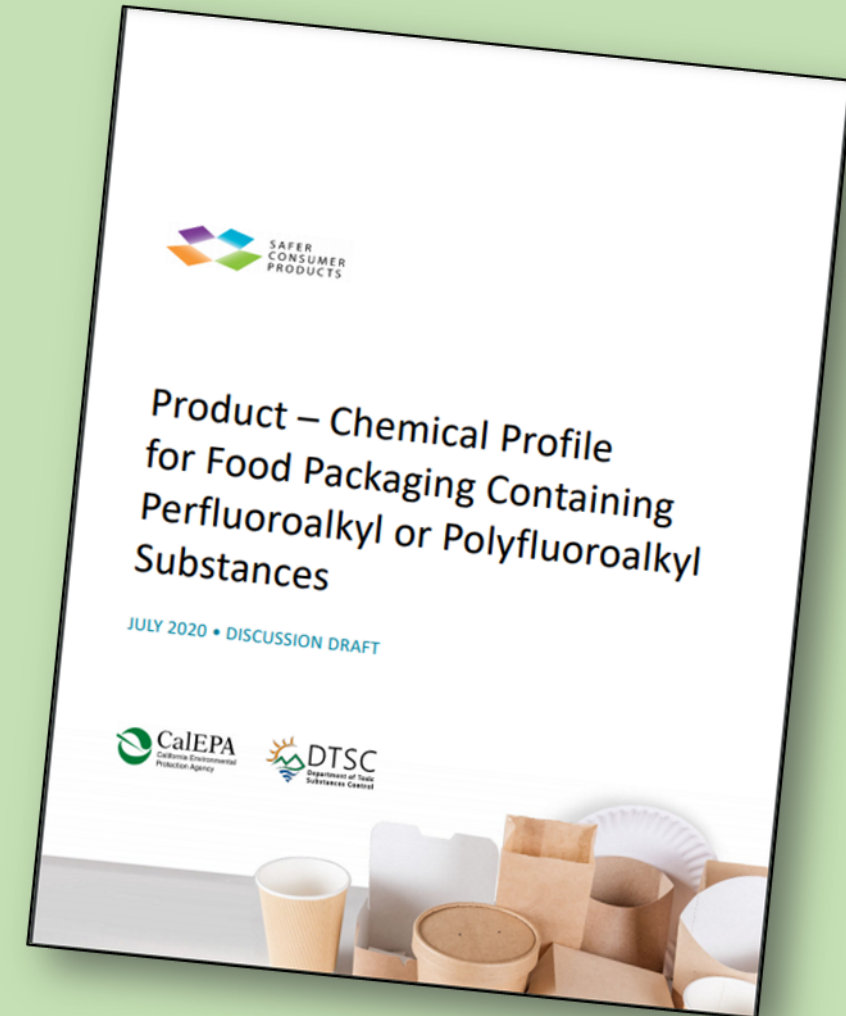
Carpets and rugs with PFAS adopted as Priority Product, effective July 1, 2021



Treatment products containing PFAS used for textiles in rulemaking process



Food packaging containing PFAS

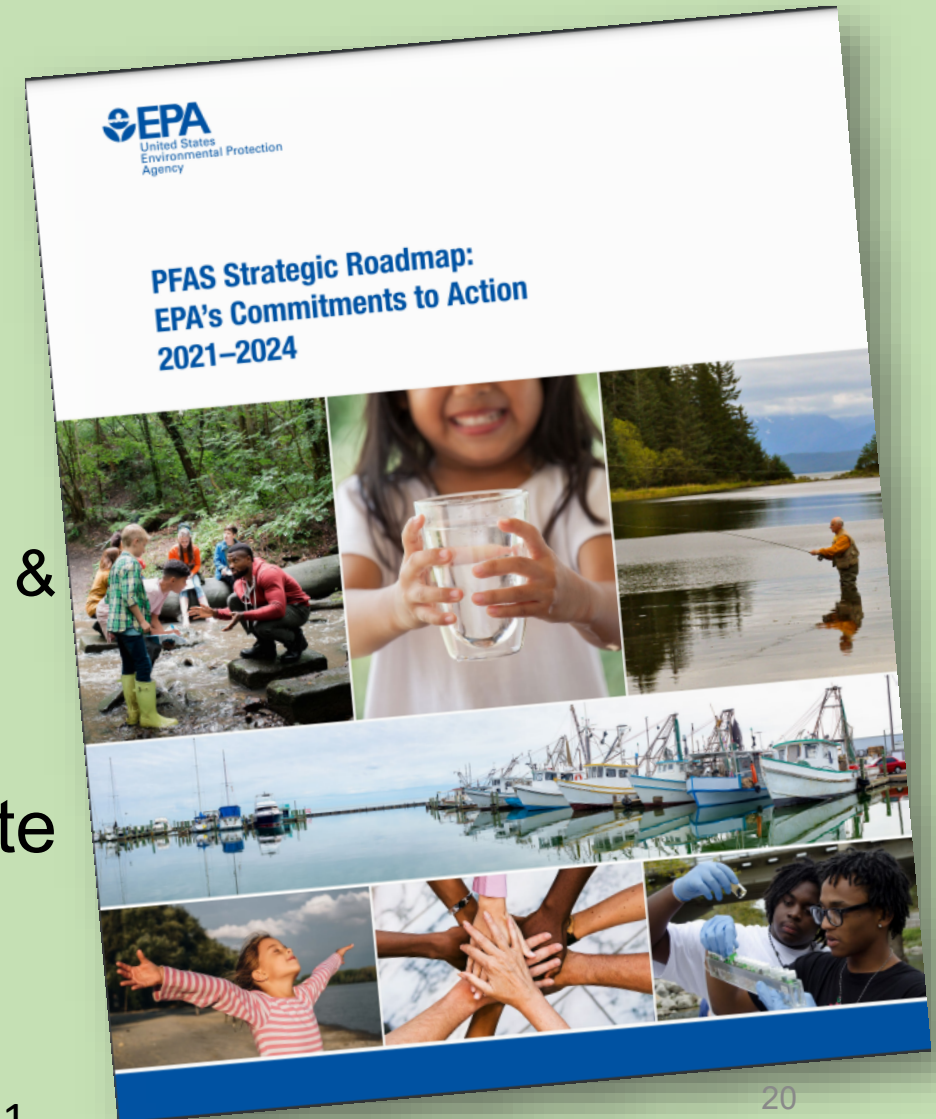


Recent CA legislative action on PFAS

- AB 1200 (Ting)
 - Bans PFAS in plant fiber-based food packaging in 2023
 - In 2023 requires disclosure of intentionally added Candidate Chemicals in cookware handles or food contact surfaces
 - Bill supported by SCP work on these products and SCP's class approach to PFAS
- AB 652 (Friedman)
 - Prohibits sale in CA of specific juvenile products containing PFAS
 - Requires PFAS replacement chemicals to be “the least toxic alternative”
- SB 1044 (Allen)
 - Prohibits manufacture and sale of Class B firefighting foams with PFAS after Jan 1, 2022

US EPA's PFAS Strategic Roadmap

- Approach
 - Consider lifecycle of PFAS
 - Prevention
 - Hold polluters accountable
 - Science based decision making
 - Develop methods to test, measure, remove & destroy
 - Protect disadvantaged communities
- Goals = Research – Restrict – Remediate



Thank You!

Contact me

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SCP home page

<http://www.dtsc.ca.gov/SCP>

CalSAFER

<http://calsafer.dtsc.ca.gov>

Candidate Chemical List

Product Listings/Rulemaking/

Petitions/ Technical documents

eList

<http://bit.ly/scpupdates>