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

FDIC Seidman Center, Rooms 203 & 205
3501 Fairfax Drive, Arlington, VA
Wednesday – Friday, December 6-8, 2006

Summary of Meeting #6

Decisions at Meeting #6

Groundrules

Environmental Community Caucus member Rob Moore resigned; as a result, the committee now consists of 20 members. The committee agreed to amend the groundrules to reduce the number required for a quorum by one, from 17 to 16. The language now reads as follows: "The committee will take no official action, such as offering advice or recommendations, with fewer than 16 participating Advisory Committee members."

Vote: 20 Agree, 0 Not Opposed, 0 Disagree

Meeting Summary #4

The committee agreed to approve the summary from Meeting #4 with the revisions suggested by a subgroup convened to recommend final language.
Vote: 20 Agree, 0 Not Opposed, 0 Disagree

Meeting Summary #5

The committee agreed to approve the summary from Meeting #5, with the following revisions:

- Move action box above section titled "Discussion of Data Analysis for the Pilot Study"
- Same section, third sentence, delete "…least helpful or…"
- Section titled "Discussion of Uses" under the state alternative proposal, the note for items 4 and 5 should read "…estimated value for data greater (~~less~~) than…"

Vote: 20 Agree, 0 Not Opposed, 0 Disagree

FACDQ Recommendations on Policy Issues (See full text on pages 3 – 7)

The committee agreed to the general concepts outlined in the revised Recommendations on Policy Issues document and tasked the Policy Work Group with further refinements of the document. The committee:

- Supports the intent of the policy recommendations, as revised;
- Recommends that the Policy Work Group refine the language in the recommendations per the FACDQ discussion in December, and also those items highlighted [in gray scale] in the document; and
- Recommends that the Policy Work Group bring back to the FACDQ their refinements for final decision-making.

Vote: 19 Agree, 1 Not Opposed, 0 Disagree

Final Report Work Group
The committee agreed to task the Final Report Work Group with beginning work on the final report. The committee asked the work group to begin assembling a draft of the final document, leaving placeholders where necessary, for the committee to discuss at a future meeting.
Vote: 18 Agree, 0 Not Opposed, 0 Disagree, 2 Absent

Matrix Effects
The FACDQ recommends the Policy Work Group develop some guidance on the topic for the FACDQ to consider at a future meeting.
Vote: 18 Agree, 2 Not Opposed, 0 Disagree

Technical Work Group Assignments
The committee agreed to assign the following tasks, in priority order, to the Technical Work Group:

- Complete the pilot results, report and recommendations for presentation to the committee at its next meeting.
- Develop recommendations around a procedure or procedures for the committee to consider at its next meeting.
- Develop recommendations and other details for initial and on-going verification (time permitting).
- Develop a list of existing methods and associated priorities for detection and quantitation limits (time permitting).

Vote: 20 Agree, 0 Not Opposed, 0 Disagree

Policy Work Group Assignments
The committee agreed to assign the following tasks, in priority order, to the Policy Work Group:

- Complete refinements to the revised policy issues document, particularly highlighted sections.
- Develop recommendations on data quality objectives for the committee to consider at its next meeting.
- Develop recommendations on implementation issues, using earlier one-pager (from Mary Smith) and ideas from FACDQ6 meeting.
- Develop guidance on matrix effects for the committee to consider at a future meeting.
- Develop recommendations and other details for initial and on-going verification.
- Develop a list of existing methods and associated priorities for detection and quantitation limits.

Vote: 20 Agree, 0 Not Opposed, 0 Disagree

Working Definitions
The committee agreed to table the discussion of its working definitions for a future meeting.

FACDQ Recommendations on Policy Issues
The FACDQ worked diligently at its sixth meeting in December 2006 to reconcile and reach agreement on the policy recommendations below.

The FACDQ voted on December 8, 2006 on the language that follows. EPA's votes reflect the views of the Office of Water for Clean Water Act Programs.

The FACDQ:
- supports the intent of the following policy recommendations, as revised;
- recommends that the Policy Work Group refine the language in the recommendations per the FACDQ discussion in December and also those items highlighted [in gray scale] below; and
- recommends that the Policy Work Group bring back to the FACDQ their refinements for final decision-making.

Vote: 19 Agree, 1 Not Opposed, 0 Disagree

[Note: must clarify lab-specific vs. national/state DL/QL vs. permit QL throughout the document.]

1. Lab-Determined Detection Limits (DLs) and Quantitation Limits (QLs)[1]

Recommendation: The FACDQ recommends that EPA promulgate the descriptive single-laboratory procedure recommended by the FACDQ for individual laboratories to determine their actual detection and quantitation limits. The FACDQ further recommends that this descriptive procedure replace the one currently in 40 CFR Part 136 Appendix B.

2. Method Promulgation

Recommendation: The FACDQ recommends that when the EPA promulgates future analytical methods in 40 CFR Part 136, detection limits (DLs) and quantitation limits (QLs) shall be included with the methods using the procedure recommended by the FACDQ. These limits will serve to define the minimum required performance of a laboratory, and may assist in comparing performance of one method to another (facilitating selection of a method most suitable for a given use), and may define important thresholds for use in evaluating compliance. (See the section titled "NPDES Permits and Compliance Uses.") The limits will be published in a table in a promulgated rule in 40 CFR Part 136. [2]

3. Demonstration of Laboratory Proficiency of Detection and Quantitation Limits

Recommendation: The FACDQ recommends developing a process for initial and on-going verification of DLs and QLs by laboratories. This recommendation includes the following guidance:

[1] The Policy Work Group agreed to use the terms DL for detection limit and QL for quantitation limit.
[2] The Policy Work Group has agreed to incorporate a new table of promulgated detection and quantitation limits in a rule, but the Group has not had a full discussion of what would be included in the table.

- The FACDQ recommended procedure (e.g., what goes into 40 CFR Part 136 Appendix B) should include the on-going demonstration (either explicitly within the procedure or as an "attachment" if the FACDQ chooses to recommend a consensus procedure).
- Separate initial vs. on-going demonstrations.
- Strive for feasibility, practicality, representativeness and cost-effectiveness.

4. **Future Updates of Promulgated Analytical Method DLs and QLs**

Recommendation: The FACDQ recommends that EPA periodically review current capabilities of promulgated analytical methods. The focus of this review should be on methods where there have been significant improvements in detection or quantitation limits or on methods that do not contain DLs or QLs. This review would be particularly important for cases where detection and quantitation limits are critical to the permit program (e.g., those required for very low WQBELs). EPA should focus on analytes for which current methods provide poor performance or do not meet program needs. Using best judgment and where resources are available, EPA shall update DL and QL limits on an on-going basis. EPA should also consider information submitted by states and/or other qualified third parties. EPA shall publish an annual Advanced Notice of Proposed Rulemaking (ANPR) announcing the DLs and QLs they propose to update.

5. **Recommendations for NPDES Permits and Compliance Uses for WQBELs below QL:**

Recommendation A:

The FACDQ recognizes that the existence of WQBELs at concentrations less than method QLs presents a number of NPDES-related issues. These include appropriate approaches for:

- Calculating monthly averages,
- Determining compliance with daily maximum limits and monthly average limits,
- Reporting data, and
- Appropriate compliance response in light of data uncertainty and the need for the protection of public health and the environment.

To deal with these various issues, the FACDQ recommends a balanced response as outlined below.

