

A close-up photograph of a glass dropper with a metal cap, dispensing a single drop of clear liquid into a test tube. Several other test tubes are visible in the background, slightly out of focus. The scene is set in a laboratory environment with soft, diffused lighting.

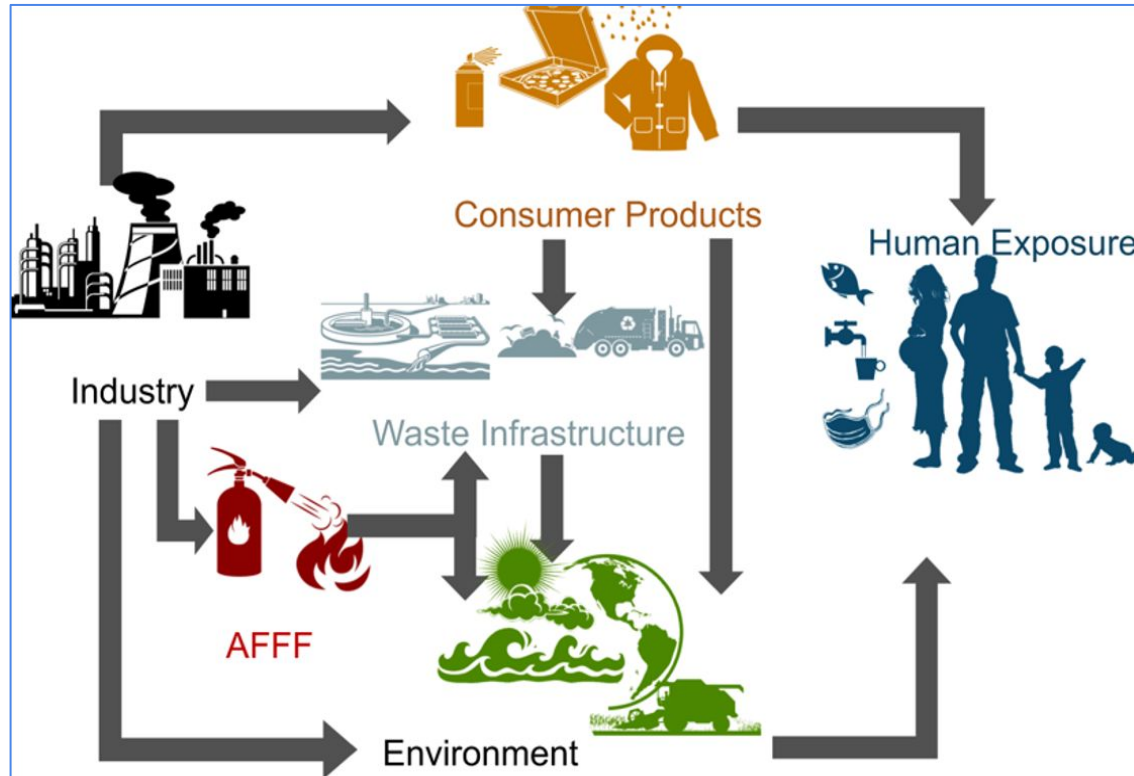
Colorado's PFAS Permitting Experiences

ACWA Mid-Year Meeting | March 16, 2022



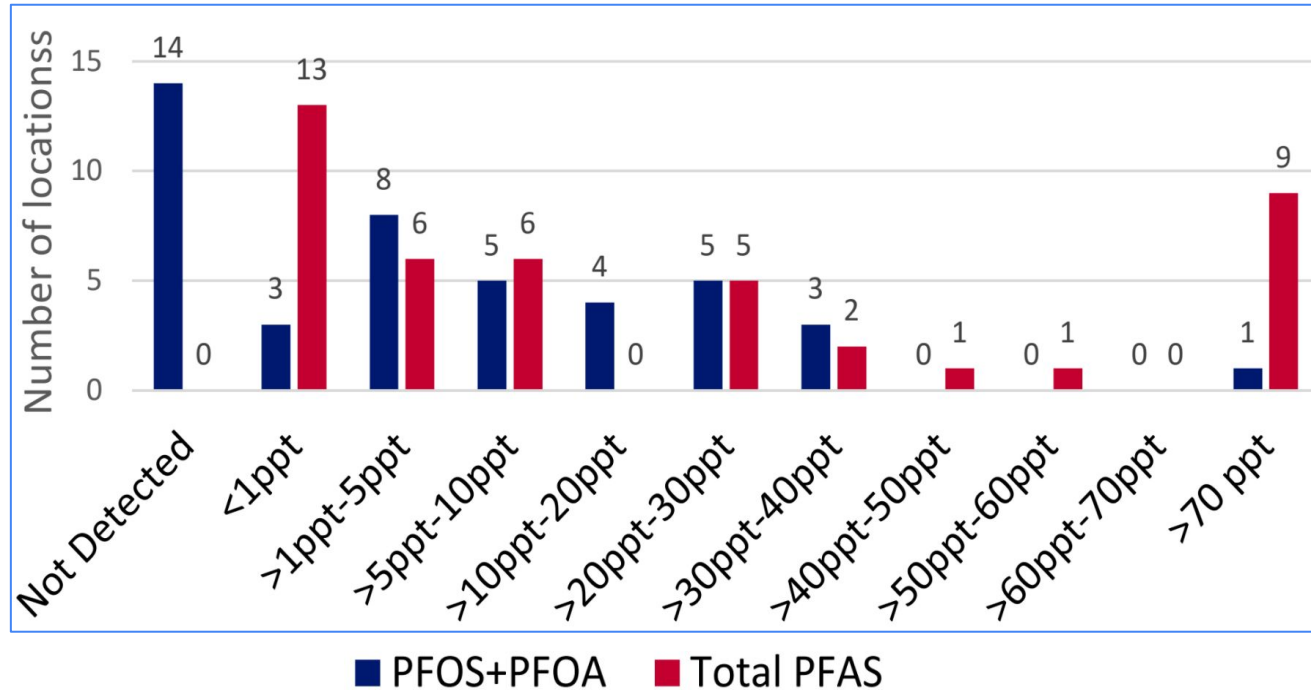
PFAS in Colorado

CDPHE PFAS Action Plan - identify contamination, reduce exposure and prevent further contamination



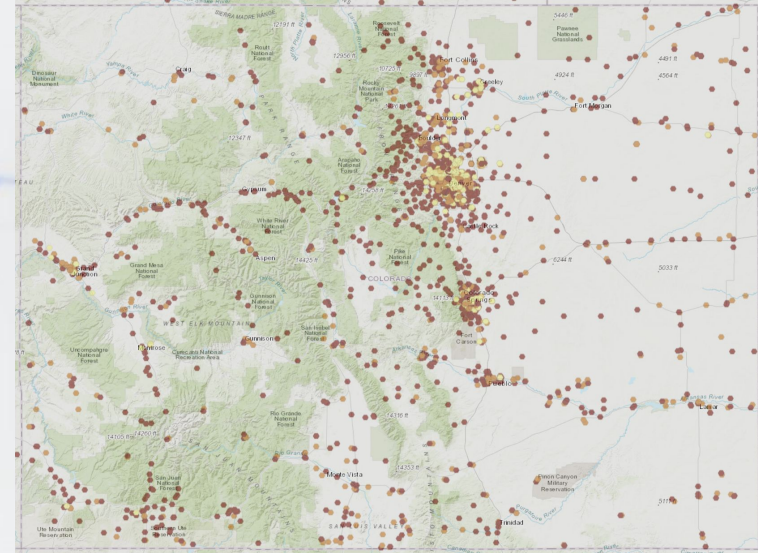
PFAS Concentrations in Colorado Streams: 43 locations

- PFOS, PFOA, PFNA, PFHxS, PFBS, PFHxA and PFHpA had highest levels and were most prevalent
- GenX and ADONA not a problem



How Colorado is using PFAS test results

- Use test results and potential source data to identify at risk water systems and private wells
- Share data and partner on sampling efforts with local public health agencies and EPA R8
- Help public water systems with source water protection
- Collaborative pilot fish study
- Mapping test results and vulnerability
- Support EPA, ASDWA, ACWA and others



PFAS Cash Fund to support sampling and help impacted communities

- \$25 per truckload of fuel from Sep 2020 - Sep 2026
- Capped at \$8M and supports PFAS grant program to award grants for:
 - Sampling, assessment, investigation of PFAS in ground or surface water
 - Water system infrastructure to treat for PFAS
 - Emergency assistance to affected communities and water systems



