

Space Launch Delta 45 Alignment with Department of the Air Force Management Strategy for Addressing PFAS

Space Launch Delta 45, in coordination with the Department of the Air Force, Air Force Civil Engineer Center, NASA, and local water providers, continues to take proactive measures to address Per- and Polyfluoroalkyl Substances at Patrick Space Force Base and Cape Canaveral Space Force Station. These actions reflect our ongoing commitment to protect human health and the environment and are in direct support of the Department of the Air Force's six-point strategy for managing PFAS.

This update provides an overview of our monitoring efforts, environmental cleanup activities, transition to safer alternatives, and continued community engagement.

1. Protect Human Health and the Environment

PSFB and CCSFS receive drinking water from the City of Cocoa, which conducts regular testing to ensure water quality. As consecutive community water systems, both installations also conduct additional sampling through the Bioenvironmental Engineering Flight and NASA Environmental and Medical Contract teams.

- At CCSFS, quarterly PFAS testing in 2023 under the EPA's Unregulated Contaminant Monitoring Rule 5 showed all results were below laboratory detection limits.
- At PSFB, stand-alone PFAS testing conducted in 2020 and 2023 found two compounds—PFBS and PFHxA—at very low levels at one facility. These detections were well below the EPA's current health advisory thresholds.
- Future PFAS testing at PSFB is scheduled for all four quarters of 2025 under the UCMR 5 program.

Other annexes, such as the Jonathan Dickinson Missile Tracking Annex and Malabar Transmitter Annex, rely on municipal water sources. In 2024, their respective providers—Village of Tequesta and City of Palm Bay—completed PFAS testing with results that slightly exceeded the EPA's new health advisory levels. SLD 45 continues to monitor these results and remains in communication with the municipalities.

2. Transitioning to Safer Firefighting Alternatives

SLD 45 has fully transitioned from legacy firefighting foams to fluorine-free formulations, in line with Department of Defense directives:

- 2017–2018: All fire trucks and suppression systems transitioned from older long-chain AFFF to short-chain C6 foam.
- June 2024: All firefighting systems at PSFB and CCSFS completed the final change-out to the new fluorine-free foam (F3), approved for DoD use in 2023.

These transitions significantly reduce the risk of future PFAS releases.

3. Cleaning Up Past PFAS Releases

SLD 45 is conducting a Remedial Investigation under the federal Comprehensive Environmental Response, Compensation and Liability Act process to determine the extent of PFAS impacts from past use of firefighting foam.

- Investigations began in 2015 with historical reviews and continued with soil, sediment, and groundwater sampling at suspected release sites.
 - As of 2024, PSFB has eight PFAS investigation sites, and CCSFS has four. All are being evaluated for extent of contamination and risk to ecological and human health.
 - The current phase focuses on “step-out” sampling to define the boundaries of any impacts and inform next steps for cleanup or mitigation.
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4. Testing Innovative PFAS Treatment Technologies

Cape Canaveral SFS was selected to pilot new PFAS containment technology using soil stabilization techniques between 2018 and 2024.

- Adsorbent products were mixed into PFAS-impacted soils at a former fire training area to prevent groundwater contamination.
 - Ongoing monitoring confirmed the effectiveness of this solution in limiting PFAS movement—offering a potential model for future remediation efforts.
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5. Integrating PFAS Mitigation into Construction Projects

SLD 45 takes steps to ensure that construction activities do not contribute to PFAS exposure:

- Design Phase Review: Potentially contaminated groundwater is tested before any dewatering activities begin.
- Safe Soil Disposal: Soil from areas with PFAS risk is tested and, if necessary, disposed of at certified hazardous waste landfills.
- Innovative Construction Methods: Teams use directional drilling and other low-impact methods to minimize ground disturbance and protect water systems.

Infrastructure improvements continue to help minimize the potential for PFAS to enter the sanitary sewer system. Notable projects include over 20,000 feet of rehabilitated sewer piping and multiple manhole linings to prevent infiltration and inflow.

6. Engaging and Informing the Community

Transparency and collaboration remain central to our approach:

- Restoration Advisory Board (RAB): SLD 45 holds open community meetings three times per year to share updates on environmental efforts, including PFAS. Meetings occur the first Tuesday of February, June, and October.
 - Annual Water Reports: PFAS testing results and drinking water updates are included in the annual Consumer Confidence Report for PSFB and made available to all base residents.
 - Collaborative Partnerships: SLD 45 partners with the City of Cocoa Beach to monitor wastewater PFAS levels and supports infrastructure improvements through regular testing at key sites.
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What's Next?

SLD 45 will continue to work with state and federal regulators, municipal partners, and the community to monitor water quality, address environmental concerns, and keep the public informed. Our goal is to ensure a safe and sustainable environment for all who live and work at PSFB, CCSFS, and surrounding communities.

For more information, or to view upcoming Restoration Advisory Board meeting details, please visit: <https://www.patrick.spaceforce.mil/Resources/Environmental-Information/>