

Minutes
BCLQAAC Technical Subcommittee Meeting
September 28, 2007, 9:40 am
MWLAP's Surrey Office, 10470-152nd. St. 2nd Fl. Fraser Rm.

Present

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

- 1.0 Introduction.**
- 2.0 Adoption/Correction to Minutes from June 8, 2007. Minutes were adopted without further changes.**
- 3.0 Action Items from Last Meeting**

Methods for Hazardous Waste Leachate Quality Standards

***ACTION (Feb 07).** Rob to draft a 2 page PBM method for paraquat and diquat in water by HPLC using EPA/APHA protocols and include reasonable performance criteria and prescribed elements. Done. Rob handed out the draft PBM method.*

***ACTION (Sept 07).** Committee members to review the draft paraquat and diquat method and forward comments back to Rob by November 30/07.*

***ACTION (June 2007).** Rob may pick up the project from Chris S. and write the draft Method based on EPA 8270 to cover as many of the TCLP GCMS Leachate parameters as possible. Ongoing. Rob handed out the summary page listing all of the parameters except for two, Desisopropyl-atrazine and Methoxychlor, method references with approximate MDL's. Validation is done on water but should be applicable for leachates as well. Maxxam can meet all proposed MDL's using EPA 8270/8081 except for the missing 2 parameters for which ref. standards will have to be purchased.*

***Recommendation.** Committee need to further identify atrazine metabolites*

***ACTION(Sep. 07).** Rob to attempt to draft a short summary method including MDL's (for water) 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. If further method-MDL validation is necessary provide a cost estimate.*

Action (June 2007) Steve to check on the status of funding(5k) accrued for the project. Done. The 5K funding is not available any longer.

ACTION (June 2007). Mark to incorporate committee recommended revisions and forward the final Fluoride draft method to Steve for web posting. Steve to post. Done. The method is now closed for further comments. Committee recommended few final changes, which include change lab duplicate frequency to 5%, it is acceptable to spike post extraction to meet recovery of 80-120%. Committee endorsed the method with the two changes.

ACTION (Sep2007). Mark finalize the fluoride method by incorporating the two changes recommended by the committee and forward to Steve.

ACTION (Sep 2007). Steve to post the finalized fluoride method under “Methods Awaiting Director’s Approval”.

Recommendation. Committee recommended Steve to update the hold times in the lab manual which should be method specific should also be listed in a table in the lab manual. Carried forward. Done. Steve provided the draft sample preservation and hold times table for committee review.

ACTION (Sep2007).Steve to distribute the draft table electronically to the committee members for review.

PBM method for PAH’s in soil – Mark

ACTION (June 07’). Mark to draft a generic PBM PAH reference method based and equivalence criteria acceptability criteria based on NRC HS3B reference material and the soxhlet extraction utilizing acetone/hexane solvent Labs will test their methods against the equivalence criteria once it has been developed. 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.

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.

ACTION (June 2007) Mark to incorporate committee recommended changes to the VOC method and forward to Steve for web posting. Steve to post it. Done. The committee approved the method with the recommendation to change the storage temperature to read $4 \pm 2^{\circ}\text{C}$.

ACTION (Sep2007). Mark to incorporate the storage temp. change and forward to Steve. Steve to post the method under “Methods Awaiting Director’ Approval.

Analysis of barite in soil – Mark

ACTION(June 2007). Mark to forward the finalized CaCl₂ method approved by the committee to Steve for web posting. Steve to post it. Done. Jim Hofweber signed off the method as ‘Director Approved’ for use in the quantification of soluble barium species to support assessment and remediation under the CSR. Meanwhile, Glyn is evaluating at alternate XRF methods for determining BaSO₄. According to Glyn, Protocol 14 is the main tool used to determine if a site is actually a barite site requiring testing.

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

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. Carried forward to the next meeting. Discussion focused on proposed changes in the volume of acid and conc. used.

Analytical Methods for CSR Air Concentration Criteria – Glyn

ACTION. Each lab member to review the table of substances and list the individual analytes with the MDLs’s that could be potentially determined analytically. Forward the list to Steve by the end of February 07’. Done. Three laboratories submitted the methods and MDL’s to Glyn. Glyn asked for the list of references for the methods.

ACTION (JUNE 2007). Mark to forward the list of applicable NIOSH and EPA methods references for the substances to Glyn in form of a letter. 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). The consensus was to try and write a method based on EPA TO-15 to capture the majority of VOC’s. Further discussion included the option of incorporating an open scan prior to selecting quantitative methods and a need to further define what constitutes volatile substances under the CSR Air Criteria?

ACTION (Sep 2007). Glyn to forward to committee members, EPA Region 9 air volatile list.

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.

Society of professional chemists – update. Scott and Patrick are currently working on the membership criteria.

4.0 New Items

4.1 Chrome VI in water preservation. Mark sent an EPA preservation guide using NaOH for field preservation.

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.

4.2 Methyl Bromide /Methyl Chloride behavior in salt and fresh water.

Joanne asked the committee's expert opinion on the chemical properties of methyl bromide, such the relationship between the gaseous and liquid phases and temperature, relationship interaction with methyl chloride, and expected burn symptoms on human skin.

5.0 **Date and Place of Next Meeting.**

January 11, 2008 at the Ministry's Surrey office