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

Teleconference Meeting 1-866-299-3188 202-566-1045#

Summary of Meeting #8

Decisions at Meeting #8

1. Removal of DL_{nat}

The FACDQ approves the removal of DL_{nat} from the Revised Uses document.

Vote: 16 Agree, 2 Not Opposed, 1 Disagree

NOT APPROVED

2. Uses Recommendation on MQOs for Future Promulgation of Methods

The FACDQ recommends, for future method promulgation, that target MQOs for Data Quality Indicators (DQIs), such as Precision, Accuracy, Method Specified Qualitative Identification, and False Negative error rates derived from the Data Quality Objectives (DQO) process, be established for Quantitation Limits in Part 136. If the target MQOs cannot be met, EPA may promulgate with rationale.

Straw Vote: 9 Agree, 9 Not Opposed, 0 Disagree (6/8/07 AM)

Vote: 16 Agree, 2 Not Opposed, 1 Disagree

NOT APPROVED

Day 1 - Wednesday, July 25, 2007, 1:00 PM - 4:00 PM EDT

*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, conducted a roll call of Committee members; all members were present except Chris Hornback. A member indicated he would have to leave the meeting for some period, and Mr. Reding requested that Committee members who needed to leave the call notify the facilitator who would track participation for purposes of maintaining a 16-member quorum.

Mr. Wheeler then reviewed the Protocols, Groundrules, and Voting document (*Document # FACDQ8-02*) and the agenda for the meeting. Items on the agenda included two votes on issues from the June 6-8 FACDQ meeting, presentation of a Revised Uses document (*Document # FACDQ8-04*) by the Policy Work Group for the committee's consideration and direction, and status reports from the committee's Work Groups.

Discussion of Removing DL_{nat} from the Revised Uses Document

Mr. Wheeler then introduced the Uses Document with DL_{nat} Deleted (*Document # FACDQ8-03*) and called on Mary Smith of EPA to explain the changes in the document and the rationale for them.

Mary Smith explained that during the June FACDQ meeting, some committee members realized that in the Uses document, the DL_{nat} was proposed for record keeping and reporting but it was not used or needed for compliance decision making. Given that, they questioned the value of including the DL_{nat} in the Uses document.

In response to a request to explain the pros and cons of deleting the DL_{nat} , Ms. Smith said that the "pro" was that it was not needed; the "con" might be that others would want EPA to create a DL_{nat} . Committee members then had the following discussion about the implications of removing DL_{nat} .

Question: Would the DL_{nat} establish a ceiling on the DL_{lab} ?

Response (John Phillips): Generally DL_{lab} will be below DL_{nat} . Without a DL_{nat} we would not have a sense of a lab's capability.

Response (Richard Burrows): The QL_{nat} puts a ceiling on a DL_{nat} ; a DL_{nat} cannot be within a certain range of a QL_{nat} . There is no benefit to having two numbers.

Question: Would removing DL_{nat} mean no reporting to ICIS? We don't want to lose an impetus to move toward lower DLs. I'm in favor of lower DLs for toxins below WQBEL.

Response (Mary Smith): DL_{nat} would not be reported; labs would still report a DL_{lab}.

Question: If we keep DL_{nat} , are we recommending that EPA create something that takes a lot of resources but has no use? If it remains, we need a rationale for it.

Response (Mary Smith): I do not think it takes a lot of resources. It's a reporting issue. The question is, why have it if we are not using it?

Question: If labs have to provide their own DLs, would EPA still develop a DL_{nat}? Response (Mary Smith): Yes, we will put it in the method.

Question: If EPA plans to put DLs in a new method without a use, should we be silent on this or make a recommendation on its use and possibly add, "use the recommended procedure?"

Response (Mary Smith): EPA would be using the recommended procedure for QL, so there is not reason not to say it for the DL.

