COMMENTS ON THE ADDENDUM TO THE 2015 TREATMENT SUBCOMMITTEE MCL SUPPORT DOCUMENT

"RECOMMENDATION ON PERFLUORINATED COMPOUND TREATMENT OPTIONS FOR DRINKING WATER"

NEW JERSEY DRINKING WATER QUALITY INSTITUTE TREATMENT SUBCOMMITTEE

FEBRUARY 16, 2016

NEW JERSEY DRINKING WATER QUALITY INSTITUTE TREATMENT SUBCOMMITTEE

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DWQI TREATMENT SUBCOMMITTEE

Commissioner Bob Martin of the New Jersey Department of Environmental Protection requested that the DWQI develop recommended maximum contaminant levels (MCL) for three long-chain perfluorinated compounds (PFC):

- Perfluorononanoic acid (PFNA)
- Perfluorooctanoic acid (PFOA)
- Perfluorooctanesulfonic acid (PFOS).

2015 RECOMMENDATION

The Treatment Subcommittee found that the best available treatment for all three compounds was the same.

Accordingly, in 2015, when the DWQI issued its recommended MCL for PFNA, the Treatment Subcommittee released one document to address treatment for these three compounds, entitled: Recommendation on Perfluorinated Compound Treatment Options for Drinking Water

ADDENDUM

- At the September 22, 2016 DWQI, the Treatment Subcommittee presented the draft "Addendum to Appendix C: Recommendation on Perfluorinated Compound Treatment Options for Drinking Water."
- A public comment period was held from September 22 November 21, 2016.

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• Three submissions related to the Addendum.

- <u>Comment</u>: TS did not "evaluate the feasibility of water suppliers of all kinds and types across the State implementing carbon or other treatment on their water supplies" and "has not evaluated the feasibility of achieving the MCL, nor has it provided an assessment of the potential utility and efficacy of treatment technologies other than granular activated carbon (GAC)".
 - <u>Response</u>: Although the DWQI TS endeavors to identify those treatment techniques that are effective and feasible to achieve the recommended MCL, and to recommend the best available technologies, as per N.J.S.A 58:12A-3, it is the role of the Department when adopting an MCL to determine if that MCL is "economically and technologically feasible."

- <u>Comment</u>: "there is no discussion of regulatory basis for how [treatment] waste may be classified under RCRA."
- <u>Response</u>: This is a consideration that is outside the charge of the TS to identify a feasible treatment alternative.

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- <u>Comment</u>: "the report fails to indicate that treatment via anion exchange resin (stand-alone or as a polish to GAC) may also offer significant improvement over stand-alone GAC treatment..."
- <u>Response</u>: On page 8 of Appendix C, the original document reads: "As with all other treatment options, bench scale and pilot scale testing will be required to understand the field applicability, establish essential detail design criteria such as pre-treatment needs, and cost effectiveness of the above options."

- <u>Comment</u>: "[Reverse Osmosis (RO)] alone or RO after GAC..represents the best available treatment technology economically achievable to remove PFCs."
- <u>Response</u>: On page 3 of Appendix C, the TS report reads: "At the present time the members of the treatment subcommittee recommend that the use of granulated activated carbon (GAC) or an equally efficient technology should be considered for treatment of PFNA, PFOA and PFOS detected above the DWQI recommended MCL subject to the on-site pilot testing performance results." Therefore, RO is not precluded from being considered a best available technology. The TS notes that RO presents two significant challenges for water systems, that is, a possible high rejection rate and waste disposal.

CONCLUSIONS

 The Treatment Subcommittee continues to conclude that it has been demonstrated that PFOA can be reliably and feasibly removed by carefully designed GAC treatment to below the recommended healthbased MCL of 14 ng/L.

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