California Environmental Laboratory Accreditation Program (ELAP)

Environmental Laboratory Technical Advisory Committee (ELTAC) Meeting

March 28, 2018

State Water Resources Control Board
Division of Drinking Water

NOTICE OF ENVIRONMENTAL LABORATORY TECHNICAL ADVISORY COMMITTEE (ELTAC) MEETING

March 28, 2018
10:00 a.m. – 4:00 p.m.
(or until completion of business)

Location 1	**Location 2**
California Environmental Protection Agency Building	Metropolitan Water District of Southern California
1001 I Street, Conference Room 2540	700 North Alameda Street, Room 1-102
Sacramento, CA 95814	Los Angeles, CA 90012

The Environmental Laboratory Accreditation Program (ELAP) will host a meeting of its technical advisory committee, as noted above. The notice and agenda for this meeting and others can be found at www.waterboards.ca.gov/elap. For further information regarding this agenda, see below or contact ELAP at elapca@waterboards.ca.gov or (916) 323-3431.

This meeting is available via webcast at https://video.calepa.ca.gov/.

AGENDA

ITEM 1 – Call to Order/Roll Call
ITEM 2 – Public Comments on Items Not on the Agenda
ITEM 3 – Approval of Minutes from the December 6, 2017 meeting
ITEM 4 – DELAPO Report (to include information on ELAP's Assessor Training Contract, Regulations development, Contracts under development, Interim Certificates, Drinking Water Certification Manual, US EPA Audit outcome, staffing updates, TNI mentor groups, Agency Partner requests for assistance from ELAP)
ITEM 5 – Method Update Rule and Method Detection Limit procedure
ITEM 6 – ELTAC By-Laws Review and Proposed Revisions
ITEM 7 – Orange County Sanitation District's Adoption of the TNI Standard
ITEM 8 – Informational Item: Division of Drinking Water Priorities
ITEM 9 – Review Action Items/Close Meeting

Action may be taken on any item on the agenda. The time and order of agenda items are subject to change at the discretion of the ELTAC Chair and may be taken out of order. The meeting will be adjourned upon completion of the agenda, which may be at a time earlier or later than posted in this notice.

In accordance with the Bagley-Keene Open Meeting Act, all meetings of ELTAC are open to the public.

Government Code section 11125.7 provides the opportunity for the public to address each agenda item during discussion or consideration by ELTAC prior to ELTAC taking any action on said item. Members of the public will be provided appropriate opportunities to comment on any issue before ELTAC, but the ELTAC Chair may, at his or her discretion, apportion available time among those who wish to speak. Individuals may appear before ELTAC to discuss items not on the agenda; however, ELTAC can neither discuss nor take official action on these items at the time of the same meeting [Government Code sections 11125 and 11125.7(a)].

The meeting locations are accessible to the physically disabled. A person who needs a disability-related accommodation or modification in order to participate in the meeting may make a request by contacting Katelyn McCarthy at (916) 322-7902 or emailing katelyn.mccarthy@waterboards.ca.gov. Providing your request at least five business days before the meeting will help to ensure availability of the requested accommodation.

Webcast Information

Webcast	**https://video.calepa.ca.gov/**

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM
ELTAC MEETING
Wednesday, March 28, 2018 – 10:00 a.m.
1001 I Street, Conference Room 2540
Sacramento, CA 95814
And
Metropolitan Water District of Southern California
700 North Alameda Street, Room 1-102
Los Angeles, CA 90012

Meeting Agenda

TIME	AGENDA ITEM	PRESENTER(S)
10:00am	**Call to Order** *Objective: Roll call.*	Stephen Clark, *Chairperson*
10:05am	**Public Comments on Items not on Agenda**	Open
10:10am	**Summary of December 6, 2017 Meeting & Approval of Minutes** *Objective: Amend or approve minutes.*	Stephen Clark, *Chairperson*
10:15am	**ELTAC Member Presentation** *Objective: Provide feedback, ask questions.*	David Kimbrough, *Member*
10:30am	**DELAPO Report** *Objective: Update members on recent developments and activities.*	Christine Sotelo, *DELAPO*
11:15am	**Method Update Rule** *Objective: Discuss implementation in California.*	Jacob Oaxaca, *ELAP* All members

12pm-1:15pm	Lunch	
1:15pm	**ELTAC By-Laws** *Objective: Propose revisions to ELTAC By-Laws, if necessary.*	Stephen Clark, *Chairperson* All members
2:00pm	**Orange County Sanitation District's Adoption of the TNI Standard** *Objective: Share case experience with committee members.*	Ron Coss, *Member* All members
3:00pm	**Informational Item: Division of Drinking Water Priorities** *Objective: Provide information to committee members.*	Melissa Hall, *Division of Drinking Water*
3:30pm	**Close – Review Action Items** *Objective: Review any assignments generated during the meeting.*	Stephen Clark, *Chairperson*
3:45pm	**Adjourn**	

ELTAC Meeting

March 28, 2018

Sacramento and Los Angeles

ROLL CALL

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM
ELTAC MEETING
Wednesday, March 28, 2018 – 10:00 a.m.
1001 I Street, Conference Room 2540
Sacramento, CA 95814
And
700 North Alameda Street, Room 1-102
Los Angeles, CA 90012

MEETING PACKET

Roll Call

Name	Affiliation	Member Type	Present
Diane Anderson	APPL, Inc.	Rep	
Mindy Boele	CWEA	Rep	
Jill Brodt	Brelje and Race Laboratories	Rep	
Bruce Burton	Division of Drinking Water	SRAE	
Gail Cho	CA Dept. of Fish and Wildlife	SRAE	
Stephen Clark	Pacific EcoRisk	Rep	
Ronald Coss	CWEA	Rep	
Huy Do	CASA	Rep	
Andy Eaton	Eurofins Eaton Analytical	Rep	
Miriam Ghabour	Metropolitan Water District of Southern California	Rep	
Bruce Godfrey	ACIL	Rep	
Anthony Gonzales	CAPHLD	Rep	
Rich Gossett	Physis Environmental	Rep	
David Kimbrough	Pasadena Water and Power	Rep	
Mark Koekemoer	Napa Sanitation District	Rep	
Bruce LaBelle	Dept. of Toxic Substances Control	SRAE	
Allison Mackenzie	Babcock Laboratories	Rep	
Christine Sotelo	CA ELAP	DELAPO	
Renee Spears	State Water Resources Control Board	SRAE	

Abbreviation	Member Type
DELAPO	Designated ELAP Officer, nonvoting
Scribe	Minutes (non-member)
SRAE	State Regulatory Agency Employee, nonvoting
Rep	Representative Member, voting

PUBLIC COMMENTS ON ITEMS NOT ON AGENDA

Public Comments on Items Not on Agenda

Members of the public may address the Environmental Laboratory Technical Advisory Committee (ELTAC) regarding items that are not contained in the meeting agenda at this time.

However, ELTAC may not discuss or take action on any item raised during this public comment session, except to decide whether to place the matter on the agenda of a future meeting [Government Code sections 11125 and 11125.7(a)].

APPROVAL OF DECEMBER 6, 2017 MEETING MINUTES

Stephen Clark, Chairperson

CALIFORNIA ENVIRONMENTAL LABORATORY TECHNICAL ADVISORY COMMITTEE (ELTAC)
COMMITTEE MEETING MINUTES
DECEMBER 6, 2017

More information on the Environmental Laboratory Accreditation Program (ELAP) and previous ELTAC meetings can be found at http://www.waterboards.ca.gov/elap.

CALL TO ORDER

Chairperson Andy Eaton called the meeting to order on December 6, 2017 at 10:35 a.m. at the California Environmental Protection Agency Headquarters, 1001 I Street, Conference Room 2540, Sacramento, CA 95814 and the Metropolitan Water District of Southern California, 700 North Alameda Street, Room US2-145, CA 90012.

COMMITTEE MEMBERS PRESENT

DELAPO: Christine Sotelo

Representatives (voting):

Diane Anderson
Mindy Boele
Stephen Clark
Huy Do
Andy Eaton
Miriam Ghabour
Bruce Godfrey
Anthony Gonzalez
Rich Gossett
David Kimbrough
Mark Koekemoer

State Regulatory Agency Employees (non-voting):

Bruce Burton
Gail Cho
Bruce LaBelle
Renee Spears

Not Present:

Jill Brodt
Ronald Coss
Allison Mackenzie

OTHER STAFF PRESENT

Scribe: Katelyn McCarthy

ELAP: Maria Friedman, Jacob Oaxaca

ANNOUNCEMENT

- *Evacuation information in case the fire alarm goes off during the meeting.*
- *The Committee meeting is being webcast and recorded.*

COMMITTEE MEETING

PUBLIC FORUM

Any member of the public may address and ask question of the Committee relating to any matter within ELTAC's scope provided the matter is not on the agenda, or pending before the Advisory Committee.

COMMITTEE BUSINESS

Call to Order/Roll Call

Public Comments on Items Not on Agenda

(The Committee will not take any action but will consider placing any item raised on the agenda at a future meeting.)