Later in the discussion, Ms. Smith indicated that EPA did not intend for the DL in a method to be a requirement labs would have to meet. Larry LaFleur then said that he had no objections to a number in a method if it was not to be a specification.

Discussion of Revised Uses Document

Mr. Wheeler asked Dave Akers to provide an overview of the Revised Uses Document (*Document # FACDQ8-04*) and to indicate proposed changes to specific Uses recommendations. Mr. Akers began by saying that the Uses document was a package document. He said that he and Mary Smith had revised the document with a goal of making it more "user friendly" and to improve its readability. Mr. Akers then went through the document, recommendation by recommendation, indicating proposed changes.

After Mr. Akers' introduction, Mr. Wheeler asked for committee questions and comments on specific recommendations.

1. Lab-Determined Detection Limits and Quantitation Limits

Question: Should a footnote address a requirement to use the procedure? Right now there is no requirement to use the Part 136 methods for detection in Clean Water Act programs.

Response (Larry LaFleur): This seems like an implementation issue. Response (Nan Thomey): It's on the Implementation Work Group's July 24 list. We want it where it isn't currently in use.

Tim Fitzpatrick suggested that the procedure be referred to as the "draft FACDQ procedure, the name Richard Burrows had proposed, rather than as the "modified ACIL." Larry LaFleur said that he thought this section was a recommendation to replace 40 CFR Part 136, not just to use the new method. Mary Smith said the current Appendix B might be moved into Part 141 because it is used in the Drinking Water program. This sparked concern from the lab caucus which opposes having to run two different procedures. Mr. Wheeler concluded the discussion by saying that the Policy Work Group would consider the removal and approach to this issue.

2. Matrix Effects

Mr. LaFleur, who is leading a subgroup to develop recommendations on matrix effects, said the current language reflects the early stage of the subgroup's work and that it would change as more specific recommendations were developed.

3. Verification of Laboratory Proficiency of Detection and Quantitation Limits Michael Murray mentioned that he was working by email with a subgroup including Richard Burrows and David Kimbrough on verification. He said he expected to have something to send to the Policy Work Group in the near future.

4. Future Method Promulgation &

5. Future Updates of Promulgated Analytical Methods

(The committee discussed these recommendations together.)

Mr. Fitzpatrick asked why a clause mentioning "lowest published water quality criteria" in Section 5.B. was not repeated in Section 4.B. After some discussion the Committee decided to ask the Policy Work Group to address this suggested revision at its next meeting.

The committee also had significant discussion about an issue that had been raised in the Policy Work Group, which was whether or not to narrow the focus of the QL_{nat}. The Policy Work Group said it was looking for direction from the committee on this issue and, if the direction were to narrow the focus, what should the narrowed focus be?

Mr. Wheeler asked the committee if it agreed to narrow the focus; the response was that it did. Mr. Wheeler then asked for input on what the narrowed focus should be. Richard Burrows proposed that the narrowed focus should be on areas where QL_{nat} has the most use, that is, where methods cannot meet water quality criteria. John Phillips agreed and, given the variability across the nation, he suggested that EPA gather information by Regions, to determine the lowest values needed nationally. Mary Smith replied that, in addition to getting input from the states, EPA would also consult with scientists about emerging issues. Larry LaFleur suggested that the committee could state its intent and let EPA work on it.

6. Setting Permit Conditions, Reporting and Using Data, and Determining Compliance When the Water Quality Based Effluent Limit (WQBEL) is Less Than Detection and Quantitation Capabilities of Existing Methods

In response to a suggestion that matrix effects should be considered in this section, Tom Mugan replied that matrix effects would relate to the package as a whole and would need to be considered throughout the package.

7. Great Lakes Initiative

There were no comments on this section.

8. Other Uses to Consider

Steve Bonde proposed a new recommendation that he acknowledged was outside the scope of the committee's work. It read 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 stake-holders, the FACDQ suggest this procedure be a primary candidate."

