

Drinking Water Quality Institute
October 30, 2009 Meeting Minutes
New Jersey Environmental Infrastructure Trust Building
Princeton Pike, Lawrenceville, NJ

Members Present: Mark Robson (Chair), Perry Cohn, Russell Ford, Steve Jenniss, Judith Klotz, Sandy Krietzman, Paul La Pierre, Jean Matteo, Leslie McGeorge, David Pringle, Gloria Post, Carol Storms

Non-members Present: Linda Bonnette, Branden Johnson, Eileen Murphy (NJDEP-DWS); Zoltan Szabo (USGS); Jenny Liu, Dan Turner (DuPont); Tony Russo (Chemistry Council of New Jersey); Anthony Matarazzo (New Jersey American Water)

1. Call to Order, Welcome and Introductions—M. Robson

Chairman Robson called the meeting to order at 1:10 PM. He noted for the record that he had hosted an informal Rutgers University seminar on PFOA at the Eco-Complex since the last DWQI meeting at the request of Dr. Robert Tardiff, who wished to share information on the topic. Chairman Robson stressed that this was not a formal meeting of the Drinking Water Quality Institute (DWQI). A New Jersey Network film crew filmed the informational seminar.

2. Minutes from March 4, 2009—M. Robson

Draft minutes were reviewed by the DWQI and were approved with corrections provided by B. Johnson from earlier comments by DWQI and NJDEP.

3. Appointments/Reappointments—B. Johnson

B. Johnson reported that the appointment/reappointment packages had been forwarded to the NJDEP Commissioner's Office and were then sent to the Legislature and the Governor's Office in August. No word had been received by the time of today's meeting, and no word was expected until at least after the Legislature reconvened in November.

4. Subcommittee Summaries—Subcommittee Chairpersons

Health Effects: D. Pringle reported the Health Effects Subcommittee had met twice since the DWQI's last meeting. The Subcommittee has completed the 1,2,3-trichloropropane (1,2,3-TCP) health-based Maximum Contaminant Level (MCL) recommendation document. They had also briefly reviewed the USEPA's most recent Contaminant Candidate List (CCL3). Every five years the USEPA is required to publish a list of contaminants (1) that are currently unregulated, (2) that are known or anticipated to occur in public water systems, and (3) which may require regulations under the Safe Drinking Water Act (SDWA). SDWA section 1412(b)(1) requires USEPA to determine whether to regulate at least five contaminants from the CCL every five years. New Jersey had recommended that perchlorate, PFOA, MTBE, and 1,2,3-TCP be added to the CCL3 list, and USEPA has included them in the final CCL3. USEPA also put PFOS on the CCL3; NJDEP is not developing a health-based MCL recommendation of PFOS at this time.

D. Pringle also noted that USEPA had published in August 2009 a notice it would reconsider its October 2008 proposal not to regulate perchlorate and to set a health reference level (HRL) at 15 ug/L. NJDEP had submitted comments disagreeing with the 2008 proposal, stating that the proposed HRL would not protect infants, and that the decision against regulation was based on an inappropriately high HRL which greatly reduced the population predicted to be exposed to excessive concentrations. NJDEP submitted comments on the 2009 notice, supporting EPA's reconsideration of its earlier proposal.

USEPA is beginning development of lifetime drinking water health advisories for PFOA and PFOS. NJDEP's website states that development of a PFOA MCL recommendation is a top priority for DWQI. However, it will be some time before a draft health-based MCL recommendation document is ready for review by the Health Effects Subcommittee.

