

# Colorado Water Quality Control Commission Policy 20-1

## *Policy for Interpreting the Narrative Water Quality Standard for PFAS*



Association of Clean Water Administrators | August 2020  
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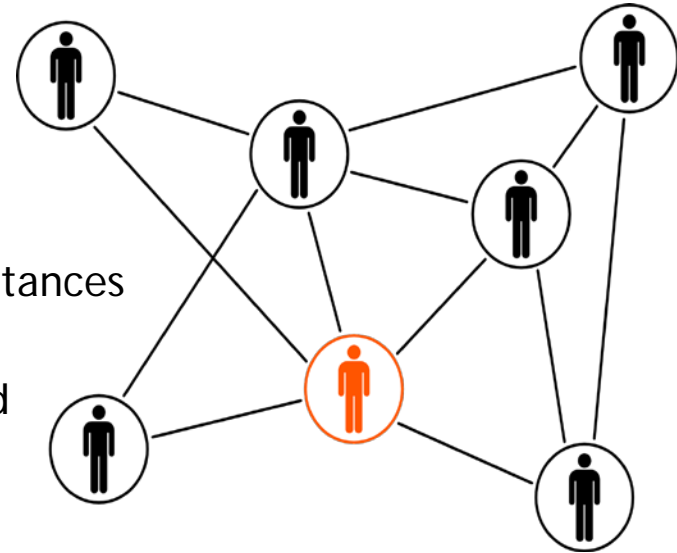


# What we know about PFAS in Colorado

- PFAS contamination of drinking water sources in El Paso, Boulder, Adams Counties from AFFF
- 2020 PFAS drinking water sampling project
  - 400 public water systems (50% of community systems)
    - No treated drinking water above EPA health advisory (70 ppt for PFOA+PFOS)
  - 71 surface water sites (5% of segments)
    - Detects at all sites, one above EPA health advisory
- At least one NPDES permittee is discharging at levels above the EPA health advisory
- PFAS levels in blood of residents from El Paso County
  - Colorado School Public Health's PFAS AWARE<sup>1</sup> study
  - PFOS, PFOA, and PFHxS 2-12 times higher than national levels
- Big unknowns
  - Other 50% of community public water systems
  - Non-community systems
  - Private wells (20% of Coloradans rely upon)
  - 95% of surface waters
  - NPDES permittees

# What is Colorado doing overall?

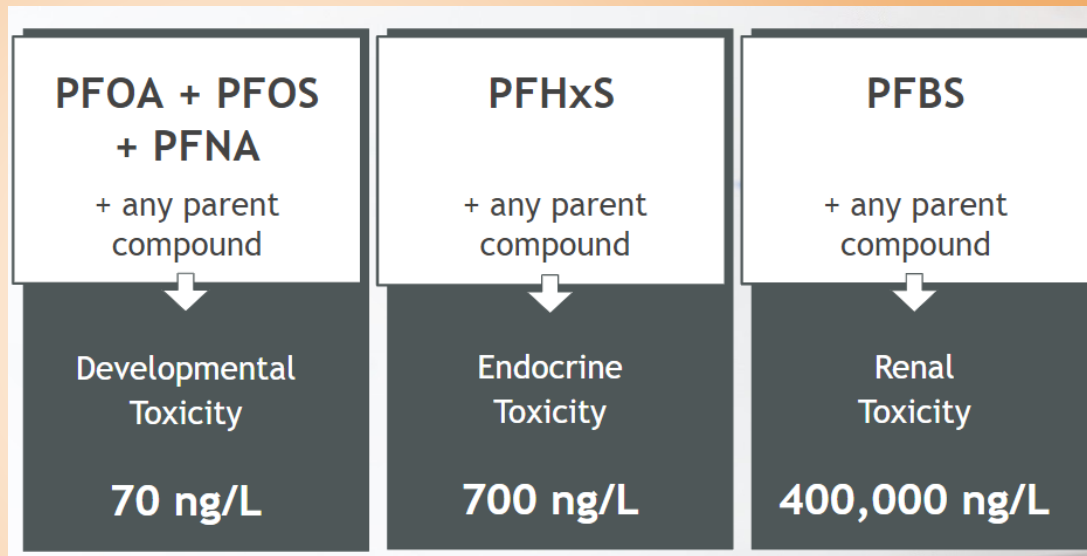
- Key - identifying sources, reducing risk to drinking water
- Fire department survey
- Inventory of sites where PFAS has been found
- NPDES permittee survey - who is using or storing it
- Groundwater remediation and cleanup
- Early steps of state MCL
- Banned use of PFAS fire fighting foam in most circumstances
- Seeking compensation for remediation
- SB20-218: New fund for wastewater infrastructure and technical assistance and a “takeback” program
- Using existing regulatory authority - like Policy 20-1