Approval of Amended Minutes from July 13, 2017 Meeting

Motion: Member Godfrey moved to adopt the minutes.
Seconded by: Member Gossett
MOTION CARRIED: December 6, 2017

Aye:	Member Anderson
	Member Boele
	Member Clark
	Member Do
	Member Eaton
	Member Ghabour
	Member Godfrey
	Member Gonzales
	Member Gossett
	Member Kimbrough
	Member Koekemoer
Nay:	None
Absent:	Member Brodt
	Member Coss
	Member Mackenzie
Abstain:	None

Vote for a New ELTAC Chairperson

Committee members submitted secret ballots to ELAP for one of three candidates running for the position of ELTAC Chairperson. The candidates were Member Stephen Clark (specialty laboratories), Member Ron Coss (California Water Environment Association), and Member Bruce Godfrey (American Council of Independent Laboratories).

Member Stephen Clark was elected and committee members were notified by ELAP following the meeting. He will serve as Chairperson for one year.

DELAPO Report

- ***DELAPO Christine Sotelo reflected on the progress made by ELAP and ELTAC over the past three years.***
- ***Staffing updates***
  - ***New assessor in Glendale office – Ali Hossain***
  - ***New vacancy – Supervisor of Program Development, Research, and Enforcement Unit***
- ***Sotelo informed the committee about preliminary feedback from US EPA's 2017 audit of CA ELAP***
- ***Sotelo provided an update on the Method Update Rule implementation in California***
- ***Sotelo informed the committee about two contract proposals under development – the Early TNI Implementation Project and a training focused on documentation development for TNI requirements***
- ***Sotelo discussed the passage of Assembly Bill 1438 and its effects – it updates outdated references, updates the appeals process, and modifies the process for suspending or revoking accreditation to provide for a hearing before the State Water Board. The bill did not include any additional accreditation requirements.***

Regulations Update

Christine Sotelo informed the committee that the timeline for development and adoption of ELAP's regulations for accreditation had been extended due to resource constraints. She also informed the committee that ELAP intended to accept approximately 85% of comments that the program received from the community during the comment period for the preliminary draft regulations and thanked everyone for their input.

Fields of Accreditation

ELAP staff member Jacob Oaxaca presented a plan to revise ELAP's current "Fields of Testing" to "Fields of Accreditation" based on technology. The draft FOA's included in the meeting packet were not inclusive but intended to be an example of the reorganization. ELAP asked committee members to submit comments to the program on the proposal.

Fee Stakeholder Workgroup Update

David Ceccarelli, State Water Board Division of Administrative Services, provided a summary to the committee of the work that had been done up to that point by his staff and the ELAP Stakeholder Fees Workgroup in response to requests from the laboratory community that the Water Board revise ELAP's current fee structure to be more equitable. He summarized the options that the workgroup had developed and discussed potential next steps. Committee members expressed concern about the timeline in relation to the timeline for adoption of ELAP's regulations for accreditation.

Informational Item: Laboratory Intercalibration Exercises

Dr. Stephen Weisberg of the Southern California Coastal Water Research Project gave an informational presentation about laboratory intercalibration exercises that his organization had facilitated in the past and the

information that the exercises had provided. Committee members discussed whether ELAP laboratories would benefit from participating in a similar project without formal conclusion.

Informational Item: Transition to SDWIS-PRIME

Paul Williams, State Water Board Division of Drinking Water, provided information to the committee members regarding future requirements for reporting analytical results for drinking water.

Informational Item: Perchlorate Workgroup

Dr. Eric Miguelino, State Water Board Division of Drinking Water, provided an update to the committee on the work that had been done with Members Eaton, Ghabour, and Kimbrough to determine whether the laboratory community had the capacity to meet a lower Detection Limit for Reporting for Perchlorate. No formal recommendation had been reached by the Division at this point.

Action Items

- ***Committee members - comments on proposed FOAs to ELAP***
- ***Katelyn McCarthy - reach out to members regarding commitment for a next term on ELTAC***
- ***Katelyn McCarthy - schedule March meeting date and look into June meeting date***
- ***Katelyn McCarthy - distribute presentations from guest speakers to members and post online at www.waterboards.ca.gov/elap on the Events Calendar.***

Adjournment

The Committee adjourned at 3:30pm.

ELTAC MEMBER PRESENTATION

David Kimbrough, Pasadena Water and Power

PASADENA

Pasadena Water and Power

ELTAC Meeting

Presented by
David Kimbrough, Ph.D., Water Quality Manager

March 28, 2018

Interim Accreditation

- H&SC 100850 (c) **Upon the filing of a complete application** for certification or accreditation pursuant to subdivision (a) and Section 100870, the state board may issue to a laboratory interim certification or accreditation **pending the completion of onsite assessment**. Interim certification and accreditation shall be nonrenewable and shall remain in effect until certification and accreditation is either granted under subdivision (a) or denied under subdivision (b), but **not later than one year after the date of issuance**.

Interim Accreditation

- CCR 64803 (f) A laboratory desiring interim certification under authority of Health and Safety Code, Section 100850(d) **shall file a written request for interim certification with its application**. An interim certificate shall be issued after payment of the basic and per-Field-of-Testing fee published by the Department pursuant to Health and Safety Code, Section 100425 and 100860.1(a) for each Field of Testing applied for, completion of the requirements of either Section 64807 or 64809, and after the Department has determined that the laboratory has submitted a complete application.

Expiration of Certificate

- Labs are getting Interim Certificates even though they did not request interim accreditation.
- They are not getting On-Site Assessments within one year.
- Labs are having their Certificates of Accreditation expire through no fault of their own
- Labs are without a current Certificate for weeks and months at time

Lab Cert Manual

Pasadena Water and Power

EPA 815-R-05-004
January 2005

Manual for the Certification of Laboratories Analyzing Drinking Water

Criteria and Procedures Quality Assurance

Fifth Edition
Supersedes EPA/570/9-90/008, April 1990
EPA 814-B-92-002, September 1992
EPA 570/9-90-008A, October 1991
EPA 815-B-97-001, March 1997

PASADENA

Lab Cert Manual

Pasadena Water and Power

DISCLAIMER

The U.S. Environmental Protection Agency's (EPA's) Office of Ground Water and Drinking Water, in the Office of Water, and the Office of Research and Development of the U.S. Environmental Protection Agency prepared this manual. Those Offices as well as EPA's ten Regional Offices have reviewed this manual. EPA intends to use this manual for its own use in certifying laboratories for analysis of drinking water contaminants. In order to assume primary enforcement responsibility for the drinking water regulations, a State must either have available laboratory facilities, certified by the Administrator, capable of conducting analytical measurements of drinking water contaminants, or establish and maintain its own program for certification of laboratories. States wishing to adapt the procedures and criteria of this manual for their own certification program should revise it to accurately reflect accurately their State certification program.

This is a guidance manual and not a regulation. It does not change or substitute for any legal requirement. While EPA has made every effort to ensure the accuracy of the manual's discussion, the obligations of the regulated community are determined by the relevant statutes, regulations or other legally binding requirements. The manual obviously can only reflect the regulations in place at this time of its preparation. Consequently, for any definitive description of current legal obligations, the public should not rely only on the discussion in the manual. This manual is not a rule, is not legally enforceable, and does not confer legal rights or impose legal requirements upon any member of the public, States or any other Federal agency. In the event of a conflict between the discussions in this manual and any statute or regulation, this document is not controlling. The word "should" in this manual does not connote a requirement but does indicate EPA's strongly preferred approach to ensure the quality of laboratory results. EPA may decide to revise this manual without public notice to reflect changes to its approach or to clarify and update the text.

The mention of commercial products in this manual does not constitute an endorsement of the use of that product by EPA.

Lab Cert Manual

Pasadena Water and Power

- EPA intends to use this manual for its own use in certifying laboratories for analysis of drinking water contaminants.
- States wishing to adapt the procedures and criteria of this manual for their own certification program should revise it to accurately reflect accurately their State certification program.
- This is a guidance manual and not a regulation.

Lab Cert Manual

Pasadena Water and Power

- The word “should” in this manual does not connote a requirement but does indicate EPA’s strongly preferred approach to ensure the quality of laboratory results.

Requirements: 22 CCR § 64809.a and 22 CCR § 64815.b The PT Provider instructions require that the laboratory analyze the samples following normal analysis procedures. **Applicable Federal Guidance from Drinking Water Certification Manual Chapter III Section 13.1** states PT samples should be analyzed in the same manner as routine samples.

Finding: PTs are run by all 3 technicians and an average of the results is reported. This is not how routine samples are processed.

Regulation that establishes the requirement:

22 CCR § 64809.a
22 CCR § 64815.b

Applicable Federal Guidance:

Drinking Water Certification Manual Chapter III Section 13.1

13. Requirements for Maintaining Certification Status

13.1 Proficiency Testing (PT) Samples

At least annually drinking water laboratories certified for chemical contaminants must satisfactorily analyze a PT sample to maintain certification (40CFR 141.23(k)(3)(i),141.24(h)(17)(i)(A) and 141.89(a)(1)(i)). PT samples should be analyzed in the same manner as routine samples. Laboratories must acquire the PT sample from a supplier acceptable to the appropriate certification authority.

22 CCR § 64809

§ 64809. Performance Evaluation Testing.

(a) No laboratory shall be certified to perform analyses in any Subgroup of any Field(s) of Testing as identified in Section 64823 unless the laboratory has submitted results for the analysis of performance evaluation sample study set(s) (where performance evaluation sample study set(s) exist) in each Subgroup within each Field of Testing for which certification is requested, and the results for the testing of the study set are in agreement with the criteria established below:

22 CCR § 64815

§ 64815. Quality Assurance.

