



Analytical Methods & Quality Assurance Workgroup (AMQAW)

Thursday, March 13, 2014

USGS MD-DE-DC Water Science Center, Baltimore Office

Meeting Materials:

<http://www.chesapeakebay.net/S=0/calendar/event/21498/>

MINUTES

Announcements

- A new Chesapeake Bay Agreement is drafted and available for public comment. You can view the Agreement on the CBP website at: www.chesapeakebay.net/watershedagreement
- National Water Quality Monitoring Council Conference, Apr 28–May 2, 2014, in Cincinnati, Ohio
- Restore America's Estuaries 7th National Summit, Nov 1–6, 2014, Gaylord National Convention Center, in Washington D.C.
- STAR released the New Insights Report describing improvements to Chesapeake Bay water quality due to the implementation of management actions. You can view the report here: http://ian.umces.edu/pdfs/ian_report_439.pdf
- [PSA: What does it take to restore and protect the Chesapeake Bay?](#)

CBP Tidal and Non Tidal Network FFY '14 Funding – Bruce Michael, AMQAW Chair

Funding for FY14 for both Tidal and Nontidal Water Quality Monitoring Networks have been restored to FY12 funding levels, after the FY13 budget cut.

AMQAW Workplan Priorities – New items for 2014

[AMQAW Workplan Priorities](#)

ACTION: The workgroup was asked to review the draft workplan for 2014 and send comments, questions, or concerns to Mary Ellen Ley (Workgroup Coordinator).

Comparison of USGS and CBP Continuous Monitoring – Mary Ellen Ley, AMQAW Coordinator

USGS has implements continuous monitors at stations not part to the Chesapeake Bay Program Nontidal Network.

Some insights include:

- Post calibration needed for drift correction. Must assume deterioration is constant over time in nontidal waters, however, tidal waters do not have that assumption.
- Bleach injection system to prevent fowling of WetLab sensors. This occurs four times a day, with 1 mL of diluted bleach.

Coordinated Split Sample Program – Mike Mallonee, ICPRB/CBPO

- [August, November & February Mainstem Results](#)
 - **ACTION:** Issue with DCLS TDN Split Sample Mainstem – Jay will send an amended data sheet to Mike Mallonee.
- [September & December Tributary Results](#)

Revisions to CBP Analytical Methods – Mary Ellen Ley, AMQAW Coordinator

Supplemental Materials:

[TSS & VSS Methods](#)

[Analytical Methods & QC – Chapter IV – Section C: Laboratory QA/QC](#)

[Alkaline Persulfate Digestion Revisions](#)

[Total Particulate carbon & Nitrogen Methods](#)

TSS & VSS Methods – Workgroup comments

- New TSS Method for “Entire Sample Filtered:”
 - The DNR method used at DHMH involves the analysis of the whole bottle sample and now has a method code of TSS L02 to differentiate between the other labs using a subsample of the bottle.
 - Add a quantitative transfer step with a rinse (this method may be closer to SSC method)
 - **ACTION:** MD-DNR and DHMH will continue to do the TSS L02 method for split samples and coded as such in DUET.
- Under “Materials and Apparatus:”
 - In the field VA uses plastic where the procedure states ceramic or glass apparatus and materials are used.
 - In the field DE uses plastic filtration apparatus and graduated cylinders
- Under “Sample analysis:”
 - Difficult to determine weight of residue in the field, water sample volume restrictive for an increase up to 1L of sample.
 - **ACTION:** Come up with language to not restrict field crews to 1L samples
- In 2007, there was an agreeance, that there was no need to re-weigh filters if the weight was measured within 10% of the double weight determination.
 - DE dries filters overnight. DE performed a study to show that it creates consistent results, as they do not perform the double weight determination test, since overnight is much longer than the one hour required in the procedure.
 - **ACTION:** Ben Pressley will find the above study for Mary Ellen Ley.
- What reference materials are being used by the different labs for QC of TSS?
 - Labs order from different companies online such as ERA, Sigma, and Environmental Express. VA preforms reference samples quarterly, DCLS preforms QC reference samples daily with every run, and DHMH runs QC reference sample quarterly.
 - **ACTION:** Procedure will require (at least) quarterly runs of known reference samples for QC.

- Significant Figures
 - Leave that section in procedure, clarification provided by the group.
- **ACTION:** Remove the numerical reporting limit within the procedure, it is technique limited, and not an examination of the instrument.
- FSS method:
 - Is there a need for a method code L02 for FSS?
 - No need
 - Is there a reference sample for FSS?
 - None available

Particulate Carbon/ Particulate Nitrogen:

ACTION: Comments in regards to PC/PN method should be sent to Jay Armstrong Jay will distribute a revised version in one month to the AMQAW members.

DUET Questions – Mary Ellen Ley, AMQAW Coordinator, USGS/CBPO and Mike Mallonee, ICPRB/CBPO

Presentation: [DUET Questions](#)

The workgroup reviewed field blank, duplicate sample codes, and consistency checks that are problems in the DUET database. The workgroup discussed possible solutions.

USGS Reference Sample Program – Fall 2013 Results – Lea Rubin, CRC/CBPO

Excel File available on [Event Webpage](#)

Reference sample results reviewed with the workgroup.

Blind Audit Program Update – Jerry Frank, NASL/CBL

No update at this time.

Potential Evolution of STAR Workgroups

Draft Workgroup Structure: [Re-Alignment of STAR Workgroups in 2014](#)

Workgroup was asked to review the draft workgroup structure and provide comments, question, and concerns to Peter Tango (STAR Coordinator) and Lea Rubin (STAR Staffer).

LEADERSHIP:

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| Lea Rubin (Monitoring Staff) | CRC/CBPO | lrubin@chesapeakebay.net |

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