States that have been delegated the NPDES program from EPA have the authority under the Clean Water Act to adopt regulatory provisions that are different, but no less stringent than, those required under federal regulations. Such state-adopted provisions that would operate in lieu of the following recommendations could include a QL value lower than the nationally promulgated QL. In that case, the QL applicable under the state program would be used for determining compliance, reporting, and other applicable requirements.

i. The FACDQ recommends that a Part 136 DL and QL determined by the procedure recommended by the FACDQ be promulgated for each method/analyte combination which shall be the upper bound for lab performance. The default QL is the Part 136 promulgated value, unless states adopt an alternative but no less stringent approach. The permit must include the applicable QL. The NPDES permit must contain language that requires the use of a Part 136 method with a QL at or below the WQBEL. If no such method exists, the permit must provide that the appropriate method with the lowest QL be used. The facilities must require the lab to report lab-specific DLs and QLs as determined by the procedure recommended by the FACDQ and maintain such information for a period of at least five years. The FACDQ further recommends, for purposes of updating the Part 136 DLs and QLs, that EPA require the lab-specific information be reported in the Integrated Compliance Information System (ICIS).

[Note: This needs work in terms of implementation, particularly with respect to Part 122 but not Part 123. For example, the FACDQ needs to consider what happens when the national QL changes during the life of the permit, and whether there were suggestions from the FACDQ to address that.]

ii. Set average and daily maximum permit limits at the WQBEL.

iii. While the FACDQ recognizes that values between a given laboratory's DL and QL have a higher level of uncertainty, the science suggests they are unlikely zero. However, assigning a non-zero value where an analyte is detected but not quantified (DNQ) would have significant compliance and enforcement implications. Therefore, assign zero for values less than the permit QL when determining average and daily maximum discharge levels.

iv. To determine NPDES permit compliance, compare average and daily maximum discharge levels, calculated in accordance with item (iii.) above, to the respective WQBEL.

v. A permittee must report to the permitting authority all information in the following manner:

When reporting daily maximum sample results:

a. For values less than the DL, report "ND" (not detected) on the DMR.
b. For values greater or equal to the DL and less than the QL, report "DNQ" (detected not quantified) on the DMR.
c. For values greater than or equal to the QL, report the actual values on the DMR.

When reporting averages:

d. Where all values used to calculate an average are less than DL, report "ND" on the DMR.

e. Where all values used to calculate an average are greater than or equal to DL but less than QL, report "DNQ" on the DMR.
f. When values used to calculate an average are a combination of ND and DNQ values, report "DNQ" on the DMR.
g. When any value used to calculate an average is greater than or equal to QL, report on the DMR the average as calculated in item (iii.) above.

Additional reporting requirements:

h. Report the lab-specific DL and QL and the individual numeric result for any value that is greater than or equal to the lab-specific DL and less than the permit QL in a supplemental report.
i. The permitting authority shall report the lab-specific DL and permit QL for each analyte to EPA in ICIS.

vi. Permits shall include language that triggers additional steps when a "significant number of" (to be determined in permitting process) DNQ values are reported. These steps may include additional or accelerated monitoring, analytical studies such as matrix studies, pollutant minimization programs, or other permit conditions outside of the determination of compliance with effluent limitations. Reports under such provisions will be done outside of the DMR reporting process, except that any additional effluent testing performed using approved analytical methods as part of the special studies must be reported according to the protocol in (v.).

Recommendation B: Current EPA guidance for implementing permit limits for WQBELs that challenge current analytical capabilities stipulates that the permit should specifically reference the most sensitive method approved in 40 CFR Part 136 and require its use to demonstrate compliance. The FACDQ recommends that EPA modify this reference to "the most appropriate method, taking into account sensitivity, selectivity and matrix effects" (i.e., "best method") and that EPA then incorporate this revised guidance into the regulation that it issues to implement the FACDQ recommendations.

6. **Matrix Effects**

Recommendation: The FACDQ recommends the Policy Work Group develop some guidance on the topic for the FACDQ to consider at a future meeting.

7. **Other Uses to Consider**

Recommendation: The FACDQ tabled the following list of additional uses:

- ambient monitoring 305(b)
- pretreatment
- non-regulatory operational monitoring
- stormwater monitoring
- other studies, such as fish tissues or biosolids characterization
- reasonable potential analysis

8. Another Issue to Consider: Alternative Test Procedures

Recommendation: The FACDQ tabled the option of developing recommendations to EPA on updating the Alternative Test Procedures (ATP) program.

9. Implementation of the FACDQ Recommendation

Recommendation: Initially, EPA would propose a new regulation that would essentially establish the recommendations of the FACDQ as regulations. This would include removing any current procedure (if that is the recommendation of the FACDQ), incorporating any recommended procedures, and making any other changes recommended by the FACDQ (e.g., new permitting regulations per our current discussion of uses).

Once those regulations are in place, the procedures would be utilized in all future EPA method development/validation work and DLs and QLs would be promulgated with all new methods. As deemed appropriate by EPA, additional Federal Register notices and rulemaking would be used to update the detection and quantitation limits.

Day 1 – Wednesday, December 6, 2006, 9:00 AM – 5:00 PM

Opening and Introductions
Richard Reding, EPA Designated Federal Officer (DFO), opened the meeting at 9:05 AM and welcomed participants. He announced that Environmental Community Caucus member Rob Moore had been selected to serve on the New York Governor's transition team and, because of the time required for work on the transition team, had officially resigned from the committee. He also reported that Environmental Community Caucus Richard Rediske would participate in the meeting via the teleconference line. He then turned the meeting over to Alice Shorett, facilitator.

Ms. Shorett introduced the facilitation team from Triangle Associates. She announced that Derek Van Marter was leaving Seattle for a new job in eastern Washington and that Cole Gainer would assume Derek's duties. She then initiated a round of introductions of advisory committee members.

Ms. Shorett observed that the committee had made significant progress over the past 18 months toward achieving the objectives in the committee's charter, which were to:

> *Provide advice and recommendations on approaches for the development of detection and quantitation procedures and uses of these procedures in CWA programs.*

At the committee's July meeting, she recalled, the committee had

- Agreed to a document describing the characteristics the committee wants in a procedure;
- Accepted the pilot study design and authorized moving forward on the pilot study;
- Discussed in detail uses for detection and quantitation; and
- Agreed that the committee needed more time to complete its work and fulfill the charter obligations.

Since July, the pilot study had been launched and results were expected in January. The Policy Work group had continued its work on the "uses straw" proposal from the July meeting. In 12 meetings and through a lot of email work, the Policy Work Group had developed a set of recommendations on policy issues related to uses for discussion and decision at this meeting. The focus of this meeting, she said, would be on those uses.

Ms. Shorett recalled Ephraim King's advice from the July meeting: which was to "find the issues you can get close to resolution on, like consensus points. The committee has a wonderful opportunity to find middle ground, and set the future in terms of CWA method decision-making for the next 20-30 years." Where the committee could not reach agreement, Mr. King had urged the members to identify the divergent opinions and move on.

Ms. Shorett encouraged the committee to listen carefully, including listening for the "why" behind what members said, and to search for ways to develop a package that would meet the interests of all the constituencies at the table.

Ms. Shorett then turned the microphone over to Mary Smith of EPA.

Welcome from EPA
Mary Smith welcomed everyone and echoed the fact that the meeting's focus would be on uses.

In response to questions about what would constitute sufficient "significant progress" that EPA would extend the committee's charter, she said that she needed to be able to report to Mike Shapiro on Thursday evening that the committee had been able to work together to find compromise on issues that had been on the table for the last 15-20 years. She acknowledged that a lot was at stake for everyone at the table. From the perspective of the federal government, she said, budgets were shrinking and there was impetus to focus on the things that really counted and to find ways to make them happen.

Agenda Overview and Grounding
Ms. Shorett then briefly reviewed the agenda for the three day meeting. She noted that the meeting on Day 1 was designed to present the draft policy recommendations and respond to questions of clarification and intent. After that, members would "vote" as individuals in a "straw poll" on the policy recommendations, so everyone could see where there were areas of agreement and where additional work was needed. Members would then have the rest of the day to work together, both within caucuses and across caucuses, to find areas of agreement on uses.

