

Approved November 28, 2017

New Jersey Drinking Water Quality Institute (DWQI)  
March 27, 2017, 1 pm  
**Meeting Minutes**

Members Present:

Keith Cooper (Chair)	Bahman Parsa	Sheng-Lu Soong
Patricia Gardner	Gloria Post	Carol Storms
Jessie Gleason	Daniel Salvito	Norm Nelson
Sandra Krietzman	Anthony Matarazzo	

Members Absent:

Judith Klotz  
George Van Orden

Non-members Present:

Kristin Tedesco, Linda Bonnette, Lorraine Salamanca, (NJ Department of Environmental Protection)  
Jon Hurdle (NJ Spotlight)  
Mark Theiler (Middlesex Water Company)  
Lydia Work (Environmental Standards)  
William Gray (Woodard & Curran) Tom Imbriglotta (U.S. Geological Survey)  
Tracy Carluccio (Delaware Riverkeeper)  
Mark Cuker (Williams Cuker Berezofsky)  
Ashley Thomas (Student)  
Tara Vonroth (Student)  
Irene Kropp, Caryn Barnes (Langan Engineering & Environmental Services)  
Tom Leach, Sam Jones (NJ Chemistry Council)  
Tom Ames  
Jules Thiessen (Test America)  
Barker Hamill  
John Manganaro (Water Resource Mangement/R & V Engineering)  
Toni Granato (Sierra Club)  
Perry Cohn

1. [Drinking Water Quality Institute \(DWQI\) Chair:](#)

Chairman Cooper provided an overview of the meeting and reminded everyone to sign in so that the Department can add them to their communication list. He reminded attendees that minutes and presentations are posted on the website following the meeting. He reminded attendees that we are thankful for the use of the USGS facility and that there are some facility security rules. He also noted that there would be an opportunity for questions during public comment period or comments on agenda items. All members introduced themselves.

Approved November 28, 2017

2. **Review of February 16, 2017 Minutes** – Members reviewed the minutes of the last meeting. No amendments were made. The minutes were unanimously approved.

3. **UCMR3 Presentation:** Sandy Krietzman (NJDEP) presented sampling data from the third round of the US EPA Unregulated Contaminant Monitoring Rule.

Carol Storms asked if there is co-occurrence of the volatile organic compounds (VOCs) sampled for in UCMR3 with other VOCs. Sandy Krietzman responded that there were very few UCMR3 detections of VOCs in general, and that she did not recall any obvious co-occurrence. She also noted that the group of contaminants sampled for UCMR3 is a limited one. With respect to chlorate, Carol also stated that NJ regulations require that water systems are allowed up to 30 days of storage. She thought this might be contributing to chlorate levels. Anthony Matarazzo stated that systems can make adjustments to disinfection to reduce chlorate levels. He also noted that he believes that there is co-occurrence of strontium with hard water. He indicated that water softening on a large scale would be very expensive. There was also some discussion regarding co-occurrence of strontium and calcium. Other co-occurrence involves 1,4-dioxane, which is a solvent stabilizer, and trichloro- or tetrachloroethylene. There was discussion about advanced oxidation as the only known reliable treatment for removal of 1,4-dioxane.

Gloria Post added that NJDEP has an interim groundwater quality standard for 1,4-dioxane. She indicated that a rule to adopt the interim standard into the promulgated Ground Water Quality Standards regulations will be proposed soon. The GWQS generally are based on the same health based criteria and PQLs as MCLs. However, treatment is not a consideration in developing the GWQS, but it could be a driving factor in a DWQI MCL recommendation for 1,4-dioxane.

Caryn Barnes asked what happens if 1,4-dioxane is found in a water system. Sandy Krietzman indicated that the Department would recommend monitoring.

The Chairman stated that the DWQI has these open discussions to get feedback from the people who are dealing with the issues in practice. We are all working together for the protection of public health. We need to be cognizant that, in some instances, the MCL may be driven by the practical quantitation limit, and/or that natural background occurrence may need to be taken into consideration. There was discussion regarding the fact that estrogens were infrequently detected in UCMR3, yet they are prevalent in surface water. Anthony thought that the large surface water systems required to monitor for hormones in UCMR3 (28 NJ systems serving more than 100,000 people) may be removing these contaminants with their existing treatments, such as ozone or GAC. One of the unintended benefits of these types of treatment is that compounds such as estrogens are broken down and therefore not found in the treated water. NJ American has done studies to demonstrate this.

4. **NJ Regulatory Update Presentation:** **Kristin Tedesco (NJDEP) spoke about NJDEP regulatory process and the status of Safe Drinking Water Act and Private Well Test Act rulemaking efforts.** Tracy Carluccio stated that she is frustrated by the amount of time that it has taken the Department to move from the July 2013 recommendation for PFNA to rulemaking. She noted that she expected a proposal this year. She hopes that the Department has ironed out kinks in its process so that we can move forward more quickly in the future.

Approved November 28, 2017

Anthony Matarazzo made a comment on disposal of radiologicals removed in residential treatment of private wells into homeowner septic. He stated that the issue of whether such disposal returns the radiologicals to the aquifer should be addressed.

