Drinking Water Quality Institute Treatment Subcommittee Minutes Conference Call January 15, 2010 (10:00-11:00)

Members via Teleconference: Paul LaPierre (Chair), Carol Storms (Aqua NJ)

Others Present: (From DEP) Eileen Murphy

I. Hexavalent Chromium

The Health Effects subcommittee is preparing a risk assessment for hexavalent chromium in drinking water. The recommended human-health based level might be as low as 0.6 (California's proposed level) to 0.7 ug/L (Gloria's estimate of NJ's level). It is therefore critical to know if there is water treatment available that is able to reduce hexavalent chromium levels in water to these levels (or below), for both public water supplies as well as private wells. D. Pringle noted at the last DWQI meeting that the Health Subcommittee had heard that trivalent chromium could be converted to hexavalent chromium during chlorination, used for disinfection in drinking water treatment. Thus the Health Subcommittee wanted the Treatment Subcommittee to explore this issue, as well as whether other disinfection options convert chromium and the extent of such conversion.

II. Perfluorinated compounds

NJ has prepared a human health based guidance value for perfluorinated octanoic acid (PFOA), a perfluorinated compound. Studies in NJ and in other parts of the country show PFOA, as well as other perfluorinated compounds, can occur in drinking water at somewhat elevated levels. As the Health Effects Subcommittee continues to develop human health based recommendations for each perfluorinated compound (beginning with PFOA), it is important to determine whether these perfluorinated compounds can be reduced from drinking water to levels below the health based recommendations, based on studies from public water systems, private wells and laboratories focusing on removal of from drinking water.

III. Radiological

Data from the private well database indicate uranium is a problematic radiological constituent in northern NJ counties and radium is problematic in the south. Radon can occur state-wide. There is treatment information available for public water systems but not much treatment of private wells, especially when there are multiple radiologicals present in the water (i.e., in some areas both uranium and radium occur). We are interested in learning about studies examining the best treatment options for private well owners for radiological contamination. (The Radon Subcommittee is supposed to discuss radon treatment for private wells at some point, but that meeting is not yet scheduled; as Carol Storms sits on both committees and her utility is exploring some small-system treatment options, it might be useful to have her discuss this topic for the Treatment Subcommittee's consideration of treatment for radiologicals generally as well as mixes.