(b) The quality assurance program manual shall address all quality assurance and quality control practices to be employed by the laboratory and shall, at least, include the quality assurance and quality control requirements specified in the test methods for which the laboratory holds, or seeks, certification. The manual shall include the following elements: laboratory organization and personnel responsibilities; quality assurance objectives for measurement data; sampling procedures (when the laboratory performs the sampling); custody, handling, and disposal of samples; calibration procedures and frequency; analytical procedures; acquisition and reduction, validation and reporting of data; internal quality control checks; performance and system audits; preventive maintenance; assessment of precision and accuracy; corrective action; and quality assurance reports.

WS & WP PT Samples

Pasadena Water and Power

(17) Analysis under this section shall only be conducted by laboratories that are certified by EPA or the State according to the following conditions (laboratories may conduct sample analysis under provisional certification until January 1, 1996):

(i) To receive certification to conduct analyses for the contaminants in § 141.61(a) (2) through (21) the laboratory must:

(A) Analyze Performance Evaluation (PE) samples provided by EPA, the State, or by a third party (with the approval of the State or EPA) at least once a year by each method for which the laboratory desires certification.

(B) Achieve the quantitative acceptance limits under paragraphs (f)(17)(i)(C) and (D) of this section for at least 80 percent of the regulated organic contaminants included in the PE sample.

(C) Achieve quantitative results on the analyses performed under paragraph (f)(17)(i)(A) of this section that are within ±20% of the actual amount of the substances in the Performance Evaluation sample when the actual amount is greater than or equal to 0.010 mg/l.

(D) Achieve quantitative results on the analyses performed under paragraph (f)(17)(i)(A) of this section that are within ±40 percent of the actual amount of the substances in the Performance Evaluation sample when the actual amount is less than 0.010 mg/l.

(E) Achieve a method detection limit of 0.0005 mg/l, according to the procedures in appendix B of part 136.

22 CCR § 64809

§ 64809. Performance Evaluation Testing.

(a) No laboratory shall be certified to perform analyses in any Subgroup of any Field(s) of Testing as identified in Section 64823 unless the laboratory has submitted results for the analysis of performance evaluation sample study set(s) (where performance evaluation sample study set(s) exist) in each Subgroup within each Field of Testing for which certification is requested, and the results for the testing of the study set are in agreement with the criteria established below:

OSA Schedules

- A number of laboratories accredited for compliance testing for the Safe Drinking Water Act have had OSA's under the new contract system.
  - > These OSAs are taking two to three times as long as OSA's conducted in the past by ELAP
  - > ELAP has a long history of being behind schedule on OSAs
  - > Doubling and tripling the length of OSA's will only make matters worse
  - > Reports and Deficiency Letters are taking months to arrive after the OSA

DELAPO REPORT

Christine Sotelo, ELAP

Accomplishments from (and since) your last meeting

- You elected a new chairperson
  - Stephen Clark, Pacific EcoRisk
  - Thank you to all candidates for your willingness to serve

- Everyone wants to continue our work together!
  - A few members committed to a one-year term
  - Most would like to stay for two additional years

Much to Tell

- ***Administrative Items***
  - Staffing Updates
  - US EPA Audit Outcome
  - Drinking Water Certification Manual
  - Interim Certificates

- ELAP Initiatives
  - Regulations
  - Forum on Environmental Accreditation
  - Assessor Training Contract
  - Other Contracts
  - Agency Partner relationships
  - TNI Mentor Groups

Staffing Updates

- New staff in PT Unit
  - Janet Hernandez, Environmental Scientist
  - Ample laboratory and data validation experience

- New Supervisor of the Program Development, Research and Enforcement Unit
  - Jacob Oaxaca
  - Former lead investigator in PDREU was promoted

US EPA Audit Outcome

- They are pleased with our progress
  - But always room for improvement
- Findings were mostly administrative in nature
  - Documentation/Electronic files
  - Certificate dates
- Also recognized that we are hamstrung by our lack of PT database
- We are seeing the outcome of this audit as a confirmation of the progress we've made
  - As well as the value of our management system

Drinking Water Certification Manual

- ELAP is necessary for the Division of Drinking Water to maintain primacy under the Safe Drinking Water Act
  - "Primacy" means that the state can monitor and enforce drinking water regulations for the US EPA
- The Division of Drinking Water requires compliance with current federal laws
  - The Division regulations require laboratories to use US EPA methods, in accordance with federal regulations
- Drinking Water Certification Manual sets out federal requirements, and makes recommendations for drinking water laboratories
  - Requirements must be complied with where they reflect federal requirements
  - Manual is "guidance" where it goes beyond federal requirements
  - US EPA encourages labs to follow guidance because it considers them best practice
- Most laboratories in California are already following both requirements and guidance
  - Thank you for caring about your charge!

Interim Certificates

- “Interim” accreditation is typically issued when ELAP has not had an opportunity to assess a laboratory yet, but the laboratory meets other requirements to be accredited
  - Such as passing required Proficiency Tests
- ELAP issued interims to drinking water laboratories in anticipation of our training contract being executed
  - Which took longer than planned
- The laboratory can do business as usual
  - No need to reapply if you have an interim
  - Continue to do your annual PTs

Much to Tell

- Administrative Items
  - Staffing Updates
  - US EPA Audit Outcome
  - Drinking Water Certification Manual
  - Interim Certificates

- ***ELAP Initiatives***
  - **Regulations Update**
  - Forum on Environmental Accreditation
  - Assessor Training Contract
  - Other Contracts
  - Agency Partner relationships
  - TNI Mentor Groups

Regulations Development Update

- Our team has been working toward addressing the community's concerns
  - We have incorporated approximately 85% of comments
- Anticipate regulations becoming effective in the second quarter of 2019
  - Board Meeting early 2019
- We anticipate releasing another preliminary draft prior to your June meeting
  - We'll ask for comments on the changes

Much to Tell

- Administrative Items
  - Staffing Updates
  - US EPA Audit Outcome
  - Drinking Water Certification Manual
  - Interim Certificates

- ***ELAP Initiatives***
  - Regulations Update
  - **Forum on Environmental Accreditation**
  - Assessor Training Contract
  - Other Contracts
  - Agency Partner relationships
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Forum on Environmental Accreditation

- Held in Albuquerque, NM – January 22nd -25th
- California is making an impact on the TNI community
  - Many attendees support our proposed modification for Technical Director Qualifications
  - About half of those polled supported our proposal to only require one proficiency test per year
- Held multiple mentor sessions to address the issues raised by ELTAC
- We encourage laboratories to participate
  - The consensus process is one reason we have proposed adoption of TNI
  - We want California to be represented

Much to Tell

- Administrative Items
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- ***ELAP Initiatives***
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  - **Assessor Training Contract**
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Assessor Training Contract Progress

ELAP Assessor Training Contract Progress (October 30, 2017 - February 28, 2018)	
On-Site Assessments Completed	49
Upcoming On-Site Assessments Confirmed	24
Draft Reports In Progress	14
Final Reports Sent to Laboratories	35
Acceptable Corrective Action Responses Received	4
Unacceptable Corrective Action Responses Received	13
Corrective Action Response Reviews in Progress	4

Pilot Round of Training Assessments

- First impressions – we are pleased
  - It's clear that NV5 staff are experts in their field
- We have been fine-tuning after feedback from the initial assessments
  - To minimize scheduling and logistical hiccups
  - Addressing delayed assessment reports
  - Ensuring proper citation is used
- We want to hear from you as well
  - Thank you for your earlier observations, David
  - We encourage laboratories who have had assessments to email feedback to elapca_comments@waterboards.ca.gov

Observations so far – Assessments

- Positive feedback from the laboratory community
  - NV5 staff are professional, good communicators, thorough, knowledgeable
- Longer assessments than a historical ELAP assessment
  - Assessors are more experienced
  - Training and answering questions takes extra time
- Assessment Reports have been delayed
  - Training our staff on how to write findings takes time to get right
  - We're committed to hitting our 30-day target

Observations so far - Reports

- New format and electronic delivery have been well received
- Gap analysis is broad
  - Not detailed down to every clause in the standard
  - Much discussion during assessment related to TNI compliance
  - Verbal summary during exit conference
- Corrective Action Plans are new to our laboratories
  - ELAP and NV5 review the laboratory's plan to correct, and approve or deny
  - Laboratories do not need to submit proof of corrections to ELAP – implementation will be verified during next on-site assessment

Much to Tell

- Administrative Items
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- ***ELAP Initiatives***
  - Regulations Update
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  - Assessor Training Contract
  - **Other Contracts**
  - Agency Partner relationships
  - TNI Mentor Groups

Early Implementation Contract Proposal

- Original proposal was for six laboratories to receive consulting services to implement the 2016 TNI Standard in one year
  - Due to available funding, we have revised to two laboratories
- There will also be a “pay-it-forward” component
  - Participant laboratories will pass on the knowledge they gain during the process
- Water Boards contract unit is backlogged – will not be executed until 2019
  - Gives us time to identify laboratories who will participate
- Criteria for participating laboratories to apply is under development
  - We will notify the community via email

