

Colorado Residual Designation Authority in Air Transportation Sector

ACWA Stormwater Roundtable Meeting
Boston, MA | October 21, 2022

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Colorado Industrial Stormwater General Permit Renewal (COR900000)

Draft Permit

- March 10, 2022
- 60+ days public comment

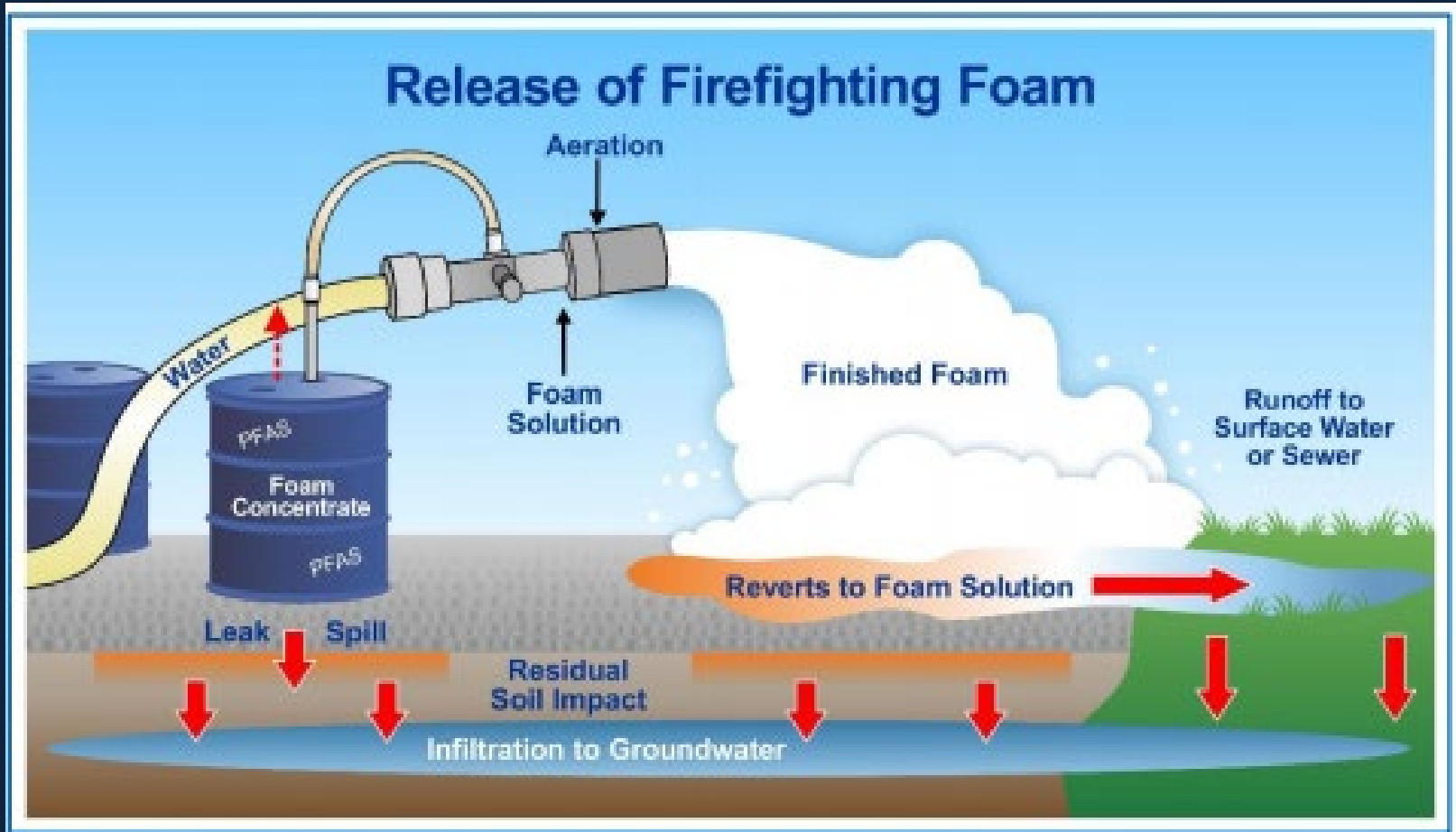
Final Permit