Quorum Groundrule Revision
Ms. Shorett then reviewed the committee's groundrules for decision-making, specifically related to a quorum. As a result of Mr. Moore's resignation, the committee's composition had gone from 21 to 20 members. With participation by 80% of the committee as the criterion for a quorum, she suggested that the new quorum should be 16 rather than the previous 17. The committee approved her suggestion.

> **Action**: The committee agreed to amend the groundrules to reduce the number required for a quorum by one, from 17 to 16. The language now reads as follows: "The committee will take no official action, such as offering advice or recommendations, with fewer than 16 participating Advisory Committee members."
> *Vote*: 20 Agree, 0 Not Opposed, 0 Disagree

Review and Approval of Draft Meeting Summaries #4 and #5
Ms. Shorett asked the committee to turn first to the revised summary of Meeting #4. She recalled that a balanced subgroup had been formed after Meeting #5 to review the transcript of Meeting #4 and to propose revised language for a disputed section of the draft summary. The proposed new language had been distributed to the committee. The

committee reviewed the revised language and approved the summary of Meeting #4, as revised.

Action: The committee approved the summary of Meeting #4 with the revisions suggested by a balanced subgroup convened to recommend final language.
Vote: 20 Agree, 0 Not Opposed, 0 Disagree

The committee then reviewed the draft summary of Meeting #5. After discussion and agreement on specific revised language, shown in the box below, the committee approved the summary of Meeting #5.

Action: The committee agreed to approve meeting summary #5, with the following revisions:

- Move action box above section titled "Discussion of Data Analysis for the Pilot Study"
- Same section, third sentence, delete "…least helpful or…"
- Section titled "Discussion of Uses" under the state alternative proposal, the note for items 4 and 5 should read "…estimated value for data greater (~~less~~) than…"

Vote: 20 Agree, 0 Not Opposed, 0 Disagree

Caucus Reports on Outreach
Mary Smith of EPA, the only committee member to report on outreach since the July meeting, said that her interagency group had discussed the issues on the agenda for this meeting.

Committee Discussion and Decisions on Policy Issues and Actions
Ms. Shorett then asked members to refer to the document entitled, "Draft Policy Recommendations for Discussion and Decision." The goal for this part of the meeting, she said, was to review the Policy Work Group's recommendations which reflected a great deal of hard work and compromise. She said that Policy Work Group members Mary Smith, Larry LaFleur (Industry Caucus) and Tom Mugan (States Caucus) would walk the committee through the recommendations. During this review, she asked committee members to ask questions only about the "intent" or "clarity" of the recommendations. There would be time later in the meeting to discuss the recommendations themselves.

Mary Smith set the stage for the review by again highlighting the need to make the tough decisions on uses. Mr. LaFleur and Mr. Mugan took turns walking the committee through the draft recommendations. Member questions, responses, and comments are presented in the discussion below each recommendation. In the few cases where the committee proposed revised language to a recommendation, those proposals are shown.

1. <u>Lab-Determined Detection Limits (DLs) and Quantitation Limits (QLs)</u>

Discussion: Nan Thomey proposed revised language as follows: "method (~~procedure~~) shall (~~should~~) replace 40 CFR…" stating that it had always been a desire for a lab to measure what it could actually achieve.

Question (Tim Fitzpatrick): *Does this refer to a single lab procedure?*
Response (Nan Thomey): *Yes.*

2. Method Promulgation
   Question (Tim Fitzpatrick): Does the Policy Work Group have any recommendation as to what constitutes a multi-lab procedure*?*
   Response (Larry LaFleur): We did not discuss that since it is to be the focus of the next meeting. In general, there should be promulgated methods to facilitate discussions.
   Comment: We are trying to go in the direction EPA seems to be going. In the future, labs and EPA would use procedure(s) that the committee would recommend.
   Question (Richard Burrows): Did the committee talk about how we would come up with the numbers for existing methods?
   Response (Larry LaFleur): There were no specific recommendations. That is something we would need to explore in the context of implementation.
   Comment: There was consensus among the Policy Work Group that the focus would be on new methods and methods that have problems.

3. Demonstration of Laboratory Proficiency of Detection and Quantitation Limits
   Discussion: Mr. LaFleur noted that this topic was important and needed to be addressed in detail in the future.

4. Future Updates of Promulgated Analytical Method DLs and QLs
   Discussion: Mr. LaFleur said that a well defined procedure with a manageable mechanism for updates was needed to address this topic. He mentioned that the Policy Work Group had listened to EPA's concerns and recognized that updating DLs and QLs was not practical. Instead, this recommendation called for EPA to consider the "cost-benefit" of updates in the future in relation to needs and budgets. Several committee members suggested changing the last sentence so that the recommendation did not imply that EPA was under *no* obligation ever to revisit methods.

After a 15-minute break the committee continued its review of the recommendations, again led by Mr. LaFleur and Mr. Mugan.

5. Recommendations for NPDES Permits and Compliance Uses for WQBELs at or below QL
   Discussion: Mr. Mugan clarified that this recommendation assumed that the "reasonable potential" process had already been completed and that the permit limit was below the QL. Mr. LaFleur pointed out a misuse of data between detection and quantification in point 4 of the recommendations.

Question (Steve Bonde): What is reported in point 4, lab QL and DL or method QL and DL?

Response: We think you would use a lab-specific QL but this question has not been specifically addressed yet. At this time a permitee must report to a regulator so I would think QL would be the QL listed in the permit.

Question (Tim Fitzpatrick): What reporting schemes are we talking about and which DL/QLs are we talking about?

Response (Nan Thomey): We couldn't nail down these specific issues in the time available. Consequently, when it comes to voting on them, Triangle may have to force specifics on language and choices.

Because of its relevance to Recommendation 5, the committee then reviewed Attachment B to the draft recommendations, which had been provided by Dave Akers. Mr. Akers explained that his comments were not a proposal but rather reflected a concern that had been raised by the debate over a nationally promulgated QL vs a descriptive QL.

Question (Dave Piller): What would happen in the following scenario: If you get a lab QL that is locked into a five-year permit, what would happen if that lab later left and you had to choose another lab? How would that work with your permit limitations?

Response (Dave Akers): You would have to review the QL of the new lab and check for compliance limitations and schedules.

Comment: The lab [descriptive] QL would not be described in the permit as a numerical value but more as a target, that is, the value would have to be lower than or equal to the national value. If there were a nationally promulgated QL, Attachment B might be irrelevant.

6. Matrix Effects

The committee agreed to reserve discussion of this topic for later in the meeting.

7. Other Uses to Consider

Discussion: Mr. LaFleur said that the list was a response to the committee's promise not to table all the issues that had been considered months before. He said the committee needed to talk about the issues on the list and that it was possible that some could become future assignments. Jim Pletl recommended that 303(d) be added to the list. The committee was reminded, though, that it had decided not to address 303(d) detection/quantitation issues at its July 2006 meeting. Therefore, 303(d) uses were not added back into the discussion.

8. Another Issue to Consider: Alternative Test Procedures (ATP)

Discussion: Cary Jackson told the committee that the bullets presented in the recommendation were an effort to streamline the ATP program.

Question (Mary Smith): How do we grapple with ATP's in terms of the QL and DL issues?

Response (Cary Jackson): That is probably outside the scope of this committee but the committee could address the concerns and make recommendations.

9. Implementation of the FACDQ Recommendation
   Discussion: Mr. LaFleur said this recommendation was a placeholder for what to do in the interim period after decisions had been made but before policies had taken effect. Mary Smith commented that the MDL procedure was currently the only thing in regulation and that it would continue to be applicable in the interim period.

