

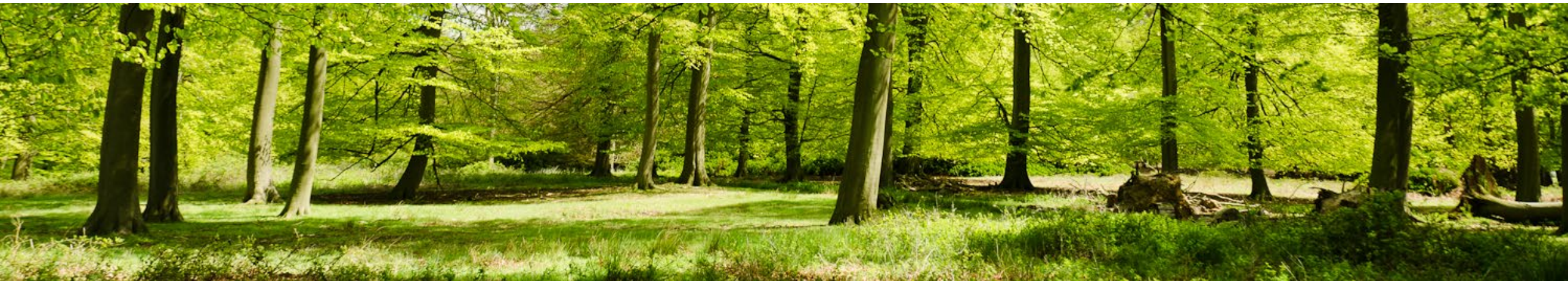


Department of  
Toxic Substances  
Control

# Impacts of PFAS on Federal Entities, Local Municipalities, and Regulatory Agencies

**Society of American Military Engineers  
(SAME)/Professional Environmental Management (PEMA)  
Panel Discussion – March 7, 2023**

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# Topics

- Overview of DTSC programs addressing PFAS
- DTSC Safer Consumer Products Program
- Work in progress.

# Programs within DTSC Addressing PFAS

- Safer Consumer Products (SCP)
- Environmental Chemistry Laboratory (ECL)
- Site Mitigation and Restoration Program (SMRP)

# DTSC – Safer Consumer Products (SCP) Program

- **2008** – CA legislature passed AB 1879. Required adoption of regulations to establish a process for identifying and prioritizing chemicals in consumer products that have the potential to have adverse impacts to public health and environment, and to establish a process for evaluating potential safer alternatives.
- California's Green Chemistry law - aims to reduce toxic chemicals in consumer products.
- Approved by the Office of Administrative Law on August 28, 2013
- Regulations effective as of October 1, 2013

## Environmental Chemistry Laboratory (ECL)

- Supports DTSC's SCP and looking into product testing for PFAS (e.g., compliance testing in carpets and rugs, spray on upholstery, artificial turf).
- Helped develop USEPA Method SW-846 Test Method 8327.
- Analyzed PFAS in wastewater in Bay area

# Site Mitigation and Restoration Program (SMRP)

- Regulatory oversight of Department of Defense ( DOD) and non-DOD site investigations and remediation of PFAS.
- Coordinates with Water Board on PFAS investigations
- Manage PFAS at orphan sites.
- PFAS Work Group to share information, track PFAS status and coordinate work at cleanup sites

# DTSC – Hazardous Waste Management Program

- The USEPA has not yet listed PFAS as hazardous wastes or substances under Resource Conservation and Recovery Act (RCRA), Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), Emergency Planning and Community Right to Know Act or the Clean Air Act.
- Therefore, DTSC permit is currently not needed for treatment or disposal at this time.

# Goals of the SCP Program

- Reduce hazardous chemicals in consumer products.
- Increase the adoption of green chemistry principles and safer alternatives to chemicals of concern in consumer products.



# Main Elements In Implementation of SCP Regulations

- Identify Candidate Chemicals
- Identify Priority Products
- Alternatives Analysis
- Regulatory Responses



# Two of the Priority Product Categories

1. Treatments Containing PFAS for Use on Converted Textiles or Leathers (Effective 4/1/22)
2. Carpets and Rugs with PFAS (Effective 7/1/21).

## What does this mean?

- Domestic and foreign manufacturers of PFAS-containing products that are being sold in California are required to submit a Priority Product Notification through DTSC's CalSAFER portal, within 60 days of listing.
- Additional documentation, such as intent to remove or replace the product or chemical, or a Preliminary Alternatives Analyses, must be submitted within 180 days.

