

ENVIRONMENTAL LABORATORY ADVISORY COMMITTEE

June 12, 2014

MINUTES

Members Present

Matthew Rexing
Evelyn Dawson
Michael Dew
Rick Amalfi
Brian Sitko
Laura McCasland
Elizabeth Baker
Mary Tyer
Randy Gottler
Cynthia Garcia
*Nancy Turner
Barbara Escobar
Elizabeth Proffitt
Jim Williams
Robert Vertefeuille
Christina Hoppes

Members Absent

Kurt Novy

Guests Present

Brittaney Dempster
Kerri Keller
*Terri Garcia
*Dawn Weyer
Jennifer Calles
Gail Adams
*Leanne Nieu Kirk
Emily Vanaskey
Jenny Cahoon
Brad Cahoon
Brenda Steffy
Heather King
Anupa Jain

SLS Staff

Prabha Acharya
Steve Baker
Isaac Robert
Frank Martinez
Kathryn Wangsness
Elena Coulter
Daniel Perez
Galan Larson

ADEQ Staff

Becky Soter

* by phone

CALL TO ORDER

WELCOME/INTRODUCTION

Matt Rexing called the meeting to order. There was a quorum present. Matt summarized the various items:

- There were 2 new members: Robert Vertefueille and Christina Hoppes; a handout was available with the list of new members.
- Prabha had updated the ELAC letterhead; asked the members to review to make sure they are accurate;
- No quorum was present at the last meeting; there are two minutes to approve;
- At the last meeting Tucson was left out during introduction; Terri tried to intervene but she couldn't be heard. Maybe need to check the speaker volume before the meeting?
- More than one microphone shouldn't be on, cause a lot of background noise, the sound isn't clear.

Steve Baker welcomed everyone and thanked them for coming. Everyone introduced themselves.

APPROVAL OF MINUTES

Both the minutes were approved – December 12, 2013 and March 13, 2014.

ADEQ UPDATE

There was nothing to report.

ITEMS FOR DISCUSSION:

Top 10 audit findings:

Isaac Robert gave a PowerPoint presentation; the summarized list is attached at the end of this minutes.

ALA UPDATE:

Availability of propylene Standard (ADHS Information Update #119)

Robert Vertefueille: In the Information Update 119, under the current requirement by ADEQ for reporting propylene with full QC by 8260B, it was necessary to purchase the reference material; he didn't think it was available in the market.

Prabha responded that she did some research and found that it was sold by Liquid Air and was available in separate containers, however, the situation had changed since the update was sent out; Debbie Goodwin, who replaced Jeanene Hanley, came across a note kept by Jeanene that propylene was a difficult compound to quantitate and therefore, ADEQ has decided that it is no longer required to report propylene with full QC and it can be reported as a TIC compound. Now all the additional six compounds to 8260B can be reported as TIC and there was no need to purchase reference compounds. Since propylene testing was approved earlier with the requirement to comply with all the QC requirements of 8260B, ADHS will look into the wording as to how it was approved earlier and then decide if it has to be director approved again as a TIC compound.

ADHS Requirement for Separate Hazardous Waste PTs for Analytes Covered Under the WP Program:

Robert voiced the concerns of the lab community that the PT testing had to be repeated for aqueous matrix in both the WP and Haz-waste programs and that Prabha had since confirmed that PT for TCLP/SPLP were not needed; what was reason for duplicating tests in both the programs?

Steve explained that just before the draft rules were submitted to GRRC in 2006, the changes were made to include the requirement to analyze the hazardous waste PT samples in addition to the WP PT samples because the Haz-waste PT samples were made available at that time because of NELAC's requirement; before 12/2006, the WP study covered for Haz-waste as well.

Prabha explained further: For drinking water, if licensed for different methods for the same parameter, then different PT lot samples must be used for each licensed method. For WP and Haz-waste programs, a single aqueous PT sample can be used to run all the licensed methods in both the programs; for e.g., if licensed for 200.8, 200.7, 6010B/6010C, 6020 for lead testing, a single WP PT sample can be used to run all the 4 licensed methods. If licensed for lead in soil matrix as well and the compliance results are being reported, then a soil PT sample must also be purchased and run.

Matt suggested summarizing these in the next Update.

There was a question if biosolids fell under wastewater? The response was It depended on the amount of water present in the sample.

MALA Update:

Clarification to Info Update #119 (items 5 & 6):

Christina Hoppes inquired if the requirement for matrix spikes to be within the Table 6 limits was applicable to both 624 and 625 methods (Update item #5) ; Prabha responded that it was applicable to all the 600 series methods; since she was communicating with EPA mainly on 625, she forgot to mention 624.

Christina wanted clarification on the default limits versus control limits (Update item #6); Prabha explained that certain methods mostly SW846 methods did not have method required QC limits especially for the spikes; the option given in the method was to develop the control limits with ± 3 SD and the limits had to be updated once every 6 months; the labs especially out of state labs were very unhappy about it even after the updating was stretched to annually; so in 2005 a subcommittee was formed to develop alternate default limits in place of control limits; the committee used more stringent limits like using LCS limits for MS default limits; the labs

liked it a lot; ADHS requires that the labs decide if they are using default limits or control limits and include it in their SOP; they cannot pick and choose depending on how an individual batch performs.