Attachment A. Draft Framework for Implementing FACDQ Recommendations
   Discussion: Nan Thomey explained that she had drafted a flow chart as a visual representation of the committee's recommendations so the committee could see how all the recommendations were interconnected. Ms Thomey added that the flow chart presented included a few modifications to her original idea, but that it still showed visually one option for how the committee's recommendations could be interconnected.

This concluded the committee's initial review of the draft policy recommendations and questions of intent and clarity.

Mr. Shorett said that committee members had told the facilitators that they wanted to know where everyone on the committee was relative to the recommendations. In response to this request, she said the next step would be for committee members to participate in a "straw poll" on the recommendations they had just reviewed. The recommendations were presented on flip charts around the room, with options below each: agree, not opposed, disagree and a space for comments. Members were asked to move around the room as caucuses but to "vote" as individuals on each recommendation by putting their initials in the boxes of their choice (agree, not opposed, disagree) and adding any comments they had relative to the recommendation.

Mr. Shorett said that the committee would adjourn for lunch after members completed the "straw poll." When the committee reconvened, they would jointly review the results of the "straw poll" and see where there were areas of substantial agreement and where further discussions were needed.

Following the lunch break, Ms. Shorett said that the facilitation team had prepared a summary of the "straw poll" votes and the comments and projected them for the committee to review.

The following is the "straw poll" vote summary as projected before the committee:

Straw Poll Summary

		Agree	*Not Opposed*	*Disagree*		
1	Lab Descriptions	20	0	0		
2	Nat Prom QL	8	5	5		
2	Pub of Table	4	8	4		
3	Lab Proficiency	15	3	1		
4	Future Updates	5	12	3		
5A.1	Permit @ WQBEL	4	14	1		
5A.2	0 for Averaging	7	9	4		
5A.3	Compliance Using 0	4	11	4		
5A.4	Supplemental Report	2	18	0		
5A.5	Additional Steps	-	-	-		
	May	5	12	0		
	Shall	3	1	4		
5B	Most Appropriate Method	18	2	0		
		Should	*Should Not*			
6	Matrix Effects	20	0			
7	Other Uses	-	-	-		
		Issue is within FACDQ charter		**Priority**		
		Yes	*Not Opposed*	*High*	*Med*	*Low*
8	Alt Test Procedures	10	5			7
		Agree	*Not Opposed*	*Disagree*		
9	Implementation of Recommendations	7	12			

After reviewing the results, the committee began discussion of the recommendations, beginning with Recommendation #1, Lab-determined DL's and QL's, where the "straw poll" indicated the committee had reached consensus. After discussion of the precise language in the recommendation, the committee agreed to the following recommendation:

1. Lab-Determined Detection Limits (DL's) and Quantitation Limits (QL's)[3]

Recommendation: The FACDQ recommends that EPA promulgate the descriptive single-laboratory procedure recommended by the FACDQ for individual laboratories to determine their actual detection and quantitation limits. The FACDQ further recommends that this descriptive procedure replace the one currently in 40 CFR Part 136 Appendix B.

The committee then turned to Recommendation #2 related to Method Promulgation. Discussion of this recommendation focused on the goals of building on the existing framework, preventing "lab shopping," and creating a level playing field. The committee reached agreement on the following recommendation:

2. Method Promulgation

[3] The Policy Work Group agreed to use the terms DL for detection limit and QL for quantitation limit.

Recommendation: The FACDQ recommends that when the EPA promulgates future analytical methods in 40 CFR Part 136, detection limits (DL's) and quantitation limits (QL's) shall be included with the methods using the procedure recommended by the FACDQ. These limits will serve to define the minimum required performance of a laboratory, assist in comparing performance of one method to another (facilitating selection of a method most suitable for a given use), and define important thresholds for use in evaluating compliance. (See the section titled "NPDES Permits and Compliance Uses.") The limits will be published in a table in a promulgated rule in 40 CFR Part 136. [4]

After a short break the committee reconvened and took up Recommendation #5, related to NPDES Permits and Compliance Uses for WQBELs below QL. The "straw poll" had shown that there was a significant division of opinion within the committee on this recommendation.

Ms. Shorett asked the committee for suggestions on how to reach agreement. Ms. Smith offered the following compromise which was projected for the committee to consider:

Possible compromise addition for #5:
Set a national QL by looking first at the most sensitive methods, but also consider matrix effects and other factors. The national QL is considered the upper bound for lab performance by analyte and by method. The default QL/DL is the Part 136 promulgated value, unless states generate their own or allows lab-specific limits. Require facilities to ensure their labs are reporting lab-specific DLs and QLs as determined according to the procedure recommended by the FACDQ. [Need step for regulatory data reporting.] ICIS will accommodate this data that EPA will then use to consider for updating the national QL/DL.

After considerable discussion, the proposal was revised as follows:

[4] The PWG has agreed to incorporate a new table of promulgated detection and quantitation limits in a rule, but the Group has not had a full discussion of what would be included in the table.

Possible compromise addition for #5:

The FACDQ recommends that a Part 136 DL and QL determined by the procedure recommended by the FACDQ be established for each method/analyte combination which shall be the upper bound for lab performance. The NPDES permit must contain language that requires the use of a Part 136 method with a QL at or below the WQBEL. This QL can be the Part 136 QL, or a State or lab-specific generated QL. If no such method exists, the permit must provide that the method with the lowest QL be used. The facilities must require the lab to report lab-specific DLs and QLs as determined by the procedure recommended by the FACDQ and maintain such information for a period of at least five years. The FACDQ further recommends, for purposes of updating the Part 136 DLs and QLs, that EPA require that the following lab-specific information be reported in the Integrated Compliance Information System (ICIS)

1. DL
2. QL
3. Date DL and QL were last updated
4. Method name
5. Lab name and address

The committee concluded its deliberations for the day at this point.

Public Comment

Ken Osborn of the East Bay Municipal Utility District briefly addressed the committee via the teleconference line. In response to the committee discussion in the previous section of listing quantitation and detection limits in new methods, Mr. Osborn said that he had reviewed results from some Alternative Test Procedures (ATPs) that he had in his office and noted that some of them included quantitation and detection limits in tabular form. He said that there was at least a start on this process, even though the issue of keeping the limits up to date remained a thorny one.

Wrap-up and Adjourn for the Day

Alice Shorett asked that interested committee members arrive at 8:00 AM the following morning, an hour before the meeting was to convene, to discuss the recommendations and the latest version of the proposal for #5. She encouraged caucuses to meet over the evening to identify opportunities for negotiation.

Richard Reding, DFO, adjourned the meeting at 7:12 PM

Day 2 – Thursday, December 7, 2006, 9:00 AM – 5:30 PM

Welcome and Agenda Review
Richard Reding, DFO, opened the meeting at 9:00 AM and turned the meeting over to the facilitator, Alice Shorett.

Ms. Shorett identified three sets of topics the committee needed to address over the course of the day:

- Continued discussion and decisions on policy recommendations related to uses
- Matrix Effects
- Data Quality Objectives and Measurement Quality Objectives

The format of the day would include work as a full committee, in caucuses, and across causes, with a goal of reaching consensus on as many uses as possible. She also asked for a round of applause for the committee members who had worked late the night before at the informal technical session.

Please note: Because much of the discussion on Day 2 occurred in caucuses and cross-caucus work groups, this summary presents specific proposals that were developed in smaller groups and projected for the full committee to consider. Committee discussions of these specific proposals follow the proposal.

