

SUB-COMMITTEE OVERVIEW

The Toxics Sub-committee (TSC) is a sub-committee of the Watershed Management Committee (WMC) of the Water Environment Federation (WEF). The TSC develops and conducts activities to advance the understanding, planning, implementation, and use of sound scientific principles to effectively assess and manage effects of toxic compounds in the aquatic environment. The aquatic environment includes the water column, sediments and aquatic organisms in freshwater, estuarine and marine systems. Toxic effects include those that adversely affect aquatic organisms such as fish and invertebrates, and those that adversely affect human or wildlife health due to ingestion of water and fish and shellfish. The types or categories of toxics are those that are or could be regulated under the Clean Water Act (CWA), including metals such as copper and zinc, metalloids such as arsenic, organics such as pesticides, phthalates, flame retardants, polychlorinated biphenyls (PCBs), microconstituents, toxins from harmful algal blooms, mercury, etc.

The sub-committee was established in late 2013.

MISSION AND OVERALL CHARGE

The sub-committee shall recommend, develop, and conduct activities to advance the understanding, planning, implementation, and use of sound scientific principles to effectively assess and manage effects of toxic compounds in the aquatic environment. The aquatic environment includes the water column, sediments and aquatic organisms in freshwater, estuarine and marine systems. Toxic effects include those that adversely affect aquatic organisms such as fish and invertebrates, and those that adversely affect human or wildlife health due to ingestion of water and fish and shellfish.

Membership:

The TSC members can include utility personnel, consultants, academia, manufacturers, non-government organizations and government (federal, state, local) employees. The implications of toxics management are impacting a broad spectrum of human society in a variety of ways in all regions. As such, the sub-committee is looking to grow in terms of membership numbers as well as in diversity of member backgrounds and experience.

SUB-COMMITTEE ACTIVITIES AND TASKS

- Key issues and topics identified by the sub-committee to date (May 2016) include:
 - Issues pertaining to the intersection of the CWA and Comprehensive Environmental Response and Cleanup Act (CERCLA); sediment cleanup goals and sediment quality criteria; remediation responsibilities, etc.

TOXICS SUB-COMMITTEE

- New human health criteria for ambient waters based on higher fish consumption rates for protection of sub-populations of higher fish consumers such as Native American tribes
- New understanding and implementation tools for factors that affect toxicity and bioaccumulation, such as the Biotic Ligand Model for metals toxicity to aquatic life
- New criteria and implementation approaches for ammonia toxicity to aquatic life
- Ongoing concerns about human health and aquatic toxicity effects of personal care products and pharmaceuticals, microconstituents, nanoparticles, etc. that occur in surface waters
- Activities and tasks consistent with those of the broader WMC that may be applicable to the TSC:
 - Provide a forum for WEF members to share and learn concepts and technology related to toxics management.
 - Coordinate, integrate, and leverage ongoing efforts in WEF related to toxics management and then initiate activities on important topics not being addressed, such as institutional, socioeconomic, intergovernmental, and policy issues.
 - Use toxics management as a vehicle to promote partnerships with other organizations and agencies to further the mission of WEF.
 - Promote public policies that encourage effective toxics management by providing WEF members, the public, and policy makers with technical information.
 - Review, evaluate, and disseminate information on toxics management, based on actual agency experiences. Deliverables include webcasts, white papers, etc.
 - Encourage adoption of new advances and applications for toxics management.
 - Develop workshops and moderate technical and panel sessions at WEFTEC.
 - Author articles for WEF's technical journals.

LIASIONS WITH OTHERS

To better accomplish its mission, as coordinated through the WMC structure and processes, the sub-committee shall integrate its activities with other WEF committees that consider science and technologies relevant to toxics management, currently including:

- WEF Municipal Resource Recovery Design Committee
- WEF Industrial Wastewater Committee

TOXICS SUB-COMMITTEE

- WEF Stormwater Committee
- WEF Technical Practice Committee
- WEF Program Committee
- WEF Government Affairs Committee
- The sub-committee will also strive to partner with Member Associations and other organizations, such as:
 - The Water Environment & Reuse Foundation
 - Organizations outside WEF that are active stakeholders in toxics management (e.g., Society of Environmental Toxicology and Chemistry, International Water Association, etc.)

ORGANIZATION

The sub-committee is led by the chair. A list of all WMC chairs and vice chairs can be found on the WEF website.