

**Drinking Water Quality Institute
Meeting Minutes
May 13, 2005
At the Environmental Infrastructure Trust
Lawrenceville, NJ**

Members present: Mark Robson, Leslie McGeorge, Perry Cohn, Paul LaPierre, Carol Storms, Steve Jenniss, Eileen Murphy, Dave Pringle, Barker Hamill, Jean Matteo, Ray DiFrancesco

Members absent: Bruce Chorba, Eugene Golub

Non-members in attendance: Jill Lipoti, Gloria Post, Diane Pupa, Syed Rizvi, Michele Putnam, Pat Gardner, Gary Czock, Ann Kruger, Ching Volpp, Linda Bonnette, Sue Shannon, Karen Fell, John Shevlin, Jenny Goodman, Linda Walsh

1. Call to Order and Administrative Business

Chair Mark Robson opened the meeting at 1:30 pm. He stated that Ann Kruger was present for Ella Fillapone, who herself would be attending for Eugene Golub. The DEP is adding additional information on the DWQI to it's web pages. It was decided that the next meeting of the full DWQI will be July 29, 2005, at 1:30 p.m. There was also a brief discussion on the status of filling vacancies on the DWQI and it was reported that the recommendations are being reviewed. M. Robson stated that B. Chorba would like to resign as Chair of the Health Effects Subcommittee but continue to remain on the Subcommittee.

2. Subcommittee Reports

a. Testing Subcommittee

S. Jenniss reported that the Testing Subcommittee has met three times since the last full DWQI meeting. Outside laboratories were contacted for input on perchlorate testing methods. S. Jenniss explained that a goal is to select a method or methods that is accurate, reliable, and rugged, and the preference is for a published, peer reviewed, established method. EPA methods are typically used. S. Jenniss explained that EPA Method 314.0 is one method currently available to measure perchlorate, and has a reporting level of one to five ppb. EPA is in the process of formalizing what will be known as EPA Method 314.1 but it has not actually been approved by EPA yet. He noted that EPA Method 314.0 cannot measure perchlorate to low levels if the sample has high TDS, but this is not expected to be a problem with the majority of drinking water samples because drinking water samples generally have relatively low TDS.

b. Treatment Subcommittee

P. LaPierre stated that the Treatment Subcommittee met once since the last full DWQI meeting. They are working on an RFP for the treatment of unregulated contaminants. There will be a literature review for ground water and for surface water, as well as demonstration projects, to address unregulated contaminants. Regarding perchlorate, the three most promising treatment technologies for public water systems are ion exchange, liquid phase carbon, and membrane technologies. It appears some technologies can readily treat to below 4 ppb, which will be sufficient if the recommendation of the Health Effects Subcommittee is 5 ppb. If the recommendation of the Health Effects Subcommittee is 1 ppb, the Treatment Subcommittee will have to look at the available technologies in more detail. Most treatment studies reported results as "<4 ppb" which was the reporting limit of Method 314.0 at the time.

c. Health Effects Subcommittee

P. Cohn gave a presentation entitled "Toward a Perchlorate Reg," which included a discussion on the thyroid and perchlorate. The slides contained information on perchlorate toxicity, the results of studies, cancer considerations, and other issues. He explained that the NAS chose a reference dose of 0.0007 mg/kg/day, which would be further reduced in the development of an MCL depending on the Relative Source Contribution selected.

B. Hamill stated that the Health Effects Subcommittee will be meeting again soon to further discuss a recommendation. He noted that in addition to promulgating an MCL, the DEP must also establish the monitoring and compliance strategy for a compound. The subcommittee is considering whether the nitrate monitoring and compliance requirements might be a good model for perchlorate.

It was noted that a study of breast milk of New Jersey women is going to be conducted.

3. Minutes of March 11, 2005, Drinking Water Quality Institute Meeting

A motion was made, seconded, and passed unanimously to approve the minutes from the March 11, 2005, Drinking Water Quality Institute meeting.

4. Radon

B. Hamill started the discussion by noting radon is a unique and difficult contaminant to regulate. There is a significant risk from a health perspective. Currently there is no Federal or State MCL for radon. EPA proposed an MCL in 1999 which would allow a state to either take a traditional approach or implement a multimedia mitigation

program (MMP). EPA, in part because of congressional action, has not yet finalized the radon MCL and is not expected to do so any time in the near future.

P. Gardner gave a power point presentation entitled "Radon in Drinking Water." The exposure pathway is through ingestion of waterborne radon and by inhalation of the gas and it's progeny. 15,000 to 22,000 lung cancer deaths per year are predicted from indoor air, while 168 fatal cancers per year (89% from lung cancer and 11% from stomach cancer) are expected from radon in water. P. Gardner stated that EPA's air program is being reinvigorated to look at reductions in risk.

B. Hamill discussed our legislative authority under the A-280 Amendments, which don't address radiological contaminants but do address carcinogens. He noted that regulation of radon will be more complex than for other contaminants due to legal issues, timeframe of regulations, sampling requirements, sampling location decisions (point of entry versus distribution system), and differential costs to communities (small systems have a shorter radon residence time). In addition, contribution of radon water supply from the water system itself due to scaling and coating on pipes may be a factor in the occurrence of radon.

The timing of review of radon in the DWQI work plan was discussed. It was agreed each subcommittee would begin to discuss radon, and that the full DWQI would also further consider it.

P. Gardner noted that all air monitoring in New Jersey is done under a purely voluntary basis.

5. Subcommittee Chairperson

Dave Pringle will be the new Chairperson of the Health Effects Subcommittee.

6. Adjournment

The meeting was adjourned at 3:55 p.m.

Minutes prepared by

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