TNI Documentation Workshops

- This training will build on the knowledge gained from the Early Implementation Contract
- We anticipate it being focused on documentation development with a consultant
  - Labs would keep the “tools” they receive that day
  - Will be able to work on refining their existing documentation
- Open to everyone
- Will follow the Early Implementation Project

Third-Party Assessments

- The Expert Review Panel recommended we accept third-party assessments
  - This will help with ELAP's resource challenges
- We will be able to accept via establishment of a Memorandum of Understanding agreement
  - Currently drafting this document
- We will look to ELTAC once the agreement is drafted to review the technical details and qualifications for the firms that will qualify
  - Likely at your next meeting

Intercalibration Exercise Contract

- Postponed
  - Unfortunately we do not have funding at this time
- We will revisit next year
  - Our Agency Partners want this

Much to Tell

- Administrative Items
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- ***ELAP Initiatives***
  - Regulations Update
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  - Assessor Training Contract
  - Other Contracts
  - **Agency Partner relationships**
  - TNI Mentor Groups

Agency Partner Requests

- We have been getting an increasing number of requests for assistance and training from other regulatory programs
  - We see this as a very positive thing
- However, this in an increase in our workload
- We are working with the Water Boards training department to develop new trainings to meet this need

Much to Tell

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- ***ELAP Initiatives***
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  - Agency Partner relationships
  - **TNI Mentor Groups**

Mentor Groups

- Groups have begun to form to help each other with the implementation of TNI and share resources/tools
- Some ACIL laboratories are willing to mentor
- We want to charge ELTAC with identifying how ELAP might support these groups
  - Facilities?
  - Communications?
  - Post information on our webpage?
  - Connect laboratories?

US EPA METHODS UPDATE RULE

MUR Methods

- 2017 Methods Update Rule was effective September 27th
- We anticipate updating our FOTs in June
  - We will continue to offer the older versions, for now
- MDL Procedure
  - Some states are requiring implementation in all matrices
- We want ELTAC's recommendation on which path we should take

Part 136 Method Update Rule
Revisions to Appendix B – MDL Procedure as Applied to Drinking Water

Office of Ground Water and Drinking Water, Technical Support Center
October 2017

In the revised Part 136, Appendix B procedure, method detection limits (MDLs) are determined by analyzing seven method blanks (i.e. laboratory reagent blanks, LRBs) along with seven low-level laboratory fortified blanks (LFBs). Laboratories then use the higher MDL calculation derived from either the LRB or LFB replicates. ***From a drinking water perspective, if a laboratory practices good hygiene by keeping their laboratory clean (i.e. sample prep areas, glassware, instrumentation, etc.), the method blanks should never indicate a recurring background as nearly all blank failures would invalidate analytical results. Consequently, the revised procedure should have little to no impact, and MDLs will be calculated in the same way as described in the original MDL procedure used over the last thirty years.*** The question then becomes whether the revised MDL procedure has any significance for the drinking water program. The short answer is "yes," with careful consideration for the following:

1. <u>Specific citations to Part 136, Appendix B in the drinking water regulations.</u> Such citations will require a laboratory to follow the new procedure. There are three such regulatory citations related to the analysis of VOCs and laboratory certification:
   a. For all VOCs, except vinyl chloride. 40 CFR 141.24(f)(17)(i)(E) – "Achieve a method detection limit of 0.0005 mg/L, according to the *procedures in appendix B of part 136."*
   b. For vinyl chloride. 40 CFR 141.24(f)(17)(ii)(C) – "Achieve a method detection limit of 0.0005 mg/L, according to the *procedures in appendix B of part 136."*
   c. For all VOCs. 40 CFR 141.24(f)(20) – "Each certified laboratory must determine the method detection limit (MDL), as defined in *procedures in appendix B to part 136*, at which it is capable of detecting VOCs. The detectable MDL is 0.0005 mg/L. This concentration is the detection concentration for purposes of this section."

   There is also such a citation in the lead and copper rule:
   d. 40 CFR 141.89(a)(1)(iii) – "To obtain certification to conduct analyses for lead and copper…Achieve the method detection limit for lead of 0.001 mg/L according to *procedures in appendix B of part 136* of this title." There is not a similar explicit specification for copper, but it is implied: 40 CFR 141.89(a)(3) – "All lead and copper levels measured between the PQL and MDL must be either reported as measured or they can be reported as one-half the PQL specified for lead and copper in paragraph (a)(1)(ii) of this section. All levels below the lead and copper MDLs must be reported as zero."

2. <u>EPA methods and MDL procedure</u>. A few of the older EPA methods (e.g. 515.1, 548.1, 555) and various methods evaluated through the alternate test procedure (ATP) program and approved for drinking water analysis (e.g. OIA-1677 OW cyanide method) specifically cite the Part 136, Appendix B MDL procedure. Labs using those methods will need to follow the new procedure. Many of the newer EPA drinking water methods, however, either describe the specific steps for the 'old' MDL procedure without referencing Part 136, Appendix B or they reference the 1981 Glaser/Budde paper that was the basis for development of the old MDL procedure. Options for dealing with these methods are:
   a. <u>Apply the new MDL procedure across all methods</u>. From the standpoint of consistency, this would be a logical choice. Laboratories that analyze wastewater samples will be required to

follow the new procedure and it may be simpler to revise all their SOPs to specify the new procedure for both drinking water and wastewater methods. *Do not* penalize a lab if they choose to implement the new MDL procedure even if the drinking water method only describes the old procedure for determining MDLs (provided of course that their method blanks meet the method criteria).

b. Follow methods as written. If Part 136, Appendix B is not cited in a regulation and its associated methods, and a method contains the steps for determining MDL following the old procedure, it becomes a judgement call. Just be consistent in applying such judgement across the region.

3. Standard Methods. Similar issue as the EPA methods discussed above. Rather than incorporating QC within each method which would result in a massive unwieldy book, Standard Methods consolidates the common QC requirements within specific sections (e.g., Sect. 4020 contains the QC that pertains to the Part 4000 methods). ***The separate QC section is considered an intrinsic part of each method***. In the 22nd edition of *Standard Methods for the Examination of Water and Wastewater*, the QC section references the MDL Revision 1.11 in Part 136. That's the 'old' MDL determination. But the recently published 23rd edition incorporates the requirements of the 'new' MDL procedure (the editors apparently had anticipated publication of the CWA methods update rule prior to publication of the 23rd edition). We will be reviewing the methods within the 23rd edition for subsequent approval in a *Federal Register* notice at a later time. So, again, a laboratory may choose to apply the new MDL procedure across all methods or use the old procedure as described in the older editions.

The following represent some highlights from the new procedure:

1. Read the revised procedure and especially the frequently asked questions (FAQs) on the CWA webpage at:
   https://www.epa.gov/cwa-methods/method-detection-limit-frequent-questions.

2. The value calculated from the seven low-level LFBs is called the MDL_s. The MDL_s is the same as the 'old' MDL. The seven method blanks are used to calculate the MDL_b, which involves a similar evaluation of contamination/noise associated with the measurement. The final MDL is the higher of the two values. ***From the standpoint of conducting drinking water analyses, the MDL_b should not be the higher value***. If it is, that's a sure sign the lab needs to take corrective action.

3. The new procedure requires that the LFBs used to calculate the MDL are representative of laboratory performance throughout the year, rather than determined from a single analysis batch. Thus, the laboratory needs to analyze at least seven low-level LFBs and seven LRBs for an instrument in a two-year period (spread over at least three batches), but there is also a requirement to analyze two LFBs per quarter in separate batches for any quarter in which samples are analyzed. There are several nuances to this; read the FAQs.

Under Part 136, laboratories have the option to pool data from multiple instruments to calculate one MDL that represents multiple similar instruments. That is not considered a reasonable option for drinking water:

1. Chapter IV, Sect. 7.2.9 (Initial Demonstration of Capability) in the Laboratory Certification Manual states: "Before beginning the analysis of compliance samples, an initial demonstration of capability (IDC) must be performed for each method as required by the method. The IDC includes a demonstration of the ability to achieve a low background, the precision and accuracy required by the method, and determination of the method detection limit (MDL). ***An IDC should be performed***

for each instrument." This specification of determining the MDL per method and per instrument precludes the option of determining a multi-instrument MDL for instruments that will be used to analyze drinking water compliance samples.

2. For some drinking water contaminants, e.g. the SOCs identified in 40 CFR 141.24(h)(18), qualification for reduced monitoring is based on specified low threshold levels. In order for a laboratory to meet those low levels, they will need to optimize *lower* detection levels. Pooling data from multiple instruments will have the net effect of increasing variability, resulting in *higher* calculated MDL values.

As discussed in the FAQs on the CWA web page, while the rule becomes effective 30 days after publication in the *Federal Register*, "EPA recognizes that it is not possible for any laboratory to make this change instantaneously. The laboratory should comply with the requirements of its control authority or permitting authority to implement Revision 2 of the MDL procedure." No one needs to start from scratch, cease operations and conduct new MDL studies. The revised procedure is structured to allow labs to use existing batch LRBs and low-level LFBs to calculate their initial MDL under the new procedure.

