Alaska International Airport System

AeroNexus®

Introduction to PFAS at the Fairbanks International Airport

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To Keep Alaska Flying and Thriving






Timeline

• Existing burn pit construction	1993
• In use for training	1993 - Current
• FAI water sampling	Summer 2017
• FAI received water airport sampling test results	Oct. 27, 2017
• FAI contracted Shannon & Wilson, Inc.	Nov. 3, 2017
• Off airport well sampling began	Nov. 10, 2017
• FAI contracted Spring Alaska	Nov. 10, 2017
• FAI contracted Vision Construction	Nov. 20, 2017
• Issue request for proposal (RFP) bid for permanent water hook up contractor	Winter ‘17-’18
• Begin water hook up project (CUC)	Spring/Summer 2018

Current FAI Burn Pit

Why have PFAS been used at airports?

PFAS have been used at FAI in AFFF for use in emergency fire response and required FAA training exercises.

The Federal Aviation Administration (FAA) mandates[4]:

- " testing of firefighting foam equipment on aircraft recuse and firefighting vehicles is done in accordance to NFPA 412: Standard for Evaluating Aircraft Rescue and Fire-Fighting Foam Equipment"

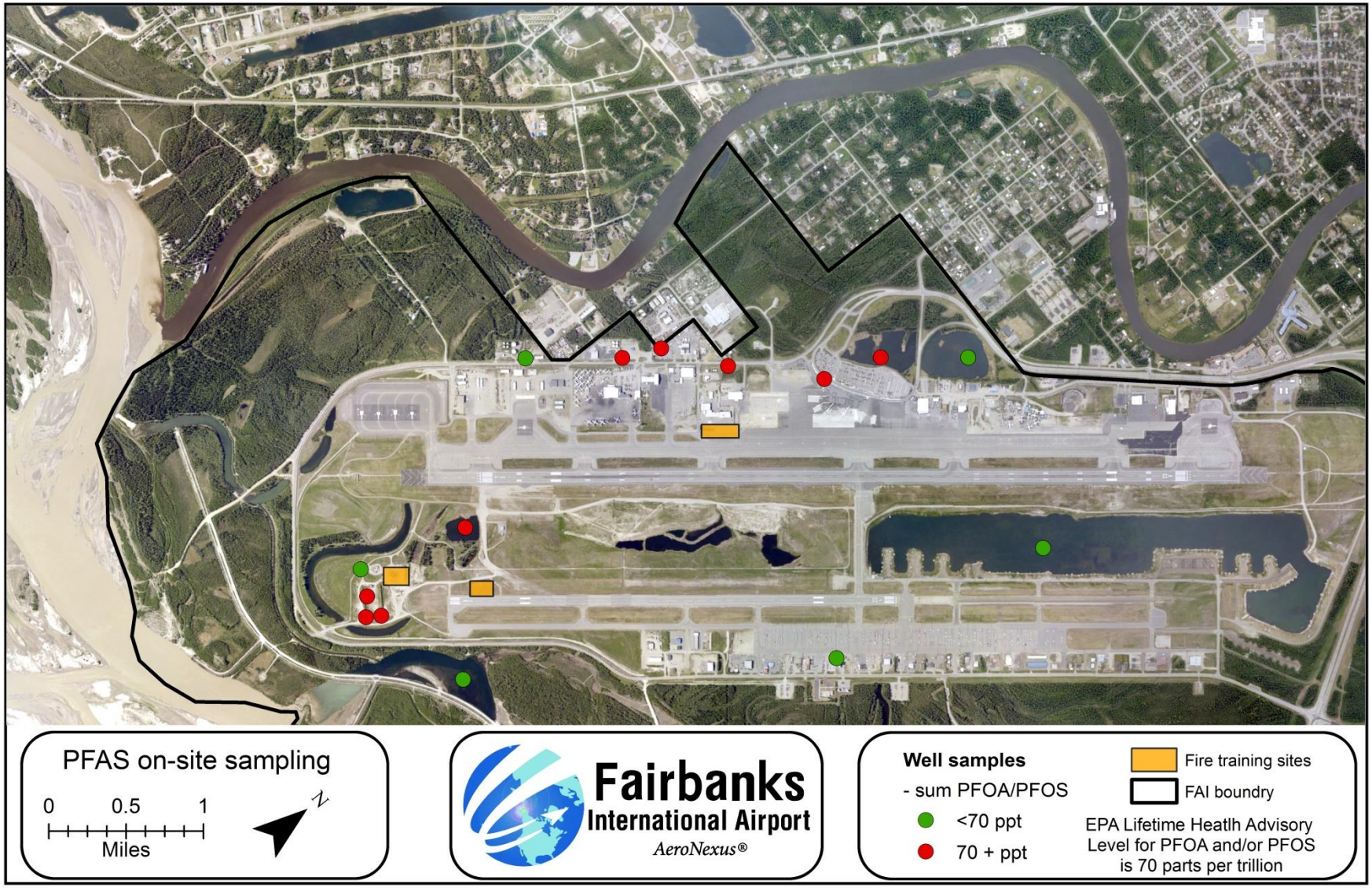
Simplified summary of NFPA 412[5]:

- Foams shall be flowed annually to insure expansion ratio and drainage criteria are met.

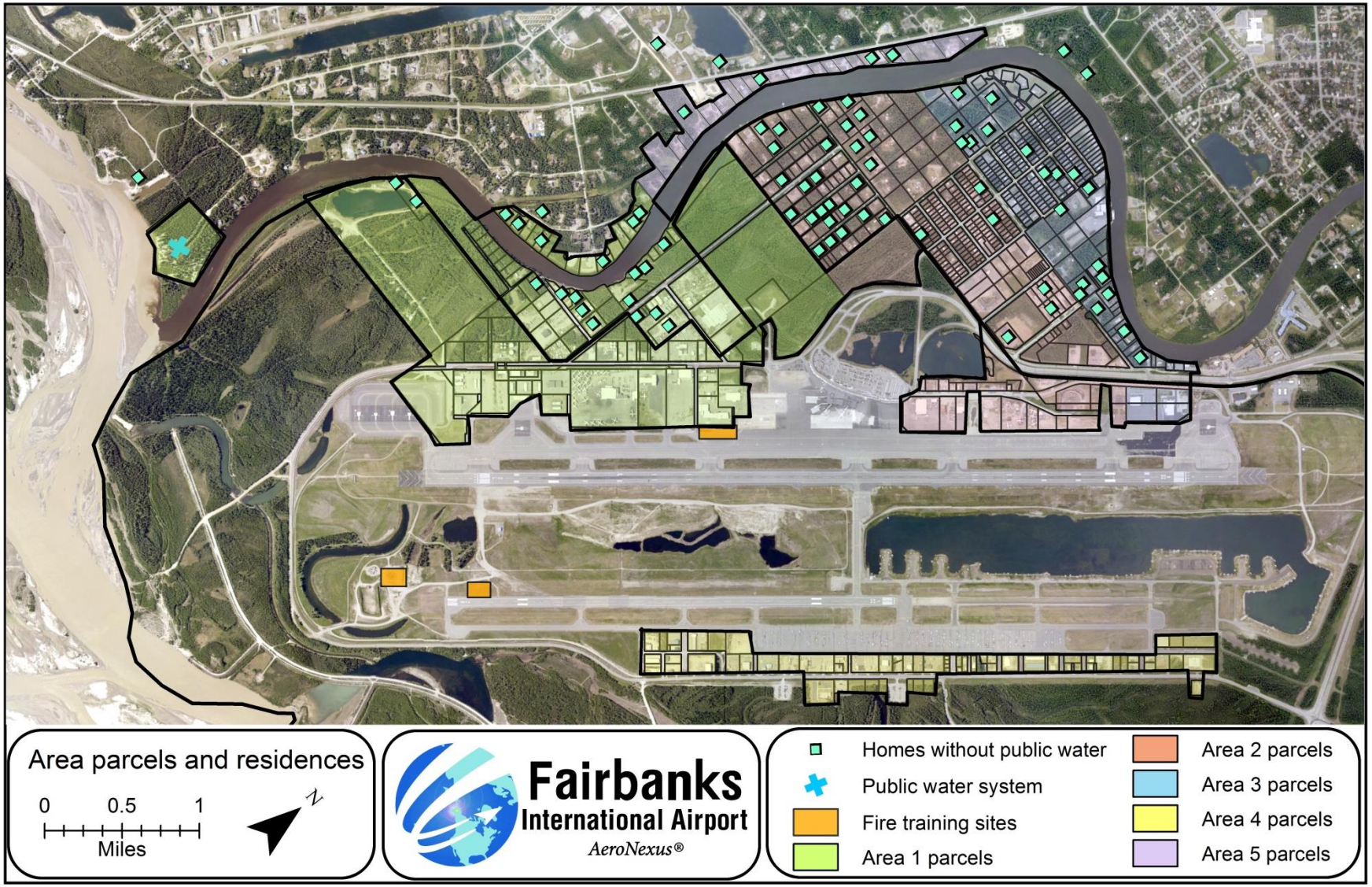
The use of AFFF at FAI prompted testing of monitoring and testing wells for PFAS presence (sampled summer 2017)

