

US EPA ARCHIVE DOCUMENT



October 17, 2018

Jennifer Orme-Zavaleta  
EPA Science Advisor  
United States Environmental Protection Agency  
Ariel Rios Building (MD 4101M)  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460

RE: Laboratory Involvement in the Quality Assurance Project Plan Development Process

Dear Dr. Jennifer Orme-Zavaleta:

The Environmental Laboratory Advisory Board (ELAB or Board) has completed its investigation into improving the IDQTF process by identifying actions that will allow prime contractors' technical staff to gain a better understanding of how to improve project planning and better achieve measurement quality objectives. The Board now recognizes that the extent of contract laboratory involvement in the project planning depends on the extent that prime contractors decide it is in the interest of the project's success to involve them sooner.

In its final recommendation on this topic the Board suggests that EPA reach out to organizations such as the American Council of Independent Laboratories (ACIL) and the Environmental Business Institute (EBI) to ask that they effectively involve themselves in educating prime contracting engineering firms on how to strengthen projects achievements by involving laboratories early in the Quality Assurance Project Plan Development Process. These organizations have the resources and connections to lead such an effort by conducting workshops at forums representing prime contractors that contract environmental testing laboratories. It is the Board's opinion that the EPA should encourage these organizations to design conference sessions and training workshops connecting environmental engineers with environmental laboratory scientists to explain how collaborating on QAPP development improves overall success of their projects.

The Board thanks the Office of Science Advisor for introducing it to the IDQTF stakeholders who have explained how prime contracting engineering firms are responsible under the Federal Acquisition Regulations to contract environmental testing laboratories. The Board hopes that in the future prime environmental engineering contractors will understand that project success increases with environmental laboratory involvement in the planning process.

Sincerely,

*Michael F. Delaney*

Michael Delaney, Ph.D.  
Chair, Environmental Laboratory Advisory Board

CC: ELAB members

ACIL

EBI

Attachment: April 2016 Letter from ELAB to EPA



April XX, 2016

Lara P. Phelps, Senior Advisor  
U. S. Environmental Protection Agency  
Office of the Science Advisor  
109 T.W. Alexander Drive (E243-05)  
Research Triangle Park, NC 27711

RE: Laboratory Involvement in the Quality Assurance Project Plan Development Process

Dear Ms. Phelps,

The Environmental Laboratory Advisory Board (ELAB or Board) investigated concerns from the contract environmental laboratory community that laboratories are routinely left out of the process of developing the data quality and measurement quality objectives for federal projects. Specifically, the Interdepartmental Data Quality Task Force (IDQTF) was identified as not including contract laboratories in this process. Although ELAB understands that IDQTF does not have the authority to set requirements for contracting analytical services, the Board maintains that involving contracting laboratory scientists earlier in Quality Assurance Project Plan (QAPP) development can greatly improve project outcomes.

As a result of these efforts, the Board recommends identifying organizations that are willing to:

- Perform outreach to environmental testing laboratories to clearly communicate and explain the prime contractors' hiring processes and advise contract laboratories on how to better market their analytical services.
- Demonstrate to prime contractors that involving laboratory scientists earlier in the development of their QAPPs will improve project outcomes. These experienced biologists and chemists, who have the expertise to communicate with their scientists and answer their scientific questions and concerns as they arise, can facilitate the data quality objective process for planning, assessment, reassessment and adjustment; assist with approved method selection; recommend modifications necessary to achieve project measurement quality objectives; increase transparency in the decisions made using the analytical results; increase data completeness rates; and support prime contractors by fully reviewing and vetting project plan technical objectives to increase their success rate as analytical services are provided.
- Facilitate the relationship between prime contractors and contract laboratories while explaining the benefits of extensive coordination with each other during the project planning process. This will allow prime contractors to gain strong confidence in the laboratories' ability to meet performance requirements.

Organizations should be familiar with the Environmental Data Quality Workgroup (EDQW) strategies and IDQTF objectives for project planning and know how to effectively convey to engineering firms that working closely with laboratories has the benefit of strengthening their project goals and achievements.

