# PFAS – Risk, Regulations and Remediation -3 Hour

# H2M Associates, Inc., North Jersey Water Conference, NJ Water Association

## **Description:**

PFAS, or per-and polyfluoroalkyl substances, are a class of chemicals used traditionally in the manufacture of coatings and equipment design to resist water, grease, and heat. PFAS have for decades been used in military, industrial, commercial, and residential product applications. However, exposure studies have demonstrated that PFAS is associated with several negative human health effects, including cancer, liver damage, fertility problems, and other diseases. Further, PFAS are known to be present and persistent in the natural aquatic environment – of the dozens of closely studied compounds in the PFAS family, three (3) have been regulated in New Jersey as primary drinking water contaminants, and the federal government is currently evaluating a rule proposal to regulate PFAS as an amendment to the Safe Drinking Water Act. In addition, consideration is being given at the State and Federal levels to regulating PFAS in wastewater process streams (both treated liquid effluent and sludge). This presentation seeks to educate drinking water and wastewater professionals on the current state of the industry with regard to PFAS and empower them with the best current decision-making tools for managing their own water resources and utilities.

<u>Who Should Attend</u> – Operators, utility executives, regulators, environmental attorneys, laboratory and field water quality professionals/scientists, engineers.

<u>What Will be Covered</u> – The course will cover the history of PFAS and its risk profiles, followed by a review of the current regulatory frameworks at the NJ State and Federal levels. Finally, treatment technology alternatives will be reviewed and compared, and participants will be led through a PFAS treatment case study, where a real-world application is reviewed for understanding of how principles are applied.

### Agenda:

## 8:00 - 8:30 am, Sign-in

- 1. PFAS Sourcing and Contamination Pathways, History of Use, Toxicology, and Communicating Risk
- 2. The PFAS Regulatory Framework NJ State and Federal, Past/Present/Future
- 3. Alternatives Analysis and Treatment Technologies Selection GAC, IX, and RO
- 4. PFAS Treatment Implementation Case Study Construction Logistics and Start-Up Challenges

#### 12:15 Dismissal

There will be one fifteen-minute coffee break, and a 30-minute break for lunch.

## Presenters:

<u>Karen E. Benson, P.G.</u> – H2M Practice Leader, H2M, Hydrogeology and Regulatory Compliance <u>Alec J. Mittiga, P.E.</u> – Senior Discipline Engineer, H2M Water Resources - Mr. Mittiga has more than 15 years of experience in the areas of water, wastewater, and civil engineering. He has served in the capacity of project engineer and project manager responsible for the evaluation, design, regulatory permitting, and construction administration of potable water systems, including supply, treatment, and distribution; wastewater collection systems, including pumping stations, force mains, and gravity sewers; and stormwater detention, pumping, and drainage systems. His specialties include hydraulic analysis of potable water, wastewater, and drainage systems, as well as Geographic Information Systems (GIS).

Patrick K. Cole, P.E., CME, CPWM – Vice President, Water Resources, H2M

#### **Accreditation:**

3.0 TCH for NJ-Licensed Water and Wastewater Operators. TCH Course Number 04-012401-30. 3.0 Hours, CPWM. 1.0 Technical, 1.0 Management, 1.0 Government. DLGS-NJWA-260.

#### **Date and Location:**

January 25, 2024: Boonton Senior Citizen Center, 126 North Main Street, Boonton, Morris County

Pre-Registration is required and available at <a href="https://www.njwater.org">www.njwater.org</a>. To ensure ample time, please plan to arrive at 8:00 am.