- Final scheduled for December 31, 2022
- Reissue ~1000 certifications

Effective Date

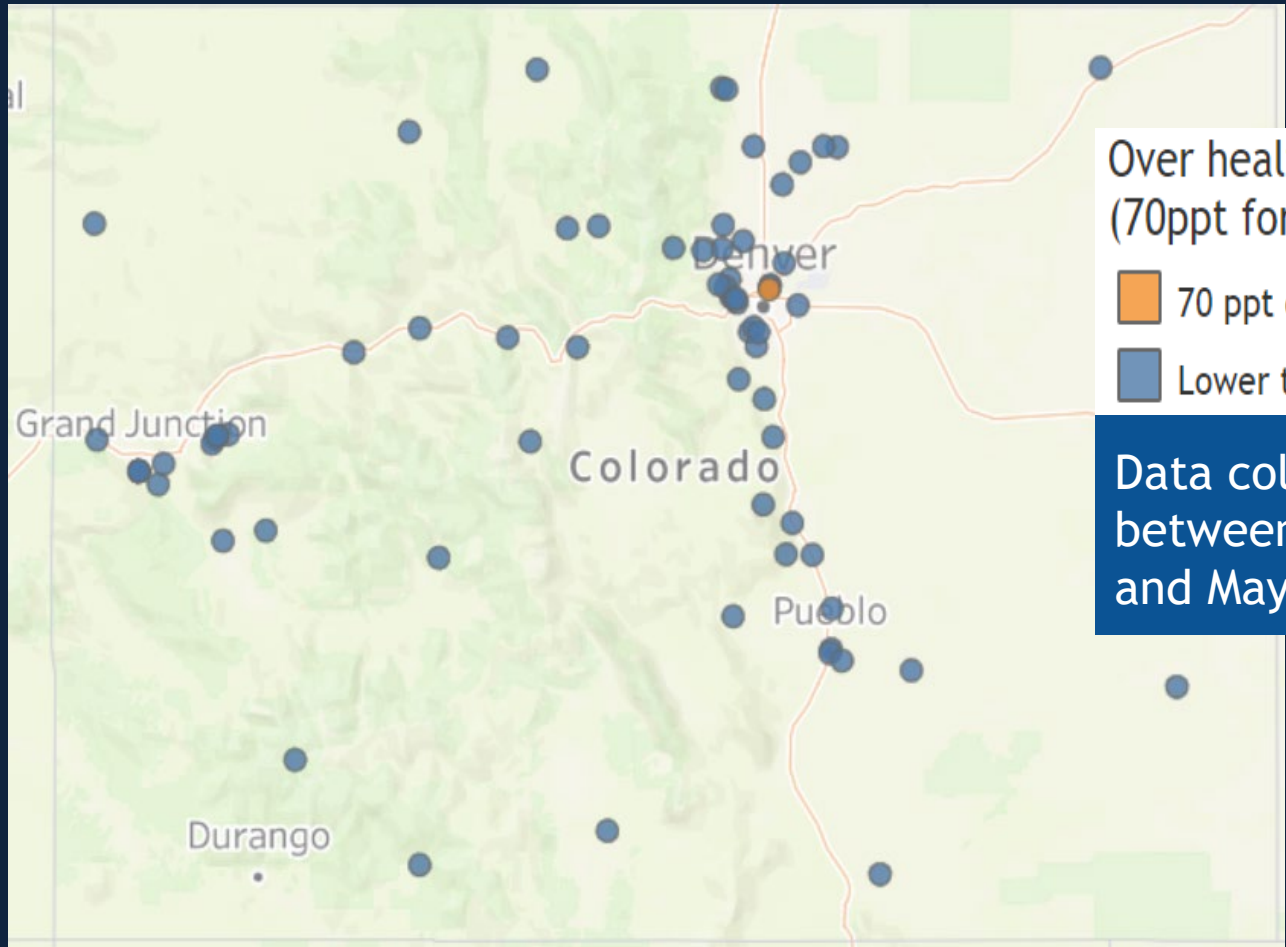
Effective date to be set in late 2023

PFAS in stormwater



Source: Pennsylvania PFAS Action Team Initial Report, 2019

<https://www.governor.pa.gov/wp-content/uploads/2019/12/20191205-PFAS-Action-Team-Initial-Report-Pennsylvania.pdf>



