

Forum on Environmental Measurement

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Overview

- Background, Purpose, Scope
 - Office of the Science Advisor (OSA)
 - Forum on Environmental Measurement (FEM)
 - Science Policy Council (SPC)
 - Environmental Laboratory Advisory Board (ELAB)
- FEM Activities and Programs
 - Measurement
 - Monitoring
 - Laboratory
 - General
- Summary
- Contact Us



OSA – Background

- Mission – Provide leadership and serve as an honest broker for cross-Agency science, science policy, and technology issues.
- Principle areas of responsibility:
 - Advising the EPA Administrator on science and technology issues and their relationship to Agency policies, procedures, and decisions with use of the best available science.
 - Leadership in promoting consistency and consensus for Agency measurement, monitoring, and laboratory science activities.
 - Leadership in catalyzing the development, verification, and deployment of sustainable technologies that help solve environmental problems.
 - Leadership in leveraging Earth observations and modeling for Agency missions.
 - Oversight of Risk Assessment Forum, Science Policy Council, and Program in Human Research Ethics.

FEM – Background

- Forum on Environmental Measurement (FEM)
- Formed by the Science Policy Council (SPC) in April 2003
- Mission – Promote consistency and consensus within the EPA, and provide an internal and external contact point for addressing measurement methodology, monitoring, and laboratory science issues with multi-program impact.
- Composition of Senior Agency Managers.

SPC – Background

- Science Policy Council (SPC)
- Formed by the Administrator in December 1993
- Mission – Charged with primary responsibility within the Agency for addressing and resolving cross-media, cross-program, and interdisciplinary science policy issues.
- Composition includes Science Advisor, Agency Appointees, and Career Scientists/Managers.

FEM – Purpose / Scope

- Enhance Agency programs by recommending principles for:
 - Validating and disseminating methods for sample collection and analysis;
 - Developing scientifically rigorous, statistically sound and representative measurements; and
 - Employing a quality systems approach that ensures data gathered and used by the Agency are of known and documented quality.
- Establish procedures and policies that provide consistent, yet flexible, measurement tools to support environmental decision-making.
- Provide EPA and the public with a central point for addressing measurement methodology, monitoring, and laboratory issues with multi-program impact.

ELAB – Background

- Environmental Laboratory Advisory Board (ELAB)
- Formed under the provisions of the Federal Advisory Committee Act (FACA) in 1997
- Composition of approximately 15 members from areas such as:
 - Trade Associations from the Environmental Laboratory Industry
 - Trade Associations from the Regulated Community
 - Academia
 - Federal, Local, and/or Tribal Governments
 - Laboratory Assessment Bodies
 - Others

ELAB – Purpose/Scope

- Enhancing EPA’s measurement programs in areas such as:
 - Validating and disseminating methods for sample collection and for biological, chemical, radiological, and toxicological analysis;
 - Developing scientifically rigorous, statistically sound, and representative measurements;
 - Employing the performance paradigm in environmental monitoring and regulatory programs;
 - Improving communications and outreach between the EPA and its stakeholder communities; and
 - Employing a quality systems approach that ensures that the data gathered and used by the Agency are of known and documented quality.

ELAB – Purpose/Scope (cont.)

- Facilitating the operation and expansion of a national environmental laboratory accreditation program. In this regard, ELAB will provide advice and recommendations to EPA on issues that impact the non-governmental community that are related to:
 - The operation and expansion of a national laboratory accreditation program characterized by an acceptance of the program by all states and suitable for accrediting environmental laboratories or entities of all sizes and types; and
 - Steps that need to be taken in order to facilitate the further implementation of the performance paradigm in the nation’s environmental monitoring and environmental laboratory accreditation programs.

Action Agenda

- Improving the Quality of Agency's Methods
- Flexible Approaches for Environmental Measurement
- Communication and Outreach
- Toolbox of Techniques – Method Detection, Method Quantitation, Calibration
- General Laboratory Competency
- National Environmental Accreditation
- Environmental Measurement Symposium
- Environmental Technology for Monitoring
- Monitoring Assessment



Measurement Programs

- Improving the Quality of Agency Methods
 - Identify, define, and correct concerns with existing EPA issued measurement methods in addition to ensuring adequate validation and peer review to avoid future problems.
- Implementation of the Performance Approach
 - Flexible Approaches to Environmental Measurements has been established to reinvigorate the goals of Performance Based Measurement Systems (PBMS) with the versatility each program office needs.
- Method Detection/Quantitation/Calibration
 - Environmental Measurement Glossary and a Toolbox of Techniques for consistency in use across the Agency to more appropriately and accurately calculate these important measurements.



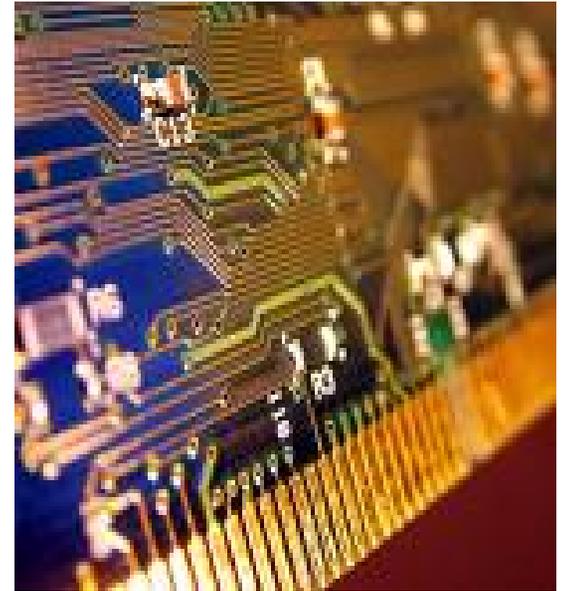
Laboratory Programs

- General Laboratory Competency
 - Maintenance of a documented quality system with periodic independent assessments for all Agency laboratories.
- National Environmental Accreditation Issues
 - Promotion and utilization of national environmental accreditation programs.



Monitoring Programs

- Environmental Technology for Monitoring
 - Address the use and benefit of new technology, starting with sensors.
- Monitoring Assessment
 - With a starting definition for monitoring, an inventory will be created then a needs/gaps analysis and leveraging opportunities identification for all the Agency's monitoring programs.



General Program Activities

- Communication and Outreach
 - Website conduit(s) for connecting Agency information.
- Environmental Measurement Symposium
 - Combined meeting of the National Environmental Monitoring Conference (NEMC) and The Forum on Laboratory Accreditation (Forum).
 - NEMC provides the principal forum for addressing policy and technical issues affecting monitoring in all environmental media.
 - The Forum is the semi-annual meeting of The NELAC Institute (TNI), which develops environmental accreditation standards and programs.
 - Symposium being held August 10 – 15, 2009 in San Antonio, Texas (www.nemc.us or www.nelac-institute.org).



Summary

- The FEM is the central focus point for addressing measurement, monitoring, laboratory, and method issues with multi-program impact.
- ELAB is the private sector voice.
- Regardless of the environmental landscape, there are benefits to tackling challenges with consistency and consideration of information needs.
- Collaboration with partners and technology advancements will provide the Agency with greater information than previously available.
- Much has been accomplished, but there are always new challenges that arise and more work to be done.



Contact Us

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