# Water Quality Control Commission Policy 20-1

# What does the policy do?

- Relies upon existing “free from” narrative standards for ground and surface water
- Provides guidance on how to implement the narrative in permits by setting “translation levels” for some PFAS
- Establishes guidance for lab methods



Full policy can be found at <https://www.colorado.gov/pacific/cdphe/wqcc-policies>

Link to basic fact sheet (with other links!): <https://docs.google.com/document/d/1-2Ay4dJjoIRaHQRikkOeKVW9vh-KZHhOUSHf4RI-F1I/edit?usp=sharing>



# Implementation through permits: monitoring

- **Monitoring**

- Will be focused on facilities with a likelihood of PFAS discharges to state waters
- Will use discharger survey, locations near known sources, collection systems containing likely or known sources, and facility type
- May come through duty to provide information letters or permit conditions
- October 1 stakeholder meeting will address potential monitoring under the industrial stormwater general permit (COR900000)

- **Source investigation or source control**

- May be required for WWTPs with existing pretreatment programs
  - > 5MGD and receiving industrial discharge that pass through or interfere with the operation of the POTW that discharge to/upstream of water supply segments
- Facilities that are using PFAS and discharge to/upstream of water supply segments or groundwater



# Implementation through permits: effluent limits

- **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 in order to lower PFAS levels through source investigations and source control
  - Starting place for source investigations
    - EPA Pretreatment Program: <https://www.epa.gov/npdes/national-pretreatment-program>
    - WQCD FAQs: <https://drive.google.com/file/d/1JJBVLsENbJ1NVuiDZ6ulF9aUq9R7elms/view>
- **Long-term dewatering may include numeric effluent limits (COG318000)**
- **Industrial facilities with high PFAS levels in effluent may see numeric effluent limits**
- **No numeric effluent limits for stormwater permits**
  - BUT there may be practice-based limits



# Extra







# Translation values include parent PFAS

Polyfluoroalkyl substances and side-chain fluorotelomer compounds can break down into perfluoroalkyl substances.

8:2 FTS



PFOA

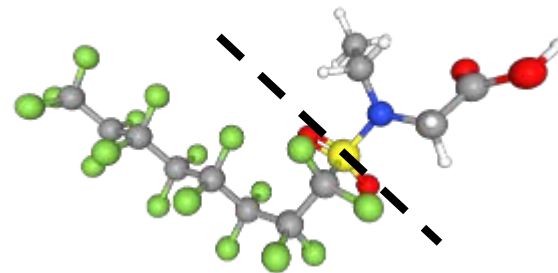
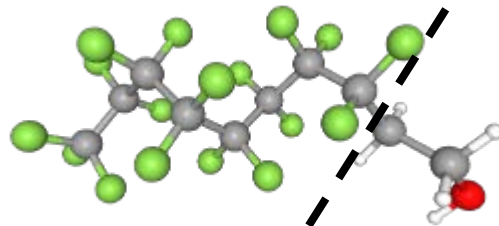
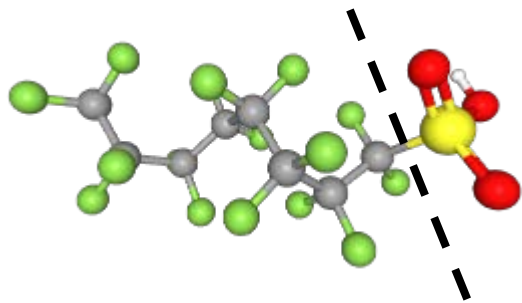
NEtFOSAA

NMeFOSAA

PFOSA/FOSA



PFOS





# Laboratory methods

Policy recommended analytical approach aligns with anticipated EPA-approved method:

- Specific to analytical methods for wastewater
- Includes 25 PFAS
- Compliant with Department of Defense (DoD) quality assurance protocols
  - DoD QSM 5.1 or later [Table B-15: Per- and 214 Polyfluoroalkyl Substances (PFAS) Using Liquid Chromatography Tandem Mass 215 Spectrometry (LC/MS/MS) With Isotope Dilution or Internal Standard Quantification 216 in Matrices Other Than Drinking Water]
- Allows for comparable, replicable results

# Policy's translation values: squarely in the middle

