

Minutes
BCLQAAC Technical Subcommittee Meeting
January 25, 2008, 9:40 am
MWLAP's Surrey Office, 10470-152nd. St. 2nd Fl. Mike Gow Rm.

Present:

Mark Hugdahl – ALS
Marie England – Bodycote
Rob Gilbert - Maxxam
Brent Mussato – CARO
Julius Fulop – Cantest
Scott Hoesktra – Hazco
Glyn Fox – MOE
Steve Horvath - MOE

1.0 Introduction.

2.0 Adoption/Correction to Minutes from September 28, 2007. Minutes were adopted. Corrections (post-meeting): Solvent for reference PAH solids method should be DCM/acetone (not hexane/acetone). For Barite in Soil item, change calcium extraction to calcium chloride extraction.

3.0 Action Items from Last Meeting

Methods for Hazardous Waste Leachate Quality Standards

***ACTION (Sept 07).** Committee members to review the draft paraquat and diquat method and forward comments back to Rob by November 30/07. **DONE.** EPA reference method for Paraquat/Diquat should be updated to 549.2, June 1997. Rob to confirm whether any changes are required to refer to this more recent reference. Once this is determined, Steve can post for public comment.*

***ACTION (Sep 2007).** Rob to draft a short summary method including MDL's (for water/TCLP extracts) based on a modified EPA 8270 for all parameters that can be covered by 8270 for the next meeting and try to estimate the performance criteria.*

***ACTION(Jan 2008)** Committee members are to send Rob their current or recommended QC control limits for these parameters.*

***ACTION(Jan 2008).** Rob to compile the table of acceptance limits and draft the method.*

ACTION (Sep2007).** Mark to finalize the fluoride method by incorporating the two changes recommended by the committee and forward to Steve. Method is endorsed by BCLQAAC. Steve to post on Ministry website in section for Methods Awaiting Director Approval. **DONE.

ACTION (Sep2007). Review of draft Preservative / Container / Holding Times Table. Steve to distribute the draft preservation table electronically to the committee members for review. DONE. Table was discussed briefly. When complete, this should be published in Lab Manual, and should supercede container/preservation/hold time requirements for all prior Lab Manual methods. ACTION (Jan 2008) All committee members to provide detailed input to Steve prior to next meeting. A detailed review of this table is to be conducted at the May 2008 meeting.

PBM method for PAH's in soil – Mark

ACTION (June 07'). Mark to draft a generic PBM PAH reference method based on equivalence criteria acceptability criteria for NRC HS3B and RTC Reference Material and the Soxhlet extraction utilizing DCM/acetone. DONE. Mark distributed the draft method that outlines the reference method including the performance requirements. Committee recommended Mark to further define the average recoveries.

ACTION (Sep 2007). Mark to further define the average PAH reference sample recoveries and distribute to members. Committee members to review and forward the comments to Mark prior to the next meeting. DONE. Committee endorsed method with the following changes: Change “dried” to “chemically dried” in introduction. Use of internal standards is to be a requirement. Mark to forward method with final changes to Steve. Steve to post for public comment.

Recommendation. Steve to investigate the application of 63um particle sizing to marine sediment metals analysis. Steve distributed additional criteria that describes the importance of using <63u fractions for measuring contaminant accumulation in the silt and clay fractions. Discussion followed and recommendation that <63u should be considered for application of in situ sediment characterization. Steve will follow it up further. Steve provided draft guidance for assessment of aquatic sediments. Committee recommended that PAHs not be analyzed on the <63u fraction, to prevent evaporative losses from drying/sieving.

ACTION (Sep2007). Mark to incorporate the storage temp. change ($4\pm 2^{\circ}\text{C}$) into the VOC method and forward to Steve. Steve to post the method under “Methods Awaiting Director’ Approval. DONE.

Analysis of barite in soil .

ACTION(Sep 2007). Steve to post the Soluble Barium by Calcium Chloride Extraction method under “Additional Ministry Approved Methods”. DONE.

