

EMERGING CONTAMINANTS COMMUNITY CHARTER

Overview

The vision of the WEF Emerging Contaminants Community is to establish WEF as a recognized leader and trusted resource of information on emerging contaminants for water professionals, the public and decision makers developing policy and regulations.

Mission and Overall Charge

Our mission is to gather practitioners of the Emerging Contaminants Community with expertise or interest in studying risk to the industry in the upcoming decade, with a watch eye of future contaminants, to provide an informed, trusted voice and guidance to water professionals, the public, and decision makers. To protect human health and the environment by addressing the presence of Emerging Contaminants and to solve Emerging Contaminants challenges.

Emerging Contaminants Community Activities and Tasks

The Emerging Contaminants Community would track newly occurring constituents to better position the industry for response. Such as, collecting data to track Emerging Contaminants treatment and destruction progress and associated costs.

The Emerging Contaminants Community would establish communication and educate on the following efforts:

- Repository of technical resources with community approval on wef.org or WEF Unity.
- Expanding Emerging Contaminants related public outreach to increase awareness about Emerging Contaminants.
- Provide education and resources to enable WEF members to advocate for funding for Emerging Contaminants research, appropriate regulation of Emerging Contaminants, and funding for utilities to address Emerging Contaminants.
- Collect, review and summarize available information and research to provide widespread, consistent, and reliable information concerning Emerging Contaminants.
- Provide a platform for water professionals to collaborate, train, and share information about Emerging Contaminants.
- Prepare reference materials, guidance, or host meetings in support of Operator training and Emerging Contaminants awareness based on prioritization and urgency.
- Support research efforts related to Emerging Contaminants treatment and destruction technologies including efficacy, financial implications, feasibility, and fate and transformation along the treatment process
- Collaborate with experts to improve or revise standard methods for monitoring practicability and implementation

Listed below are the anticipated Emerging Contaminants Community subject areas. Eventual organization around the topic areas (possibly into Focus Groups) would be explored early and on

an ongoing basis. Each Focus Group, once confirmed, will have a Chair and Vice Chair to manage the group and be open to all members of the Emerging Contaminants Community.

- Inorganic Chemicals: We can either consider inorganics out of scope due to not being anthropogenic, create a distinct Inorganic category, or cover them as a particulate. We seek input from the CLC on this.
- Organic Chemicals
 - **PFAS Focus Group**
 - Source and generation – industrial contributions
 - Changes withing the wastewater treatment process
 - PFAS in wastewater discharge and impact on water quality
 - PFAS in Biosolids – disposal and/or treatment-destruction-other management
 - **Organic Contaminants (Non-PFAS) Focus Group** (to be established upon interest)
 - 1,4-Dioxane
 - Pharmaceuticals
 - Pesticides
- **Radionuclides Focus Group** (to be established upon interest)
- Particulate
 - **Micro-and Nano- plastics Focus Group**
 - **Particulate Contaminants Focus Group** (to be established upon interest)
 - Asbestos (consider crossover with Inorganic)
 - Nanoparticles

Altogether, two established Focus Groups emerge, and three proposed Focus Groups remain as growth opportunities pursuant to Emerging Contaminants Community member interest.

Liaisons with Other Communities

Emerging Contaminants is a theme throughout many of the other WEF communities. Review Emerging Contaminants fate and transformation in air emissions, receiving waterbodies, landfill leachate, wastewater influent, residuals, and industrial pretreatment. As such, the Emerging Contaminants Community liaisons actively work with the following communities to ensure collaboration and to minimize effort duplication.

- **Residuals and Biosolids:** Build partnerships with the Thermal Treatment Focus Group, amplify their current work, and support their ongoing efforts with technical publication development. However, there may be other technologies beyond thermal treatment for addressing PFAS in Biosolids – ex. Incorporation in sequestered materials and disposal as agricultural amendment or fertilizer products that prevent PFAS transport; or disposal sequestered biosolids in landfills to prevent transport.
- **Municipal Resource Recovery Design:** Work with MRRDC to identify work groups which align with the goals of this Committee and how to work seamlessly together.
- **Plant Operations and Maintenance:** Work to share best practices regarding power quality issue identification and resolution, power metering and sub metering, as well as develop electrical infrastructure asset management guidance.
- **Industrial Water:** Offers opportunities to engage on CWE and industrial energy innovations. Industrial pretreatment management for PFAS reduction in discharges.

- **Research:** Offers opportunities to engage on emerging contaminants research and innovation. Changes in precursors within wastewater treatment
- **Intelligent Water Technologies:** Linkages on big-data; energy-use, energy-quality and other instrumentation.
- **Air Quality and Odor Control:** Offers opportunity to integrate air quality permitting to reduce discharges of PFAS and other emerging contaminants.
- **Program Committee (and Workshop Proposal Review Committee):** Help shepherd and develop workshops that highlight PFAS issues at WEFTEC and specialty conferences.
- **Technical Practice Committee:** Provides opportunities for Emerging Contaminants Community members to contribute and/or participate in the development, review, and update of emerging contaminants related WEF technical publications and Manuals of Practice.
- **Students and Young Professionals:** Create relationships with YPs and incorporate them throughout the Emerging Contaminants Committee. Provide opportunities for YP professional development and leadership.
- **Utility Management:** Liaison with leadership around a wide variety of emerging contaminants management topics.
- **WEFTEC Emerging Contaminants Symposium:** PFAS, Microplastics, 1-4 Dioxin papers and abstracts could be better consolidated under a new Emerging Contaminants Symposium – offered as a future topic of discussion.
- **Public Communication and Outreach:** Can work to help develop strategic communication strategies around efforts related to emerging contaminants, new PFAS regulations, upcoming microplastic regulations, etc.
- **Government and Regulatory Affairs:** Can inform, coordinate, and help track emerging contaminants-related legislation related to or affecting the water and wastewater industry.
- **Water Reuse**
- **Laboratory Practices**
- **Small Systems**
- **Disinfection and Public Health**

Emerging Contaminants Community Structure

The Emerging Contaminants Community is led by a Chair, Vice Chair, and 2nd Vice Chair. Each serves concurrent two-year terms; at the end of which, the new Chair, Vice Chair, and 2nd Vice Chair are selected through a competitive application process. The 2nd Vice Chair would serve a total of 6 years, culminating in their last two years as Chair. **The term start dates for the above positions will be begin once the Community moves from an interim status to an active status*

The Emerging Contaminants Community would also have a YP Vice-Chair who would be selected through a competitive application process and serve a one-year term in Emerging Contaminants Community leadership.

Other Emerging Contaminants Community positions include WEFTEC Workshop Representative; among others that will be added, along with additional MET-related positions as the Community



grows. Such as, the Community Past Chair, Projects Director, Member Engagement Director, Social Media Director, and Member Association Outreach Chair.

The Emerging Contaminants Community will also have the following leadership groups - a Steering Committee, a Strategic Leadership Committee, and a Nominating Committee – comprised of current leadership roles and members of the Community.

The Emerging Contaminants Community will be under the CLC Community of Practice – Training, Research & Regulations.