Finally, D. Pringle noted that Alan Stern of NJDEP, Office of Science presented an informative talk on the oral cancer slope factor assessment for hexavalent chromium that had been developed to support possible revision of the ingestion-based soil standard for chromium. This information will be considered by the Health Effects Subcommittee for to start work on a possible revised health-based MCL recommendation for drinking water. The current chromium MCL is a federal MCL based on total chromium. Analytical and treatment issues would most likely be limiting factors in establishing a health-based MCL recommendation if it were based on the new oral slope factor. California EPA has asked for public comment on a draft Public Health Goal for hexavalent chromium in drinking water based on a very similar slope factor, and NJDEP has commented in support of this Public Health Goal. The Subcommittee asked that the Testing Subcommittee look at the analytical issues and available occurrence data for hexavalent chromium in drinking water. S. Jenniss said he was not certain of the available analytical methods for detecting low levels of hexavalent chromium; G. Post said she would ask her California colleagues about people the Testing Subcommittee could contact about analytical methods. She noted that the proposed Public Health Goal in California is currently 60 parts per trillion (ppt); the New Jersey health-based MCL might be around 70 ppt if based on the New Jersey slope factor. D. Pringle commented that in Hudson County ground water was not used for drinking water, but ground water might be a source of hexavalent chromium exposure to humans elsewhere in the state if hexavalent chromium occurs naturally there, as is the case in California. D. Pringle closed by mentioning the Subcommittee had heard that trivalent chromium could be converted to hexavalent chromium during chlorination, used for disinfection in drinking water treatment. The Subcommittee asked that the Treatment Subcommittee explore this issue, as well as whether other disinfection options convert chromium and the extent of such conversion.

Testing: S. Jenniss reported that the Testing Subcommittee held a conference call on October 14, to discuss a development that might affect the MCL recommended by the DWQI for DCPA (dacthal) and degradates. USEPA analytical method 515.3 as currently published states that it provides results for DCPA and degradates. The NJ Department of Health and Senior Services (NJDHSS) laboratory has used this method for several years to analyze for DCPA and degradates. However, while NJDEP was drafting the MCL rule, Dr. Bernard Wilk (NJDEP, Office of Quality Assurance) discussed the method directly with USEPA staff, who confirmed that only the dacthal degradates, not dacthal itself, were detected using method 515.3. In order to

determine the occurrence of dacthal in the drinking water, NJDHSS, at the request of NJDEP, will perform analysis of samples using USEPA method 525.2 at sites where dacthal and degradates were previously thought to occur. L. McGeorge asked what methods to use if one were interested in both dacthal and its degradates; S. Jenniss suggested both USEPA method 515.3 (degradates) and USEPA method 525.2 (or 508) for dacthal. L. McGeorge asked whether method 515.3 used full or partial derivitization, as full derivitization would seem to still account for both dacthal and its degradates; S. Jenniss replied that the method was not sensitive enough to make USEPA or NJDHSS comfortable with using it to account for dacthal. L. McGeorge asked whether this inability of method 515.3 to analyze dacthal was documented officially—S. Jenniss said the USEPA discussed the shortcomings of the method only in email—and affirmed there was a need for USEPA to publicize this finding. L. McGeorge said that surface water samples from New Jersey have detections of dacthal or its degradates—it is now not clear which—in analyses by the U.S. Geological Survey laboratory, and said she would share those results with S. Jenniss. [*Editor's note: A caveat on the website for the DWQI 2009 recommendations for MCLs (http://www.nj.gov/dep/watersupply/njdwqinstitute_2.htm) indicates that the proposed dacthal MCL is suspended until this testing issue is resolved.]*

S. Jenniss said the Testing Subcommittee will look at the hexavalent chromium issues raised by the Health Effects Subcommittee later, after it has dealt with dacthal.

Treatment: P. LaPierre said that the Treatment Subcommittee had not met since the last DWQI meeting, waiting for the other Subcommittees to act. A meeting will be convened before the next DWQI meeting. B. Johnson noted that, as requested by the DWQI in March, Ravi Patraju (former project manager of the Black and Veatch treatment report used by the DWQI for development of its MCL recommendations) had been asked to give a summary of that report. He was not available for today's meeting, but could present at the next meeting if times were feasible; in lieu of that, the MCL document, including the report as Appendix C, is now posted on the NJDEP website (www.nj.gov/dep/watersupply/treatment_b&v_final08_rpt.pdf). The DWQI confirmed its interest in a presentation by Mr. Patraju.