Sources: [4]Use and Potential Impacts of AFFF Containing PFASs at Airports,
[5]National Fire Protection Association Standard 412

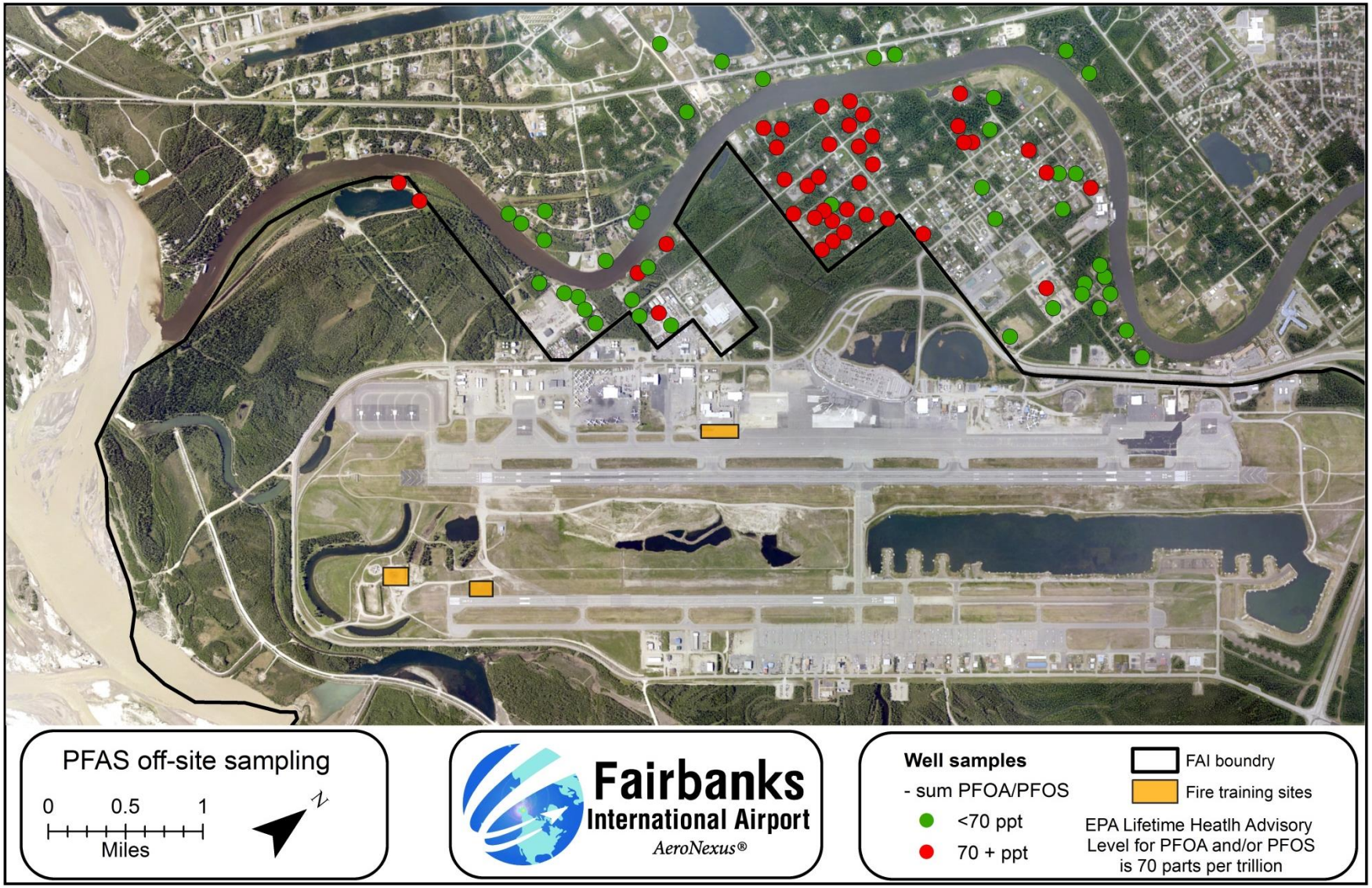
On-site PFAS Sampling Results



Sampling Area: Parcels and Residences



Off-site Sampling Results to Date



Response Actions

Short-term

- Water delivery by Vision Construction for ALL residents in sampling areas
  - Flats of water
  - Hot and cold water dispensers
  - Five gallon jugs
  - Distributed water (sourced from Alaska Best water) has been tested and meets all federal requirements including PFAS.

Long-term

- Connect impacted residents and businesses to College Utilities
  - Water main distribution system research
  - Home and business visits
  - Engineering plan design and contract award

Note: If residents run out of water prior to their next scheduled delivery, water is available for pick-up at the Airport Response Center 24/7/365 call 474-2530 to coordinate.

Moving Forward

PFAS sampling results will determine the scope of action moving forward

- Phase 1 sampling is in progress
  - 97 wells have been sampled to date
  - 42 out of 88 sample results are at or above the 70ppt LHA
- Phase 2 sampling will step out to sample more drinking water wells until we know the extent of the contamination and have a perimeter of clean wells.

Necessary future action will involve on-site and off-site projects, including:

<u>Off-site</u>

- Determine extent of PFAS plume
- Providing temporary drinking water for all residents whose wells have been sampled, and request drinking water.
- Expansion of College Utilities system to residents whose well water is above the EPA Lifetime Health Advisory Levels for PFOS/PFOA.

<u>On-site</u>

- Site characterization (e.g., extent of contamination, identifying sources and dates)
- Remediation (removal or treatment of affected soil and water)
- Closure and decommissioning of current fire pit

Risk Management

The Division of Risk Management administers the self-insurance program for each State agency, handling all third party claims.

For more information please visit:
http://doa.alaska.gov/drm/

Risk Management

All residents who believe they are impacted by the contamination may contact Risk Management to receive claim filing instructions.

For claim filing instructions contact:
Alaska Department of Administration
Division of Risk Management
Jack Albrecht, Claims Administrator
PO Box 110218
Juneau, AK 99811-0218
Phone: 907-465-2183
Fax: 907-465-3690
Email: jack.albrecht@Alaska.gov

Additional contacts:

Scott Jordan - Director
907-465-5723

Sheri Gray – Risk Manager
907-465-5724

Community Outreach

FAI is committed to being open and transparent

Press Releases:

- Sign up for GovDelivery https://public.govdelivery.com/accounts/AKDOT/subscriber/new?

