

**Laboratory Committee –  
Report to BACWA Board**

Laboratory committee meeting on: October 11, 2022  
Executive Board Meeting Date: October 21, 2022  
Committee Chair: Samantha Bialorucki, City of Palo Alto

**Committee Request for Board Action:** None

Regular meeting: 33 attendees via Zoom representing 24 agencies and the Regional Water Board

**Best Practices for Infrared Temperature Measuring Devices**

Diane Lawver (Quality Assurance Solutions, LLC) presented on the regulatory requirements related to infrared temperature monitoring devices, also known as “IR Guns.” A recording is available from BACWA. She has also prepared a white paper based on references including 40 CFR Part 136, 40 CFR Part 141, Standard Methods for the Examination of Water and Wastewater (23<sup>rd</sup> Edition), the TNI 2016 Standard, and the Manual for the Certification of Laboratories Analyzing Drinking Water (2005); she intends to share the white paper with the committee. A few of the concepts covered in the training session include:

- Working IR Guns can be checked against a reference IR Gun that is traceable to NIST or they can be checked against a reference thermometer in water/glycerin. A correction factor can be developed from either approach. The correction factor cannot be more than 1 degree.
- The verification of the working IR Gun should be every 6 months if used for microbiology temperature measurements. If used only for chemistry testing, at least annually. Manufacturer instructions supersede reference method requirements if stricter for verification frequency.
- To get an accurate correction factor, it is best practice to check the IR Gun at the expected temperature of use (<10°C range of use) or to bracket the temperature of use with three points if the range of use is >10°C. Laboratories apply the correction factor closest to the measured temperature or apply an average correction factor for a range of use >10°C.

**California ELAP and Third-Party Assessment Findings**

Diane Lawver (QA Solutions) also presented on findings from fifty Onsite Assessment Reports (OSAR’s) prepared by California ELAP and approved third-party assessors. A recording is available from BACWA. She obtained the OSARs from a public records request and from volunteer agencies, and analyzed 761 individual findings to look for trends. Some of the trends she noted in her presentation were:

- On average, reports from ELAP had 3 times as many individual findings as reports from third-party assessors.
- More than half of all individual findings are related to Section 64802.05 (QA), indicating a problem with omitting required topics from the QA Manual or not following the QA Manual as written.
- For Chemistry methods, BOD and TSS had the most findings written. For Microbiology, media and records had the most findings written. For Fish Bioassay, reference toxicant, SOP’s, and water quality testing had the most findings written.

**BACWA Updates:**

- The Regional Water Board is now including language implementing the Statewide Toxicity Provisions within NPDES Permits; it will become effective after EPA approval. The newest example ([Rodeo SD Tentative Order](#)) is for a deep water discharger and therefore includes surveillance monitoring.
- The [Tentative Order of the Mercury/PCB watershed permit](#) is now available for review and proposes reduced monitoring frequencies for PCB congeners. Provide comments to Mary Cousins by Oct 28.
- Nutrient Data for the Group Annual Report are due to HDR by November 23<sup>rd</sup>. [Link to Excel template.](#)
- Data from Phase 2 of the PFAS Regional Study will be available in early 2023. Meanwhile, EPA is proposing to designate PFAS analytes as Hazardous Substances under CERCLA.

**ELAP Updates**

- [New ELAP Field of Accreditation Tables](#) were announced 9/28. No new analytical methods or analytes have been added to any FOA tables. Changes do not affect current accreditation.
- ELAP is no longer providing a courtesy Failure to Comply Notice for Proficiency Testing errors or for filling out ELAP FOA tables incorrectly. An error in your application or PT deficiencies that cause denial of accreditation will now require an amendment application to remedy.

**TNI Training and Implementation**

- The 16th TNI training session with Diane Lawver is scheduled for Tuesday, October 18<sup>th</sup>. Recordings of previous sessions are available through the [BACWA website](#) (password required).

**Remembrance of Farid Ramezanzadeh**

Members shared memories of their former Lab Committee colleague, who was part of the Bay Area wastewater laboratory community for 20 years.

**Next Regular Meeting : December 13, 2022, Format and Time for Holiday Party TBD**