Drinking Water Quality Institute
June 4, 2015 Meeting Minutes
New Jersey Environmental Infrastructure Trust Building
Princeton Pike, Lawrenceville, NJ

Members Present:

Keith Cooper (Chair)	Anthony Matarazzo	Fred Sickels
Jessie Gleason	Norman Nelson	Sheng-Lu Soong
Judith Klotz	Bahman Parsa	Carol Storms
Sandra Krietzman	Gloria Post	George Van Orden

Members Absent: Laura Cummings
Environmental Health Expert, Senate – vacant
Environmental Health Expert, Assembly – vacant

Non-members Present:
Yin Zhou, Helen Chudzik (NJDOLPS)
Linda Bonnette, Kati Angarone, Kristin Tedesco, Karen Fell, Michael Evenson, Lorraine Salamanca (NJDEP-Division of Water Supply & Geoscience)
Gary Buchanan, Sandra Goodrow (NJDEP-Office of Science)
Erica Bergman (NJDEP - Site Remediation)
C. David Riker, Gabrielle Goodrow, Tina Fan (NJDOH)
Paul Linskey, Chuck Jones (Solvay)
Christopher Roe (Fox Rothschild)
Judi Durda (Integral Consulting)
Toma Varner (Haley & Aldrich)
Tom Imbrigiotta, Zoltan Szabo (USGS)
Tracy Carluccio, Ed Rodgers (Delaware Riverkeeper Network)
Bill Wolfe
Tom Leach (Chemistry Council of NJ)
Mark Cuker (Williams-Cuker Berezotsky)

1. Call to Order, Welcome and Introductions—K. Cooper

Chairman Cooper called the meeting to order just after 2:00 pm and thanked everyone for coming. He also reminded attendees to please sign in. He asked members to introduce themselves. He announced that this would be Fred Sickels (DEP – DWSG, Director) last meeting as he was retiring at the end of the month, and thanked Fred for his contributions to the DWQI. Chairman Cooper outlined the agenda and asked that commenters limit their comments to 5 – 10 minutes and concentrate their comments on the topic at hand, PFNA, as was the case at the last meeting.

2. Review of Minutes from April 8, 2015— K. Cooper

Chairman Cooper asked that the members review the previous meeting minutes. The minutes were approved with minor typographical edits. He noted that they would be posted on the DWQI website. He also noted that all presentations would be posted as well.

3. Summary of Responses to the Comments Received on PFNA draft recommendations

- **General – Keith Cooper**
- **Health Effects Subcommittee – Jessie Gleason**

- **Testing Subcommittee – Bahman Parsa**
- **Treatment Subcommittee – Anthony Matarazzo**

4. Public Comment

The chairman reminded commenters to announce themselves and limit themselves to about 5 minutes.

Bill Wolfe noted that the language in the preface of the presentation that stated that the DWQI was making a recommendation on PFNA at the "direction" of the Commissioner was a conflict in that the DWQI was established to be independent of the Department. Compounds could be researched at the suggestion or request of the Commissioner but doing so at the direction of the Commissioner is a conflict. He also noted that the $12 million cost of construction referenced in the Treatment Subcommittee report might be misleading because this was a new facility. He recommended either excising the amount from the report or qualifying it.

Anthony Matarazzo believed that the report was clear that the $12 M was for a new facility.

Bill Wolfe also noted that it was his understanding that blending (as a form of treatment) was prohibited. *Fred Sickels* responded that it is not preferred, but under limited circumstances it can be part of an engineered solution, and if designed and monitored appropriately it can reduce costs. Mr. Wolfe noted that the Subcommittee had done a superb job with the report but asked that it be clarified that blending is not treatment.

Mr. Wolfe noted the industry comments regarding occurrence and asked the DWQI to make it clear that occurrence data is irrelevant to their task. He asked whether DWQI was mandated to consider occurrence data. *Sandy Krietzman* responded that historically the Testing Subcommittee has looked at these data. Mr. Wolfe noted that considering occurrence data should not be a pre-condition, but rather it should be looked at as a matter of scientific inquiry.

Finally *Mr. Wolfe* noted that while the USEPA does have to demonstrate a measurable health benefit (for MCL development), that is not a criterion of the New Jersey Safe Drinking Water Act.

Tracy Carluccio noted that the Delaware Riverkeeper submitted comments and is very concerned that work move forward to remove PFNA from our water. The Riverkeeper supported the Treatment and Testing Subcommittee reports, but asked that the DWQI also address point of use treatment devices. She noted that granulated activated carbon (GAC) was readily available and that its use is achievable. She noted that the use of GAC and reverse osmosis together can extend the life of GAC and remove PFCs. While she was supportive of the recommended MCL, she did believe that a lower MCL was appropriate for children who drink more water and are susceptible to developmental impacts. Specifically, MCLs of 3 ng/L and 5 ng/L may be appropriate depending on the target group. She noted that developmental impacts can be indelible for children. She asked the Treatment Subcommittee if GAC would remove PFNA to this level regardless of the MCL. *Anthony Matarazzo* stated that the Treatment subcommittee

found data that indicates that PFNA could be removed below 5 ng/L. *Keith Cooper* also noted that GAC treatment will remove PFNA below the recommended MCL of 13 ng/L. He also noted that the recommended MCL will protect effects over 70 years of exposure, including developmental effects that occur from shorter exposure durations. *Gloria Post* noted that a table was added to the Treatment Subcommittee report to show that PFNA could be consistently removed to levels less than 5 ng/L.

