Drinking Water Quality Institute
April 8, 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:
Alison Reynolds (NJDOLPS)
Linda Bonnette, Linda Walsh, Kati Wessling, Karen Fell, Michael Evenson, Lorraine Salamanca (NJDEP-Division of Water Supply & Geoscience)
Gary Buchanan, Sandra Goodrow, R. Lee Lippincott, Brian Pachkowski (NJDEP-Office of Science)
Erica Bergman (NJDEP - Site Remediation)
Claude Brodesser-Akner (NJ Advance Media)
Erik Person (Langan Engineering)
Tom Churchelow (NJ Utilities Association)
Jeff Tittel (Sierra Club)
Tracy Carluccio, Ed Rodgers (Delaware Riverkeeper Network)
Bill Wolfe
Perry Cohn
Sharon Lerner (Nation Institute)
Tom Leach, Hal Bozarth (Chemistry Council of NJ)
Jennifer Coffey (Association of New Jersey Environmental Commissions)
Thomas Fikslin, Ron McGillivray (Delaware River Basin Commission)
Jon Hurdle (NJ Spotlight)
Kate Annunziato, Daniel Millemann, Carrie Greenfield (Rutgers University)
Mark Cuker (Williams-Cuker Berezotsky)

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

Chairman Cooper called the meeting to order just after 1:00 pm and thanked everyone for coming. Chairman Cooper stated that the purpose of the meeting is to present and discuss the draft recommendation documents on PFNA authored by the three subcommittees. He mentioned that the draft reports had been posted on the DWQI website earlier in the week (April 6). He asked all in attendance to sign in. and noted that agendas were available. All members introduced themselves. Chairman Cooper briefly explained the agenda, noting that the public would be invited to provide comments or ask questions. He asked that all participants identify themselves and limit their comments to five minutes. He also noted that the comment portion of this meeting and the subsequent period during which the DWQI would accept written comments for 30 days was part of the new public process that was presented at the meeting last April. He stated that the comments are to be divided amongst the subcommittees as appropriate for discussion. Finally, he noted that the minutes from the April 29, 2014 will be posted tomorrow

with any changes noted at today's meeting and that the Institute was already beginning work on the next chemical, PFOA.

2. Review of Minutes from April 29, 2014— K. Cooper
Chairman Cooper asked that the members review the previous meeting minutes. The minutes were approved with minor typographical edits. They will be posted on the DWQI website.

3. Health Effects Subcommittee Presentation of "Health- Based Maximum Contaminant Level Support Document: Perfluorononanoic Acid (PFNA)" - presented by Subcommittee Chair Jessie Gleason.

Comments/Questions: None.

4. Testing Subcommittee Presentation of "Report on the Development of a Practical Quantitation Level for Perfluorononanoic Acid" – presented by Subcommittee Chair Bahman Parsa, Ph.D.

Comments/Questions: None.

5. Treatment Subcommittee Presentation of "Recommendation on Perfluorinated Compound Treatment Options for Drinking Water"- presented by Anthony Matarazzo

Comments/Questions: None.

6. Public Comment

Bill Wolfe asked if comments must be limited to PFNA.

Chairman Cooper indicated that discussion at today's meetings would be limited to comments on today's presentations only.

Bill Wolfe noted strong objection to this limitation.

Claude Brodesser-Akner asked why the Institute looked at PFNA first before PFOA.

Keith Cooper responded that the Institute was asked by NJDEP Commissioner Martin to look first at PFNA, presumably because of the situation of PFNA drinking water contamination in Paulsboro, NJ.

Jeff Tittel asked what the DWQI recommendations mean for people who have been awaiting an answer for five years? What is the health impact of the delay in addressing these contaminants?

Keith Cooper replied that he agreed that these compounds are persistent and their toxicity needs to be evaluated in a timely manner. While there are some similarities in the toxicity among this

group of perfluorinated compounds, the structure of each the compound can impact its toxicity. Although it would have been nice if the DWQI had continued to look at these compounds over the past several years, he noted that it is the role of the Institute to look forward rather than backward.

