

**Federal Advisory Committee on Detection and Quantitation Approaches and Uses  
in Clean Water Act (CWA) Programs (FACDQ)**

**Summary of Teleconference Meeting #9  
August 28, 2007, 1 PM to 4 PM EDT**

Decisions at Meeting #9

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NONE

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\*Note: No transcript was prepared for this meeting and all perspectives offered at the meeting are not reflected in this summary.

**Opening and Introductions**

Richard Reding, EPA Designated Federal Officer (DFO), opened the meeting at 1:00 PM EDT and welcomed the participants. Bob Wheeler, facilitator, then introduced the facilitation team from Triangle Associates and conducted a roll call of advisory committee members. Mr. Wheeler noted that a quorum of members was present; he asked members to notify the group if they had to leave the call.

Mr. Wheeler welcomed and introduced guests from American Society for Testing and Materials (ASTM) and Standard Methods who were invited by members of the Policy Work Group to speak to the committee.

Mr. Wheeler reviewed the agenda (*Document #FACDQ09-01*) and stated that the purpose of the meeting was to review documents, hear reports, and provide direction to work groups so they could finalize draft products for the committee's September meeting. He emphasized that the purpose of the September meeting would be to make decisions and finalize documents so the Final Report Work Group could prepare a Draft Final Report for the committee to review and approve at its final meeting in December.

Mr. Wheeler reviewed the protocols for the call and the committee's groundrules for decision making (*Document #FACDQ09-02*).

**Other Issues, Concerns, and Recommendations**

Mr. Wheeler invited committee members to identify any additional issues, concerns or recommendations they wanted the committee to consider at its September meeting. As an example, Mr. Wheeler referenced a recommendation that Steve Bonde had proposed during the July 25 FACDQ Teleconference meeting in favor of having a single procedure for all EPA programs, as follows:

*“To maintain consistency between all EPA programs, the FACDQ recommends the EPA consider adopting a single procedure for all programs; including SDWA and SW-846 programs. As this procedure has been thoroughly studied and vetted by a group of stakeholders, the FACDQ suggest this procedure be a primary candidate.”*

Mary Smith, EPA, asked Mr. Bonde if he meant for his recommendation to apply to *all* EPA programs since it did not seem to be a good fit, for example, for EPA's Air Program. Mr. Bonde said that he intended his recommendation to extend primarily to EPA's Drinking Water and Solid Waste programs. After discussion, it was agreed that the facilitators would send a revised recommendation to the Policy Work Group for discussion and finalizing before forwarding it to the committee with other materials for the September meeting.

With a goal of "having no surprises" in September, Mr. Wheeler reported that Jim Pletl, who sent apologies for not participating on this call, had indicated that he wanted to propose several recommendations for the FACDQ's consideration. It was agreed that Mr. Pletl and others could send language that would be forwarded to the committee with the rest of the mailing on Friday, August 31.

On behalf of the Technical Work Group, Larry LaFleur raised the issue of a study to confirm the performance of the recommended procedure. After discussion, it was agreed to create a placeholder for a recommendation in favor of having the Office of Water complete a long-term study to confirm the performance of the selected procedure/s.

## **Work Group Reports and Updates**

### ***Implementation Work Group***

Nan Thomey indicated that her group had generated several products for the Policy Work Group's review, including a "timeline" for implementation, a flow chart of the steps in the process in the Uses document, and a document describing education and outreach to communicate the changes effectively.

### ***Final Report Work Group***

Zonetta English explained that her group had drafted a few sections but had decided not to spend time on Uses and a procedure until final decisions were made. She said that the committee's goal was to reach consensus decisions in September but, if the group was not able to reach consensus, the committee would have to decide how to report majority/minority positions. Between September and December, she said, the Work Group would prepare a Draft Final Report for review and a final vote in December.

### ***Matrix Effects***

Larry LaFleur reported that his subgroup had drafted a general recommendation in favor of EPA's issuing guidance related to matrix effects; the recommendation identifies specific issues to be addressed in the guidance. He expected to have a final draft ready to include with other September meeting documents by the end of the week.

### ***Verification***

Michael Murray said his subgroup, that included David Kimbrough and Richard Burrows, also had produced fairly general recommendations on initial validation and on-going verification. He said the Policy Work Group would review it before it was sent to the committee on August 31. John Phillips asked if the recommendation addressed

frequency. Mr. Murray replied that the recommendation would note the general importance of frequency but it would not have a specific recommendation.

***MQO's for Future Promulgation of Methods – EPA Rationale for Opposition***

Mr. Wheeler called on Mary Smith who had been the only one to vote against setting MQO's for future method promulgation during the July 25 FACDQ Teleconference to explain her vote. She listed the following three reasons for her no vote:

- 1) The data quality objectives (DQO) process would say what the data quality indicators (DQIs) were; they could not be determined in advance
- 2) EPA does not see false negatives (beta) as relevant
- 3) If we were to set goals, we knew we would violate them a lot because we know we cannot meet MQOs for many of the analytes.

