

Airports permitted to use aqueous film-forming foam (AFFF), California, 2014-2022

Karasaki, S., Pace, C., Cushing, L., Morello-Frosch, R. (2023). Airports permitted to use aqueous film-forming foam. Drinking Water Tool metadata, prepared by the Water Equity Science Shop, UC Berkeley. Contact: cpace@berkeley.edu

File name: PFAS_source_Airports_P139_permit.shp

Spatial Reference

Geographic Coordinate System	NAD 1983	Projected Coordinate System	NAD 1983 (Teale) Albers (Meters)
WKID	4269	Projection	3310
Authority	EPSG	Authority	EPSG
Angular Unit	Degree (0.0174532925199433)	Linear Unit	Meters (1.0)
Prime Meridian	Greenwich (0.0)	False Easting	0.00
Datum	D North American 1983	False Northing	-4000000.0
Spheroid	GRS 1980	Central Meridian	-120.0
Semimajor Axis	6378137.0	Standard Parallel 1	34.0
Semiminor Axis	6356752.314140356	Standard Parallel 2	40.5
Inverse Flattening	298.257222101	Latitude of Origin	0.0

Description

This shapefile contains 36 polygons representing public airports in California that may be a potential source of PFAS contamination due to permitted use of aqueous film-forming foam (AFFF). Airports equipped to use AFFF are required to have [Part 139 certification](#) (P-139) by the Federal Aviation Agency (FAA). Airports with both current and historical (2014 – 2022) P-139 certification are considered as potential PFAS sources in this dataset.

Methods

We downloaded boundaries for public airports from the [California Department of Transportation](#) (Caltrans)¹ on 11/2/22 and combined them with 1) a list of 30 airports with current P-139 certification², and 2) an additional 6 airports that had received P-139 certification between 2014-2022 (identified using [Bureau of Transportation](#) data³). Sixteen of these 36 airports were missing spatial boundaries in the Caltrans data set linked above. We approximated and manually drew their spatial boundaries individually using ArcGIS Pro 3.0.2, Google search, and satellite imagery. Two airports (Bob Hope and San Bernardino) were also identified as Superfund sites⁴ (another category of drinking water threats). The boundaries for these airports were integrated with superfund geography for consistency in the Drinking Water Tool.

Limitations

Airport boundaries originating from Caltrans were developed by Caltrans for general reference. In some cases, boundary lines were interpreted among the property and fence line and do not represent official airport property boundary determinations. Attributes were derived by Caltrans from FAA Airport Master Records and Reports and were not screened for accuracy.

Attribute Table

Field Heading	Field Description
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FID	ESRI generated field
Shape*	Polygon - ESRI Generated field
AirportID	Airport identification code
SITE_NAME	Facility name
CITY	City
COUNTY	County
FAASITENO	FAA site number
URL	link
Also_contains	Indicates overlap with superfund site, department of defense polygon, or potential point source of PFAS
Shape_Are	Area in square meters
Shape_Len	Length in meters

Acknowledgements

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References

1. CA.Gov. California Open Data Portal. Caltrans Airport boundaries. Updated 2-16-22. <https://data.ca.gov/dataset/airport-boundaries>.
2. California State Water Board, Department of water quality. Point layer for Airports permitted to use Aqueous Film Forming Foam (AFFF). Updated June 27, 2019. <https://gispublic.waterboards.ca.gov/portal/home/item.html?id=79be3add14bc4c32837dbffb13ab9893>.
3. United States Department of Transportation. Federal Aviation Administration, Part 139-Airport Certification. Updated August 3, 2022. https://www.faa.gov/airports/airport_safety/part139_cert.
4. Pace, C., Karasaki, S., Cushing, L., Morello-Frosch, R. (2023). Superfund sites in California. Drinking Water Tool metadata, prepared by the Water Equity Science Shop, UC Berkeley.