

Drinking Water & Clean Water Advisory Council
September 13, 2022 – 10:00 a.m.
Meeting Notes

The meeting began at 10:04 a.m.

Welcome and opening remarks – John Webb, Assistant Director, Division of Water

Emergency / disaster recovery – discussed flooding and current status. DOW has partnered with DOT and KDFWR regarding stream debris removal. Drinking water service is mostly recovered, still working on clean water issues and systems. There has been a large influx of floodplain permitting requests; on Thursday a floodplain permitting workshop will take place in Whitesburg. The recent emergencies have emphasized the importance of water infrastructure across the state, and has opened discussions regarding building back safer, healthier, and stronger, rather than just making repairs.

Drinking Water and Clean Water SRF Guidance – discussed changes to both documents as a result of the Bipartisan Infrastructure Law (BIL), and additional criteria including Lead Service Line (LSL) inventory & replacement categories, and emerging contaminants (PFAS), have been added. LSL assistance is broad in terms of eligible projects; replacing both public and private side of distribution lines is required by the Lead and Copper Rule Revisions. KIA completed some updates on the KIA portal to allow for new categories on project profiles. In addition to criteria, increased scoring point values for green infrastructure and nature-based solutions for flooding events and water quality improvement.

PFAS developments – Last week DOW released its initial fish tissue report based on a limited data set. Results show the highest of 16 compounds was PFOS. Average concentration of PFOS in fish from streams is 13 ppb and in lakes was 5 ppb. Sampling sites were based on previous ambient sample results. After consultation between DOW, DPH, and KDFWR, consumers are advised to follow statewide fish consumption advisories for mercury while final PFAS numbers are being analyzed. Sensitive populations may want to further limit fish consumption. On August 26, EPA published notice in the Federal Register of rulemaking for designating PFAS and PFOS as hazardous substances under CERCLA. Consequence is significant because it would require facilities to report quantities discharged in excess of 1 lb. OMB found economic significant impact, so more work will be required before a rule is finalized. The group discussed treatment vs. MCLs, granular activated carbon manufacturers, costs, treatment optimization, and other related PFAS/PFOS issues.

PFAS Treatment

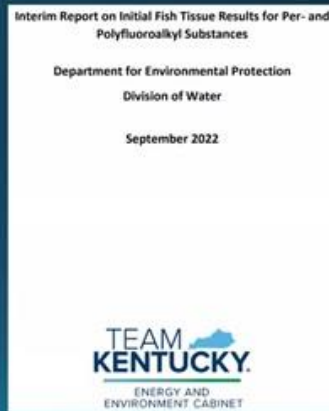
Comparison of PFAS Removal Technologies

PAC	GAC	Ion Exchange	Reverse Osmosis / Nanofiltration
Effective for removal of long chain PFAS (PFOA, PFOS)	Effective for removal of long chain PFAS (PFOA, PFOS)	Effective for removal of long chain PFAS (PFOA, PFOS)	Effective barrier to PFAS and almost all additional CECs
Less effective for short chain PFAS	Less effective for short chain PFAS	More effective for short chain PFAS	High energy use
Many facilities may already have PAC	Effective Removal of many CECs	PFAS Specificity a blessing and a curse	Disposal challenges of highly concentrated PFAS reject stream
High doses of PAC required	Media can be reactivated and put back into service	No media regeneration process	
Long contact time ideal	EBCT required ~ 10 – 20 minutes	EBCT = 2 – 4 minutes	
Variable PAC performance (water quality and carbon)			
Impacts to solids handling?			



PFAS Update

- New DOW Report on Fish Tissue PFAS Results
 - Sept 9 report release – 2021-2022 study period
 - PFAS detected in all 98 fish tissue samples
 - PFOS = highest of all 16 PFAS compounds ranging from 0.31 to 50 parts per billion (ppb)
 - Average PFOS in streams = 13 ppb
 - Average PFOS in lakes = 5 ppb
- Recommendation (DEP, DPH, and DFWR) to follow existing statewide fish consumption advisory for mercury and any site-specific advisories
- Sensitive populations may want to exercise additional caution regarding frequency and quantity



eec.ky.gov/pfas

Water Workforce Survey – Valerie Lucas and Donna McNeil presented results from the 2022 survey. The group discussed several issues related to hiring and retention of water employees.

Committee reports

Compliance & Regulations – sampling plan document being developed (Kim Padgett)

<https://eec.ky.gov/Environmental-Protection/Water/Drinking/DWProfessionals/Pages/Compliance.aspx>

Infrastructure Sustainability

Lead In Drinking Water

Nutrients

PFAS

Small Wastewater Systems

Source Water Protection

Source Water Protection Needs Survey: <https://forms.gle/2W2znEs1vjA7yqjH8>

Source Water Protection Week 2022 website: <https://bit.ly/SWPWeek>

Announcements

Governor's Conference on Energy and the Environment - Oct 17 & 18

DWAC/CWAC tentative meeting schedule for 2022 (2nd Tuesday of the last month of the quarter): December 13.

DWAC/CWAC tentative meeting schedule for 2023 (2nd Tuesday of the last month of the quarter): March 14, June 13, September 12, December 12.

The meeting adjourned at 12:00 p.m.