## **AB 1200 Approved by the Governor – Oct 5, 2021**

Prohibits, beginning January 1, 2023, any person from distributing, selling, or offering for sale in the state any food packaging that contains regulated perfluoroalkyl and polyfluoroalkyl substances or PFAS at or above 100 parts per million in total organic fluorine.

Requires a manufacturer to use the least toxic alternative when replacing regulated PFAS in food packaging.

# **AB 1200 Approved by the Governor – Oct 5, 2021 (cont'd)**

Beginning January 1, 2024, requires a manufacturer of cookware sold in the state to list the presence of PFAS in the product label when present in the handle of the product or in any product surface that comes into contact with food, foodstuffs, or beverages.

## **AB 652 Approved by the Governor – Oct 5, 2021**

Prohibits, beginning July 1, 2023, any person, including a manufacturer, from selling or distributing in commerce in this state any new juvenile product that contains regulated perfluoroalkyl and polyfluoroalkyl substances (PFAS).

The bill requires a manufacturer to use the least toxic alternative when replacing PFAS chemicals in a juvenile product.

# Comparison of Regulatory / Potential Screening Levels for PFAS in Water (ng/L or ppt)

	USEPA Health Advisory	USEPA MCL (Proposed)	USEPA Regional Screening Level for Tap Water (11/2023) (THQ=0.1)	California Public Health Goal (Proposed)	California Notification Level	California Response Level
PFOA	0.004	4	6	0.007	5.1	70
PFOS	0.02	4	4	1	6.5	
PFNA		HI = 1.0	5.9			
PFHxS			39		3	20
PFBS	2,000		600		500	5,000
HFPO-DA/GenX	10		1.5			
PFBA			1,800			
PFHxA			990			

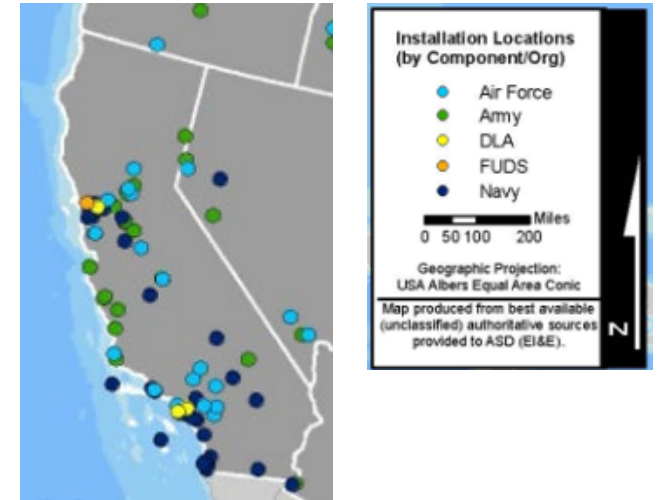
# DOD Sites: PFAS Screening Levels

- Screening levels for 8 PFAS compounds based on USEPA RSLs (May 2023)/DOD guidance (Aug 2023).
- New/updated RSLs (e.g., Nov 2023 RSLs) expected to be adopted in the future
- Currently the DOD does not accept California SWRCB's NLs/RLs or SFBRWQCB's ESLs as screening levels.
- Promulgated state standards may be considered as ARARs in the FS.



# Overseeing DOD's PFAS Investigation and Remediation in California

- DOD's Response to PFAS Contamination
  - Quickly address PFOS/PFOA in drinking water & cut off exposure when necessary.
  - Follow CERCLA process to fully investigate releases, prioritize responses, and determine appropriate cleanup actions based on risk
    - 23 RIs being planned, 31 RIs underway  
(as of March 31, 2023)



Source: DOD Briefing for the Committees on Armed Services of the Senate and the House of Representatives, Sept 2023

# 62 Military Facilities in California with Known or Suspected PFAS Releases

## AIRFORCE

- Air Force Plant 42
- Beale Air Force Base
- Castle Air Force Base
- Channel Islands ANG
- Edwards Air Force Base
- Fresno ANG Base
- George Air Force Base
- Los Angeles Air Force Base
- March Air Force Base
- March Air Reserve Base
- Mather Air Force Base
- McClellan Air Force Base
- Moffett Field ANG Station
- Norton Air Force Base
- Onizuka Air Force Station
- Ontario ANG Station
- Travis Air Force Base
- Vandenberg Air Force Base