LUNCH – Back at 1:15pm

ELTAC BY-LAWS

Amending the By-Laws

- By-Laws establish that review is required every two years
- Any proposed amendment must receive a 2/3 majority vote (all members)
  - And must be approved by the Deputy Director of the Division of Drinking Water
- Please review the By-Laws prior to the meeting and be prepared to propose/discuss potential amendments
  - ELAP will keep record
- Voting will take place at your next meeting

ENVIRONMENTAL LABORATORY TECHNICAL ADVISORY COMMITTEE

BY-LAWS
Adopted 02/04/2016

ARTICLE I

Name

The name of this Committee shall be the Environmental Laboratory Technical Advisory Committee (ELTAC).

ARTICLE II

Bagley-Keene Open Meeting Act

All meetings shall be conducted in accordance with the provisions of the Bagley-Keene Open Meeting Act (Government Code, Title 2, Division 3, Chapter 1 (commencing with Section 11120)), and each member is subject to the provisions of the Bagley-Keene Open Meeting Act. No provision of these By-Laws is intended to nor may be interpreted to conflict with or supplement the Bagley-Keene Open Meeting Act.

ARTICLE III

Objectives and Functions

ELTAC serves to implement objectives and requirements authorized in Section 100863 of the California Health and Safety Code.

ELTAC is established in law to "assist, advise and make recommendations regarding technical, scientific, and administrative matters concerning the accreditation or certification of environmental laboratories." (Health and Safety Code Section 100863) The law further provides that: "Subcommittees of the committee may be appointed consisting of committee members and other persons having particular knowledge of a subject area, for the purpose of assisting the … [State Water Resources Control Board] on special problems and making recommendations to the Committee for consideration in the establishment of rules and regulations."

ELTAC shall assist the State Water Resources Control Board, Division of Drinking Water (hereafter referred to as “Division”), Environmental Laboratory Accreditation

Program (hereafter referred to as “ELAP”) by providing advice and making recommendations regarding technical and scientific matters for the establishment of rules and regulations that will ensure the proper administration and enforcement of provisions pursuant to Health and Safety Code, sections 100825-100920 as well as provisions in other statutes that impact environmental laboratory activity.

The Committee shall also function as a means of exchanging information and opinions related to environmental laboratory technology, methods, and practice. In support of this function, ELAP may request ELTAC member laboratories participate in outreach and education efforts and allow assessors the ability to tour their laboratories in order to learn about technologies the assessors have not previously witnessed.

ELTAC shall assist ELAP in:

A. Developing scientifically rigorous recommendations regarding issues that impact the regulated laboratory community, regulatory agencies, and data users
B. Improving communications and outreach between ELAP and its stakeholder communities
C. The operation and improvement of ELAP
D. The implementation of a performance based, transparent accreditation program that is accountable to ELAP stakeholders

ARTICLE IV

Membership

A. Types of Members
    1. Designated Environmental Laboratory Accreditation Program Officer (DELAPO)

        A full-time employee of ELAP shall be appointed as the DELAPO by the Deputy Director of the Division of Drinking Water (hereafter referred to as “Deputy Director”). The DELAPO or a designee shall be present at all of the meetings of the Committee and Subcommittees. Meetings may not be conducted in the absence of the DELAPO or designee. Each meeting shall be conducted in accordance with an agenda approved in advance by the DELAPO. The DELAPO is authorized to adjourn any meeting when he or she determines it is in the public’s best interest to do so. The DELAPO is not a voting member of the Committee.
    2. Representative Member (Representative)

        A Representative is an individual who is appointed by the Deputy Director to speak on behalf of a group, organization, or any other recognizable

group of persons having an interest in matters before ELTAC. Representatives are voting members of ELTAC.

3. State Regulatory Agency Employee (SRAE)

   SRAEs are appointed by the Deputy Director to speak on behalf of a California State board, department or office by which they are currently employed. SRAEs are not voting members of ELTAC.

4. Chairperson

   This position shall be held by a current Representative. Annually, the Chairperson shall present a summary of ELTAC's scope of work to the State Water Board Members. The Chairperson shall be elected by voting members of ELTAC. The Chairperson shall solicit and create agenda items for ELTAC meetings. The Chairperson shall submit the agenda to the DELAPO at least 30 days before the scheduled ELTAC meeting for approval. The Chairperson is highly encouraged to be present at all meetings held in Sacramento. Voting for the Chairperson shall follow voting procedure as outlined in Article V. This member retains full voting privileges.

5. Scribe

   The Scribe shall be an ELAP staff member who is appointed by the DELAPO. The Scribe is responsible for the meeting minutes, which shall highlight discussions and decisions made on agenda items and other orders of business. The Scribe shall make the minutes available to the public after the committee approves them. This is not a voting position.

B. Composition

ELTAC shall be comprised of the DELAPO and approximately fifteen (15) members (Representatives and SRAEs) to speak on behalf of interested parties and environmental laboratories subject to the Environmental Laboratory Accreditation Act. One of the current Representatives shall serve as the Chairperson. The Committee shall consist of a broad range of individuals who come from interested parties and environmental laboratories that have a wide range of expertise that includes, but is not limited to, ELAP's fields of testing. There shall be committee members from both Northern and Southern California, from both publicly and privately owned laboratories, and from laboratories of all sizes. Those serving on ELTAC shall be selected by the Deputy Director based upon their expertise and knowledge of: conformity and standards development, laboratory quality systems and accreditation, analytical methods and methods development, overall analytical laboratory operations; and familiarity of regulatory framework and requirements for compliance needs. Membership shall be established and term appointments maintained in such a manner as to require a minimum number of new appointments from each category each year, with terms

overlapping to maintain stability and continuity within ELTAC. The membership of ELTAC shall be constituted such that no one set of stakeholders shall have dominance over ELTAC and every Representative has substantive knowledge of ELAP services and environmental laboratory operations.

C. Terms for Representatives, SRAEs and the Chairperson
    1. The membership term for Representatives and SRAEs shall be two (2) years unless an appointment is made to fill an un-expired term of a member not completing a term, in which case appointments of less than two (2) years may be made.
    2. Representatives and SRAEs of ELTAC may not be appointed for more than four (4) consecutive years of service with a maximum lifetime service of six (6) years. In order to preserve representation on the ELTAC, with the consent of the incumbent member, current appointments shall be continued with full voting rights and privileges until replacements are seated.
    3. The term of the Chairperson shall be one (1) year. The Chairperson shall not have restrictions on the amount of terms that can be served, as this position is elected annually.

D. Expectations

    Representatives and SRAEs must have the resources and technical expertise to support participation on ELTAC. Representatives and SRAEs are expected to attend all ELTAC meetings, and provide an oral report out to ELTAC during the October meeting on communication held with their constituents. Failure to provide reports may result in dismissal from ELTAC at the discretion of the Deputy Director. In order to facilitate discussion, Representatives and SRAEs may attend meetings in person or remotely. Failure to attend ELTAC meetings may result in dismissal as outlined in Section E of this Article.

E. Absences and Dismissal

    In the event a Representative or SRAE cannot attend an ELTAC meeting, he/she may choose an alternate to attend the meeting. An alternate may speak on behalf of a Representative or SRAE but the alternate's presence does not count toward a quorum. If a Representative or SRAE has sent an alternate in his/her place, that alternate shall not vote on agenda items. If the Chairperson cannot attend an ELTAC meeting, he or she must select an alternate to act as the Chairperson from existing ELTAC membership. A Representative/SRAE may be removed by the Deputy Director or by a 2/3 vote by the voting members on ELTAC. In the event a Representative or SRAE obtains work in a new field or fails to represent his/her constituents, a new Representative or SRAE shall take his/her place in accordance with the process outlined in Article V.

ARTICLE V

Appointments, Elections and Voting

A. Representative and SRAE Appointments

ELTAC shall consist of members appointed by the Division of Drinking Water Deputy Director. Applications for Representative and SRAE positions shall be submitted in writing to the DELAPO by no later than the 15th of September. A complete package will include:

1. The applicant's/nominee's full name, title, institutional affiliation, and contact information.
2. The applicant's/nominee's area(s) of expertise.
3. A summary of qualifications (1-2 sentences) outlining the individual's technical expertise and who they would represent. Inclusion of a curriculum vitae or resume is desirable.
4. Letter of recommendation or written endorsement from an organization, association, etc. (optional)

The Deputy Director shall appoint all Representatives and SRAEs after evaluating nominations. The Chief of ELAP, the Deputy Director and the Assistant Deputy Director of the Division of Drinking Water shall evaluate all nominees for eligibility and make their selection based on the most qualified candidate(s). In selecting committee members, executive personnel shall consider candidates who represent the different technical fields within the laboratory community, regulatory agencies, and data users. All nominations shall be made public.

B. Nominating the Chairperson

Before proceeding to the election for the Chairperson, one or more candidates must be nominated by a current Representative or SRAE at the October ELTAC meeting. The nomination must be accepted by the nominee in order to be considered as an eligible candidate in the voting process. When nominations are completed, the voting members, as provided for in these By-Laws, shall elect the Chairperson.

C. Electing the Chairperson

Voting for the Chairperson shall be conducted during the October ELTAC meeting. Each Representative shall be allowed one vote. The Chairperson shall be decided by a simple majority vote. Voting is not binding and the Deputy Director may appoint a different Chairperson if he/she deems it necessary.