There was a question if the actual control charting (plotting) of the data points required? Prabha responded that one used to plot the points during the pre-electronic days to monitor the trend and to take preventative measures before the QC failed. Now with all the software availability one can monitor the trend by reviewing the data points; there is no need to plot the points manually.

Prabha responded to another question: if the additional compounds added to any method are director approved, then they become compliance parameters and since the QC limits are not given in the method for those additional compounds, one can use the control limits or the default limits; if the additional compounds are added per client request and they are not director approved, then they are not for compliance; control limits, default limits or any in-house limits can be used.

Request an Update on the ADHS Primacy Lab Status:

Matt: The reason this was brought up at the MALA meeting was there were three criteria to maintain primacy in the state and Primacy lab was one of them.

Steve: the negotiations with ADEQ fell through, for state lab to continue as the primacy lab for drinking water methods; Lab Licensure has two in-state labs as the primacy labs- Fiber Quant for asbestos and ARRA for Radio chemical methods. ADEQ is looking for a private lab to make it a primacy lab; primacy labs are exempt from being licensed by ADHS; ADEQ will make sure the contract will require inspections by ADHS.

SUBCOMMITTEE REPORTS:

Rules:

Steve: nothing much to report; a couple of licensed labs had volunteered to write letters to the Director, obviously they haven't done it, otherwise the program would have heard from the Director.

Training:

Matt Rexing gave an update: Field sampling workshop may be held around October/November of this year at the Pima County facility; Hopefully Joe Harmon will be able to assist in the training; he has been a part of the training for many years; Barbara is trying to get some grant money for the training; the technical sub-committee of AZ Water Association receives grants for training all the time; the training will be held at Pima County facility at Tucson.

DMRQA:

Becky Soter: ADEQ had nothing to report.

SET NEXT MEETING DATE & ADJOURNMENT:

The next meeting was scheduled for September 11, 2014; the meeting was adjourned.

NEW BUSINESS:

Matt Rexing said that the Maricopa County inspection this time included some lab items as well; they looked at the MDL studies; this is the first time they have reviewed any lab data.

TOP 10 ADHS AUDIT FINDINGS

ELAC Meeting

June 12, 2014

1. The laboratory was not analyzing a laboratory fortified blank at the method reporting level every analysis day (EPA Drinking Water Manual Fifth Edition, Chapter four, section 7.2.12) in noncompliance with A.A.C.R9-14-615 C.3.a. Some examples are EPA 300.0, 200.8, 524.2, 549.2.
2. The laboratory was analyzing and reporting parameters not on the Arizona List of Licensed Parameters in noncompliance with A.R.5 36-495.01 et seq. The data was not appropriately flagged. For example licensed for 8260C reported results by 8260D
3. The laboratory did not maintain all compliance testing equipment in proper operating condition in noncompliance with A.A.C. R9-14-611.2, -612 and -615.C.11. One example is that the thermometers (digital, glass, IR, etc.) are not calibrated against a NIST certified thermometer.
4. Laboratory did not maintain complete and current training information relating to analytical personnel who perform testing of compliance samples in noncompliance with A.A.C.R9-14-616.5. The training files must include all the required information.
5. EPA Method 1664, Revision A
The laboratory was not performing the repeat weighing (EPA Method 1664A, Section 11.4) in noncompliance with A.A.C.R9-14-612 and -615.C.3.a. The method states "repeat cycle of drying, cooling, desiccating, and weighing until weight loss is <4% of the previous weight or <0.5 mg whichever is less."
6. EPA Method 1664, Revision A
The laboratory was not filtering the hexane extracted sample through filter paper and sodium sulfate (Method 1664A, section 11.3.8) in noncompliance with A.A.C.R9-14-615 C.3.a.
7. Standard Methods 5210B, BOD, 20th Ed.
The temperature of the sample was not verified to be at $20 \pm 1^{\circ}\text{C}$ before dilutions (SM 5210B.4.e.5) in noncompliance with A.A.C.R9-14-612 and -615.C.3.a. The method does state

that chilled samples can be warmed to $20 \pm 3^{\circ}\text{C}$ but requires bringing the samples to $20 \pm 1^{\circ}\text{C}$ before making dilutions.

8. EPA Method 524.2 Revision 4.1, Measurement of Purgeable Organic Compounds in Water by Capillary Column GC/MS

The laboratory was not using a desorb time of four minutes to analyze samples (EPA Method 524.2, section 11.1.2, ADHS Information Update #89, paragraph #6) in noncompliance with A.A.C.R9-14-611.1 and -615 C.3.a.

9. The laboratory did not maintain a record showing the traceability of all reagents or standards in noncompliance with A.A.C. R9-14-615.C10 & 11 & -611.1, -612, -613.

Not maintaining a permanent record of the manufacturer/lots and expiration dates used for each prep/analytical batch.

In addition, reagents/standards containers must be marked with date of receipt or dates in use.

10. Sample container sterility was not verified prior to use by testing with a non-selective broth [SM 9060A.1] in noncompliance with A.A.C.R9-14-612.

For example signed certificate of analyses was not obtained prior to use for Whirl Pac Thio Bags, Colifert and ampuled media, and Colitag in SDW.