

Trace Organics Subcommittee Meeting September 22, 2009

Room 2B-09

Attendees: Karla Fowler, Doug Raines, Jim McCauley (Chair), Tim Gaffney (notes)

Via Phone: Dave Clark, Kathy Cupps, Susan Kaufman Una, Craig Riley, Heather Trim, Kara Warner.

Time	Topic	Decision or Action Needed
1:00 p.m. – 1:05 p.m.	Introductions, review agenda	Adjust agenda if necessary
1:05 p.m. – 1:15 p.m.	Review notes and action items from last meeting	Prepare focus for current meeting
1:15 p.m. – 2:00 p.m.	Discussion of WateReuse Symposium proceedings from Sept. 13 -16, 2009	Subcommittee members in attendance should come prepared to summarize some of the findings presented
2:00 p.m. – 3:45 p.m. (15 minute break at group discretion)	Next steps: 1. Is this group ready to make recommendations to the RAC? If so, initiate the process. 2. Does this group desire to schedule another meeting for input from toxicological experts, analytical chemists, or other experts before making final recommendations back to the RAC?	Discuss and formulate: either recommendations or requests for further study and input
3:45 p.m. – 4:00 p.m.	Wrap up, assignments, action items	Agenda and action items for next meeting
Next meeting	TBD	

The meeting began with the team approving the agenda, and going over the summary notes from the meeting on 9/1/09. Craig has some minor edits for the notes which he will send to Jim.

Symposium: The team discussed the symposium. The presentations are copyrighted, but you could contact presenters directly to see if they would give you information. The terminology used for PPCP's and EDC's was discussed. Several terms were used at the symposium. Soil

aquifer treatment has the potential to remove several microconstituents. Nonylphenol, a surfactant, is more difficult to attenuate in soils. Dr. Sally Brown at Univ. of Washington has also completed some soil treatment studies with results showing little to no pass through of trace chemicals in the leachate collected from soil columns. There was a question as to what chemicals of concern are showing up in California studies. Another study from Park City Utah investigated the influence of wastewater discharge estrogen upon fish. Low levels of estrogen had impacts upon vitellogenin production (a protein) in male fish held in a pen placed in the wastewater effluent aeration chamber for three weeks. However, wastewater effluent did not alter the sex ratio of downstream fish in a field study. Synergistic effects may be gained from combinations of disinfection processes including UV, ozone, and hydrogen peroxide.

Participants from the U.S. and from other countries attending the symposium indicated that there are many uncertainties at this time regarding chemicals of concern, microconstituents and/or trace organics.

Chemicals discussion: EPA has two standard methods (protocols) for testing chemicals. The suite of chemicals tested for can include as many as 174 chemicals. It was suggested by an environmental advocate that you could first monitor for a large number of chemicals, then reduce the scope if some chemicals never show up in the monitoring. We may not know enough to regulate these chemicals now, but there should be flexibility to include these in future permits when more information is available.

The sampling was done in one day, at five separate plants. The direct cost for the sampling and analysis was \$90,000. They sent their samples to two labs, Manchester, and a laboratory in Vancouver, B.C.

Next Steps: A brief discussion of the rule development timeline was given by Tim. In order to meet the Dec. 2010 deadline for a final rule, we must be ready to file a CR102 by June 2010. We may need up to 3 months for a Small Business Economic Impact Analysis and Cost Benefit Analysis, 6 weeks for internal management review, and 6 weeks for AAG review. Some of these may be done simultaneously, but the bottom line is that we will need a draft rule by the end of 2009 in order to stay on schedule. The rule must pass the “least burdensome alternatives” test.

Is the group ready to make recommendations to the Reclaimed Water Rule Advisory Committee (RAC)? It was agreed that the group should be ready to make a set of recommendations to the RAC after one more meeting. Jim will send out a list of dates to the group to find a suitable date and time for the next meeting.

Potential Draft Recommendations to the RAC: A white paper with six potential recommendations for the RAC was presented. The team discussed the merits of each of the

recommendations. Recommendation # 1 is to have Ecology and DOH convene a “blue ribbon” panel of experts to determine the “state of the science” for PPCP’s and EDC’s.

Items discussed:

- How often to meet (2-3 or 5 years); multiple days in a single year
- Who would select the panel
- How to fund the panel
- How frequent would updates occur
- In state input only, or expand to national and international sources of information
- How broad a scope, reclaimed water only or waste waters, storm waters, drinking water etc...

Panel Funding: The committee held an in-depth discussion of funding of the panel and ancillary costs. One recommendation was to include the funding as part of a reclaimed water permit, with a further recommendation that it be expanded to other water related permits as well. The permit could use similar language and format as that used currently in storm water general permit. Others in the committee found it difficult to see how it could be in every permit issued. If the fee were assessed only in reclaimed water permits, it could become a disincentive to build reclaimed water projects. It was also expressed that drinking water would “push back” if the funding were spread drinking water permits.

It was expressed that if it isn’t in a permit, even if it were placed in the rule, then it (funding) may not happen at all. Having this in the permit assures the long term viability of the money coming in to keep the panel alive.

Ecology staff indicated that currently our permit fee rule does not allow the use of permit funds for education and research. The stormwater general permit stipulation is not a “fee” but an alternative to allow collaborative monitoring between multiple systems. Ecology will pull information from the Stormwater Phase I General permit and distribute to the subcommittee.

Another position expressed was that panels and meetings listed as components of a permit are not compelling, but monitoring of effluent for all permittees may be a viable option. Risk assessment could be based on the data from the monitoring from land application, stream flow augmentation, and discharges.

Recommendation # 4: The recommendation to have the federal EPA take the lead on the research and development of water quality standards for PPCP’s and EDC’s was discussed. Having them monitor what is out there may be good or bad. The broader perspective from the EPA may provide a better picture, however we have no control over EPA, so our input might not be accepted.

Recommendation # 6: Include Best Management Practices for projects placed in the rule where PPCP's are of concern. The team expressed concerns about what a utility would do, how the BMP's would be enforced and concerns about how to deal with run-off in the application process.

The meeting closed with an agreement to meet one more time, sometime in October prior to the Oct. 28th RAC meeting.