## ARMY

- AFRC Los Alamitos
- Army Aviation Support ARNG Stockton
- Camp Roberts
- Camp San Luis Obispo
- Fort Hunter Liggett
- Fort Irwin
- Fort Ord
- Fresno ARNG TASMG
- Military Ocean Terminal Concord
- Roseville Armory ARNG
- Sacramento AASF
- Sharpe Army Depot
- Sierra Army Depot

## NAVY / MARINE CORPS

- Alameda Naval Complex
- Azusa NCCOSC Morris Dam
- Concord NWS
- Coronado Naval Amphibious Base
- Crows Landing NALF
- Hunter Point NSY
- Long Beach NS
- Long Beach NSY
- Mare Island Naval Complex
- Marine Corps Air Station El Toro
- Marine Corps Air Station Tustin
- Marine Corps Logistics Base Barstow
- MCAGCC Twenty Nine Palms
- MCAS Miramar
- MCB Camp Pendleton
- NAF El Centro
- Naval Air Station Lemoore
- Naval Air Weapons Station China Lake
- Naval Base Ventura County, Point Mugu
- Naval Base Ventura County, Port Hueneme
- Naval Base Ventura County, San Nicolas Island
- NAVBASE Coronado
- NAVBASE Point Loma (SUBBASE)/SPAWAR (SSC)
- NAVBASE San Diego
- NAVCOMTELSTA Stockton
- NAVWPNSTA Seal Beach
- NAVWPNSTA Seal Beach Fallbrook
- NOLF Imperial Beach
- San Diego AUXLNDFLD NAVBASE Coronado
- San Diego FASWTC PAC NAVBASE Point Loma
- San Diego Nise-West NAVBASE Point Loma
- Treasure Island Naval Complex

Data as of May 2020, according to SWRCB's website <https://www.waterboards.ca.gov/pfas/military.html>

# PFAS Status at DTSC SMRP Sites

		PA	SI	RI	FS	RA	Short-Term Actions to Address PFAS in Drinking Water	Existing P&T with PFAS Treatment
DOD Sites	Air Force (18)	Various Phases Mostly Transitioning from SI to RI					4	2
	Army (13)						2	
	Navy/Marine Corps (31)						3	
Non-DOD Sites		Data Not Available						

# PFAS Investigations at DOD Sites

- Mostly transitioning from PA/SI to RI
- Some sites investigating non-AFFF sources
  - Recent concern on potential PFAS release from open burning/open detonation of munitions/ordnance containing fluoropolymers
- PFAS PA/SI/ESI
  - EPA recent guidance (Feb 2023) clarified that PA/SI/ESI are not adequate for decision-making at facilities already on NPL and all scoping activities should be considered as part of RI for regulatory review.
- Lab method and analyte list
  - Mostly QSM 5.3 Table B-15/Modified Method 537
  - Draft Method 1633 for all new contracts and task orders starting in 2022 (DOD guidance in Dec 2021)

# Common Observations from DOD's PFAS Investigations

- Potential Modification of Conceptual Site Model (CSM)
  - Should look at AFFF and non-AFFF sources.
  - Recent concerns on open burning/open detonation of munitions/ordnance containing fluoropolymers being a potential source of PFAS.
  - New screening levels may require re-evaluation of sites previously screened out during PA/SI and require further evaluation in the RI.
- Lab method and analyte list
  - Mostly QSM 5.3 Table B-15/Modified Method 537.
  - Transitioning to Draft Method 1633 following DOD guidance (Dec 2021).
  - However, most PFAS investigations currently do NOT analyze the full list of 40 PFAS compounds under Draft Method 1633.

# CERCLA Hazardous Substance Designation

- CERCLA PFAS Enforcement Discretion (based on EPA's recent public listening session in March 2023)
  - EPA intends to **focus** on manufacturers, federal facilities and other industrial parties whose actions result in the release of significant amounts of PFAS.
  - EPA **may choose not to take** CERCLA enforcement action against certain entities.
  - EPA may settle and provide CERCLA **contribution protection** to some parties.

# Implications of EPA's Proposed Designation of PFOA & PFOS as CERCLA Hazardous Substances

- The proposed rule would strengthen DTSC's ability to clean up sites contaminated with PFOA & PFOS and to hold responsible parties accountable for PFAS investigation and cleanup.
- New sites may be required to conduct PFAS investigations.
- Closed/NFA sites or sites under long-term O&M may need to be re-opened for PFAS investigation.
- Existing sites/remedies may need to be re-evaluated and modified to address PFAS contamination.

# Acknowledgments

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# QUESTIONS/COMMENTS ?