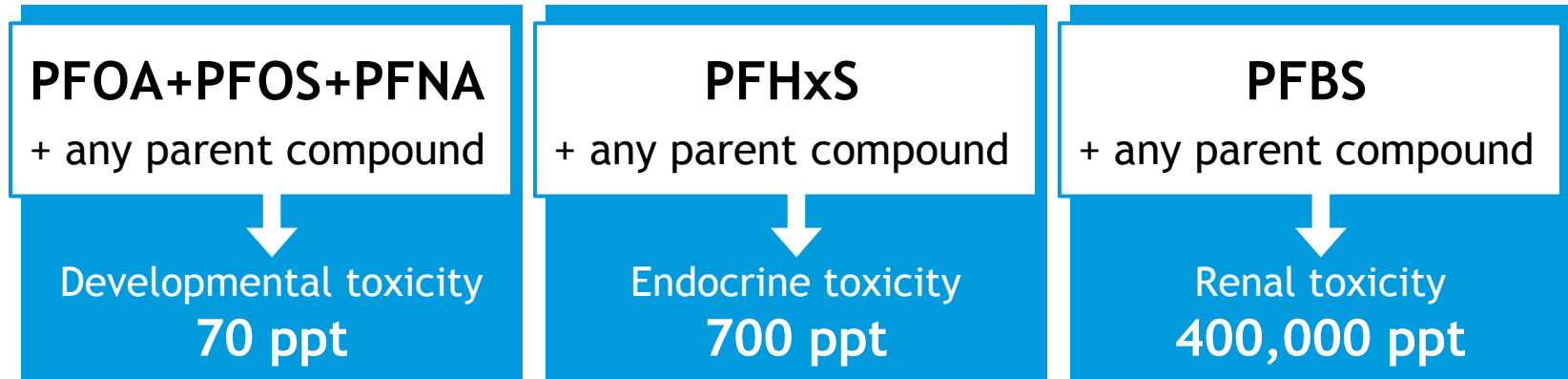
Colorado Policy 20-1

Unique-ish things about Colorado's regulatory environment

- We regulate discharges to groundwater the same way we do surface water (designated uses, standards, etc)
- A separate citizen commission sets regulations and can adopt policies
- VERY limited resources for developing MCL or water quality standards
- We have a history of interpreting the narrative standard through numerics in permits
 - TDS
 - EC/SAR
 - MTBE

Policy 20-1: Limit PFAS entering state waters

- Not a water quality standard - interprets existing narrative standards: “waters shall be free from substances toxic to humans, animals, plants, or aquatic life”
- Monitoring requirements (25 PFAS) for facilities likely to discharge PFAS to state waters
- Guidelines for permitting and using translation levels as effluent limits



Specific permitting exceptions in policy

- No effluent limits for stormwater
- POTWs get a full term of monitoring before any effluent limits to focus on source control
- No antidegradation
- Allows division the discretion to not set effluent limits for short-term discharges or where there is significant uncertainty as to impact

Implementation of Policy 20-1



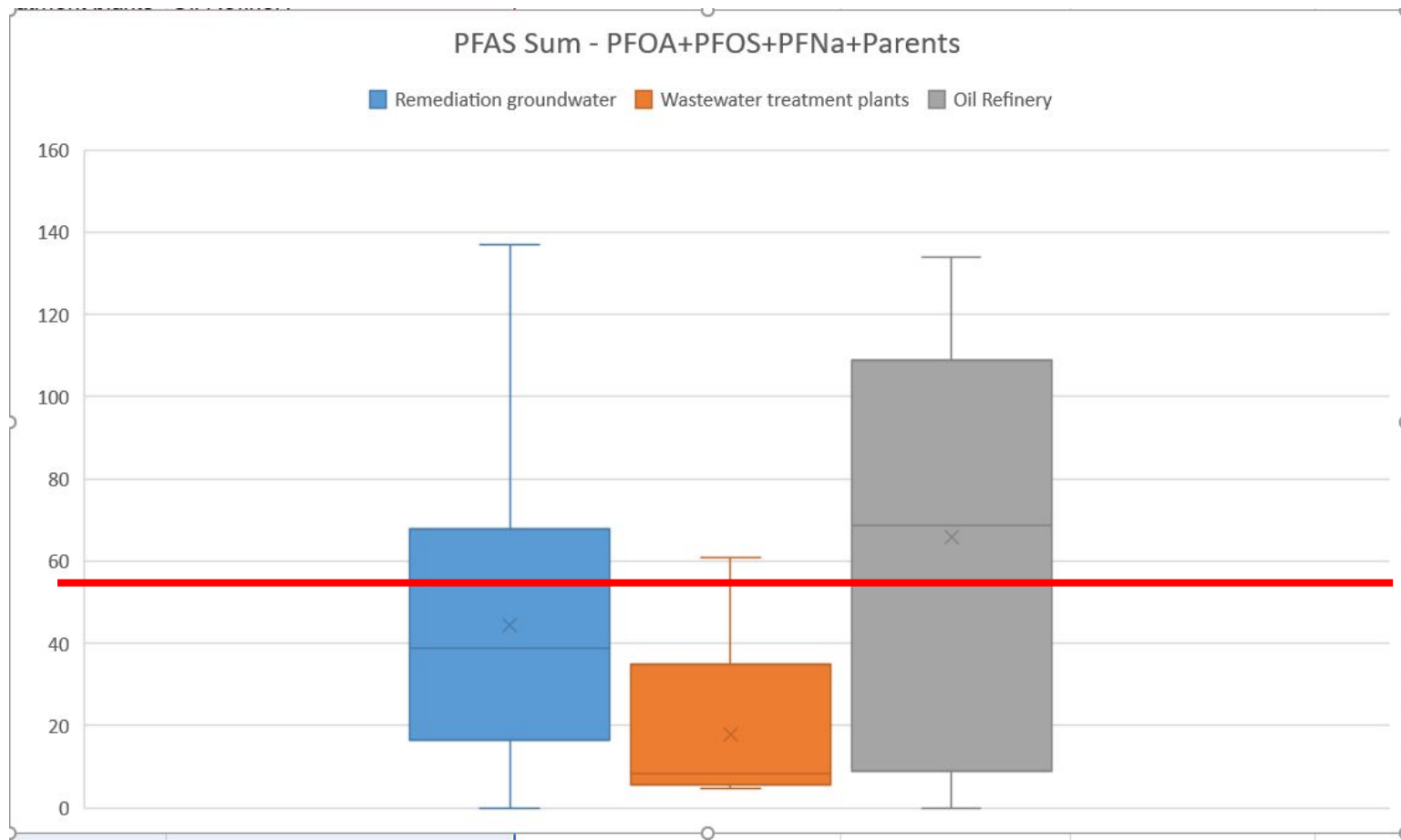
Permitting - Effluent limits and Monitoring