Continued Discussion and Decisions on Uses
Ms. Shorett asked the FACDQ members who had arrived early in the morning to present the proposal language they had drafted. The proposal, projected before the committee, read as follows:

> Possible compromise addition as #5.A.0:
> The FACDQ recommends that a Part 136 DL and QL determined by the procedure recommended by the FACDQ be promulgated for each method/analyte combination which shall be the upper bound for lab performance. The default QL/DL is the Part 136 promulgated value, unless States adopt an alternative but no less stringent approach. The NPDES permit must contain language that requires the use of a Part 136 method with a QL at or below the WQBEL. If no such method exists, the permit must provide that the appropriate method with the lowest QL be used. The facilities must require the lab to report lab-specific DLs and QLs as determined by the procedure recommended by the FACDQ and maintain such information for a period of at least five years. The FACDQ further recommends, for purposes of updating the Part 136 DLs and QLs, that EPA require lab-specific information be reported in the Integrated Compliance Information System (ICIS).
> [Need to add that the permit will include the QL.]

The discussion that followed included the following comments:
Comment (Richard Burrows): A suggestion may be needed for what would be done to or required of analytes without QL's.

Comment (Tim Fitzpatrick): This allows EPA to take advantage of existing data from other states.

Comment (Michael Murray): Would like to see enough room for states to adopt more sensitive methods so that current low QL initiatives aren't damaged.

Comment (Larry LaFleur): There are issues with a lab-specific process and a regulatory system based upon descriptive methods. Mr. LaFleur said he would like some dialogue on most appropriate method but appreciated the goal of all data going to ICIS.

Comment (Barry Sulkin): It needs to be kept in mind that some states, such as New Mexico, cannot go lower than EPA levels.

Comment (Steve Bonde): We like this because the language doesn't suggest that state permits will require a specific method.

Ms. Shorett suggested that a few people work together as a drafting group over lunch and revise the language for the committee to review after lunch. Recommendation 5A.3 was projected next before the committee and discussed for comments and ideas.

> 5A.3: To determine compliance, compare discharge levels to the WQBEL after assigning 0 (zero) to results <QL, as in #2 above: [When determining average and daily maximum discharge levels, set values < QL equal to zero.]

Comment (Michael Murray): People feel DL is important so a value other than zero should be used. The actual value could be used or even an estimate/fraction.

Comment (Tim Fitzpatrick): Since the value is 99% greater than zero it makes sense to use the number you get.

Comment (Dave Piller): As this is for permit compliance reporting only, the value may be reported as zero but the hard data will still be included in the archives.

Comment (Larry LaFleur): Let's talk about the interpretation of what enforcement means. If we change the 'may' to 'shall,' then perhaps we need new recommendations changing severity of noncompliance consequences.

Comment (Mary Smith): We should make clear that zero would not be reported to ICIS.

Comment (Steve Bonde): Having zero could affect the health of an ecosystem.

Comment (Chris Hornback): This structure is a good balance and it works for a number of reasons.

Comment (David Kimbrough): The intent here is to strike a balance and this is a good approach, balance and compromise.

Comment (Dave Piller): We have to remember that this is for NPDS permit reporting and compliance. The data is not going away. It is a normal practice to use zero. A standard practice is to report the detection limit in the DMR if you are nondetect. If all your values are less thans, you don't say it's zero because you substitute zero for everything. The substitution is only used if you have positive values and less than values. If they're all less than, then you would report less than the largest less than value that you had when you had the DMR. I do have permits that require me to provide all data used in averaging. So even today those values are being supplied to the agencies.

Comment (Barry Sulkin): There is still a question of geometric mean. Certain bodies of water have parameters around bacteria content and corresponding implications. The permitee is not just at risk for reporting above the QL, so are the fish and people swimming. Fish and sediment have been found loaded up with pollutants like mercury and PCBs though all water quality reports say 'non-detect'.

Comment (Chris Hornback): Violation means more to us than enforcement as it tarnishes our reputation in the public eye.

Ms. Shorett called for a short break during which she and Ms. Smith met with appointed caucus leaders. The group jointly developed a proposal to include an introduction to Recommendation #5 that would acknowledge the package as a whole, the uncertainty of data, patterns of data, and the states' rights to be more stringent. The following proposed introduction was read and projected:

> The FACDQ recognizes that the existence of WQBELs at concentrations less than method QLs presents a number of NPDES-related issues. These include appropriate approaches for:
>
> - Calculating monthly averages,
> - Determining compliance with daily maximum limits and monthly average limits,
> - Reporting data, and
> - Appropriate compliance response in light of data uncertainty and the need for the protection of public health and the environment.

To make progress on other recommendations where the committee was divided, Ms. Shorett asked the committee to divide into four cross-caucus groups, each of which would develop a proposed revision for an assigned recommendation for the committee as a whole to review.

Recommendation #2, Method Promulgation:
Bob Avery, Richard Burrows, Jim Pletl, Dave Piller, Michael Murray, and Dick Reding

Recommendation #3, Demonstrated Lab Proficiency &
Recommendation #4, Future Updates:
Tim Fitzpatrick, Larry LaFleur, David Kimbrough, and Nan Thomey

Recommendation #5, NPDES Permits and Compliance for WQBELS below QL:
Dave Akers, Steve Bonde, Chris Hornback, John Phillips, Michael Murray, and Mary Smith

Recommendation #9, Implementation:
Barry Sulkin, Cary Jackson, Tom Mugan, Roger Claff, and Zonetta English

Mary Smith told the committee that she would need to get a sense of whether or not the new drafts were close to what people could live with before her telephone conversation with Mike Shapiro that evening about the future of the FACDQ committee. The

committee then worked in cross-caucus work groups to develop revised recommendations for the committee as a whole to review.

Ms. Shorett reconvened the committee in the afternoon to hear reports from the four groups. Their proposals were projected, one at a time, for the committee to review and discuss. After discussion, the committee also took a "straw poll" on the revised language; the results of the "straw poll" are shown below the revised recommendation.

Recommendation #2: Method Promulgation
Jim Pletl walked the committee through his work group's recommendation, identifying specific changes the group proposed. Dave Akers added that it might be worthwhile to revisit this recommendation to see if introductory language regarding states' rights should be included.

2. Method Promulgation

Recommendation: The FACDQ recommends that when the EPA promulgates future analytical methods in 40 CFR Part 136, detection limits (DLs) and quantitation limits (QLs) shall be included with the methods using the procedure recommended by the FACDQ. These limits will serve to define the minimum required performance of a laboratory, and may assist in comparing performance of one method to another (facilitating selection of a method most suitable for a given use), and may define important thresholds for use in evaluating compliance. (See the section titled "NPDES Permits and Compliance Uses.") The limits will be published in a table in a promulgated rule in 40 CFR Part 136. [1]

The work group also identified objectives which were separate from the policy recommendations:

- Analytical methods and their associated DLs/QLs must be updated with a frequency that keeps current with advancing technologies
- EPA needs to promulgate a process recommended by the FACDQ for developing DL's and QL's for new methods in a timely fashion
- In the interim, EPA should list the new DL's and QL's that they intend to promulgate

Vote: 18 Agree, 2 Not Opposed, 0 Disagree

Recommendation #5: NPDES Permits and Compliance for WQBELS below QL
Ms. Shorett read the proposed recommendation (in the box below) aloud and mentioned that the group had hinted at global recognition with this language. Richard Burrows said that it was not clear whether or not the QL's and DL's were nationally promulgated. Michael Murray added that the committee needed to be clearer regarding the DL's and whether or not they were lab specific. The committee then conducted a straw poll on the proposed recommendation

5. Recommendations for NPDES Permits and Compliance Uses for WQBELs below QL:
Recommendation A:

The FACDQ recognizes the existence of WQBEL's at concentrations less than method QLs presents a number of NPDES-related issues. These include appropriate approaches for

- Calculating monthly average,
- Determining compliance with daily maximum limits and monthly averages limits,
- Reporting of data, and
- Appropriate compliance response in light of data uncertainty and the need for the protection of public health and the environment.

