

# *Ideal System for State Environmental Laboratory Accreditation*

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*Criteria for Implementation of an Ideal Accreditation System*

*Offered by APHL's Government Environmental Laboratory Accreditation Subcommittee*

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## **Introduction**

A strong accreditation program for state environmental laboratories can accomplish a number of goals.<sup>1</sup> In addition to ensuring a respected and trustworthy laboratory program, an accreditation program can:

- Facilitate the visibility and legitimacy of the services provided by the environmental laboratory;
- Distinguish the accredited laboratory from competing providers;
- Assure the quality and value of services provided by the laboratory;
- Ensure that laboratories can deliver a standard set of services; and
- Ensure the comparability and interoperability of quality systems and quality control standards provided by different state laboratories.<sup>2</sup>

An effective accreditation system provides an acknowledgement by an independent, qualified entity that a laboratory operates at a level of competency or ability to perform their work to stated standards. In addition, the accreditation process provides a level of prestige and credentialing to the laboratory.

An “Ideal Accreditation System,” therefore, attends to the divergent goals of various stakeholders, including APHL, the general public, state public health laboratories and environmental laboratories, the regulatory programs using laboratory services, and the accrediting organizations. An “ideal” system incorporates the various attributes described below.

While any one accrediting system is unlikely to include all of the attributes, APHL’s environmental health committees believe states should strive to incorporate as many attributes as possible when creating or revising its laboratory accreditation system. This is not an exhaustive list, but rather those pieces necessary for a consistent, reliable, and thorough accreditation system. Note that the attributes address the accreditation system itself, not the certification or assessment program or authority, which may require additional or different characteristics.

APHL’s Government Environmental Laboratory Accreditation Subcommittee will update and revise this list of ideal attributes over time as needed and appropriate. The Subcommittee encourages accrediting entities to review these attributes and consider incorporating as many as possible into their systems.

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<sup>1</sup> This document will refer to “state” laboratories as the majority of accrediting programs are at the state, rather than local or federal levels.

<sup>2</sup> Adapted from G.P. Mays white paper, “Can accreditation work in public health? Lessons from other service industries.”

The list divides into two categories:

- “mandatory,” those components a program must have to be an ideal accreditation system, and
- “desirable,” those attributes a program may include to strengthen the basic system.

## Ideal Accreditation System Attributes

### *Mandatory \**

- Consistent, uniform and applicable to all states while recognizing flexibility to meet the specific needs of individual states;
- Accepted and made available for all areas of environmental testing (all programs/matrices);
- Appropriate federal authority providing US EPA oversight and approval for all environmental media testing programs;
- Appropriate state authority to administer and enforce the accreditation system, including laboratory accountability should the laboratory fail to meet mandated standards;
- Operated free of conflict-of-interest and avoiding states engaging in self-certification;
- Flexibility to allow each laboratory to request/receive accreditation in areas they are testing\*;
- Complements other accreditation systems that public health laboratories may seek or be subject to;
- Recognized and accepted by those seeking to use the environmental data, including: sister agencies within a state, environmental agencies in other states, and all federal agencies\*;
- A code of ethics, including:
  - guarantees of data integrity to ensure data quality\*; and
  - a transparent set of criteria for the selection of accrediting bodies;
- Continuing education requirements for laboratory personnel and auditors to maintain core competencies;
- A central or regional authority that laboratories can consult with while determining implementation, changes, or efficiencies while accounting for in-state restrictions;
- Adequate and reliable technical support;
- Quality control data provided in concert with reported results;
- An annual laboratory proficiency testing program\*;
- An EPA-approved training program for auditors, including measurable standards to ensure personnel possess the necessary technical and quality/management system competencies to administer the program\*;
- Requirements by regulatory programs that laboratory data be from an accredited source\*;
- A formal appeals process for laboratories that disagree with assessment findings and accreditation decisions;
- Adequate funding for full implementation and maintenance;
- Supported through a budget-neutral system to the state for laboratory participation\*; and
- Addresses concerns expressed by some states about being accredited by other states;

\* Denotes currently occurring under Safe Drinking Water Act pursuant to US EPA certification.

*Desirable*

- A training component for accredited laboratories beyond core competencies;
- Flexibility and legal clearance to analyze samples from other “markets” or states;
- An evaluation process that allows for informal recommendations or suggestions, rather than formal audit findings, from a reviewer concerning existing issues or inefficiencies;
- A no-fault method for information sharing between state environmental laboratories to discuss common accreditation issues; and
- Partnerships or collaborations with other interested parties, such as data users and sample collectors, to improve data quality.

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