Website:

- dot.alaska.gov/faigroundwater

Email:

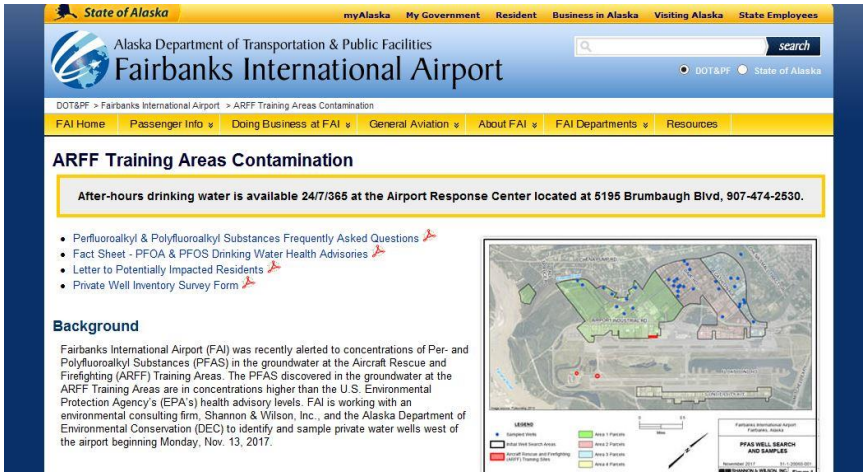
- FAIgroundwater@alaska.gov

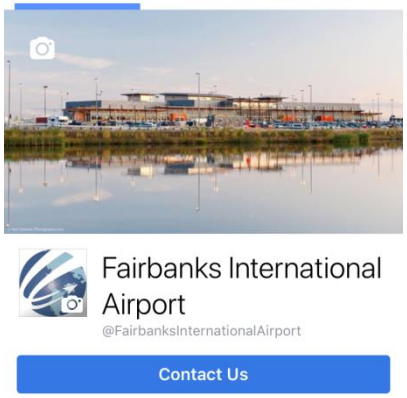
Follow us:

- **Facebook** https://www.facebook.com/FairbanksInternationalAirport/
- **Twitter** - @Fly_Fairbanks

Contact:

Angie Spear
Division Operations Manager - FAI
O: 907-474-2529
C: 907-978-8697





Questions?

Sources

[1] National Institute of Environmental Health Sciences:
https://www.niehs.nih.gov/health/materials/perflourinated_chemicals_508.pdf

[2] New Jersey Department of Health:
http://www.state.nj.us/health/ceohs/documents/eohap/generic_pfc_factsheet.pdf

[3]Environmental Protection Agency:
https://www.epa.gov/fedfac/emerging-contaminants-and-federal-facility-contaminants-concern

[4] Use and Potential Impacts of AFFF Containing PFASs at Airports:
Thalheimer, Andrew H., et al. Use and Potential Impacts of AFFF Containing PFASs at Airports. No. Project 02-60. 2017.

[5] National Fire Protection Association Standard 412:
http://hamyarenergy.com/static/fckimages/files/NFPA/Hamyar%20Energy%20NFPA%20412%20-%202003.pdf

Appendix A

NFPA 412 Details[5]:

5.1 Expansion Ratio and Drainage Time Requirements.

Foams shall be tested as specified in 6.3.2 and 6.3.3 of this standard and shall meet at least the performance requirements specified in Table 5.1.

Table 5.1 Foam Quality Requirements

Foam Agents	Minimum Expansion Ratio	Minimum Solution 25% Drainage Time in Minutes	
		Test Method A	Test Method B
AFFF or FFFP air-aspirated	5:1	3	2.25
AFFF or FFFP non-air-aspirated	3:1	1	0.75
Protein	8:1	N/A	10
Fluoroprotein	6:1	N/A	10

6.3.2 Test Method A and 6.3.3 Test Method B