Steve Bonde said the intent of his language was to address a big issue for the lab caucus, the possibility that some other EPA program would require labs to continue to use the MDL. Nan Thomey said that having to use different procedures would create an insurmountable implementation issue for the labs. Others said they thought that several procedures had been included in the Pilot Study specifically to address the needs of other programs. Richard Burrows added that the procedure the committee was developing had been modified to make it compatible with the LCMRL. After further discussion, Mary Smith indicated that she saw two issues: 1) daily laboratory operations and 2) how the Drinking Water Program sets its Maximum Contamination Level (MCL), considering both the issue of Steve Bonde's recommendation and the issue of different procedures for different EPA programs.

In conclusion, Mr. Wheeler said the Policy Work Group would be tasked with this issue.

9. Alternative Test Procedures

There were no comments on this section.

Mr. Wheeler then summarized the list of Uses items the FACDQ had assigned to the Policy Work Group. He said the items would be reflected in a revised version of the Uses Document that the facilitators would send to the Policy Work Group.

Committee Decisions

The Committee then turned to the first of two votes on the agenda: whether or not to eliminate DL_{nat} from the Revised Uses document.

Action: The FACDQ approves the removal of DLnat from the Revised Uses document.

Vote: 16 Agree, 2 Not Opposed, 1 Disagree NOT APPROVED

After some discussion as to why committee member David Kimbrough disagreed with the proposed action and whether or not the opposition was resolvable during the teleconference call, it was agreed that Mr. Kimbrough would send his rationale to the Policy Work Group so it could address the issue and make a proposal at a future committee meeting. It was also suggested that those who favor removing the DL_{nat} should provide their rationale.

The next decision the Committee voted on intended to replace a "straw vote" on Method Quality Objectives (MQOs) for future promulgation taken during the June 6-8 FACDQ meeting.

Uses Recommendation on MQOs for Future Promulgation of Methods

Action: The FACDQ recommends, for future method promulgation, that target MQOs for Data Quality Indicators (DQIs), such as Precision, Accuracy, Method Specified Qualitative Identification, and False Negative error rates derived from the Data Quality Objectives (DQO) process, be established for Quantitation Limits in Part 136. If the target MQOs cannot be met, EPA may promulgate with rationale.

Straw Vote: 9 Agree, 9 Not Opposed, 0 Disagree (6/8/07 AM)

Vote: 16 Agree, 2 Not Opposed, 1 Disagree NOT APPROVED

Mary Smith said she voted to disagree with the recommendation for the following three reasons: 1) the Data Quality Objectives (DQO) process sets MQOs and this recommendation runs counter to that process; 2) MQO goals should not be put in regulation, and 3) EPA does not believe that False Negatives ought to drive the method process. Ms. Smith added that the language was confusing; for example, what process was EPA supposed to use to set the goals? She agreed to provide a rationale for her vote, share it with the two who were "not opposed" and provide it to the Policy Work Group for further work.

Work Group Status Reports

Verification Work Group

Michael Murray said he, Richard Burrows and David Kimbrough were working by email and were considering whether to develop very general recommendations related to DLs and QLs or more specific recommendations on how to carry out verification. He said they should have material for the Policy Work Group to review shortly.

Matrix Effects Work Group

Larry LaFleur said that, given the time available, the recommendations on matrix effects were likely to be very general. Jim Pletl added a suggestion that EPA develop guidance that would address three aspects of matrix effects: 1) how to identify matrix effects; 2) validation of matrix effects during method development; and 3) cost effective methods for demonstrating matrix effects.

Implementation Work Group

Nan Thomey reported that the Work Group had gathered a list of potential issues from each caucus and indicated that each fell into the following four general categories:

- How to determine QL_{nat}s;
- How to promulgate QL_{nat}s (timelines, requirements);
- How to update QL_{nat}s; and
- Education and outreach.

