New Jersey Drinking Water Quality Institute
Radon Ad-Hoc Subcommittee Meeting Minutes
January 26, 2007

Members Present: Russell Ford (Co-Chair), Judy Klotz (Co-Chair), Barker Hamill, Leslie McGeorge, Jean Matteo

Members Excused: Steve Jenniss, Perry Cohn, Carol Storms

Non-Members Present: From DEP – Jenny Goodman (Radon Program), Judy Louis (DSRT), Karen Fell (BSDW); From USGS - Zoltan Szabo

1. Opening
   The meeting began at 1:30

2. Review of August 15, 2006 Minutes
   A motion was made, seconded and passed unanimously to approve the August 15, 2006, minutes.

3. Review of November 13, 2006, Minutes
   A motion was made, seconded and passed unanimously to approve the November 13, 2006, minutes.

4. Radon Treatment Coast Estimates – R. Ford
   The handout labeled "Radon Treatment Cost Estimates for Radon Ad-Hoc Meeting Jan. 26, 2007" was reviewed and discussed. R. Ford explained the basis for the costs. Four scenarios were considered for this draft – 0.2 mgd, 0.7 mgd, 1.0 mgd, and 3.0 mgd. Estimated costs are for purchase and installation of air stripping equipment, construction of a building to house the air stripper, a clearwell, finished water pumps, instrumentation and control, electrical, site work, piping and valves, contractor OH&P, contingencies, engineering and legal/permitting costs. Operating costs include power, labor, and maintenance materials.

5. POEs with Various Types of Aeration – B. Hamill
   The handout labeled "Breakdown of POE Radon Treatment by County and Type" was reviewed and discussed. This table was generated from the Bureau of Safe Drinking Water's SDWIS database and shows, by county, the number of points of entry for community water systems having packed tower aeration (PTA) and the total number of points of entry for community water systems having slat tray aeration and spray and/or cascade aeration (non-PTA). Most non-PTA aeration is believed to be to control iron, while most PTA aeration is believed to be in place for treatment of volatile organics. It is assumed PTA treatment for volatile organics would also treat radon that might be present.

   It was agreed that the Bureau of Safe Drinking Water would combine the new cost data with the concentration data to come up with a better estimate of total costs.

6. Risk Levels

The handout showing "Lifetime Risk from Lifetime Exposure to Radon in Water" and "New Jersey Population Risk" was reviewed and discussed. This table shows risks for ever smokers, never smokers, and both groups, based on projected MCLs ranging from 100 pCi/L to 4,000 pCi/L.

The handout showing "Lives Lost and Saved Over 70 Years from Lifetime Exposure to Radon in Water" was also reviewed and discussed. This chart presents data in terms of "lives saved."

There was discussion of the multimedia mitigation (MMM) approach for radon in drinking water, and whether there was a point where lives saved using an MMM approach might exceed the number of lives saved using just a single MCL. It was agreed the Radon Program will evaluate what additional tasks they would be able to accomplish based on various additional funding levels generated as part an MMM approach and how many additional "lives saved" would result.

7. Summary and Adjournment

The Bureau of Safe Drinking Water and the Radon Program will complete their tasks and send the information via email before Friday, February 16. We will have an optional conference call to briefly go over the material on Friday, February 16 at 2:00. We will have our next Radon Ad-Hoc Committee meeting on Friday, February 23 at 2:00.

Minutes prepared by
Karen Fell
Bureau of Safe Drinking Water
January 29, 2007