To deal with these various issues, the FACDQ recommends a balanced response as outlined below.

1. TBD
2. Set average and daily maximum permit limits at the WQBEL.

3. While the FACDQ recognizes that values between the DL and QL have a higher level of uncertainty, the science suggests they are unlikely zero. However, assigning a non-zero value where a compound is detected but not quantified (DNQ) would have significant compliance and enforcement implications. Therefore, when determining average and daily maximum discharge levels, assign zero for values < QL.

4. To determine NPDES permit compliance, compare average and daily maximum discharge levels, calculated in accordance with item two above, to the respective WQBEL.

5. A permittee must report to the permitting authority all information in the following manner:

When reporting daily maximum sample results:

- For values less than the DL, report "ND" (not detected) on the DMR.
- For values greater or equal to the DL and less than the QL, report "DNQ" (detected not quantified) on the DMR.
- For values greater than or equal to the QL, report the actual values on the DMR.

- When reporting averages:

  - Where all values used to calculate an average are less than DL report ND on the DMR.
  - Where all values used to calculate an average are greater than or equal to DL but less than QL, report DNQ on the DMR.
  - When values used to calculate an average are a combination of ND and DNQ values, report DNQ on the DMR
  - When any value used to calculate an average is greater than or equal to QL, report the average as calculated in item 2. above on the DMR

- Other reporting requirements

  - Report the individual numeric result for any value that is greater than or equal to DL reported by the laboratory and less than QL in a supplemental report.
  - The permitting authority shall report the DL and QL for each analyte to EPA

Vote: 17 Agree, 2 Not Opposed, 0 Disagree, 1 Absent

Recommendation #3: Demonstrated Lab Proficiency

Larry LaFleur walked the committee through the recommendation saying that the language was pretty much left as is since the "straw poll" comments suggested

consensus. He said his group tried to focus on guidance for the policy/technical work group as to what the intent of ongoing and initial verification should be.

3. Demonstration of Laboratory Proficiency of Detection and Quantitation Limits
Recommendation: The Policy Work Group recommends that the FACDQ develop a process for initial and on-going verification of DLs and QLs by laboratories.
Guidance to PWG/TWG:

1. The FACDQ recommendation procedure (e.g. what goes into 136 App. B) should include the on-going demonstration (either explicitly within the procedure or as an "attachment" if the FACDQ chooses to recommend a consensus procedure).
2. Separate initial vs. on-going demonstrations
3. Strive for feasibility, practicality, representativeness and cost effectiveness.

The sub-group recommends the discussion not be incorporated verbatim in the final report.
Vote: 19 Agree, 0 Not Opposed, 0 Disagree, 1 Absent

Recommendation #: Future Updates
Mr. LaFleur reported that there was some angst over the clarity of the last sentence in this recommendation and so his group tried to draw upon the language the states had suggested. He said that his group tried to find a way to strengthen, through language, the objectives of feasibility, practicality, and cost effectiveness concerning state's procedures in providing regular input to EPA.

4. Future Updates of Promulgated Analytical Method DLs and QLs
Recommendation: The Policy Work Group suggests that the FACDQ recommend that EPA periodically review current capabilities of promulgated analytical methods. The focus of this review should be on methods where there have been significant improvements in detection or quantitation limits or on methods which do not contain DLs or QLs. This review would be particularly important for cases where detection and quantitation limits are critical to the permit program (e.g., those required for very low WQBELs). EPA should focus on analytes for which current methods provide poor performance or do not meet program needs. Using best judgment and where resources are available, EPA shall update DL and QL limits on an on-going basis. EPA should also consider information submitted by states and/or other qualified third parties. EPA shall publish an annual Advanced Notice of Proposed Rulemaking (ANPR) announcing the DLs and QLs they propose to update.
Vote: 18 Agree, 1 Not Opposed, 0 Disagree, 1 Absent

Recommendation #9: Implementation
Tom Mugan reviewed his groups work on Recommendation #9 as a brainstorming and question session. Mr. Mugan presented his group's discussions as a series of questions and statements. No committee polling was conducted for these.

9. Implementation of the FACDQ Recommendation

What needs to be in regulation?

The procedure(s) – single and multi?

Other stuff – new methods, etc

FACDQ needs to be deliberate as to what should be in regulation

Until promulgation, it's business as usual. Could be more than one procedure – wording would need to be modified to reflect it

After promulgation, EPA needs to provide guidance, training, support to states (delegated authorities) and other interested groups.

QL in effect for life of permit?

Can these be automatically incorporated upon promulgation?

If QL is hard-coded in permit, then should the permit be modified? May depend on the remaining term of the permit.

Promulgated parts of EPA regulation – how incorporated into state law? Time limits?

Need for implementation schedule?

What happens with all of the existing methods approved in Part 136 that include mention of the MDL?

<u>Placeholder</u>

Interim population of table – (a fill-in-the-blank for the good analytes; 90-95% of those listed, there will still be some blanks)

*Set QL at ½ the lowest WQC in the National Toxics Rule and for non-toxic analytes ½ the SDWA MCL's as the most sensitive downstream beneficial use

Attachment A: The work group that developed a proposal for Recommendation #9 also suggested revisions to the three boxes in the flow chart below. They agreed that the chart was a nice visual supplement to the recommendations and that it helped identify future landmines that could surface through implementation. There was also some discussion over who would take responsibility for implementation of Block 3 and if it would be EPA or a yet-to-be-established entity.

3) DL/QL czar or committee to coordinate with various organizations Certification/Accreditation Programs Public outreach/Training Coordinate laboratory Consistency	6) Promulgate Initial QL/DL 7) Promulgate Initial MQOs

After the discussion and "straw polls" on the revised recommendations ended, Ms. Smith told the committee that its approval of the revisions gave her the information she needed to speak encouragingly about the progress of the FACDQ with Mike Shapiro later that evening. She said she would report on her discussions with Mr. Shapiro on Day 3.

Discussion of Matrix Effects

The committee then turned its attention to a discussion of matrix effects. Ms. Shorett referred members to the document entitled, "Options for Addressing Matrix Effects, Questions to the FACDQ from the Technical and Policy Work Groups," prepared by Larry LaFleur, which had been distributed to the committee in advance. Mr. LaFleur recalled that the straw poll taken on Day 1 had shown unanimous concern over matrix effects. Mr. Lafleur said that Policy Work Group had talked about this issue and that his document reflected those thoughts. The recommendations were in three parts:

- General recommendations
- Method validation and promulgation
- NPDES permitting

He said that he hoped to get direction from the committee to develop option A, which is:

At a minimum, we make a recommendation that:
1. EPA develop a cost effective procedure for validating the reagent water MDL in real world sample matrices which would be used by EPA, permittees or third parties and propose it in the Federal Register for public comment.
2. For all future methods, EPA would utilize the above procedure to validate their reagent water MDLs in a set number of matrices (industry proposes 6 different SIC codes as a starting point for FACDQ discussions).
3. EPA would audit/validate third party data developed using the procedure and incorporate the results into the promulgated method.
4. EPA would incorporate a table in new methods that includes the reagent water data and any matrix specific data.
5. If a new DL and QL table is added to Part 136, it also be annotated (perhaps through footnotes or a comments section) to reflect any matrix specific DL or DL information.

Comment (Tim Fitzpatrick): I agree that Option A is the best procedure to follow. I wouldn't want to delay developing a procedure until a matrix-specific approach could be incorporated.

Question (David Kimbrough): Larry, how do you see this plugging into the language in the pumpkin book?