Radon: J. Klotz said she presented three talks on the recommended radon MCL since the last DWQI meeting: to the American Water Works Association New Jersey Section annual meeting April 1, the New Jersey Section's Research and Technology Transfer Committee (RTTC) on October 7, and to the Federal-State Toxicology and Risk Assessment Committee a week ago. The main question she received on her talks was what would be done about private wells, showing the need for the Subcommittee/DWQI to continue their work on guidance for radon. She noted that several European nations had guidance or limits on radon in water from a little above New Jersey's proposed MCL of 800 picoCuries per liter or higher, but she did not know the specifics for each country. Health Canada has decided explicitly not to regulate radon in drinking water, focusing on air remediation only. L. McGeorge asked if other countries had the same types of occurrence of radon in drinking water as does New Jersey; Z. Szabo responded that a similar pattern of occurrence occurs in parts of Canada and the Baltics with granite shield rock.

R. Ford said that the Radon Subcommittee would be reconvened to deal with the private well issue. L. McGeorge asked about the reaction of the audiences to the recommended MCL; J.

Klotz said there was no apparent sense of outrage or surprise. C. Storms said her general sense of the purveyors is that they are waiting to see what NJDEP does regarding a rule proposal; A. Matarazzo said NJ American has some wells which will require treatment if the recommended radon MCL is proposed and adopted. Z. Szabo noted that treatment costs are much higher for private wells; J. Klotz said that other talks at the RTTC were encouraging about radon treatment costs for at least modestly-above-MCL levels. C. Storms said small systems are the ones that will be most affected, given little property available and struggles with compliance now; she noted her utility is working on developing a small system for air removal of radon.

5. Status of Previous DWQI Recommendations—Sandy Krietzman

Before S. Krietzman brought DWQI up to date on the status of their earlier recommendations, M. Robson noted that she is now representing the Commissioner of the NJDEP on the DWQI, replacing the retired B. Hamill.

On perchlorate, the rule was proposed March 16, 2009, with an April 13 public hearing and a close to the comment period on May 15; nine organizations submitted 34 comments. The target is for adoption of the rule, applying to community water systems, nontransient noncommunity water systems, and private wells, by March 2010 at the latest. It will expire, and need to be proposed again, if not adopted within a year of initial proposal.

The DWQI recommendation document for new MCLs and updates of current MCLs is on the web now (http://www.nj.gov/dep/watersupply/njdwqinstitute_2.htm), and a first draft of the rule has been prepared. Safe Drinking Water Act (SDWA) rules expire November 4, 2009; NJDEP has decided this leaves insufficient time to do more than re-propose SDWA rules without change. At the same time, a proposal has been prepared that includes amendments to implement certain water supply related recommendations of the Permit Efficiency Review Task Force (convened by the Commissioner of the Department in 2008 to comprehensively review the Department's permitting programs). This proposed rule also includes provisions to conform to the amendments to the SDWA at N.J.S.A. 58:12A-10 made by P.L. 2007, c. 246, commonly referred to as the Environmental Enforcement Enhancement Act, enacted effective January 2008. The proposed SDWA rules must be readopted by May 2010. Operational rule changes that had been originally envisioned as part of the SDWA rule revisions, as well as proposed water allocation rules due to expire in February 2010, will follow. This means MCL revisions, earlier expected to be part of SDWA rule re-adoption, are not expected to be proposed as a rule until next year. The radon rule, which also has been drafted, is expected to be proposed even later.

As for the DWQI recommendations to expand Private Well Testing Act testing for arsenic, mercury and gross alpha statewide, this expanded testing needs to be proposed in rule, most likely after the other rule-making mentioned above. NJDEP would like to provide additional information regarding this expanded testing at a future meeting.

C. Storms asked about the status of the proposed regulation changes regarding implementation of the federal Ground Water Rule in New Jersey. S. Krietzman said the drinking water program will implement the federal Ground Water Rule, which is adopted by reference, and a letter

providing clarification of some of the Ground Water Rule requirements to water systems on state discretionary items will be mailed today.

J. Klotz asked how MCLs would be updated if new information appears during a lengthy or delayed rule adoption process. S. Krietzman noted that traditionally NJDEP rules reflect data that might be a couple of years old because the regulatory process takes at least a year even under the best circumstances. G. Post noted that new data were incorporated into the proposed perchlorate MCL rule summary, but fortunately the new data supported the proposed MCL. L. McGeorge said that if new data contradicted the originally proposed MCL, NJDEP could not simply change the number in response to comments, it would have to re-propose the rule. She noted as well that, compared to a single contaminant, keeping up with the new literature for over 30 contaminants is difficult.