Gloria Post noted that a drinking water guidance level for PFOA was developed by NJDEP around 2007 based on information available at the time. In developing the guidance, cancer and non-cancer were evaluated. The risk assessment was based on non-cancer effects and was determined to also be protective for cancer risk at the one in one million risk level. NJDEP considered this level to be protective at the time based on the available data.

Tracy Carluccio noted that the subcommittees did impressive amount of work on PFNA, and that the draft documents are extensive. She indicated that PFNA needs to be removed from drinking water because of its health effects, especially on children and infants. PFNA has been found at higher levels in New Jersey than anywhere else in the nation. Five towns have shut down drinking water wells in the vicinity of Solvay. She noted that she was heartened when the Institute met last year, but she continues to be concerned about the length of time that it will it take for DEP to adopt a Maximum Contaminant Level.

Fred Sickels noted that the timeframe for adoption of an MCL is uncertain. After a recommendation to the NJDEP Commissioner is made, an administrative process must be followed. A rule proposal must be drafted and proposed, then comments must be accepted from the public, and the comments must be responded to in an adoption document. It can take up to a year from proposal to adoption.

Tracy Carluccio asked if the Department would consider emergency action, noting that these are urgent issues and that all PFCs should be removed from drinking water.

Fred Sickels responded that he could not say that the Department would do this.

Keith Cooper noted that the DWQI subcommittees took longer to complete its PFNA drafts because the DWQI was reestablishing its processes while evaluating PFNA With the DWQI processes now established, New Jersey can again be a leader (with respect to water protection). There is a higher prevalence of PFCs in New Jersey drinking water than elsewhere, presumably because it is a very industrialized and urbanized area. He noted that granulated activated carbon will remove many of these contaminants from drinking water.

Bill Wolfe noted a “methodological point” in that the Treatment subcommittee noted that a class of compounds could be removed by one treatment method. When would DWQI think about a more collective approach that is treatment-based as opposed to the current process that is based on evaluation of individual chemicals?

As Mr. Wolfe continued to expand his comments beyond the topic of discussion (i.e. the draft PFNA reports), Chairman Cooper asked him to stop speaking and moved on to the next speaker.

Sharon Lerner inquired about timing of the DWQI's work as related to the next chemical that will be addressed, PFOA. Will the Institute wait until the process for PFNA is completed before moving on to PFOA?

Keith Cooper said that the DWQI's work on PFOA is already underway. He said that the PFOA database is quite extensive, but that previous work by the DWQI on PFOA can be used as a starting point.

Ms. Lerner then asked if the DWQI may end up recommending a different level for PFOA than the Department's current guidance level?

Chairman Cooper thought that may very well be the case as much more data are available now than when the current guidance level was established.

Gloria Post noted that the NJDEP drinking water guidance for PFOA is based on endpoints identified in a 2005 draft USEPA risk assessment were used as the basis, and an evaluation of the primary literature was not performed. She noted that a large amount of new data has become available since that time, including developmental toxicology data and many new epidemiology studies..

Jon Hurdle said that he understood that major manufacturers were phasing out PFNA, but smaller ones were not. What would the DWQI say to people that are concerned by this?

Keith Cooper said that he was not aware of what smaller companies are doing. Gloria Post noted that the statement in the draft Health Effects Subcommittee document that smaller companies may not be phasing out long chain PFCs was a general statement cited from a review article by researchers at USEPA in North Carolina, and that this statement was not based on information specifically from New Jersey.

Sandy Krietzman thought that NJDEP would need to look into this issue in the future..

Claude Brodesser-Akner asked when the DEP Commissioner had requested the DWQI to work on PFNA, PFOA, and PFOS?

Several DWQI members responded that the Commissioner had requested this in a letter sent to the DWQI in April 2014 shortly before the DWQI reconvened. .

Jon Hurdle inquired about the cost of installation of treatment to remove PFCs.