**5. DWQI Workplan:** PFOS is being worked on currently and will be the next contaminant to move through the DWQI. Other contaminants that have been considered for potential DWQI evaluation were identified based on UCMR3 data and other information. Chlorate, MTBE, 1,4-dioxane, hexavalent chromium, and tertiary butyl alcohol are the contaminants that the Commissioner has asked the Institute to consider for potential evaluation.

Gloria Post indicated that 1,4-dioxane detections in UCMR3 are more prevalent in NJ than nationally. Anthony Matarazzo noted that treatment for this compound is challenging, and much of the experience for treatment is with wastewater. The costs for drinking water treatment are not yet understood. Chairman Cooper noted that treatment is not often the limiting factor when setting an MCL, and Gloria Post noted that the New Jersey arsenic MCL is limited by treatment capability.

Thomas Varner, a licensed site remediation professional from Haley Aldrich, indicated that there are treatment options for 1,4-dioxane other than advanced oxidation. He has used a proprietary product that he would be happy to provide information about. Anthony Matarazzo noted that GAC could also be considered but that it may become cost prohibitive. Other treatment options being explored are UV and ozone in combination. The Treatment Subcommittee indicated that it would be happy to consider any information that Mr. Varner can share.

DWQI has evaluated hexavalent chromium in the past. Gloria Post stated that much more toxicological research has occurred since the Health Effects Subcommittee recommended a Health-based MCL for this contaminant. In order to evaluate hexavalent chromium, the Health Effects Subcommittee would review these new data. Furthermore, the USEPA Integrated Risk Information System (IRIS) hopes to complete its risk assessment of hexavalent chromium this year, although this is not definite.

Chairman Cooper asked whether there are other contaminants that the drinking water community feels the DWQI should investigate. He also proposed to send out information to DWQI members on the contaminants under consideration to get their feedback. He asked if there were situations where earlier information exists, and therefore the DWQI could conduct a more expedited evaluation of some of these chemicals.

Tracy Carluccio noted that prior to 2010, the Institute made a recommendation for an MCL for perchlorate and other compounds. She indicated that perchlorate is a very toxic compound that is found in drinking water in New Jersey. She believes that this compound should be re-visited, as well as radon. These are contaminants that we know are highly dangerous in drinking water and that are not being acted on by NJDEP. She recommended that these two contaminants, especially, be included in the workplan.

**6. New Business and Next Meeting Topics:** Chairman Cooper indicated that at the next meeting, the Institute would address PFOS.

**7. Public Comments:** Toni Granato (Sierra Club) noted that his group is thankful particularly for the PFOA MCL recommendation. He also indicated that the Sierra Club is concerned with NJDEP delays to adopt the PFOA standard, and that this means that people are drinking water with higher levels of this contaminant than they should be. He noted that Governor Christie vetoed a bill to set stricter standards. Each delay directly impacts public. He noted that the Christie administration has failed to adopt any standards, and he urged NJDEP to adopt standards through emergency rulemaking. The Sierra Club believes that NJDEP needs to move forward on standard for 1,2,3-TCP. He indicated that it is important that NJDEP work on rules, and it is long overdue. He noted a failure to act for seven years, and that his group is very concerned that NJDEP misled the Legislature to stop its oversight. He stated that there has also been inaction on benzene. He urged NJDEP to take action on standards for new contaminants recommended by the DWQI and on 16 other chemicals for which the DWQI recommended revised MCLs to protect drinking water and public health.

Tracy Carluccio asked about the DWQI's timeline for PFOS. If PFOA/PFNA are any indication, then it will take a year for the DWQI to make a recommendation after it presents drafts. While she respects the process, she wasn't sure when the clock started ticking for PFOS. The public process isn't exactly the same as it was before, and she is concerned that it adds 2-3 months to the process. She believes that there is no sense of urgency at NJDEP.

Chairman Cooper responded that DWQI members are very busy with work on many different projects, so he anticipates that it will take approximately the same amount of time for a PFOS recommendation as it did for PFNA and PFOA. The public process is important, and it is also important for the Institute and the public to take the time to carefully look at the recommendations before they are finalized.

Anthony Matarazzo indicated that responsible water purveyors are not waiting for the rule to act on these contaminants. Some systems have contaminant levels close to the recommended MCL. They are facing the decision of whether to shut down, install treatment in one place, or treat each contaminated source separately. In general, water utilities do not decide whether to move forward based only on adoption of MCLs.

Tracy Carluccio indicated that residents of some towns are still drinking water above the recommended MCL, and that politics aren't needed where MCLs are concerned.

Tom Leach asked if whether the Institute would report back on workplan at the next meeting. Chairman Cooper hopes to put together a list of contaminants for future work, but indicated that, in reality, the major contaminants that have been identified are likely the ones the Institute will work on next.

#### **8. Meeting was adjourned at 3:20 PM**

The meeting was open to the public. All attendees were asked to sign in and provide contact information.

Minutes taken by Kristin Tedesco.