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
• 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