After commenting that MQO bounds are embedded in the proposed single-lab procedure, she then asked what the committee would be asked to vote on related to MQOs in September so she could prepare. Mr. Phillips noted that EPA had been the only no vote, even after a lot of tweaks and restating to address the agency's concerns. Without another alternative to vote on, he said it was his sense that this vote would stand.

This discussion led others to raise process questions related to decision making, especially in relation to a package of recommendations and how votes and "straw votes" from previous meetings should be interpreted. Other questions included:

- If one member were to vote against a component of the package, how would that affect the package as a whole?
- If a member opposed a component of the package and the package incorporated that member's minority statement explaining the opposition, could that person then vote in favor of the consensus because the minority opinion was presented?

Mr. Wheeler noted that "votes" from meetings up to this point have shaped draft or working documents that have been used as the building blocks of the committee's recommendations.

It was agreed that the committee needed clarity on a decision process for the September meeting and that the facilitation team would draft a decision process for committee review and approval at the beginning of the meeting. If the Final Report is to include majority/minority reports, Zonetta English noted that the committee would need to provide direction on where those reports would be placed in the Final Report.

***Target MQO Bounds.***

Mr. Phillips reported that the Technical Work Group was developing a proposal on Target MQO Bounds but said that he was unsure if the group would reach consensus on a set to propose. Larry LaFleur suggested that the group needed to answer if the committee even wanted bounds and, if so, where would the bounds be set. He recalled that the

purpose of the concept of “bounds” had been to set a floor for the DQO process. It was agreed that the Technical Work Group should continue its work on this topic.

### ***Single Lab DQFAC Procedure***

Richard Burrows reported that the Procedure Strike Team had looked at results of the pilot study, had tried to identify areas where the procedure didn't work well, and had then made modifications to the procedure to improve it. A technical issue that had recently emerged was whether it was better to use the K factor or Student t in calculations. The decision was really a policy call. John Phillips indicated that a document would describe the changes made to the procedure.

### ***Multi-Interlab Procedure***

Richard Redding described the work and many of the questions the group had discussed. He said the group had divided methods into two groups: existing methods and future methods. The group had looked at many issues, including the availability of data sources; the length of the testing period; and the number of labs/tests among others. He said the group had not come to agreement but was working on broad concepts.

Mr. LaFleur said that industry had highlighted the importance of this issue from the outset and that it could be a big problem for his caucus. He also questioned if the subgroup was going beyond the charge the committee had given it. In response, Mr. Wheeler read the charge from June which was to develop a process for deriving a QLnat.

### ***Definitions***

John Phillips reported that he had been asked to revise existing definitions (from the committee-approved 2005 working draft definitions) to reflect where the Technical Work Group was with the procedure. He said he was also asked to write a cover memo that would describe why the FACDQ's current definitions for detection and quantitation deviated from ISO/IUPAC definitions for Lc, Ld, and Lq. He said that the Technical Work Group had not had time to discuss his draft yet. After additional discussion, Ms. English pointed out the importance of having definitions in the Final Report so the readers could make sense of the committee's work.

### ***Uses Document***

Bob Wheeler introduced the Uses document and noted how hard the Policy Work Group had worked on it since the June FACDQ meeting, especially on recommendation #4 for developing QLnats. He indicated that specific Policy Work Group members would present the revised Uses document. He also noted that representatives from ASTM and Standard Methods were on the call to give their perspectives, pending committee authorization, on whether or not the recommendation had the potential to stifle new method development and how such a recommendation would impact their work.

Mary Smith led off for the Policy Work Group, noting that there had not been many changes to recommendations #1 through #3 since the last FACDQ meeting. She noted that Mr. LaFleur's recent work on matrix effects and Mr. Murray's recent work on verification still needed to be considered. At a later point, she asked if these three

recommendations should remain in the Uses document or be considered separately. She then asked Tom Mugan to present the two alternatives for recommendation #4, promulgation of QLnats.

Mr. Mugan explained the history (presented in Attachment B to the Uses document) that had led to the two alternatives, including the concern about stifling new method development. (Discussion of the alternatives in this recommendation was held until the remaining recommendations in the document were presented.)

Dave Akers said that no substantive changes had been made to recommendation # 5 since the July Teleconference Meeting. In response to a question, it was noted that the language in #5 was not intended to take away states' flexibility. It was suggested that it might be helpful to cross reference the relevant statement elsewhere in the document.

Mary Smith said that recommendations #6-8 had also not changed.

It was also noted that the DLnat had been removed, with the minority opinion in favor of retaining it presented in Attachment A.

#### **ASTM & Standard Methods Perspectives on Future Method Promulgation**

Bob Wheeler asked representatives from ASTM and Standard Methods to give their perspectives on whether or not the alternatives were likely to stifle new method development.

*Len Morrissey (ASTM)* said that, from staff perspective, he did not think it would stifle development. He explained that ASTM needed consensus from the committee on an approach. *Doug Glysson (ASTM)* said that, from a technical perspective, if ASTM followed its standard procedures, it would be developing the information the committee needed.