D. Pringle said he was disappointed in the delays in getting the perchlorate rule and MCL rule through the Department's review process; he felt drinking water standards were not a priority for the NJDEP's senior management or the Governor's office. Chairman Robson concurred that it was a concern that DWQI's MCL recommendations were not included in the SDWA rule proposal, and pointed out that the Commissioner attended the Institute's March meeting and praised those recommendations.

6. Public Comment

M. Robson asked for public comment. T. Russo, Chemistry Council's Regulatory Affairs representative, said there is a need to revise the public comment process for rule development, since the NJDEP and regulated parties are both strapped for resources. He said that at an October meeting with Commissioner Mauriello the Chemistry Council was told it can have input to the process when rules are proposed. Yet if the main input to the drinking water regulatory process is for regulated parties to wait until the rule is in the New Jersey Register and then have only a 60-day comment period, this is insufficient. They need earlier input into this process, as exemplified by the public hearings held by the Clean Water Council and the Clean Air Council; they also need a better handle on how health risk assessment is developed by the DWQI, perhaps through a plain-English workshop to educate the regulated community. Therefore there should be an annual hearing on a given topic, and talk with stakeholders more often. There is also a need to revisit the Administrative Procedures Act to extend sunset dates for regulations, so there is less need to rush. When ordinary citizens see something on the NJDEP website, they assume it's a standard, which is not true.

Chairman Robson responded that the Clean Water Council, of which he was previously a member, meets monthly, and has the requirement for a public hearing in its statutory mandate; the Drinking Water Quality Institute is different on both points. An informational workshop on how health risk assessments are performed is a good idea, and could include the public and be advertised widely. The DWQI made a conscious effort to maximize efficiency by working through its Subcommittees, whose members have both non-governmental (water purveyors, academics, consultants, the public) and government (NJDEP, NJDHSS) expertise in engineering, chemistry, risk assessment, and associated disciplines, and holding fewer meetings of the full DWQI. S. Krietzman added that the process used by the DWQI is described in detail on the

DWQI page of the Division of Water Supply website, including its legislative mandate, its Subcommittees, and how they reach their conclusions for each contaminant in health, testing and treatment assessment for the 1987, 1994, and 2009 processes. As for insufficient time, anyone who wants to review the 2009 DWQI recommendations for new or revised MCLs can do so now, without needing to wait for the 60-day comment period once the rule is proposed.

T. Russo said he appreciated the openness, but also wanted to know when the regulated community gets to participate; he does not want to wait for a rule to be published in the NJ Register to provide input to the DWQI process. S. Krietzman responded that stakeholders could ask to give a presentation on a topic to the relevant Subcommittee by submitting the request to B. Johnson, the DWQI's support staff.

T. Russo asked what the relationship would be between the DWQI and the forthcoming Science Advisory Board (SAB) for NJDEP. L. McGeorge said that the SAB would deal just with science, while the DWQI can address both technical and policy issues; NJDEP wants the SAB to complement rather than duplicate work of the DWQI or other NJDEP advisory bodies. The decision on the SAB's membership is in the hands of the Commissioner, and a decision date is not yet known. G. Post added that the Health Effects Subcommittee would be happy to receive suggestions for peer-reviewed literature to consider, which also should be sent through B. Johnson. T. Russo said that regulated parties need to understand the rationale behind the development of a recommended MCL. L. McGeorge felt the Basis and Background documents of the DWQI and its Subcommittees are extremely complete and detailed and offer stellar transparency. The delay in the MCL rule allows plenty of time to prepare comments if someone wants to do so. D. Pringle responded to T. Russo's comments by pointing out that the Administrative Procedure Act describes the process through which the general public and stakeholders can comment on rules.

8. Next Meeting

The next meeting is scheduled for February 1, 2009, from 10-12 PM at the New Jersey Environmental Infrastructure Trust, with a snow date of February 8 if needed.

9. Adjournment

Chairman M. Robson brought the meeting to a close at 2:30 P.M.

Minutes by B. Johnson 11-4-09.