

ENVIRONMENTAL LABORATORY ADVISORY COMMITTEE

March 21, 2013

MINUTES

Members Present

Matthew Rexing
*Nancy Turner
*Kurt Novy
Cynthia Garcia
Laura McCasland
Garry N. Brussels
Mary Tyer
Rick Amalfi
Brian Sitko
Barbara Escobar
Randy Gottler
Trina Spangle
Evelyn Dawson
Michael Dew

Members Absent

Jim Williams
Elizabeth Baker
Elizabeth Proffitt

Guests Present

Anupa Jain
Christina Hoppes
Brittaney Dempster
Kerri Keller
Kurt Ill
Robert Vertefeuille
Melissa Spencer
*Terri Garcia
*Dawn Weyer
Brian Gilbert
Peggy Cota

SLS Staff

*Prabha Acharya
Steve Baker
Galan Larson
Frank Martinez

ADEQ Staff

*by phone

CALL TO ORDER

WELCOME/INTRODUCTION

Matt Rexing called the meeting to order. The election for Chairperson and Vice Chairperson would be held after the introductions; it should have occurred in the last quarter of 2012. Everyone introduced themselves including the attendees from Tucson and Flagstaff via the phone.

Steve Baker welcomed everyone and thanked them for coming.

ELECTION OF CHAIRMAN AND VICE CHAIRMAN

Matt Rexing was elected as a Chair and Barbara Escobar as a Vice Chair.

APPROVAL OF MINUTES

The minutes from December 06, 2012 meeting was approved as written.

ADEQ UPDATE

No one from ADEQ was present. Steve had spoken to Julie Hoskin, he was told that the candidates for replacing her were being interviewed and we should know who was hired in about a month's time.

ITEMS FOR DISCUSSION:

Dissolved Oxygen, HACH 10360; QC Requirements:

Steve said the handout was put together by Prabha; Method 10360 is a stand-alone method; all the QA/QC requirements in the method must be followed; Prabha will go over the requirements.

Prabha said that when she started to read the method, she realized how disjointed and confusing it was, she decided to call Cary Jackson of HACH; he explained the method to her in 5 minutes; there were two main aspects involved: 1) the calibration of the probe which is done with the water saturated air and 2) the verification of the curve, CCV, which is done with the air saturated water; just these 2 simple steps are involved;

Water saturated air is prepared as per Section 7.1 in the method; an inch of reagent water is added to a BOD bottle, shaken vigorously for 10 seconds and the reading of the water saturated air is taken with the probe and the value is entered into the probe.

In order to verify if the calibration of the probe has been done properly, air saturated water must be prepared as per section 7.2 in the method; 1500 ml of organic-free water or BOD dilution water in a 2-L beaker is aerated for 30 minutes with a gentle stream of filtered air and allowed to equilibrate for 30 minutes to room temperature ($20 \pm 3^{\circ}\text{C}$). At this time the barometric pressure and temperature of the laboratory is taken, the values of which are used in the theoretical calculation of the DO value. Now the probe is inserted into the air saturated water and the value obtained must be within 5% of the theoretical value to verify that the probe was initially calibrated properly.

There was another QC involved, Method Performance, which measures the precision and accuracy; 4 aliquots of air saturated water are measured for DO and the recoveries should be within 5% and precision within 2.1%. The on-going QC, a CCV per batch of 20 samples, should be within 5% (Tables 4 and 5).

These are the QC requirements in the method and it was Steve's decision as what would be implemented.

Steve said these QC can be enforced in a licensed lab but not in the field; in the field he is making sure that a proper instrument is being used and the instrument is calibrated with a standard. In 3 to 6 months down the road, for Round 2, training will be offered and then additional QC will be implemented; currently there are about 40 wastewater systems that have no instruments at all. Provide feedback to Prabha in the next couple of weeks on this document, the document will be published in the Information Update; Licensed labs with this DO method on their license will be expected to follow all the required QC in the method.

There were a couple of questions: after a brief discussion it was decided 1) as long as the QC is passed, the time taken for shaking the sample was not critical (under 2 in the handout); 2) there was no need to use certified barometer; 3) the DO meter comes with the temperature compensator, need not maintain the room temperature at exactly at 20 ± 0.3 °C and 4) the applicable method will be included in the Update.

ALA Update:

Total Coliform Rule, Time of Implementation and Update:

Matt: The revised rule was published in the federal register dated 2/13/2013; the implementation date is 4/20/2016 and ADEQ was planning to set up training workshops.

MALA Update:

There was nothing to report.

SUBCOMMITTEE REPORTS:

Training:

Matt Rexing gave an update: Sampling workshop is tentatively planned for this Fall; Field methods' training is also being discussed with Orion putting on the demo on different probes – pH, DO and others - which would include the cleaning of the probe, troubleshooting and realizing when the probe is not working; Micro and Chemistry basics would be covered during the morning session; Prabha suggested that Cary Jackson of HACH would be happy to do a presentation on DO meter for about 20 minutes.

DMRQA:

There have been delays in mailing DMR-QA packages for Study 33. The original deadline was 3/25/2013 and new deadline is 4/5/2013.

SET NEXT MEETING DATE & ADJOURNMENT:

The next meeting was scheduled for June 20, 2013; the meeting was adjourned.

NEW BUSINESS:

Old Lab equipment for WIFA:

Gene Morelis of ADEQ is collecting probes that are not being used by cities for field testing.

Field QA/QC:

Steve and Prabha will work with EPA to decide on the required QA/QC for field testing.