*Standard Methods Editorial Board member Andy Eaton* identified several problems with the committee's approach. He said Standard Methods is a voluntary organization. As such, it almost never does a full round robin study like the Pilot Study. They find it difficult to get more than two or three labs to test a new method. If there were a requirement for a minimum of five to six labs to do anything, no new methods would arise because the resources do not exist to do these types of studies. Existing methods do not have QLnats. Eventually, he said, Standard Methods would face issues trying to develop them. Getting the resources to move in a timely manner would be difficult.

*Ed Askew*, Standard Methods, agreed with Andy Eaton's points. Because of its status as a volunteer organization, he said, Standard Methods has no fee structure to get labs to conduct a multilab study. Consequently, it would take a lot to get labs to do the work unless there was some way to reimburse them. He later noted that occasionally manufacturers wanted methods for new equipment; QLnats could hinder development of methods in such cases.

In response, Larry LaFleur commented on the difficulties of going back to add QLnats into existing methods. He suggested that perhaps it could be addressed by the data that was collected.

Richard Burrows explained it was a “chicken or egg” situation. Labs, he said, have little interest in developing new methods unless they can be used for compliance decisions. Given that, the best way to get the data is to put a method in Part 136, Appendix B. Requiring a QLnat in advance would be a barrier to getting a method into Appendix B.

Discussions involving Tom Muga, Larry LaFleur, Richard Burrows and Mary Smith ensued about a possible third alternative for recommendation #4. The recommendation would be a general one, that EPA implement QLnats by analyte as soon as possible whether for new or existing methods, but the QLsomething’s would be included with new methods. This approach would allow EPA to set priorities. If EPA needed a QLnat, it could work with the consensus organizations and possibly fund the development. EPA would set the priorities. Mary Smith said that general direction to EPA could be useful.

The committee asked for information to help members understand the distinctions between the three alternatives. In response to a question, it was suggested that any one of the alternatives could be written for analyte only or for analyte/method. It was agreed that breaking the alternatives into smaller components would be helpful.

### **Public Comment**

Steve Wendelken of EPA’s Drinking Water program commented on the proposed recommendation to have a single procedure that applied across programs. He said that there could be obstacles in other programs that the committee was unaware of because no stakeholders from the Drinking Water program had been involved. From a procedural standpoint, he said it could have a huge impact and change could not be made quickly or easily.

### **Wrap-Up and Next Steps**

Mr. Wheeler briefly summarized the next steps for the Policy Work Group to take on the Uses document and then listed the decisions the committee needed to make at the September meeting:

- Uses document
- Matrix effects
- Verification
- MQOs
- Single-lab procedure (Student t vs K factors)
- Determining QLnat
- Definitions
- Additional recommendations
- Work to be accomplished between September and the final meeting in December

He indicated that Triangle would send the September agenda and meeting materials to committee members of Friday, August 31. He said that the facilitation team would hold calls with the caucuses in advance of the September meeting. He encouraged committee members to talk to their constituents and to come to the September meeting prepared to make final decisions.

Dick Reding, DFO adjourned the meeting at 4:00 PM EDT.

## MEETING ATTENDANCE

<b>Committee Member</b>	<b>Affiliation</b>
<i>Environmental Community</i>	
Michael Murray	National Wildlife Federation
Richard Rediske	Grand Valley State University
<i>Environmental Laboratories</i>	
Steve Bonde	Battelle
Richard Burrows	Severn Trent Labs
Cary Jackson	HACH Company
Nan Thomey	Environmental Chemistry, Inc
<i>Industries</i>	
Roger Claff	American Petroleum Institute
Larry LaFleur	National Council for Air and Stream Improvement
John Phillips	Alliance of Auto Manufacturers (Ford Motor Co.)
David Piller	Exelon Corp.
<i>States</i>	
Dave Akers	Colorado Dept of Public Health and Environment
Bob Avery	Michigan Dept of Environmental Quality
Timothy Fitzpatrick	Florida Dept of Environmental Protection
Thomas Mugan	Wisconsin Dept of Natural Resources
<i>Public Utilities</i>	
Zonetta English	Louisville/Jefferson Co Metropolitan Sewer District
David Kimbrough	Castaic Lake Water Agency
<i>EPA</i>	
Mary Smith	US Environmental Protection Agency

### **Designated Federal Officer**

Richard Reding	US Environmental Protection Agency
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### **Facilitators**

Bob Wheeler	Triangle Associates, Inc.
Vicki King	Triangle Associates, Inc.
Blake Trask	Triangle Associates, Inc.

### **Observers**

Meghan Hessenauer	US Environmental Protection Agency
Marion Kelly	US Environmental Protection Agency
Nicole Shao	US Environmental Protection Agency
Brian Englert	US Environmental Protection Agency
Edward Askew	Standard Methods
Andy Eaton	Standard Methods
Doug Glysson	ASTM
Len Morrissey	ASTM
Kenneth Miller	CSC, Inc.

Richard Witt  
Jim Christman

OGC  
Hunton & Williams

## **DISTRIBUTED MATERIALS**

### **Committee's Packet of Materials**

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01. Final Agenda
02. Protocols, Groundrules, & Voting
03. Draft Revised FACDQ Recommendations on Uses of Detection and Quantitation in Clean Water Act Programs