Anthony Matarazzo initially noted that New Jersey American installed a plant for $80,000 but corrected himself by saying that this was the operation and maintenance costs of a 3 MGD plant that cost $2.3 million.

Bill Wolfe pointed out that the amount listed in the Treatment Subcommittee report for construction was $12.2 million. Anthony Matarazzo agreed with the corrected number. Mr. Wolfe suggested that the cost per customer be calculated.

Jon Hurdle asked if the process for establishing MCLs will speed up at this point.

Keith Cooper indicated that he hopes that the process will be faster in the future. He explained that evaluation of the epidemiological and toxicological studies is time consuming. He added that the Health Effect Subcommittee is already working on evaluating PFOA as quickly as possible. He plans to have more frequent DWQI meetings in the futures for updates, not just for presentations of draft reports.

Jon Hurdle asked how often future DWQI meetings might be held. Dr. Cooper thought perhaps every four months. He also reminded the audience that while the DWQI continues to work, NJDEP and NJDOH are also continuing to look at other compounds in their everyday work.

Jeff Tittel thanked the DWQI for their work and reminded them of a proposal made by former NJDEP Commissioner Lisa P. Jackson to install granulated activated carbon at wells impacted by synthetic organic chemicals, and he suggested that this is something that NJDEP should look at in the future pursuant to the precautionary principle. He noted the recent detections of an unregulated VOC (1,2,3-trichloropropane) in Moorestown drinking water wells. He suggested that NJDEP should consider adopting this earlier proposal despite Executive Order 2 which states that New Jersey must have a specific reasons to adopt new regulations, and he stated that a report without implementation is a hallucination. He finally recommended that NJDEP should consider health costs, i.e. lost time and work and suffering when considering regulation of drinking water contaminants

Jennifer Coffey inquired about whether the low number of reported incidences of contamination were related to a lack of monitoring.

Jessie Gleason replied that the UCMR3 data is a national monitoring program required by USEPA conducted on a 3 year cycle. Data are collected from all public water systems that serve 10,000 or more people and in addition, another 800 smaller public water systems. This is a good amount of data and monitoring.

Jennifer Coffey asked, given that that PFNA occurs 10 times more frequently in New Jersey drinking water than nationally and that it has a high toxicity and potential link to cancer, whether the Institute is confident that the recommended MCL is low enough to protect health and safety, considering all other inputs from this chemical?

Keith Cooper replied that the DWQI PFNA recommendation is very stringent compared to recommendations developed by others. He noted that PFNA has not been evaluated for carcinogenicity. It is not genotoxic but with that said, there are other potential pathways for carcinogenicity.

Ms. Coffey asked about the toxicology basis for the draft Health-based MCL.

Chairman Cooper replied that non-carcinogenic endpoints were used as the basis for the PFNA recommendation. He noted that PFC blood serum levels are critical for accurate evaluation of dose-response for the effects of these chemicals.
Gloria Post also added that for many compounds, cancer is not the endpoint for risk assessment. The Health Effects subcommittee focused on the endpoint of maternal liver weight. The subcommittee used generally accepted uncertainty factors to address Ms. Coffey's concerns that the recommended level be health protective. Generally accepted risk assessment methods were employed in developing the PFNA recommendation.

Ms. Coffey asked again if the DWQI thought they had the right number given other sources of exposure.

Gloria Post answered that a relative source contribution factor was used in to account for sources of exposure other than drinking water. This is discussed in detail in the document.

Claude Brodesser-Akner asked to what extent USEPA might impact what DEP might do with respect to PFNA.

Gloria Post answered that the answer to his question is really a policy call but noted that to the DWQI's knowledge, USEPA or other states are not evaluating PFNA.

No other comments were offered.

Keith Cooper noted that the address to submit written comments was printed at the bottom of the agenda and thanked the attendees for coming.

9. Adjournment
The meeting adjourned at 2:44 pm

Minutes by K. Wessling 4/8/15