New Jersey Drinking Water Quality Institute Radon Ad-Hoc Subcommittee Meeting Minutes August 15, 2006

Members Present: Russell Ford, Judy Klotz, Barker Hamill, Leslie McGeorge, Perry Cohn, Steve Jenniss, Jean Matteo, Carol Storms

Non-Members Present: From DEP - Pat Gardner (Bur. of Env. Radiation), Judy Louis (DSRT), Branden Johnson (DSRT), Diane Pupa (BSDW); From Black and Veatch – Kevin Dixon; From USGS - Zoltan Szabo

This is the first meeting of the Drinking Water Quality Institute's Radon Ad-Hoc Subcommittee. The goal of this Subcommittee is to determine whether it is appropriate to recommend a radon standard for drinking water, and what that standard should be.

K. Dixon presented a summary of two articles which had previously been distributed by email to the group: "Costs and Benefits of Mitigating Radon in Drinking Water" by Vitaliano (2001) and "New Perspective on the Costs and Benefits of Mitigating Radon in Drinking Water" by Raucher and Harrod (2005). Vitaliano concluded that the benefits of radon removal outweigh the costs by a substantial margin. Raucher and Harrod concluded an MCL of 1000 pCi/L is warranted in terms of cost-benefits, and that the MCL of 300 pCi/L proposed by EPA is too stringent by a considerable degree.

The Subcommittee discussed the two articles extensively. There is a marked increase in risk of cancer from radon among smokers compared with nonsmokers. How to consider the population of smokers was discussed. It was noted that EPA defines a smoker as someone who has smoked 100 cigarettes in their lifetime.

The attached table entitled "Radon Concentrations for 107 Points of Entry (POE) was discussed. This table lists the concentration ranges, the number of points of entry, the percent over the range level, the number of systems in that range and the populations served. The highest exposures appear to be in small systems serving less than 10,000 people.

Possible ways to regulate radon that were discussed include the use of an MCL, the use of an Alternate MCL, the use of an Action Level, and the use of a multi-media approach.

It was agreed that at the next meeting DEP would present information on cancer risk using radon concentrations in water at 300, 500, 800, 1000, 2,000 and 4000 pCi/L, and the information would also be separated by smoker vs non-smoker. DEP will identify the number of systems and number of POE for those concentrations as well.

Minutes prepared by DEP-BSDW December 11, 2006 Updated 01-10-07