

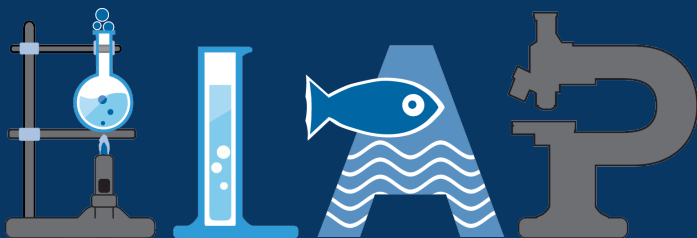
2020 Forum on Environmental Laboratory Accreditation

February 3-7, 2020 | Newport Beach, CA | Hyatt Regency Newport Beach

California Society of Environmental Analysts
Be in the Know: California Emerging Contaminants Session

Accrediting Laboratories for Emerging Contaminants

Monday, February 3, 2020 | 1:30 PM



Environmental Laboratory Accreditation Program
STATE WATER RESOURCES CONTROL BOARD

Presenter:

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Environmental Laboratory Accreditation Program

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- *On-site Assessment Unit*

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Value of Accreditation

Accreditation required for laboratories producing analytical data for California regulatory agencies.

Ensures that laboratories are compliant to an accreditation standard and competent in analyses required for regulatory purposes

~ 650 Environmental Laboratories are accredited by ELAP

California State Regulatory Agencies



Regulatory Agency Objectives

- Compliance with:
 - Federal programs - safe drinking water act (SDWA), clean water act (CWA), etc...
 - State-specific laws and regulations
- Require an expansive list of analytical testing methods in a variety of environmental media
- Driver for which methods ELAP offers for accreditation

Data Use Categories

Regulation

- ☐ Compliance
- ☐ Enforcement
- ☐ Evidence

Public Health

- ☐ Fish Consumption Advisories
- ☐ Swimming Advisories
- ☐ Beach Closures
- ☐ Harmful Algal Bloom Advisories

Ambient

- ☐ Integrated Report
- ☐ Status and Trends
- ☐ Measuring Success/Outcomes
- ☐ Informing Policy Development

Investigation

- ☐ Research
- ☐ Pilot Studies
- ☐ CECs

Contaminants of Emerging Concern (CEC's)

- Contaminant that has been newly discovered in the environment
 - Ex: PFAS, microplastics
- Known contaminants generating increased interest due to new scientific information about its impacts on public health or the environment
- Often unregulated or are regulated at a level that may no longer be considered adequately protective of human and ecological health.

CEC's and Accreditation

- Method Selection
 - Modified method
 - Research method
 - Newly developed method
- Approval of analytical methods is undertaken by federal or state programs
- Approved test methods are then offered for accreditation to ensure data is of known, consistent, and documented quality

Accreditation Process

Request to Accredit

Method Selection

Request to ELAP
to Accredit

ELAP Builds
Capacity

Assessment

ELAP Offers
Method

Laboratory
Requests Method

On-site
Assessment

Accreditation

Laboratory
Accredited

Case Study – PFAS

- In 2019 California State Water Board issued investigative Orders requiring testing of drinking water systems, and site investigations at high risk locations
- Data Quality Objectives
 - EPA Method 537.1 for Drinking Water
 - Department of Defense's Quality Systems Manual (version 5.1 or later), Table B-15, for PFAS analysis of non-drinking water matrices
- Within one month of Orders being issued ELAP began offering methods for accreditation

Case Study – Microplastics

- State Water Board required to adopt a method to be used for testing for microplastics in drinking water and requirements for four years of testing and reporting
- Included is the develop an accreditation process for laboratories implementing the selected method(s).
 - SOP's
 - Method performance
 - Proficiency Testing

This is a Partnership

Regulatory Agencies

ELAP

Laboratory Analysts

Laboratory Management

Laboratory Associations

Industry Community

Thank You

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