- **No effluent limits for construction dewatering, short-term remediation and well development (COG080000, COG317000, COG60800)**
 - Dischargers will not have limits even if their source water sample shows an exceedance of translation values UNLESS the source water is order of magnitude higher
- **Delayed effluent limits for domestic wastewater treatment plants**
 - Most permittees where effluent limits would be needed will have 5 to 9 years before effluent limits are included in their permit
 - Currently requiring monitoring and initial source investigations
- **Long-term dewatering may include numeric effluent limits (COG318000)**
- **Industrial facilities with high PFAS levels in effluent may see numeric effluent limits**
- **All permits with limits or monitoring -**
<https://docs.google.com/document/d/1KyRL6b-t1o73jK7mIZ8mhHn8ubBBbgZL-2hk6A1PyaA/edit?usp=sharing>

Public Access to Data

Facility Name (may include link to permit)	Location	Permit/ Cert. #	Kind of Facility or Activity	PFAS Monitoring?	Does Permit Have PFAS Limits?
South Canyon Landfill	Glenwood Springs	CO0048815	Landfill	Yes, through permit.	Yes
Suncor Oil Refinery	Commerce City/Denver	CO0001147	Oil refinery	Yes, through Duty to Provide Information Letters	Proposed in 11/2021 draft permit. See here.
South Platte Renew (aka Littleton/Englewood)	Englewood	CO0032999	Domestic WWTP	Yes. 2-year monitoring requirement through permit, effective Jan. 1, 2022.	No
Metro - Hite	Denver	CO0032999	Domestic WWTP	Yes. 2-year monitoring requirement through permit, effective Jan. 1, 2022	No
Broomfield	Broomfield	CO0026409	Domestic WWTP	Yes. 2-year monitoring requirement through permit, effective Jan. 1, 2022	No
Steamboat Springs	Steamboat Springs	CO0020834	Domestic WWTP	Yes. 2-year monitoring requirement through permit, effective Jan. 1, 2022	No
1515 Vrain St	Denver	COG318004	Groundwater dewatering	Yes, through permit.	Yes
Lotus	Boulder	COG318006	Groundwater dewatering	Yes, through permit.	Yes

Long-chain PFAS Effluent Monitoring So Far - Still Early



Suncor oil refinery draft permit

- ≈ 3 years of existing effluent monitoring - 200+ ppt for PFOA
- Draft includes 70 ppt and other PFAS limits from policy
 - As chronic and dail max
- Requires weekly PFAS stormwater monitoring
- Includes practice-based requirements that materials containing PFAS be kept out of stormwater system
- Special provisions to address potential seeps of PFAS-contaminated groundwater into surface water



Stormwater Permits

1. EPA draft permit in Colorado - Buckley AF base MS4 permit
 - PFAS monitoring at key outfalls and stormwater ponds
 - <https://www.epa.gov/npdes-permits/draft-npdes-permit-buckley-space-force-base-municipal-separate-storm-sewer-system>
2. Colorado MS4 permits
 - Basic housekeeping and tracking for PFAS foams
 - Note many MS4s include airports!
3. Industrial stormwater general permit - next slides

Draft Industrial Stormwater Permit

Proposed PFAS Monitoring

Airports, haz waste and landfills = highest concern

⇒ **automatic monitoring and practice-based limits**

Sectors A, B, C, E, N, O, AA, and AC = elevated concern

⇒ **conditional monitoring and practice-based limits**

Other Sectors = some concern, but less

⇒ **monitoring not required at this time,
practice-based limits apply**

Airports - New areas for designation (RDA)

- Current areas requiring coverage: vehicle maintenance, equipment cleaning, deicing operations
- Renewal permit to include additional areas having:
 - 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.

Thank you! Any questions?

Action Plan and resources available at: cdphe.colorado.gov/pfas

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