Phase III Report recommendations are ongoing to be resolved at the next committee meeting. It was recommended that that the BC SALM method may have to be written more prescriptive, to prevent inconsistencies with Barium (and other metals). Carried forward to the next meeting. Discussion focused on

proposed changes in the volume of acid and conc. used. Committee members unanimously agreed to change BC SALM to a prescriptive method (with flexibility for non-critical elements). Proposed method: Weigh 1.0g dried/sieved sample, digest with 2.5mL HCl+2.5mL HNO₃+5mL H₂O at 90+/-5C (acid temp) for 2 hours +/- 15 mins. Reflux cap required. Heating mechanisms to include hotplate, hotblock, water bath, but not microwave. Weights/volumes may be scaled up.

ACTION(Jan 2008) Mark will write first draft of revised method, using new method format.

ACTION (JUNE 2007). CSR Air Concentration Criteria. Mark to forward list of applicable NIOSH and EPA method references for to Glyn in form of a letter (Pending). The BCLQAAC Task Group on Air summarized the methods by the analytical approaches, EPA TO-15 (Summa), EPA TO-17(Thermal tube), NIOSH charcoal, and EPA TO-13 (PUF/XAD). Glyn asked committee to consider a definition for what constitutes a volatile substance under the CSR Air Criteria.

ACTION (Sep 2007). Glyn to forward to committee members, EPA Region 9 air volatile list. DONE. Glyn presented EPA Region 9 definition of volatile substances and an SAB-proposed list of volatile substances. Committee members preferred the EPA Region 9 definition, due to it's referenceability, simplicity, and practicality. A list of compounds proposed for removal from the Draft BC Air Criteria list, based on this definition were reviewed, and seemed reasonable.

ACTION(Sep 2007). The BCLQAAC Air Task Group to develop as 1st. step a list of compounds based on the Summa anal. Technique, write a draft method, and recommend a list of parameters to be deleted for lack of available methods. The matrix of allowed methods for the Draft BC Air Criteria list was refined. The Air Methods Task Group will re-convene in early February to begin work on draft air methods.

ACTION (Jan 2008). Glyn asked Air Methods Task Group to include methods for LEPH and VH/VPH. Glyn asked each lab to provide example prices for pertinent air analysis tests in support of Draft BC Air Criteria. Mark to provide Glyn with interim advice letter outlining method applicability for Air Criteria, and to include recommendations of compounds to remove from list (including rationale – ie methodology issues / consider likelihood of industrial usage in BC).

ACTION (Sep 2007). Brent to draft a method for the determination of Chrome VI in water based on the ASTM protocols. Patrick to forward Cantest protocol to Brent. DONE. Minor changes were discussed. Method endorsed by committee subject to changes. Method Spike (Lab Control Sample) is required, minimum DQOs set to 80-120%. Storage temp changed to 3+/-3C. New prescribed element: Analysis by IC or Diphenylcarbazide colourimetric method. Clarify that no preservation required if analysis conducted in 24 hours. Precision

requirement for validation tightened to <15% RSD. Brent to forward revised version to Steve. Steve to post for public comment.

4.0 New Items

Prioritizing future priorities for BCLQAAC – Brent

Brent recommended that the committee develop a list of priority topics to address at future meetings. It was agreed that the committee should conduct a review of the entire existing lab manual, to determine which methods can be deleted, and which should be set as priorities for revision. One sub-section of the lab manual will be reviewed per meeting, beginning with the Organics section (Aug 2008 meeting).

Title change for the manual to include “soil” – Rob

Steve to change title of Lab Manual to include soil, for next publication revision.

BTEX and VPH, using alternate method – Marie

Bodycote requested that headspace analysis be formally permitted within the VH method. Committee will consider this change for the next revision of the VH methods. Bodycote may use headspace for VH/VPH if they provide validation data to Steve. Steve can provide interim approval for the method. Headspace methods are already included in the lab manual for BTEX.

Cyanide in Haz Waste Regulation by TCLP – Mark

Mark raised a concern that the TCLP method may cause loss of WAD cyanide due to the acidity of the extraction fluid. Rob committed to conducting a WAD-CN spike by TCLP extraction to evaluate losses. Mark will forward literature that discusses this problem to Rob and Scott. Committee to discuss further at next meeting.

CCME – Mgmt of Municipal Wastewater Effluent Nat'l Strategy – Mark

Mark indicated that committee members should review the CCME national wastewater effluent strategy, and should provide comments to CCME, particularly on Appendix A (Preservatives / Hold Times) and Appendix B (Analytical Methodology Requirements) to Technical Supplement 3.

5.0 Date and Place of Next Meeting. Friday, May 9, BC MOE, 9:40am.