She said that the Group had identified three questions where they needed FACDQ direction to be able to move forward:

- Will the Committee recommend a QL_{nat}?;
- Will the recommended QL_{nat} be by method or by analyte?; and
- What will the Committee decide to do with existing methods?

She concluded that the Work Group would take its results to the Policy Work Group.

Final Report Work Group

Zonetta English reported that the Final Report Work Group had had two calls and was working on specific sections. However, she said the Group did not want to circulate a draft that lacked final decisions on key recommendations. She urged the Committee to keep the charter in mind and to try to reach consensus. She also indicated that the report needed to be written in such a way that readers could understand the Committee's recommendations and the rationale for them.

Technical Work Group

Single Lab Procedure Strike Team

Mr. Burrows reported that the Strike Team had had a successful meeting in Boulder, Colorado, on June 21 and 22. They had been tasked with modifying the ACIL procedure that was tested in the Pilot Study by using input on the ACIL procedure from the Pilot Study and by incorportaing good ideas from other procedures. He said that the modified procedure was better and simpler than the procedure tested in the Pilot Study. He said that the next step was for the Strike Team to Pilot Test the new procedure using existing data. In the ensuing discussion, there was some disagreement over whether or not the procedure should have incorporated Precision and Accuracy into the new procedure. Richard Reding said that the procedure had been circulated to the FACDQ for precisely this reason and asked all members to continue getting feedback within their caucuses and from constituents so that the Technical Work Group could resolve the emerging issues.

Public Comment

There was no public comment.

Wrap-up and Adjourn for the Day

After a brief roll call on members' availability for a teleconference meeting on Tuesday, August 28 from 1 to 4 pm EDT, Mr. Wheeler proposed that the Committee plan on having the meeting. He said the agenda would be similar to the agenda for this meeting: a revised Uses proposal and status reports from work groups.

He then recalled the advice of Ephraim King, Office Director from the Office of Science and Technology and the Office of Water, at the committee's June 6-8 meeting on how the Committee's hard work had already gotten them through 95% of the process and urged them to keep going in the final stretch.

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

MEETING ATTENDANCE

Committee Member	Affiliation
Environmental Community	
Michael Murray	National Wildlife Federation
Richard Rediske	Grand Valley State University
Barry Sulkin	Environmental Consultant
Environmental Laboratories	
Steve Bonde	Battelle
Richard Burrows	Severn Trent Labs
Cary Jackson	HACH Company
Nan Thomey	Environmental Chemistry, Inc
Industry	
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.
States	
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
Public Utilities	
Zonetta English	Louisville/Jefferson Co Metropolitan Sewer District
David Kimbrough	Castaic Lake Water Agency
Jim Pletl	Hampton Roads Sanitation District
EPA	
Mary Smith	US Environmental Protection Agency
Designated Federal Officer	
Richard Reding	US Environmental Protection Agency
Facilitators	
Bob Wheeler	Triangle Associates, Inc.
Vicki King	Triangle Associates, Inc.
Cole Gainer	Triangle Associates, Inc.
Observers	
Joanne Dea	US Environmental Protection Agency
Meghan Hessenauer	US Environmental Protection Agency
Marion Kelly	US Environmental Protection Agency
Nicole Shao	US Environmental Protection Agency
Brad Venner	US Environmental Protection Agency
Brian Englert	US Environmental Protection Agency
Lemuel Walker	US Environmental Protection Agency

Rochelle Smokovitz General Motors

Kenneth Miller CSC, Inc. Richard Witt OGC

Jim Christman Hunton & Williams

DISTRIBUTED MATERIALS

Committee's Packet of Materials

- 01. Final Agenda
- 02. Protocols, Groundrules, & Voting
- 03. Uses Doc with DLnat Deleted
- 04. Revised Uses 7-18-07
- 05. Final Decisions From FACDQ #7
- 06. DQFAC Single Lab Procedure Version 2.1
- 07. DQFAC Single Lab Procedure Version 2.1 Flow Charts