



New Jersey Drinking Water Quality Institute (DWQI)

May 25, 2023, 1 PM via Microsoft Teams

Meeting Minutes

Members Present (13):

Keith Cooper, Rich Calbi, Judith Klotz, Oleg Kostin, Gloria Post, Michele Potter, Patricia (Trish) Ingelido, Andrea McElroy, Jessie Gleason, Perry Cohn, Norm Nelson, Leslie Brunell, Mike Furrey

Members Absent (1):

Tina Fan

Public Attendees:

Katrina (Kati) Angarone, Chase Ballas, Josephine Bonventre, Chelsea Brook, Brandon Carreno, Patricia (Pat) Gardner, Sandra Goodrow, Lee Lippincott, Dan Milleman, Brian Pachkowski, Filina Poonolly, Benjamin Swartz (New Jersey Department of Environmental Protection, NJDEP)

Amy Stevens (New Jersey Department of Law),

Karen Benson (H2M Architects and Engineers)

Tracy Carluccio (Delaware Riverkeeper Network)

Kyle Clonan, Heather Desko (NJWSA)

Kyle England, Rayna Laiosa (Unaffiliated)

Amy Goldsmith (Clean Water Action)

Jesse Guillet (ERM)

Samantha Jones (Chemistry Council of New Jersey)

Darren Hopper, Erik Person (Langan)

Harvey Klein (Garden State Laboratories)

Trevor Mulhall (MBI)

William Mitchell (CME Associates)

Laura Norkute (NJAW)

Renee Pollard (Sierra Club NJ)

Steve Risotto (American Chemistry Council)

Mark Theiler (Middlesex Water Company)

Alissa Vanim (Aqua New Jersey)

Eric Vitale (Veolia North America)

1. DWQI Chair Remarks

Chairman Cooper opened the meeting by welcoming members and guests. Members introduced themselves.

2. Review of February 22, 2023 Meeting Minutes

Chairman Cooper stated that minor revisions to the September 8th meeting minutes were submitted to NJDEP. He asked the Institute members if there were any additional corrections or modifications to be added and received no comment. Gloria Post motioned to accept and Perry Cohn seconded. Members moved to accept the meeting minutes.

3. Membership Updates

Trish Ingelido stated that Keith Cooper is stepping down from the Institute; this will be his last meeting as Chair. Kati Angarone expressed her thanks, sharing Dr. Cooper's extensive history with the Institute and contributions to science and public health.

Gloria Post spoke on behalf of the Health Effects Subcommittee and thanked Chairman Cooper for his dedication to the Institute. She underlined the complexity and importance of his work throughout the years.

Chairman Cooper expressed his thanks and the sentiment that the DWQI's work is a team effort. He stressed the importance of fellow academics learning how their research may be used by regulatory agencies because they may not otherwise design their studies so that key data that would be very useful to regulatory agencies is obtained. He went on to discuss that the Institute must continue researching and learning as science evolves in order to protect public health with the strongest scientific basis possible.

Chairman Cooper stated that the next Chair should be selected before the next meeting.

4. Update on DWQI Treatment Subcommittee Research

Oleg Kostin [presented](#) on the Treatment Subcommittee report.

Chairman Cooper provided the opportunity for questions from the other Subcommittee members and the public.

Kyle Clonan noted studies published on the impact of phosphorus and nitrogen levels on harmful algal blooms in Great Lakes and asked whether the Treatment Subcommittee had considered these nutrients.

Oleg Kostin noted that based on his experience, phosphorus is the limiting nutrient as compared to nitrogen. He went on to discuss the 2022 harmful algal bloom in the Millstone River and added that, although nitrogen is very important to a bloom, phosphorus can be a bigger concern.

Trish Ingelido added that if there is a particular resource or paper that Kyle is aware of, he can share it with the Institute at DWQI@dep.nj.gov.

Chairman Cooper asked whether certain water treatment trains have a higher risk of cyanotoxin breakthrough than others.

Oleg Kostin referred to his experience operating water treatment plants to provide a response. He noted the various intervention methods that plants can utilize, such as changing feed locations and using activated carbon. He also noted the importance of investing in technologies that are broad spectrum and can deal with multiple concerns. He noted that the DWQI's recommendations would be beneficial for many other treatment plants around New Jersey when designing treatment for cyanotoxins.

Trish Ingelido added that NJDEP has asked for surface water treatment plants to develop and submit cyanotoxin management plans (CMPs). CMPs outline the system's treatment processes for dealing with harmful algal blooms. She suggested that CMP data could be used to gain insight on existing treatment variability in New Jersey's surface water systems.

Mike Furrey asked what techniques would be the most effective from a treatment perspective.

Oleg Kostin answered that chlorine would be the most effective, at least for microcystin, but it is also very likely to result in disinfection byproduct (DBP) formation. Chairman Cooper asked if hypochlorite is the most common chlorine type utilized by treatment plants. Oleg responded that use hypochlorite has increased, but many systems still use chlorine gas. He noted that chlorine gas is cheap but very hazardous and requires significant care in storage.

There were no updates from the Health Effects or testing subcommittees.

5. DWQI Workplan

Chairman Cooper suggested that the Testing and Treatment subcommittees continue to work to make recommendations for cyanotoxins, as the Health Effects subcommittee concluded its work. Chairman Cooper noted that EPA published a proposed rule for federal drinking water standards for PFAS and noted that the public comment period was still open for this rule proposal. Chairman Cooper asked Institute members if there were any additional areas of interest for future DWQI consideration.

Mike Furrey responded that the Institute should consider looking at perchlorate. He stated that there was activity regarding perchlorate at the federal level but was unsure whether the Institute has looked into this contaminant.

Chairman Cooper replied that there is a list of contaminants that was previously compiled to which contaminants of concern can be added. The statute asks that the Institute periodically reviews previously considered contaminants and recommendations. He noted that the new Chair will have a role in the workplan and addressing any new concerns that may arise.

Gloria Post added that the DWQI had previously evaluated perchlorate.

Chairman Cooper noted that if sufficient new information has emerged, previous evaluations may be revisited.

Harvey Klein added that there had been a proposal for an MCL of 5 ppm for perchlorate in New Jersey, but that it was not promulgated.

Chairman Cooper acknowledged that the process of strengthening drinking water regulations can move slowly, and he noted the importance of being aware of new information and being able to adjust conclusions based on new information when appropriate.

6. New Business

Chairman Cooper suggested that the next meeting be held in September and that Brandon Carreno find a date when all members are available. Brandon Carreno asked whether the next meeting should be in-person or virtual.

Chairman Cooper stated that he feels it is important to periodically meet in person, but a hybrid model for meetings would probably be best.

7. Public Comment

Chairman Cooper opened the floor for public comment.

Tracy Carluccio thanked Chairman Cooper for his leadership on behalf of the Delaware Riverkeeper Network. She said that he has been engaged with DWQI's mission and a motivated leader in helping protect New Jerseyans from harmful contaminants. She noted that Chairman Cooper has supported the use of scientific information and that New Jersey has highly benefited from his leadership.

Chairman Cooper closed the meeting by acknowledging the kind sentiments expressed by attendees. He emphasized the importance of independent science. He encouraged future students to look in the mirror and make sure that they believe in what they are doing.

Meeting adjourned.