ARTICLE VI

Operational Procedures

A. Quorum

The presence of one-half plus one of the total members on ELTAC (Representatives and SRAEs) shall constitute a quorum for the transaction of business. In the absence of a quorum, no official action may be taken by the ELTAC.

B. Meetings

1. ELTAC shall meet at least three (3) times a year. The DELAPO shall schedule meetings. One of these meetings shall be held in October.
2. Emergency or special meetings may be scheduled and held in accordance with Article II.
3. Unless otherwise scheduled by the DELAPO, all ELTAC meetings shall reside in Sacramento.
4. The proceedings of ELTAC shall be called to order and adjourned by the DELAPO and shall follow Robert's Rules of Order, newly revised.

C. By-Laws

1. These By-Laws must be reviewed by ELTAC for amendments no less than once every two (2) years.
2. These By-Laws may be amended by a two-thirds (2/3) majority vote of ELTAC's members pending final approval from the Deputy Director.
3. The Deputy Director reserves the right to make amendments to these By-Laws without the ELTAC's consent. ELTAC reserves the right to appeal these amendments to the State Water Resources Control Board during the public comment period of a regularly scheduled Board meeting.

D. Recommendations

1. Any recommendation(s) made to ELAP must be submitted in writing through letter or email to the DELAPO.
2. The DELAPO will respond no later than thirty (30) days after the recommendation has been received. The response shall be posted to the website, as well as emailed to ELTAC. The response shall include whether the DELAPO will accept or deny the recommendation, or if more time is needed.

E. Voting on Agenda Items During ELTAC Meetings

Only Representatives and SRAEs may vote for items on the ELTAC agenda unless ELTAC has decided otherwise in a previous meeting. It shall be a goal of ELTAC to reach a consensus on each agenda item.

F. Subcommittees and Consultants

Subcommittees may be established by ELTAC as needed. Each member of a Subcommittee, including persons who have not been appointed as or designated as

Representatives or SRAEs of ELTAC, must also comply with the provisions stated in Article II. Subcommittee members shall be appointed by the DELAPO. Membership on such Subcommittees may include members of the public; however, there must be at least one Representative or SRAE on any Subcommittee. All Subcommittee meetings shall be conducted in accordance with Article II. Only Subcommittee members may vote on issues before the Subcommittee. The DELAPO may request consultants to present information at a meeting of ELTAC or a meeting of a Subcommittee.

G. Regulations

Where possible, ELAP shall seek advice from ELTAC on all regulations and fees developed by ELAP related to environmental laboratory technology and practice. ELTAC may (by action taken at a public meeting) request that its comments on proposed regulations be submitted to the State Water Resources Control Board, and the DELAPO shall submit the comments to the State Water Resources Control Board. Individual members of ELTAC retain their right as a member of the public to submit comments on proposed regulations.

H. Minutes

A record shall be made by the Scribe of actions taken at each meeting by ELTAC and Subcommittee(s). The record shall then be posted in draft form on ELAP's website (www.waterboards.ca.gov/elap) until it can be approved by ELTAC. The minutes may only be approved at an ELTAC meeting or Subcommittee meeting whose actions are described in the minutes. The DELAPO shall designate a person to act as Scribe for each closed session of the ELTAC and any Subcommittee.

ORANGE COUNTY WATER DISTRICT'S TRANSITION TO THE TNI STANDARD

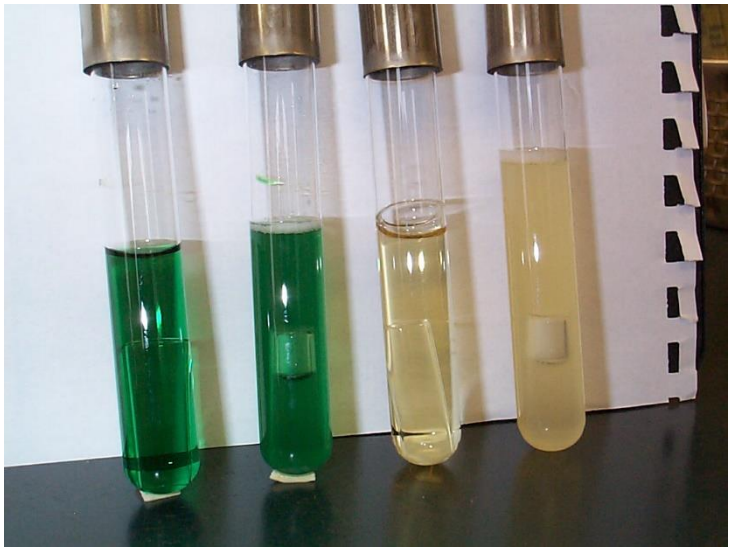
Ron Coss, Member

Adopting the TNI Standard

- As laboratories have begun working toward implementation of the Standard in California, this is a good opportunity to discuss their experiences
  - So they may pass along knowledge gained through that experience
  - And identify ways ELAP can provide support

- Ron Coss has agreed to share his experience
  - The lab has fully implemented the TNI Standard
  - They achieved TNI accreditation recently

