2009 CAM Revisions Work Group

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Meeting Minutes from August 4, 2009
Present: Don Muldoon, Liz Denly, Susan Chapnick, Lori Herberich, Dave Dickinson, Scott Buchanan, Jack Miano, Mike Reed, Steve Hartmann, Jack Miano, Jim Occhialini, Kim Reid, Dallas Wait, Liz Callahan, Edie Hutchinson, Michael LeBlanc

1. **Liz Denly presented the Organic Subcommittee's recommendations for CAM Method 8330A (Explosives).**
   - Highlights of revisions made to this method were presented to the Work Group. In general, all revisions made were consistent with other CAM methods. Two corrections will be made to the original CAM protocol:
     - Solid sample holding time will be changed from "7 days to extraction" to "14 days to extraction."
     - Solid samples will be allowed to be frozen for 1 year (not 8 weeks) similar to other extractable organic methods.
   - When completed, the explosives performance standard table will also be sent to Test America in Vermont since this laboratory routinely performs this method.

2. **Susan Chapnick presented the Inorganic Subcommittee's recommendations for CAM Methods for cyanide and hexavalent chromium.**
   - Updated performance standard tables were presented to Work Group members for the above-listed methods. Items which were added or which changed from the original CAM were discussed with the Work Group.
   - There were no objections to any of the changes/additions that were discussed.
   - Additional issues discussed include the following:
     - Cr+6 CAM: add analytical note that pH and ORP should be measured upon receipt at lab for solid samples.
     - Cr+6: add analytical note that a separate jar is recommended for Cr+6 and Total Cr so that the Cr+6 aliquot is not compromised/opened until it is needed for analysis.
     - Cr+6: Require MS for solid samples: Insoluble and Soluble MS for each soil type per project as a CAM protocol requirement for accuracy of method performance in matrix.
     - General: clarify language in all Inorganic CAM protocols that solid LCS requirement of "SRM" is a vendor-supplied certified standard.
     - Cr+6 and CN: add language similar to organic methods that re-calibration required if modify instrument or if major instrument maintenance performed.

3. **Outstanding Method Issues:** The following bullets address the highlights of this discussion:
   - The protocol for SW-846 8021A will be deleted from the CAM since this method is not utilized by any of the laboratories at MCP sites.
   - A CAM protocol will be created for the perchlorate method (EPA 332). An e-mail will be sent out to the Work Group to see who may be interested in serving on this subcommittee.

- The holding time for herbicides after derivitization is still being investigated. An e-mail was sent to the EPA MICE line looking for clarification on this issue. We are still awaiting a response.
- Dual column reporting for pesticides, PCBs, herbicides, and explosives: The reasoning behind the requirement to report the lower of the dual column results in SW-846 method 8000C was provided by the MICE line and presented to the Work Group. It was decided that regardless of the RPD, the higher value will be reported. However, if interference is suspected, the lower value can be reported but this must be narrated.
- The analytical protocol for physiologically available cyanide will be reviewed and revised, as needed, for consistency with other MassDEP analytical protocols. In general, it was agreed upon that the procedure, as written, did not need significant changes.
- Aqueous samples submitted for analysis of 1,4-dioxane by SW-846 Method 8270C will not require chemical preservation unless samples are drinking water samples and contain residual chlorine.
- Matrix spike requirement for inorganic methods: unanimous work-group decision to **require** Project-specific MS for solid samples for all inorganic CAM protocols so that we have a measure of accuracy in the sample matrix for inorganics. Requirement will be added to all performance standard tables for inorganic CAM protocols. MSD or MD will remain "recommended".

4. CAM VIIA Resolved Issues

- Don Muldoon led a discussion summarizing the outcome of DEP's recent internal meeting on CAM VIIA.
    - CAM Reporting Limits (RLs) will be the name given to the expected RLs with exceptions for each CAM protocol; CAM RLs will define the sensitivity of the method. The CAM RLs will be provided in Section 1.1.1 of each CAM protocol and will include the typical/expected RLs for solid and aqueous matrices with a table of potential exceptions to the typical RLs. RLs for waste samples will no longer be provided in this section. MDLs are still not required in any of the CAM protocols.
    - "J" values (positive results below the RL) are allowed for use but must be qualified as estimated. These are only allowed for GC/MS and ICP-AES methods.
    - John Fitzgerald will be rewriting the language associated with the analysis of drinking water samples (including TIC analysis requirements) and will clarify requirements for public water supplies versus private wells. This section will be presented at a future Work Group meeting.
    - The EPH/VPH significant modification question has been added back on to the Certification Form.
    - The DEP internal meeting had a discussion on "policy vs. guidance". The following points were decided upon:
        - Under the MCP, CAM is not required; data users can specify any analytical method they want.
        - Once you decide you want Presumptive Certainty, CAM is required.
        - CAM VII A should have a discussion on the issue of policy vs. guidance.
        - The REDUA document is guidance under the MCP. Therefore, we need to tone down the language about REDUA in CAM VIIA.
    - Don will revise the flow chart currently in CAM VIIA and present at a future Work Group meeting.

