

**Laboratory Accreditation Advisory Committee
Minutes for May 24, 2022 – Hybrid Meeting**

MEMBERS PRESENT

Danielle Cappellini, A.E. Kirby Memorial Health Center (Commercial Environmental Laboratory)
Cristin Geletei, US Steel Clariton Works Lab (Industrial Environmental Laboratory)
David Kohl, CWM Environmental (Environmental Laboratory)
Anita Martin, Chester Water Authority (Municipal Authority)
Marykay Steinman, Analytical Quality Assistance (General Public Member)
John Stolz, Department of Biological Services Duquesne University (Academic Laboratory)
Andrew Yench, Penn State State University (General Public Member)

DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) STAFF PRESENT

Pamela Higgins, Bureau of Laboratories Director
Annmarie Beach, Laboratory Accreditation Program Chief
Yumi Creason, Laboratory Accreditation Program
Adalea Brindel, Laboratory Accreditation Program
Dwayne Burkholder, Laboratory Accreditation Program
Virginia Hunsberger, Laboratory Accreditation Program
Abbey Cadden, Policy Office

CALL TO ORDER AND ATTENDANCE

The meeting was called to order by Annmarie Beach at 9:05 am.

REVIEW AND APPROVAL OF 12/1/2020 AND 7/15/2021 MEETING MINUTES

Marykay Steinman called for a vote on the minutes from the two previous meetings on December 1, 2020, and July 15, 2021. The number of members present (7) was sufficient for a quorum.

For the December 1, 2020, meeting, several corrections were required in the minutes. These were for spelling corrections (“Radiochemical” on page 2, “Stolz” on page 2, and “Geletei” on page 3) and to remove Anita Martin from the list of members present on page 1. Cristin Geletei moved to approve the minutes as corrected and John Stolz seconded the motion. The minutes were unanimously approved.

For the July 15, 2021, meeting, there were no comments or requests for changes to the minutes. John Stolz moved to approve the minutes and Cristin Geletei seconded the motion. The minutes were unanimously approved.

INTRODUCTION OF NEW MEMBERS

Annmarie Beach introduced two new Committee members recently approved by DEP Secretary Patrick McDonnell: Dave Kohl and Andrew Yench.

Two vacancies remain to be filled, including a representative from a wastewater treatment plant and an environmental engineer.

LEGIONELLA TESTING PRESENTATION

Dr. John Stolz gave a presentation on *Legionella* testing based on information gathered when visiting a laboratory that performs this testing using ISO methods. He gave a brief overview of a rapid test that takes a few hours, as well as a 14-day definitive test. Genetic sequencing can be performed for a more definitive result. The test is complicated by the fact that there are many different species of *Legionella* bacteria. The DEP is anticipating that it will start an accreditation program for this testing.

Questions/Comments on *Legionella*

Dr. Pam Higgins asked about whether the 16 serotypes of one *Legionella* species that cause 90% of illness can be differentiated.

Dave Kohl reported that his laboratory uses IDEXX method to test about 1000 samples a year with good reproducibility.

Annamarie Beach asked about whether the visited laboratory had good throughput to be able to handle large sample volumes due to an outbreak. Dr. Stolz stated that the laboratory can run large numbers of samples with the rapid test.

Dr. Pam Higgins asked about whether Dr. Stolz learned about the training needed for the testing due to needing an experience eye. Dr. Stolz said this was not part of his visit. Dr. Higgins stated that IDEXX Legiolert method would be easier to train rapidly, to which Dave Kohl agreed.

Some additional discussion took place as to whether Legiolert is a culture method with some disagreement from the attendees.

Andy Yencha asked what volume of water is needed for the qPCR test for *Legionella*. Dr. Higgins stated that 50-100 mL is sufficient since the test is highly sensitive.

Annamarie Beach stated that the situation with *Legionella* is complicated by the fact that it is not currently regulated for how sample collection and preservation are to be handled. Dwayne Burkholder added that a sample needs to be taken from hot/warm water because it is a thermophilic organism. This differs from most other organisms where cold water is sampled and the sample is preserved on ice.

Annamarie Beach stated that the Environmental Protection Agency (EPA) is currently evaluating methods for *Legionella* testing.

A member of the public asked where DEP stands regarding accreditation for *Legionella* testing. Annamarie Beach answered that DEP is at the beginning of the process. Many questions are yet to be resolved, and the PA Drinking Water Program must be part of the process.

