Contaminants of Emerging Concern Workgroup

Quarterly meeting update

06 February 2019

Update Items

- UCMR4
- PFAS
- Microplastics

UCMR4

- Monitoring in progress since Spring 2018
- Data posted to EPA's Safe Drinking Water Accession and Review System (SDWARS)
- Data released from EPA's National Contaminant Occurrence Database (NCOD) – October 2018

UCMR4

- As for UCMR3, filtered data set for 4 States and DC
- Further filter for ~50 Potomac River PWS
- Data reported for 9 PWSs:
  - Hagerstown MD
  - Waldorf MD
  - WSSC MD
  - Arlington County VA
  - Front Royal VA
  - Dulles Airport VA
  - Leesburg VA
  - Staunton VA
  - Warrenton VA

UCMR4

- Entry Point (EP) metals detected:
  - Manganese (n = 16): 2 results (0.79 – 12 µg/L)
- Entry Point (EP) cyanotoxins:
  - Anatoxin-a, Cylindrospermopsin, Total microcystin (n = 18):
    All results ND
- Distribution System (DS) HAAs detected:
  - 100% detection rate (n = 60)
  - HAA5: 13 – 87 µg/L, mean = 25 µg/L
  - HAA6Br: 4.2 – 18.9 µg/L, mean = 8.8 µg/L
  - HAA9: 19 – 94 µg/L, mean = 36 µg/L

PFAS

- Primarily a groundwater concern (exceptions: industrial discharges, airborne sources)
- UCMR3 Potomac PWS detections:
  - Rare (n = 1,470), one result only (PFHpA = 0.012 µg/L)
- WSSC monitored quarterly 2013-2018 (per MD Public Utilities Article 28-301(b)(2), reporting to Montgomery and Prince George's Counties)
  - All results (n = 96): all ND

PFAS

- Regulatory initiatives
  - Health advisory levels for PFOA, PFOS set by EPA in May 2016
  - Testimony at House hearing September 2018 calls for national enforceable standard
  - Federal (HR and Senate) proposals to regulate PFOA and PFOS reported February 2019
- Recall that UCMR3 tested only 6 compounds (PFBS, PFHpA, PFHxS, PFNA, PFOA, PFOS)
- Other PFAS may exist (e.g., GenX) but not tested

PFAS

- Regional initiative:
  - Risk plan and/or talking points
  - 2019 project for CEC and RO workgroups

- Resources:
  - EPA webinar “Treatment Technologies for Removing Chemicals of Concern: PFAS, cyanotoxins, perchlorate”
    Rescheduled for 26 February 2019 2:00-3:30 pm ET
  - New ASTM analytical method 7968/7979

Microplastics

- Increasing interest and potential concern
- Ubiquitous occurrence
  - More fibers than microbeads
- Recent webinars/conferences:
  - Corona/Eurofins – 30 January 2019 (included info on lab methods)
  - WRF – 13 December 2018 (occurrence and characterization)
  - MWMC Conference – 7 December 2018 (4 presentations)

Microplastics

- Tracking WRF research – drinking water (health effects) and wastewater treatment (removal)
- Ecological effects
- Resources:
  - Webinars and presentations can be uploaded to Samepage website