5. Certification Form Questions/Clarifications

- Don Muldoon handed out a new version of the Certification Form and Clarifications for discussion.
  - CAM 8021 will be deleted.
  - Question A will be revised to state "…..properly preserved (including temperature)….."
  - Question D (on the laboratory narrative) will move to Question F and will be revised to refer the laboratory to the nonconformances for all above questions. Liz Denly and Susan Chapnick will send Don Muldoon proposed language for this question.
  - The superscript "1" will be removed from Questions A through F as this will be addressed by the new Question F discussed above.
  - Clarifications for the EPH/VPH/APH Question will include a reference to the appropriate section of EPH, VPH, and APH methods where significant modifications can be found.

6. WSC-CAM IIA Section 1.1.1

- Don Muldoon handed out example text for Section 1.1.1 of the VOC CAM protocol to explain CAM RLs. This will be the format for Section 1.1.1 of subsequent CAM protocols.
  - Reference to the word "atypical" will be removed and replaced with "RL exceptions".
  - The sentence "For Presumptive Certainty purposes, CAM RLs are considered performance standards as described in WSC-CAM-VII A, Section 2.1(c)" will be removed. This will be replaced with "If CAM RLs are not achieved, this must be discussed in the laboratory narrative."

7. Miscellaneous CAM VII Issues

- Use of the MCP Analytical Services Request Form will not be required; this form will be described as a tool that can be utilized by the data user.
- It was clarified that report retention is required by MassDEP for 10 years.
- Requirements for MS analyses for inorganic methods discussed above will be added to CAM VII A. Liz Denly and Susan Chapnick will provide proposed language to Don Muldoon.
- Section 2.4.2, Analyte Lists: The section will be revised to state that, if applicable, labs must narrate that a truncated list was requested by the data user. This language will replace the text requiring that labs discuss the "rationale" for the truncated list in the narrative as this is more of a usability/representativeness issue that should be discussed by the data user. In this section, there will also be a reference provided to Question A on the Certification Form.
- Section 2.5, Laboratory Reporting: This section will be revisited to determine what is truly important for reporting and Presumptive Certainty. It was agreed upon that analysis time should remain on the list as this is important for evaluating carryover as well as methods with short holding times. It was also agreed upon that analyst initials can be removed from the list. The section needs to be clearer to state that these items are actually required to be included in the CAM report (and not just available in case of an audit). The beginning of each section will also be revised to eliminate language that "Parties specifying Presumptive Certainty must direct the lab" to include all information in this section. It was agreed upon that when data users specify CAM methods, they assume that the required deliverables will be reported and do not need to make a separate request for this information.

8. **Next meeting** will be held at MassDEP Central Office, 627 Main Street, Worcester, MA on September 22, 2009 beginning at 9:15 AM.

9. **Summary of Action Items:**
    1. Nancy Rothman is still waiting to hear from the MICE line on the herbicide holding time.
    2. Liz Denly will send the explosives performance standard table to Test America in Vermont for review.
    3. Liz Denly will send out an e-mail to the Work Group to recruit participants for a perchlorate subcommittee.
    4. Liz Denly and Susan Chapnick will send Don Muldoon proposed language for the new Question F.
    5. Liz Denly and Susan Chapnick will send Don Muldoon proposed language for CAM VIIA on the new requirements for matrix spike analyses for inorganic methods.
    6. Liz Denly and Susan Chapnick will send Don Muldoon Draft Performance Standard tables for each CAM protocol to begin posting on the web site.
    7. John Fitzgerald is writing the section on drinking water samples for CAM VII A.
    8. Don Muldoon is creating a new flow chart for CAM VII A.
    9. In the next two weeks, Don Muldoon will send out a new version of CAM VII A to the internal DEP team and Liz Denly for review.

Thank you all for participating in this important Workgroup to assist DEP in continuing improvement and consistency of the quality of chemical data to support MCP decisions.