Response (Larry LaFleur): We want to look at it of course, not reinvent the wheel – I think what we're looking at is a well defined procedure (with a certain number of experiments) to submit to EPA. For example, in Option A we would have the ability for 3rd parties to develop the information and submit it to EPA

Question (Dick Reding): Is there an option C? What if a permitee developed the information once they felt they had a problem with a matrix effect and submit it

for consideration? It shifts the burden off of EPA to find the resources to address these concerns for everyone.

Response (Larry LaFleur): That is exactly what we were getting at in the NPDES permitting recommendation. If we are going to put time into developing new things, then it might prioritize all of the options. What we need is direction on this. How much work we put into it and where do we go on it? I would like to see a poll of how many people would like to pursue this.

Comment (Michael Murray): I was thinking along the same lines of an Option C. I was thinking about the implementation framework that Nan originally put together. Matrix effects were under the applications phase after DLs and QLs had been developed. We might consider it in the implementation phase. An individual facility demonstrating the matrix effects is a good approach. Developing matrix specific DLs and QLs is going to be a difficult task.

Comment (Dave Akers): Looking at the Matrix Effects Document (Document #6); it seems like this document seems to lay out some more specifics of moving forward on the issue. I wonder if you have any feelings on it.

Response (Larry LaFleur): If we are going to come up with that kind of procedure for an individual facility to demonstrate matrix effects, these are the kinds of things that will need to be addressed.

Comment (Jim Pletl): I would like to emphasize the importance of this issue to our caucus. One of the things we don't talk a lot about here is our pretreatment programs. We do face this issue time and again and how to get reliable measurements that are far and removed from reagent water. I would like to hear a general vote that we are going to generate some resources to this issue.

Comment (Steve Bonde): Dave Akers and I both presented alternative procedures for this that we would also like to have considered.

Public Comment

There were no public comments on Day 2 of the meeting.

Wrap-up and Adjourn for the Day

Alice Shorett reviewed the agenda items for Day 3 which included the following:

- Review decisions on the policy issues
- Matrix effects
- DQOs and priorities of other uses
- Working definitions
- Final report outline
- Procedures
- Recap of all decisions
- Assignments to the Technical Work group and the Policy Work Group

Richard Reding, DFO, adjourned the meeting at 5:15 PM

Day 3 – Friday, December 8, 2006, 8:00 AM – 1:00 PM

Meeting Opening
Richard Reding, DFO, opened the meeting at 8:00 AM and thanked committee members for their hard work over the previous two days. He noted that the committee was scheduled to end at 1:00 PM and asked for a show of hands of anyone who needed to leave before then. (No one did.) He then turned the meeting over to Alice Shorett, facilitator.

Data Quality Objectives
Ms. Shorett briefly reviewed the agenda for the day. She then introduced committee member Jim Pletl to give a presentation (using PowerPoint) on data quality objectives (DQOs). Mr. Pletl recalled that the committee had spent significant energy trying to reach agreement on four specific measurement quality objectives (MQOs) -- false positives, false negatives, accuracy and precision, and acknowledged that it had been difficult to reach agreement across the committee. Rather than continuing that approach, he recommended that the committee step back and first seek consensus on broad DQOs. If the committee were able to agree on them, that would be useful input to EPA.

After Mr. Pletl's presentation, the committee had a productive discussion about the value of reaching agreement on broad DQOs, the implications of doing so, the importance of focusing on DQOs for Clean Water Act programs that would protect human health and the environment, and the issue of deciding which DQOs to focus on within the time the committee has. While several members spoke of the need to make progress on MQOs, others expressed concerns about trying to reach agreement on specific objectives and favored working toward agreement on broad DQOs.

Several members noted that the caucus' interest statements from the committee's first meeting could be a useful source of broad data quality objectives – such as, scientifically defensible, feasible, protective of the environment, accurate, consistent, uniform, implementable, cost effective, national applicability, and consistency with regulations. At the end of the discussion the committee agreed to ask Jim Pletl to lead the work of a subgroup (of the Policy Work Group) to review the committee's work to date and to develop a list of DQOs for the committee to consider at its June meeting.

Action: The committee agreed to task the Policy Work Group with developing broad statements of data quality objectives for the committee's consideration at a future meeting.
Vote: 20 Agree, 0 Not Opposed, 0 Disagree

Continued Discussion and Decisions on Uses
Ms. Shorett then called on representatives of a work group that had met at 7 AM to work on Recommendation 5A to report their suggested revisions to the committee. The language was projected, read aloud and discussed. It was noted that the preamble was added to acknowledge the states' legal authority and that the intent of the recommendation was to level the playing field for all interests, nationally. After

considerable discussion on proposed changes to every part of the draft, the committee broke into caucuses and discussed the proposed language while Ms. Smith and Ms. Shorett conferred with the respective caucuses.

When the committee reconvened, Ms. Smith presented compromise language she had developed and described the intent. She said there would be two sets of permit regulations. Part 123 currently says what states must do to have a regulated program. She proposed putting this into Part 122 so that it would preserve the states' primacy to do something more stringent than EPA. Regarding the concern over what would happen to permits if the national QL were to change, Ms. Smith said some states with permits running for more than five years would be subject to revisions in Part 122 that would say states would have to reopen permits or strongly consider reopening permits within five years. She said the Policy Work Group could be tasked with drafting this concept further. The states would also be allowed to choose between the national QL and a more stringent one.

The following language for Recommendation 5A was projected and voted on.

To deal with these various issues, the FACDQ recommends a balanced response as outlined below.

States that have been delegated the NPDES program from EPA have the authority under the Clean Water Act to adopt regulatory provisions that are different, but no less stringent than, those required under federal regulations. Such state-adopted provisions that would operate in lieu of the following recommendations could include a QL value lower than the nationally promulgated QL. In that case, the QL applicable under the state program would be used for determining compliance, reporting, and other applicable requirement.

i. The FACDQ recommends that a Part 136 DL and QL determined by the procedure recommended by the FACDQ be promulgated for each method/analyte combination which shall be the upper bound for lab performance. The default QL is the Part 136 promulgated value, unless states adopt an alternative but no less stringent approach. The permit must include the applicable QL. The NPDES permit must contain language that requires the use of a Part 136 method with a QL at or below the WQBEL. If no such method exists, the permit must provide that the appropriate method with the lowest QL be used. The facilities must require the lab to report lab-specific DLs and QLs as determined by the procedure recommended by the FACDQ and maintain such information for a period of at least five years. The FACDQ further recommends, for purposes of updating the Part 136 DLs and QLs, that EPA require the lab-specific information be reported in the Integrated Compliance Information System (ICIS).

[Note: This needs work in terms of implementation, particularly with respect to Part 122 but not Part 123. For example, the FACDQ needs to consider what happens when the national QL changes during the life of the permit, and whether there were suggestions from the FACDQ to address that.]

ii. While the FACDQ recognizes that values between a given laboratory's DL and QL have a higher level of uncertainty, the science suggests they are unlikely zero. However, assigning a non-zero value where an analyte is detected but not quantified (DNQ) would have significant compliance and enforcement implications. Therefore, assign zero for values less than the permit QL when determining average and daily maximum discharge levels.

iii. To determine NPDES permit compliance, compare average and daily maximum discharge levels, calculated in accordance with item (iii.) above, to the respective WQBEL.

iv. A permittee must report to the permitting authority all information in the following manner:

Additional reporting requirements:

a. Report the lab-specific DL and QL and the individual numeric result for any value that is greater than or equal to the lab-specific DL and less than the permit QL in a supplemental report.
b. The permitting authority shall report the lab-specific DL and permit QL for each analyte to EPA in ICIS.

v. Permits shall include language that triggers additional steps when a "significant number of" (to be determined in permitting process) DNQ values are reported. These steps may include additional or accelerated monitoring, analytical studies such as matrix studies, pollutant minimization programs, or other permit conditions outside of the determination of compliance with effluent limitations. Reports under such provisions will be done outside of the DMR reporting process, except that any additional effluent testing performed using approved analytical methods as part of the special studies must be reported according to the protocol in (v.).