Finally, *Tracy Carluccio* noted that, in the NY Times today, Nicholas Kristof shined a spotlight on long chain PFCs. She stated thatin NJ, we do have more PFCs than the nation as a whole, and so we should be one step ahead. As there is no action on the horizon at the federal level, it is important that NJ address these chemicals. To do so is a step forward for the health of NJ residents. She urged NJDEP to move forward.

Judi Durda thanked the DWQI for the opportunity to present her comments. She noted her 25 years of experience as a toxicologist who has conducted hundreds of studies. She noted that she was working on behalf of Solvay. She noted that she did not believe that scientific evidence was available to support the recommended MCL, and that there were gaps in the knowledge. She noted that there is no evidence of toxicity and that the MCL recommendation was premature. The MCL development should be held off until the science is better defined. If the DWQI is to move forward, they should do so in consideration of the best available science. She disagreed with the uncertainty factors used in the Health Effects subcommittee report and stated that their use was an unprecedented derivation of a drinking water standard. No MCL by NJ or any other standard has ever been developed with such little information. Its development was driven by uncertainty. She noted that the use of uncertainty factors was a divergence from the state's method, the result of which was a MCL lower than that which has been developed by anyone for any chemical by NJ or the Federal government, save one. She thought this was quite an outcome for a chemical that is not a known carcinogen. She stated that the DWQI ignored vital blood serum data and used unpublished data from Das et al.. *Keith Cooper* informed Ms. Durda that she had spoken for nine minutes. He noted that while the Health Effects Subcommittee disagrees with her on a number of points, the blood serum data that she referenced does not meet the standards for a scientific study used by the Subcommittee. He also noted that the toxicity of PFNA has been established in a number of different published studies. Finally, while they did not use epi studies, this is not at all an unusual approach. Dr. Cooper then informed Ms. Durda that she had spoken for 10 minutes and asked her to sit down. *Gloria Post* noted that the Subcommittee did not use unpublished data as the basis for the Health-based MCL recommendation. The Das et al. study was published in January 2015, prior to the completion of the draft Health Effects Subcommittee document.

Christopher Roe expressed that if the DWQI proceeded with the recommendation, it would be arbitrary and capricious. He noted that the Institute in the past had looked at practicability and feasibility with respect to occurrence for municipalities and purveyors. He noted that there were not enough labs to handle testing, and that the Institute does not know how much PFNA occurs in NJ. He estimated that complying with an MCL would cost millions of dollars. He noted that he requested to meet with the Subcommittees, but that his request was turned down. He indicated that if Paulsboro is the motivating factor for the Institute, that it should consider the local blood serum data – none of the 20 samples exceeds 17 ppb. He thought that raised the possibility that

the basis for the MCL recommendation is arbitrary. He thought the DWQI could be more open and transparent. He noted that Solvay had done more testing than NJ, and that they have data that could be helpful.

Chairman Cooper noted that the DWQI solicited input and invited presenters to Subcommittee meetings over a year ago. To allow Solvay's representatives the opportunity to present as a result of their recent request would be to provide a second bite at the apple. He noted that the Institute reviewed all the submitted comments, and that draft reports were posted in April. Adequate time was given to offer comments.

Mr. Roe noted that the DWQI used unpublished data in their analysis that he could still not obtain. He believed that the Institute was not being transparent and that the request for an extension should not have been denied. He did not feel their opinions were taken into account.

Bill Wolfe requested the ability to supplement his comments based on what he had just heard.

Chairman Cooper asked if any of the DWQI members wished to enter into executive session at this time. The members agreed, and at 3:45 pm the DWQI entered into a 20 minute closed door executive session.

5. Executive Session

6. Vote on Recommended MCL to be forwarded to Commissioner
At 4 pm, the Institute reconvened. Chairman Cooper called for a vote on the recommended MCL for PFNA. George Van Orden moved to approve the recommended MCL. Anthony Matarazzo seconded the motion. Chairman Cooper asked members to raise their hands if they were in favor of submitting the recommendation for an MCL for PFNA of 13 ng/L to the Commissioner. The vote was unanimously in favor. Chairman Cooper then stated that after some minor editorial work, he would submit the recommended MCL for further consideration in rulemaking.

7. New Business - Chairman Cooper thanked everyone present and noted that the DWQI would meet again in 3- 4 months to report on the status of their work on PFOA. No other new business was brought forth.

8. Public Comment on New Business

Bill Wolfe said that he appreciated the clarifications offered by Dr. Cooper. He asked who determines the DWQI contaminant agenda. It seemed to be a violation of the separation of DEP and DWQI if the Commissioner determines the agenda.

Chairman Cooper stated that PFCs are chemicals of concern with a growing amount of info. However, one reason to meet more frequently might be to re-evaluate previous recommendations. While the Commissioner may request that the DWQI look at certain compounds and that may inform the order of the DWQI's work, the DWQI is not precluded from making a decision to look at a compound independently.

Bill Wolfe then inquired about the outstanding recommendations for hazardous contaminants (2009), perchlorate and radon. He asked the DWQI to consider the feasibility of continuing the contaminant-by-contaminant approach to setting standards. He noted that DEP had written a white paper that addressed this, and that there are neither the resources nor the time to continue with the current approach.

Chairman Cooper noted his appreciation for Mr. Wolfe's comment.

9. Adjournment
The meeting adjourned at 4:06 pm

Minutes by K. Angarone