PFAS Narrative Policy

- Policy 20-1 describes how we will translate the narrative water quality standard for discharges permits.
- Initially, monitoring only (no numeric limits) for stormwater.
- Describes 25 PFAS chemicals to monitor, method selection, and sample considerations
- Translation level = 70 ng/L for PFOA, PFOS, PFNA, individually and to sum + parent constituents (adjusted)

Regulation 31.11(1)(a)(iv) (Basic WQS)

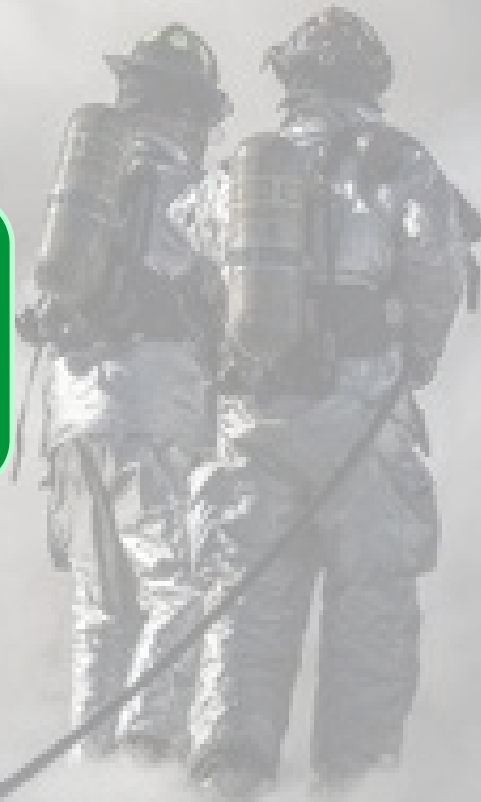
“state surface waters shall be free from substances attributable to human-caused point source or nonpoint source discharge in amounts, concentrations or combinations which are harmful to the beneficial uses or toxic to humans, animals, plants, or aquatic life.”

Why do we need an RDA?

Sector S is one the sectors most likely to contain PFAS in stormwater because PFAS containing foam is common.

Regulation language for air transportation only specifically addresses vehicle maintenance, equipment cleaning, and deicing.

Harmful chemicals should be addressed same as other industrial materials and pollutants of concern.



Activities subject to permit

Activities	Without RDA	With proposed RDA
Deicing runways and planes	✓	✓
Vehicle maintenance-fueling, repairs, other maintenance	✓	✓
Equipment cleaning operations	✓	✓
Fire training, testing, fire fighting		✓
Foam storage not related to deicing or vehicle maintenance		✓
Other releases		✓

RDA in Colorado regulation

61.3(2)(e)(ii) A stormwater discharge associated with industrial activity.

(D) Industrial facilities (including industrial facilities that are Federally, State, or municipally owned or operated that meet the description of the facilities listed in this paragraph (A)-(K)) ***include those facilities designated under the provisions of section 61.3(2)(e)(vii) [emphasis added]***.

61.3(2)(e)(vii) describes designation if the discharge contributes to a violation of a water quality standard or is a significant contributor of pollutants to state waters.

Significant Contributor of Pollutants

- Potential health Impacts
- Widespread presence throughout Colorado
- Widespread use at airports, previously required at Part 139 airports
- Released at airports nationwide and in Colorado
 - Fire training
 - Testing
 - Emergencies
 - Spills and leaks
- Peterson AFB, US AFA found in soil and surface water samples

Colorado monitoring data

Base/sample description	No. sample locations where detected	No. sample locations exceeding 70 ng/L PFOS+PFOA*
Peterson AFB/ponds	2/2	2/2
Peterson AFB/outfalls	2/2	0/2
US Air Force Academy/ surface water	10/14	0/14
Overall	14/18	2/18

*Final EPA Health Advisory Level.

