

SeaTac Airport PFAS



SHARP Report — Part 1 of 2

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• SHARP first SHARP		v2024.04.29	Ecology Info	
• SHARP rating	Medium		ERTS	726033
• SHARP date	06/12/2024		CSID	17061
• EJFlagged?	✓ – No Override		FSID	51357821
• LD confidence level	low		VCP	none
• Cleanup milestone	initial investigation		UST ID	none
• SHARPster	Priscilla Tomlinson		LUST ID	none

This section is blank if this is the first SHARP

SHARP Media	Scores	Confidence	Additional Factors
Indoor air	D4	high	multiple chemical types ✓
Groundwater	B1	medium	risk to off-site people ☒
Surface water	D4	low	climate change impacts ☒
Sediment	B3	low	plant/animal tissue data ☒
Soil	A2	high	

Location and land use info	
2300 S 154th St, SeaTac, King County, 98188	
Primary parcel	2823049016
Land use	other
Responsible unit	NWRO

Sources reviewed
Letter from Sara Cox, Port of Seattle, to Barry Rogowski, Department of Ecology, re site discovery of PFAS contamination. 9/27/23.



Primary census tract	Associated census tracts
53033028402	53033028801

Local demographics comments

The airport is located primarily on one parcel zoned for aviation operations by the City of SeaTac. Parcels to the south are zoned for aviation operations, industry, and regional business mix. Parcels east of the PFAS source areas investigated are zoned for regional business mix and community business in urban center. Parcels west of the source areas are zoned for community business, regional business mix, and urban low density residence.

Source/source area description

Seattle-Tacoma International Airport (SeaTac) is operated by the Port of Seattle (Port). The Port identified the following four areas where PFAS were known or suspected to have been used or released due to emergency response actions, equipment maintenance, or accidental discharge of fixed fire-suppression systems: fire station area, fuel farm (tank farm) area, fire training area, and industrial wastewater system area.

Soil comments

Most of the airport property is covered by buildings and pavement. Portions of the PFAS investigation areas are covered with mowed grass or shrubby vegetation with low habitat quality. Areas inside the fence are accessible to airport personnel but not the general public.

Groundwater comments

City of Highline’s Tyee well just south of the airport had a detection of PFNA above its state action level, which led Highline to take the well offline in April 2022. It is not known if the source of the PFNA was the airport.



Surface water comments

Des Moines Creek runs past the southeast corner of the tank farm area. It has not been tested for PFAS. Portions of the creek within the airport fence are not accessible to the public for fishing, but downstream portions of the creek are accessible.

Sediment comments

Des Moines Creek in the vicinity of the fuel farm is listed as Category 4C. 500 feet south of the wastewater system lagoon, the creek is listed as Category 2. It is not known if PFAS contamination extends to the Category 2 area.

Indoor air comments

PFHxS, PFNA, PFOA, and PFOS are not volatile.

Additional factors comments

Only PFAS were analyzed, but other hazardous substances from airport activities could be present.

Site history

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SeaTac used aqueous film-forming foam containing PFAS per Federal Aviation Administration requirements. The Port has taken multiple steps to reduce environmental impacts from training exercises and emergency responses involving AFFF. These include self-contained testing equipment; off-site training; educational campaigns for fire fighters, tenants, and operators; spill response plans; and environmental testing for PFAS during construction projects.

Between December 2018 and October 2020, the Port collected 49 soil samples from all four investigation areas at depths between 0.5 and 99 feet below ground surface; most samples were collected within the top two feet. Results are summarized in Table 1 in the supplemental information document. With three exceptions, the maximum concentrations of perfluorohexane sulfonate (PFHxS), perfluorononanoate (PFNA), perfluorooctane sulfonate (PFOS), and perfluorooctane (PFOA) in each of the four investigation areas exceed their MTCA soil leaching cleanup levels for protection of drinking water. The exceptions are PFHxS in the industrial waste system area and the fuel farm area and PFOS in the fuel farm area.

Between March 2019 and April 2023, the Port collected 70 groundwater samples from 15 monitoring wells in two of the investigation areas. Results are summarized in Table 2 in the supplemental information document. With one exception, the maximum concentrations of PFHxS, PFNA, PFOS, and PFOA in the fire station area and the fuel farm area exceed their groundwater cleanup levels for drinking water. The exception is PFHxS in the fuel farm area.

The Port provided notice of site discovery of PFAS contamination to the Department of Ecology on September 27, 2023.

Overflow - Site contamination and cleanup history

There are multiple Facility Site records related to SeaTac Airport.

SeaTac Airport PFAS

17061 SeaTac Airport PFAS 20240612

First SHARP

SHARP rating — Medium

SHARP Report — Part 2 of 2

Conceptual site model

06/12/2024



Assessment scores by environmental medium