- Thank you for sharing your experience, Ron



Challenges and roadblocks adopting new laboratory Accreditation Standards

Ron Coss
Orange County Sanitation District

Presentation Overview

OCSD Organization & Background

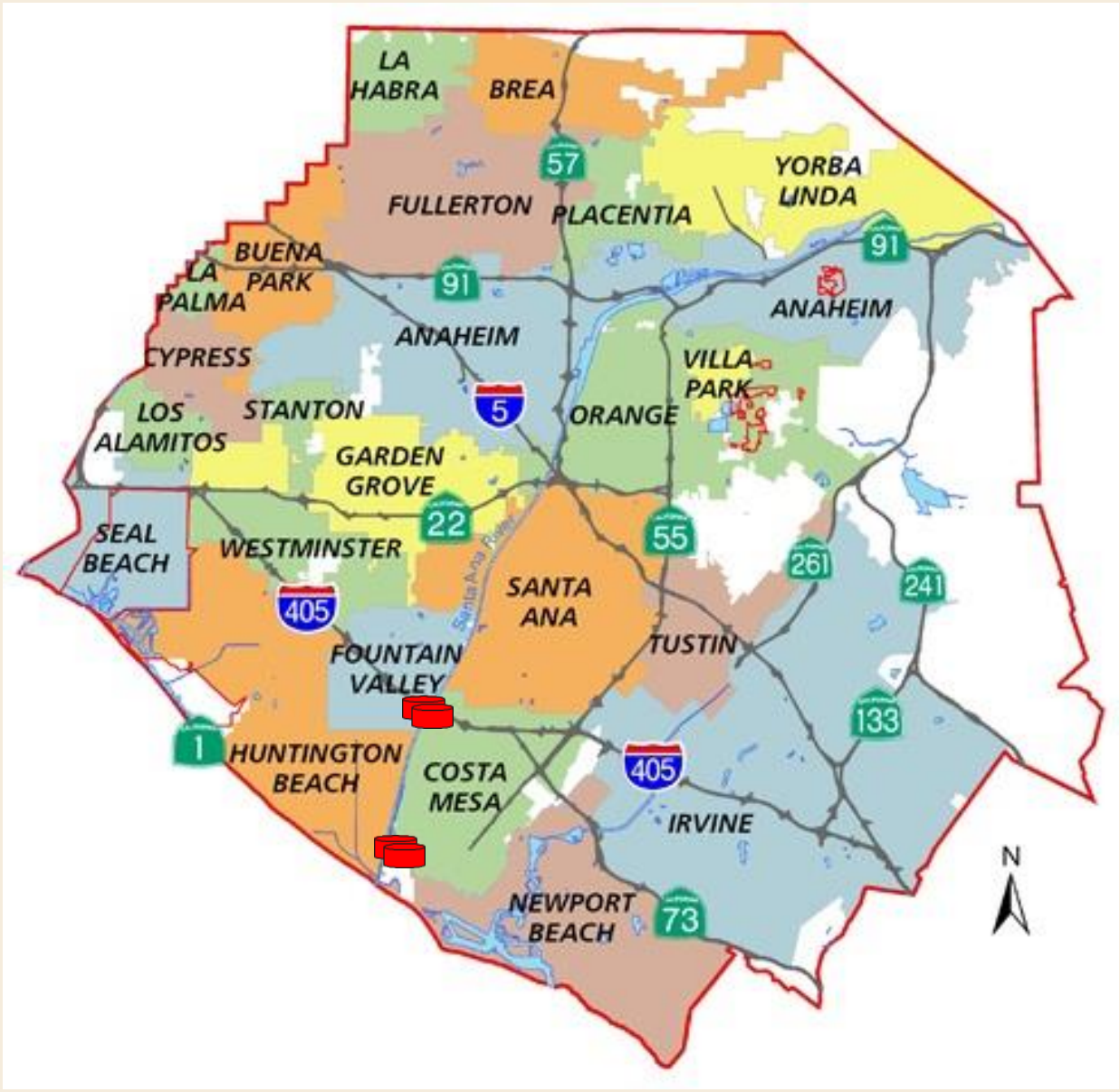
TNI & CA ELAP Accreditation standards

OCSD TNI & CA ELAP preliminary Audit results

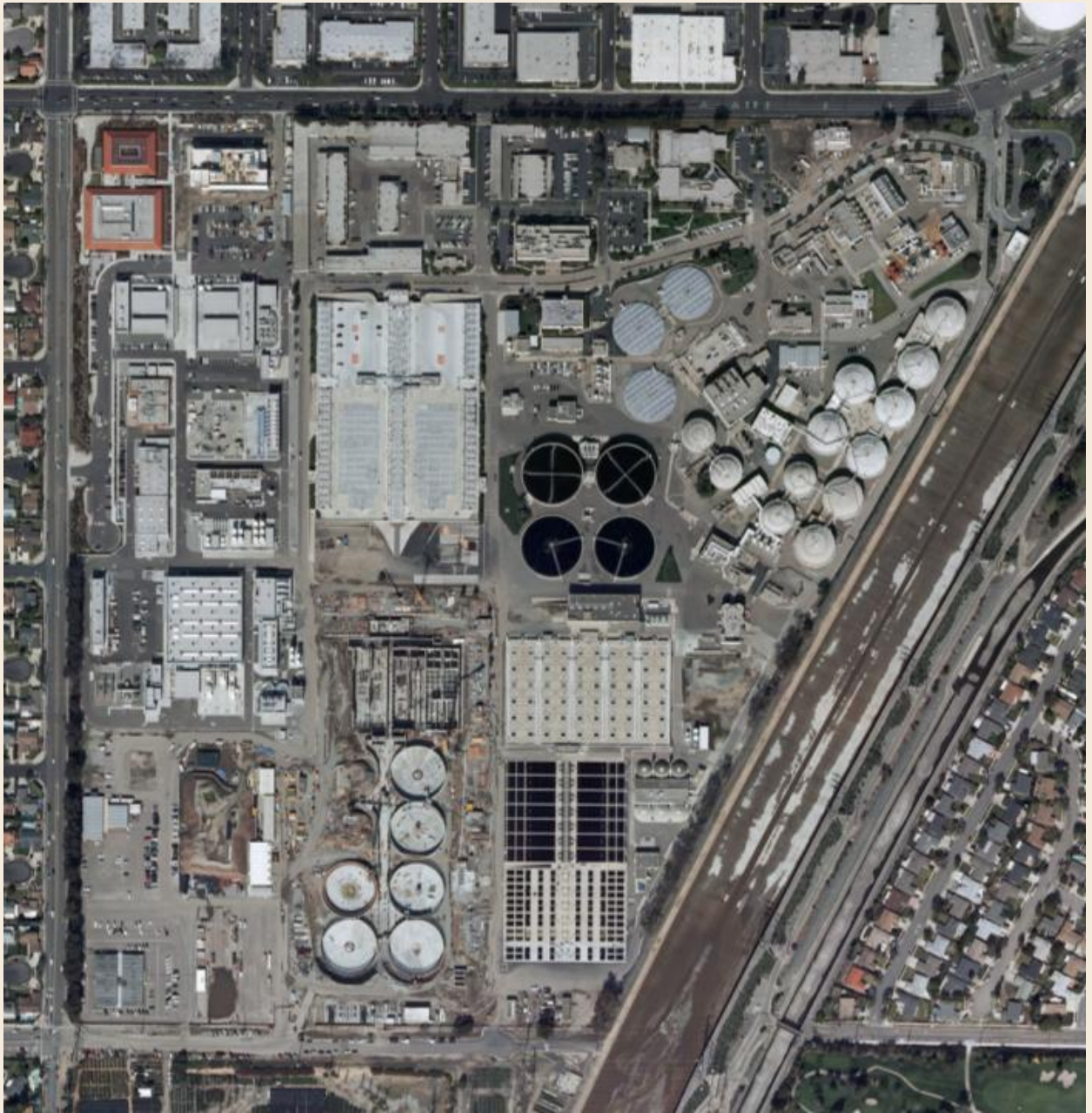
OCSD Mission

To protect public health and the environment by providing effective wastewater collection, treatment, and recycling

OCSD Service Area

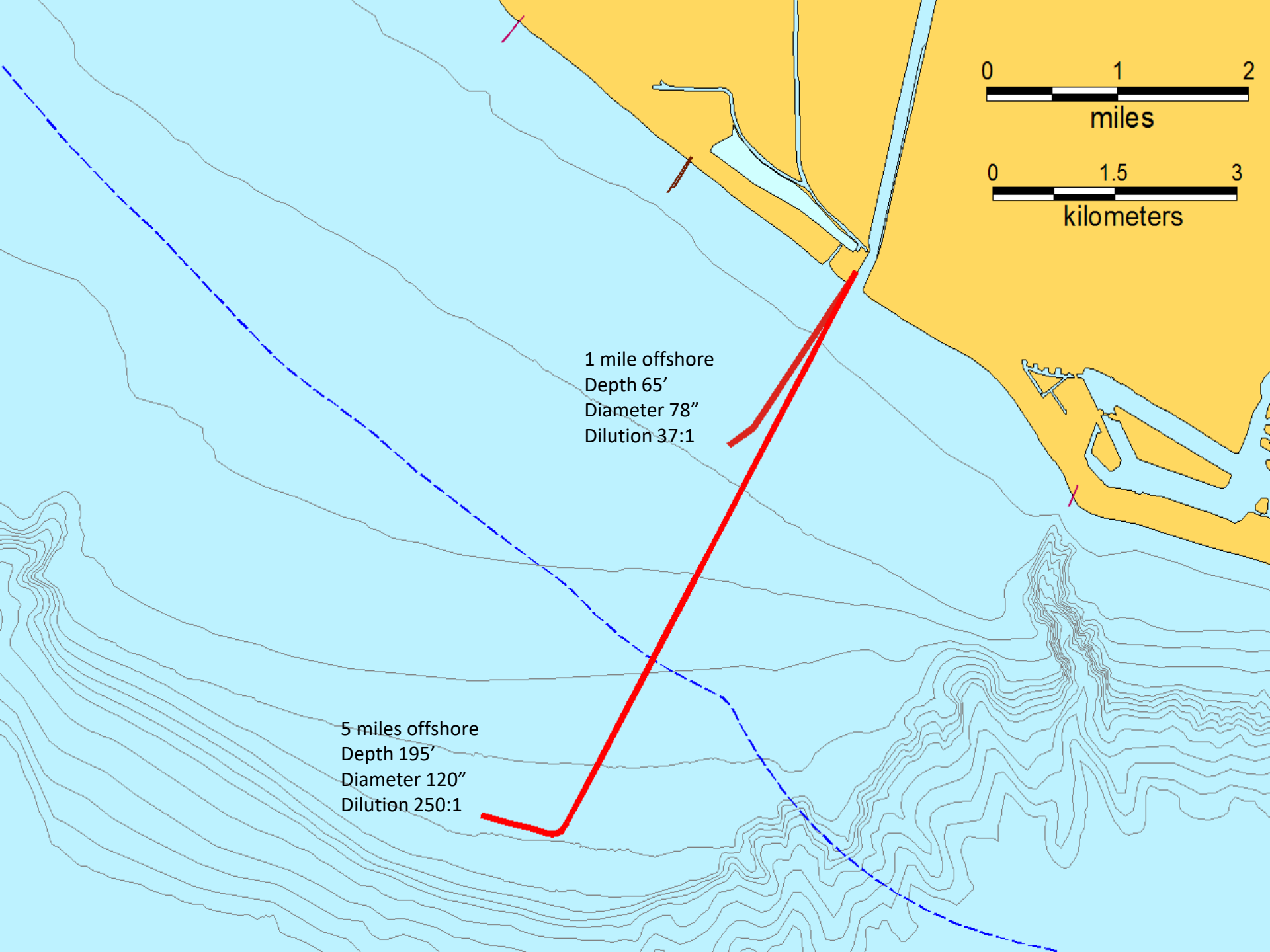


Water Recovery Facility



Water Recovery Facility

Wastewater Treatment Facility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0 1.5 3
kilometers
1 mile offshore
Depth 65’
Diameter 78”
Dilution 37:1
5 miles offshore
Depth 195’
Diameter 120”
Dilution 250:1

OCSD Laboratory Workload

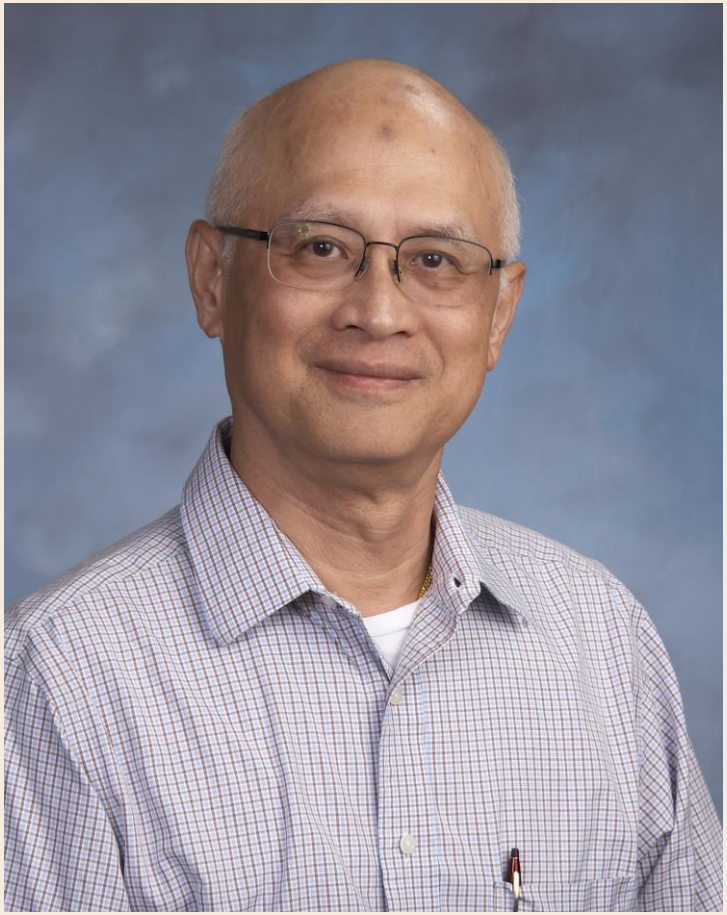
Sample type	Total # of Samples 2017
General Chemistry	62,601
Metals	9,736
Microbiology	22,933
Organic Chemistry	7,266
Total	102,536