Environmental consultants and organizations such as the American Council of Independent Laboratories and The NELAC Institute have the resources to lead these efforts. Organizations representing environmental engineering firms and/or testing laboratories should be encouraged to design conference sessions and

training workshops to connect environmental engineers with environmental laboratory scientists to explain the benefits of collaborating on QAPP development.

The Board is proud to support the EDQW charter and IDQTF in identifying actions that will allow prime contractors' technical staff to learn from laboratory scientists to gain a better understanding of methodology, sample matrices, and laboratory capacity and capability, which will improve project planning and achieve measurement quality objectives. The extent that contract laboratory involvement in the project planning increases will depend on the extent that prime contractors decide it is in the interest of the project's success to involve them sooner. Ultimately, performance-based outcomes are improved by involving the laboratories in the planning process.

Sincerely,



A. Dallas Wait  
Chair, Environmental Laboratory Advisory Board

CC: ELAB members  
TNI  
ACIL  
IDQTF

Attachment: Background, History and Discussion

## Attachment: Background, History and Discussion

During its August 2012 face-to-face meeting, the Board recognized that the environmental laboratory testing community was questioning how laboratories, engineers and federal agencies such as the U.S. Environmental Protection Agency (EPA), U.S. Department of Defense (DoD), and U.S. Department of Energy (DOE) could work together early in project planning stages to ensure that laboratories can meet testing objectives. ELAB convened a task group to explore with the Interagency Data Quality Task Force (IDQTF) how contract testing laboratories could become involved early in the process of developing data quality objectives (DQO) for government Quality Assurance Project Plans (QAPPs). Initially, ELAB followed the assertion of the environmental testing laboratory community that the IDQTF controlled the DoD, DOE and EPA project planning and management aspects of establishing DQOs for government projects. Ultimately, the Board learned that IDQTF does not dictate how or when contract laboratories are brought into the process of developing a QAPP and establishing DQOs for projects.

ELAB learned from meeting with Dr. Jordan Adelson, Chair of the DoD Environmental Data Quality Workgroup (EDQW), that the IDQTF is an initiative of the EDQW that is tasked to identify industry, DoD, DOE and EPA best practices to save time, reduce program costs, and ensure that environmental project decisions are made using sound data. The EDQW strategy is to implement national standards, use a systematic planning process, improve management and contracting practices, provide guidance and quality assurance and control policy, improve oversight of quality systems, and promote consistency. IDQTF calls for government agencies to work collaboratively to address environmental issues of emerging concern at federal facilities and promote consistent and transparent intergovernmental quality systems for planning, collecting and using environmental data of appropriate quality to ensure a scientific basis for environmental decision making.

The IDQTF's *Uniform Federal Policy for Quality Assurance Project Plans: Evaluating, Assessing, and Documenting Environmental Data Collection and Use Programs* implied to contract laboratories that the document specified that laboratories be involved in the Uniform Federal Policy (UFP) QAPP planning process. ELAB learned that a high-level federal government decision is responsible for requiring prime contractors to follow the Federal Acquisition Regulation Subpart 37.6, *Performance Based Acquisition*, to achieve contract-specified outcomes. Prime contractors are responsible for developing the UFP QAPP and hiring contract laboratories. Although requirements exist to involve DoD, DOE or EPA chemists and quality assurance surveillance in the Defense Federal Acquisition Regulation Supplement, *Improving Contract Management*, no provisions exist within the performance-based acquisition rules regarding when and how to involve contract laboratories in establishing QAPP DQOs. That is, IDQTF sets guidelines for laboratory qualifications, but it is not responsible for the level of laboratory involvement in QAPP development. Prime contractors are responsible to meet the contract performance requirements, deliver the QAPP with sampling and measurement quality objectives to the agency in question, contract the analytical laboratory services, provide the agency approved QAPP to the contracted laboratory, and validate laboratory data.

The environmental testing laboratory community explained to ELAB that laboratories are given too little advance notice to fully review prime contractors' requests for proposals and QAPPs. Laboratories often are given short deadlines to submit their most competitive bid proposals with their expressed ability to achieve measurement quality objectives, meet the QAPP requirements, and deliver complete and legally defensible analytical results on time to the prime contractor in the required format for data validation.

ELAB expresses its appreciation to Dr. Adelson for his sharing his expertise and time with the Board so that the members could better understand this issue.