Dwayne Burkholder further discussed sampling considerations. There is no set hold time, although 48 hours may be appropriate. The sample is not be chilled on ice as for other organisms. Still to be worked out are issues of chemical preservation (such as dechlorinating agents) and which methods will be approved. Methods may need to be developed for serotyping to take place after analysis. There may be a difference between how testing is performed for normal quarterly monitoring versus testing required quickly during an outbreak situation. The accreditation program must be set up so that laboratories have an incentive to apply for accreditation.

Danielle Cappellini asked which candidates would require *Legionella* testing – the Department of Health (DOH) or the DEP. Dwayne stated that a bill is currently being considered where DEP would handle monitoring while DOH would handle outbreak situations.

Dr. Pam Higgins asked about whether DOH, which currently test bodily fluids from sick people, could also test water samples and whether positive samples analyzed by DEP could be sent to DOH for serotyping. The DOH currently does not test water but sends these samples to a contract laboratory.

A member of the public asked what constitutes an “outbreak.” Dwayne Burkholder replied that it depends on the state, but when a particular building is concerned, a percent positive rate would need to exceed some threshold number (such as 30%) to be considered an outbreak. The water tested is sampled from water systems, air-conditioning, and cooling towers.

Danielle Cappellini asked about whether surface water or well water would be differentiated in new regulations for public drinking water systems.

Dwayne Burkholder stated that during a pandemic situation, there would be a need to test stagnant water that was in pipes in buildings that were closed for long periods. Annmarie Beach stated that stagnant water remaining in pipes would not be the public water supplier’s issue. The water coming out of a public water supplier’s system would need to be shown to be *Legionella*-free based on quarterly testing.

Dave Kohl cautions that testing for *Legionella* could lead to future lawsuits between owners of buildings that are shut down due to an outbreak and the public water supplier, for example.

CONFLICT OF INTEREST DISCUSSION

Dr. Pam Higgins gave some background on her history and reviewed her role at the Bureau of Laboratories. She stated that she is in a support role for the Laboratory Accreditation Program (LAP) but is not involved in any LAP decisions. LAP decisions are made solely by its supervisors Annmarie Beach and Yumi Creason. Decisions are made based on regulations with a focus on consistency and fairness among all accredited laboratories and prevention of any conflicts of interest. To prevent a conflict of interest, the DEP laboratory holds primary accreditation with New Jersey DEP, with PA DEP only providing secondary accreditation required for the laboratory to test Pennsylvania samples.

A member of the public asked if a third-party oversight committee has ever been considered. Annmarie Beach stated that LAP already has a mechanism in place with a signed conflict of interest form that is maintained for each laboratory assessment. The LAP itself is assessed regularly by TNI with a very extensive review. The idea for an oversight committee could be considered.

Danielle Cappellini asked about the volume of testing performed by the DEP laboratory. Dr. Pam Higgins responded that the laboratory performs 700,000 to 800,000 tests per year. The laboratory has 54 analysts when fully staffed, but it only has 44 analysts currently. The laboratory uses automation, including robotics, for high throughput. The level of testing is now increasing again since the pandemic.

A member of the public asked about what percentage of the testing performed by the DEP laboratory could be performed by a commercial laboratory. Dr. Pam Higgins responded that some tests are very specific and would be difficult to outsource. A courier system works well for state park samples. Some programs tend to want to use the DEP laboratory since the fees can be lower and have no priority surcharge. Funding for the DEP laboratory is not a line item in the state budget, and some funding comes from federal programs. The member of the public maintains that the situation may be unfair because commercial laboratories cannot compete for this testing. Dr. Higgins stated that some state parks are using commercial laboratories for testing and are free to do so.

A member of the public asked whether LAP conflicts of interest were limited to relatives. Annmarie Beach responded that LAP has annual ethics training, and if there is any doubt of a conflict (which could also be a former laboratory employee, a friend, or someone with a financial interest), that assessor would be switched out with a different assessor.

OTHER BUSINESS

Annmarie Beach discussed supply chain issues as fallout from the pandemic (e.g. helium, Endothall cartridges). In some cases, EPA can issue approval for substitutions.

CLOSE OF MEETING

Marykay Steinman asked for a motion to adjourn the meeting. Andrew Yencha made a motion to adjourn the meeting, and John Stolz seconded the motion. The Committee unanimously voted to adjourn. The meeting was adjourned at 10:45 am.