Colorado monitoring data

Base/sample description	No. sample locations where detected/No. sampled		No. sample locations exceeding draft HAL*	
	PFOA	PFOS	PFOA 0.004 ppt	PFOS 0.02 ppt
Peterson AFB/ponds	2/2	2/2	2	2
Peterson AFB/outfalls	2/2	2/2	2	2
US Air Force Academy/ surface water	9/14	8/14	9	8
Overall	13/18	12/18	13	12

*Interim (draft) Health Advisory Levels (HALs) (2022)

More data to consider

- Soil samples above screening levels
- More recent data
- Comparisons to non-airport locations



PFAS information survey results

- 16/66 Sector S facilities responded
- 13 responded that they use or store PFAS containing foam
- 1 indicated previous use of PFAS containing foam
- 2 indicated they did not use PFAS containing foam
- Several releases to land

Sector S

66 permitted facilities

48 Smaller
Airports

18 Part 139
Airports

1-No
foam
w/PFAS

40-
unknown
foam
w/PFAS

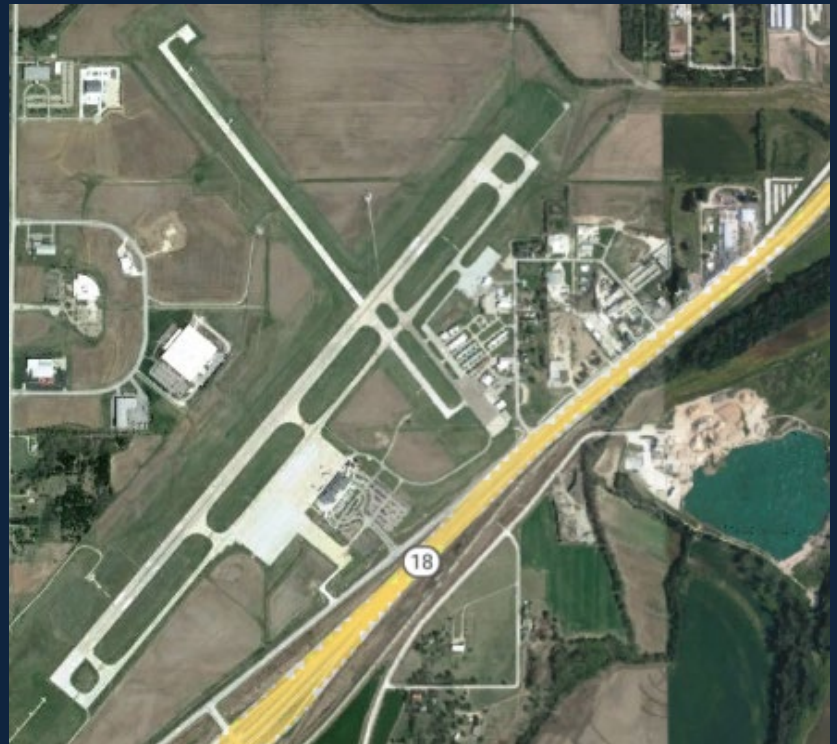
7 have
foam
w/PFAS*

All
assumed
have foam
w/PFAS

*Includes 1 facility that indicated PFAS containing foam in nearby potential sources

New areas designated for permit requirements

- Past or present fire training
- Past emergency firefighting activities where PFAS-containing foam has been released to the ground
- Past or present use, storage, or release of PFAS-containing foam to land or surface water



What are the draft requirements?

- Conduct testing/training with water or materials that do not contain PFAS
- Practice-based requirements to inventory, store, and dispose of PFAS containing foam.
- For emergency fire fighting, have procedures for spill response.
- Limit PFAS containing foam use to situations that present a significant flammable liquid hazard.
- Quarterly monitoring



Quarterly Monitoring

- After 10 samples below 35 ng/L monitoring not required
- Monitor all outfalls
- Use analytical method that is compliant with DoD QSM 5.1



PFAS Information Links

Information on the ISGP - COR900000 permit

<https://cdphe.colorado.gov/renewal-industrial-stormwater-general-permit>

Overall Information

<https://cdphe.colorado.gov/pfas-resources>

WQCC Narrative Policy 20-1

https://drive.google.com/file/d/119FjO4GZVaJtw7YFvFqs9pmlwDhDO_eG/view

QUESTIONS?