Staffing

	Lab staff	Ocean Monitoring staff	Average Daily Treatment (MGD)	Lab Staff / MGD	OMP staff / MGD
OCSD	27	14	187	0.14	0.07
LA	175	32	510	0.34	0.06
SD	95	27	144	0.66	0.19
WD	37	-	100	0.37	-

OCSD Preparation for TNI

- 2010 Lab reorganized and moved to O&M, QC section eliminated
- 2010 QA Administrator appointed & QA team created
- 2011 TNI template adopted for SOPs
- 2013 Internal audits implemented
- 2014 TNI standards adopted as best practices
- 2016 Lab reorganized and moved to Environmental Services, QC section created
- 2016 commitment to become fully TNI accredited
- 2017 applied for TNI accreditation



Yu-Li Tsai, PhD
QA Administrator

TNI & CA ELAP Standards

TNI 2009

- Standard 8 years old
- Significant guidance and support materials available
- 2 PE studies each year
- Trained auditors, with extensive check lists
- Multiple day audits, often with multiple auditors

CA ELAP (1989)

- Standards 28 years old
- Little to no support materials, regulations used for guidance
- 1 PE study each year
- Auditors vary from year to year, each with their own area of expertise. Microbiology check list
- 1 auditor for 1 day
- Auditors could be inflexible on findings

Timeline

TNI

- Applied in May 28th
- Application fee $8,500
- Audited July 31st – August 2nd, 2 auditors for 3 days
- Auditors were open to discussions with analysts
- Audit reviewed all aspects of laboratory operations, emphasized areas of documentation

CA ELAP

- Applied April 24th
- Application fee $8,698
- Audited August 2nd – 3rd 2 auditors for 2 days
- Auditors were open to discussions with analysts
- Audit reviewed all aspects of laboratory operations, emphasized procedures and methods

TNI Audit Findings

- Fluoride spreadsheet is not secure and no record of verification calculations.
- BOD: Analyst “cheat sheet” is not current.
- Quality Manual does not contain OCSD address and phone number, or Complaint Procedure, or Record of Complaints.
- Management Review does not document procedure to seek feedback from customers or review of Quality Manual.
- Mercury SOP must include addition of salt. SOP specifies 15 minutes for color development, analysts only to allow some time after reagent is added.

TNI Audit Findings (cont)

- TS & VS analysts do not document weight confirmation after final measurement is recorded.
- Analytical pipettes do not need to be sent out for calibration annually, but dispensing volume must be verified quarterly.
- SOP for manual integration of GC/MS data, must include data from before integration, after integration, and analyst who performed the integration.
- Metals preparation (Method 200.2) DOC not fully documented.

CA ELAP Audit Findings

- Method 200.7 & 200.8 SOP does not specify QA samples be processed as analytical samples.
- Metals method specifies amber sample vials for analysis, clear vials are in use.
- Method 625 SOP does not specify reagent blank to be same as sample matrix & inadequate record of analyst training.
- Cyanide SOP must include when sulfide is detected holding time is reduced from 14 days to 24 hours.
- Traceability of thermometer is missing data for transport of samples to lab.

Timeline for Accreditation

April 24th applied for ELAP renewal ($8,698)

May 28th applied for TNI accreditation ($8,500), AB State of Utah

July 1st QA section formed

Laboratory audit by TNI, July 31st – August 2nd

Laboratory audit by CA ELAP, August 2nd – August 3rd

CA ELAP on-site assessment report received September 1st

OCSD response to CA ELAP findings October 2nd

TNI audit findings received October 3rd

TNI accreditation granted October 4th

CA ELAP accreditation renewal granted October 11th

OCSD response to TNI audit findings October 19th

Utah accepts OCSD response to audit November 2nd

Afterthoughts

- Start small and keep at it
- Use available resources (TNI website is a great place to start and ELAP staff are very helpful)
- Keep it simple and don’t get discouraged, once you’ve created your documentation you only have to review/revise it annually
- When you are ready review your checklists, then do an internal audit
- The auditors will help, ask questions and discuss their findings with them
- Start on corrective actions right away

Questions?

INFORMATIONAL ITEM:
DIVISION OF DRINKING WATER PRIORITIES - Methods and Reporting Limits

Melissa Hall, Division of Drinking Water

DDW Priorities:
Methods and Reporting Limits

State Water Resources Control Board

Division of Drinking Water

Regulation Development Unit

Maximum Contaminant Level (MCL) Development

Health and Safety Code §116365(a) and (b):

- State Water Board must adopt primary drinking water standards (MCLs) that are
  - No less stringent than federal MCLs
  - ***As close as feasible to public health goal***
  - Placing primary emphasis on public health
  - Economically and technologically feasible

MCL Reviews

Health and Safety Code §116365(g):

- At least once every five years
- Provide public notice by March 1 of any proposed drinking water standard review
- Considerations for MCL Review:

  1) changes in treatment technologies that provide a greater protection of public health

  2) new evidence indicating a greater risk to public health

Public Health Goal (PHG)

- PHGs are established by the Office of Environmental Health Hazard Assessment (OEHHA)
- They are concentrations of drinking water contaminants that pose no significant health risk if consumed for a lifetime, based on current risk assessment principles, practices, and methods
- OEHHA establishes PHGs pursuant to Health & Safety Code §116365(c) for contaminants with MCLs, and for those for which MCLs will be adopted

Detection Limit For Purposes of Reporting (DLR)

The DLR is the analyte-specific regulatory minimum reporting level above which the quantity of a contaminant must be reported.

Minimum Reporting Level (MRL)

The MRL is the minimum concentration that can be reported as a quantified value a target analyte.

MCL Review – Contaminant Groupings

Group 1 (MCL ≤ PHG)

- No significant health risk
- No benefit gained from lowering MCL

Group 2 (MCL > PHG, but no detections in drinking water sources in last 4 or more years)

- No or undetected exposure risk
- No measurable benefit gained by lowering MCL

Group 3 (MCL > PHG, with detections in water sources in last 4 or more years)

- Exposure risk above PHG
- Potential benefit gained by lowering MCL

2018 MCL Review

- All 82 MCLs evaluated in 2017

- MCLs for 55 contaminants evaluated this year
  - 29 MCLs are established at levels less than or equal to corresponding PHG
  - 26 regulated contaminants were not detected in the last four years of statewide monitoring of public water system sources

- No MCL revisions recommended

- Perchlorate DLR
  - PHG lowered from 6 ppb to 1 ppb in 2015
  - DDW recommended lowering the detection limit for reporting purposes – *Approved by Board July 5, 2017*
  - Recommendation coming later in this year

Contaminants for Detection Level Review

Group	Contaminant	MCL	DLR	PHG
3	Antimony	0.006	0.006	0.001
2	Beryllium	0.004	0.001	0.001
3	Cadmium	0.005	0.001	0.00004
2	Mercury (inorganic)	0.002	0.001	0.0012
3	Thallium	0.002	0.001	0.0001
3	Lead	0.015	0.005	0.0002
3	Carbon tetrachloride	0.0005	0.0005	0.0001
	1,2-Dichloroethane (1,2-DCA)	0.0005	0.0005	0.0004
2	1,3-Dichloropropene	0.0005	0.0005	0.0002
2	Benzo(a)pyrene	0.0002	0.0001	0.000007
2	Chlordane	0.0001	0.0001	0.00003
3	Ethylene dibromide (EDB)	0.00005	0.00002	0.00001
2	Heptachlor	0.00001	0.00001	0.000008
2	Heptachlor epoxide	0.00001	0.00001	0.000006
2	Lindane	0.0002	0.0002	0.000032
2	Methoxychlor	0.03	0.01	0.00009
2	Polychlorinated biphenyls (PCBs)	0.0005	0.0005	0.00009
2	Toxaphene	0.003	0.001	0.00003
3	Bromate	0.010	0.0050	0.0001

Unregulated Contaminants Likely to Require Validated Methods for Future ELAP Accreditation

Contaminant	Proposed Method
PFAS	EPA Method 537
Nitrosamines	EPA Method 521
1,4- Dioxane	EPA Method 522
HMX, RDX, TNT	EPA Method 529
Ethylene glycol	Method?

CLOSE – REVIEW ACTION ITEMS

Stephen Clark

ADJOURN