Action: The committee agreed to the spirit of this language and to task the Policy Work Group with moving forward on this recommendation.
Vote: 20 Agree, 0 Not Opposed, 0 Disagree

In the discussions associated with the vote**,** it was recommended that the facilitation team review the discussion to capture key points that the Policy Work Group would need to consider or address when it continues working on Recommendation #5.

Recommendation #7: Other Uses to Consider
After discussion, the committee tabled further work on other uses, while acknowledging that the committee could reconsider some of the uses in the future if time permitted.

Action: The committee agreed to table the consideration of Other Uses and do no further work on it, while still recognizing its significance and the possibility of returning to the topic at some time in the future.
Vote: 18 Agree, 2 Not Opposed, 0 Disagree

Recommendation #8: Another Issue to Consider: Alternative Test Procedures
After discussion, the committee tabled further work on this recommendation, while acknowledging that the committee could reconsider this issue in the future if time permitted.

Action: The committee agreed to table the consideration of Alternative Test Procedures and do no further work on it, while still recognizing its significance and the possibility of returning to the topic at some time in the future.
Vote: 18 Agree, 2 Not Opposed, 0 Disagree

Recommendation #9: Implementation of the FACDQ Recommendation
With respect to this recommendation, it was suggested that the Policy Work Group further develop the list of implementation issues from Day 2 of the meeting (including deciding what the committee would recommend be in regulation versus guidance or what to do about methods that are Part 136 methods that include mention of the MDL in them). It was further decided that the work would proceed with participation from others on the committee who were interested in it.

Action: The committee agreed to task the Policy Work Group with further developing Recommendation 9
Vote: 20 Agree, 0 Not Opposed, 0 Disagree

Recommendation #6: Matrix Effects[*]
The committee briefly discussed this recommendation. Members noted that they had agreed it was an important issue on Day 2 and tasked the Policy Work Group with

[*] This is reported in the order the committee discussed it.

reviewing the work done on this issue by a subgroup and bring language to the committee to consider at a future meeting.

Action: The committee agreed to task the Policy Work Group with assigning a sub-group to look at Matrix Effects, and providing some guidance on them for the FACDQ to consider in its final recommendation.
Vote: 18 Agree, 2 Not Opposed, 0 Disagree

Package of Recommendations
Ms. Shorett then asked the committee to vote on the package of policy recommendations as revised, acknowledging that sections were being sent to the Policy Work Group for further work and to be brought to the committee for consideration in June. She also noted that the facilitation team had been tasked with pulling out the key points from the FACDQ's discussions of specific recommendations as input to the Policy Work Group's further work on the package.

Action: The FACDQ agreed to support the spirit and intent of the policy recommendations as revised and recommended that the policy work group refine the language in the recommendations according to the FACDQ discussions in December and bring revised recommendations to the June meeting.
Vote: 19 Agree, 1 Not Opposed, 0 Disagree

Extension of the Committee's Charter
Ms. Shorett called on Mary Smith to report on her conversation with Mike Shapiro the previous evening. She said Mike had been very pleased with the progress made and the willingness of people to come to agreement on a package. He wished to indicate his pleasure in the great job the committee was doing and said he was willing to extend the FACDQ until December 31, 2007.

Report from the Final Report Work Group
Zonetta English reported to the committee that the Final Report Group had had a conference call in November and had discussed the following:

- Audience for the report
- Purpose of the report
- Content of the report, including the Executive Summary, the report itself, and the Appendices
- Additional committee materials that would be available at the EPA website

Jim Pletl mentioned the need for a timeline or schedule for the Final Report that provided adequate time for review and editing. Ms. English asked Ms. Smith for guidance on rules regarding the dissemination of drafts for review electronically. She also asked for help to make sure feedback from each caucus would be accounted for and agreed upon. She reiterated the need for developing a schedule for the report given the complexity of the topic and the FACDQ's need for time to reach agreement.

Action: The committee agreed to task the Final Report Work Group with beginning work on the final report and to prepare a timeline for producing the document. The committee asked the work group to begin assembling a draft of the final document, leaving placeholders where necessary, for the committee to discuss at a future meeting.
Vote: 18 Agree, 0 Not Opposed, 0 Disagree, 2 Absent

Public Comment
No public comments were made on Day 3 of the meeting.

Wrap-up, Assignments and Agenda Topics for the Next Committee Meeting
Policy Work Group Assignments
The committee agreed to assign the following tasks to the Policy Work Group:

- Complete refinements to the revised policy issues document, particularly highlighted sections.
- Develop recommendations on data quality objectives for the committee to consider at its next meeting.
- Develop recommendations on implementation issues, using earlier one-pager (from Mary Smith) and ideas from FACDQ6 meeting.
- Develop recommendations on matrix effects for the committee to consider at a future meeting.
- Develop recommendations and other details for initial and on-going verification.
- Develop a list of existing methods and associated priorities for detection and quantitation limits.

Action: The committee agreed to task the Policy Work Group with these assignments
Vote: 20 Agree, 0 Not Opposed, 0 Disagree

Technical Work Group Assignments
The committee agreed to assign the following tasks, in priority order, to the Technical Work Group:

- Complete the pilot results, report and recommendations for presentation to the committee at its next meeting.
- Develop recommendations around a procedure or procedures for the committee to consider at its next meeting.
- Develop recommendations and other details for initial and on-going verification (time permitting).
- Develop a list of existing methods and associated priorities for detection and quantitation limits (time permitting).

Action: The committee agreed to task the Policy Work Group with these assignments
Vote: 20 Agree, 0 Not Opposed, 0 Disagree

Agenda Topics for June

- Pilot Study report
- Procedures
- Revised Uses
- DQOs
- Final report

Wrap Up and Dates for Future Meetings

Alice Shorett thanked committee members for their hard work and confirmed the schedule of committee meetings for 2007, all at the FDIC in Arlington, VA.

- June 6-8
- September 19-21
- December 5-7

Richard Reding also thanked members for their hard work and adjourned the meeting at 1:05 PM

MEETING ATTENDANCE

Committee Member	Affiliation
Environmental Community	
Michael Murray	National Wildlife Federation
Richard Rediske *(via teleconference)*	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
Industries	
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
Chris Hornback	National Association of Clean Water Agencies
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

Invited Speakers/Participants	
Kenneth Miller	CSC, Inc.
Kristin Leinberger	

Facilitators	
Alice Shorett	Triangle Associates, Inc.
Bob Wheeler	
Derek Van Marter	
Cole Gainer	

Observers	
Joanne Dea	US Environmental Protection Agency

Brian Englert	
Marion Kelly	
Nicole Shao	
Brad Venner	
Steve Wendelken	
Richard Witt	
Kelly Whitman	
Jim Christman	Hunton & Williams
Colin Finan	Inside EPA

DISTRIBUTED MATERIALS

Committee's Packet of Materials

Agenda (December 6-8, 2006)
Revised Draft Meeting #4 Summary (March 29-30, 2006)
Draft Meeting #5 Summary (July 13-14, 2006)
Draft Policy Recommendations for Discussion and Decision
Options for Addressing Matrix Effects
Developing FACDQ Recommendations around Data Quality Objectives
FACDQ Rationale for Selecting Non-IUPAC Conventions for Data Measurement
Recommendations and Questions for the FACDQ Related to the Draft Outline of the Final Report

Distributed at Meeting

Comparison Matrix of Detection and Quantitation Procedures
Interpretations of Detection and Quantitation Procedures Evaluation Characteristics
Caucus Responses to DQO Questionnaire
What do we need a procedure to do?
Revised Glossary of Terms