



Environmental Response Laboratory Network (ERLN) Application Packet

Version 1.7

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List of Acronyms

ALARA	As Low As Reasonably Achievable
BOA	Basic Ordering Agreement
DOD	Department of Defense
EPA	U.S. Environmental Protection Agency
ERLN	Environmental Response Laboratory Network
FERN	Food Emergency Response Network
GC/MS	Gas Chromatograph/Mass Spectrometer
ICLN	Integrated Consortium of Laboratory Networks
ISO	International Organization for Standards
LIMS	Laboratory Information Management System
LRN	Laboratory Response Network
NAHLN	National Animal Health Laboratory Network
NELAP	National Environmental Laboratory Accreditation Program
NPDN	National Plant Diagnostic Network
OEM	Office of Emergency Management
QA	Quality Assurance
QC	Quality Control
SAM	Standard Analytical Method
SOP	Standard Operating Procedure
WLA	Water Laboratory Alliance

Instructions for Completing the Laboratory Membership Application for EPA's Environmental Response Laboratory Network (ERLN)

OVERVIEW

The purpose of the Environmental Response Laboratory Network (ERLN) is to provide reliable, high quality analytical data to Federal, State, and local decision-makers to identify chemical, biological, and radiological contaminants in environmental samples collected in support of response and remediation activities.

The Water Laboratory Alliance (WLA) is an integral part of the ERLN and focuses solely on water contamination. The WLA is composed of drinking water, public health and environmental laboratories and select commercial laboratories. ERLN Member laboratories with water capability are eligible to participate in the WLA. As a result, by applying for ERLN membership, your laboratory will be automatically considered for concurrent WLA membership, if it has water analysis capability.

The attached application has been developed to collect information associated with your laboratory's interest in and attributes for participation in the ERLN program, including the WLA as appropriate. Please refer to the specific instructions provided in each section of the ERLN application. The ERLN application includes the following attachments:

- Instructions for Completion of the Laboratory Membership Application for EPA's Environmental Response Laboratory Network (ERLN) Policy for Membership in the Environmental Response Laboratory Network (ERLN)
- Laboratory Membership Application for EPA's Environmental Response Laboratory Network (ERLN)
- Coversheet for Submitting ERLN Membership Application
- Checklist for Reviewing Quality Management System

Reference materials [*including the Requirements for Environmental Response Laboratory Network (ERLN), Data Submissions and Environmental Response Laboratory Network (ERLN Requirements Document)*] are available to applicants upon request to provide additional information with their applications.

INSTRUCTIONS FOR COMPLETING THE LABORATORY MEMBERSHIP APPLICATION

1. Provide contact information for laboratory

- a. Contact information includes laboratory name, shipping address, city, state, and ZIP code, and mailing address, city, state, and zip code. Indicate "NA" for any fields which do not apply to your laboratory.
- b. Provide point of contact personnel for the laboratory. There are three line items provided for points of contact: Primary, Secondary, and Other. Include the name of contact, title (i.e., director, laboratory manager, etc.), phone number, cell/mobile phone number, fax number, email address, and emergency phone number. Indicate "NA" for any fields which do not apply to your laboratory.

2. Provide information about your quality management system

- a. Indicate "yes" if your laboratory is accredited by one of the organizations listed. Provide a copy (electronic or hardcopy) of the certificate/accreditation document(s) with the ERLN application. Additional notes can be documented in the comments section.
- b. A "no" response indicates that the laboratory is not currently accredited/certified, but maintains a documented quality system. Complete the Checklist for Reviewing Management System Document and submit this attachment with the ERLN application. Additional notes can be documented in the Comments section.

3. Provide information associated with your laboratory's documented plans and procedures

Indicate "yes" for all questions related to documentation currently available at your facility. A "no" response indicates the plans or procedures are not available at this time. Additional notes can be documented in the comments section.

4. Provide information about your sample management system

A "yes" response confirms that your laboratory has documented procedures and specific element(s) of a sample management system. A "no" response indicates that the laboratory does not have procedures and/or an active system. Additional notes can be documented in the comments section.

5. Provide information about your sample handling and storage capabilities

Provide a "yes" response if your laboratory currently has the sample handling and storage elements/capabilities identified in this section. A "no" response indicates the laboratory does not have the sample handling and storage facilities at this time. Additional notes can be documented in the Comments section.

6. Provide information about your data management and exchange systems

Indicate "yes" if your laboratory currently has the data management and exchange systems identified in this section. Select "no" if the laboratory does not have the system or data management capabilities. Additional notes can be documented in the Comments section.

7. Provide information about your ICLN membership

Select "yes" or "no" to indicate which Integrated Consortium of Laboratory Networks (ICLN) member network(s) your laboratory participates in [Food Emergency Response Network (FERN), Laboratory Response Network (LRN)-Chemical, LRN-Biological, National Animal Health Laboratory Network (NAHLN), National Plant Diagnostic Network (NPDN)]. Provide any additional notes in the "comments" section of the table.

8. Laboratory Acknowledgement of ERLN Membership Requirements

This section provides a statement that the laboratory acknowledges reviewing the *ERLN Laboratory Requirements Document, Policy for Membership in the Environmental Response Laboratory Network (ERLN)*, and confirms that the ERLN membership application accurately reflects their abilities. The Requirements Document and Policy for Membership document also apply to the WLA as a component of the ERLN. The laboratory director will sign and date the designated line.

9. Register or Update Laboratory Record in EPA Lab Compendium

As part of the ERLN application process, laboratories are also required to register in the EPA Compendium of Environmental Testing Laboratories (www.epa.gov/compendium). Laboratories already registered are required to update their information prior to submitting the ERLN application. (You will need this information for Step 4 below.)

SUBMITTING APPLICATION PACKET

- Step 1: Complete ERLN application
- Step 2: Provide supporting documentation associated with laboratory's accredited quality system for the membership application
- Step 3: Complete the Lab Compendium registration process and enter or update the laboratory's capabilities information
- Step 4: Print the Lab Compendium Submission Summary page and attach to ERLN application packet
- Step 5: Compile the signed ERLN Application, the Lab Compendium Submission Summary page, supporting documentation, and complete the Coversheet for Submitting ERLN Membership Application, which is a checklist to assure all necessary application components are provided for processing the application. All of these materials comprise a complete ERLN Application Packet.
- Step 6: Submit ERLN Application Packet via electronic mail or in hard copy form to EPA Office of Acquisition Management (OAM) using the address provided below.

Ron Bell
U.S. Environmental Protection Agency
Office of Acquisition Management
1200 Pennsylvania Avenue, N.W.
Mail Code 3805R
Washington, DC 20460
Email: Bell.Ron@epa.gov

Manuela Meyer
U.S. Environmental Protection Agency
Office of Acquisition Management
1200 Pennsylvania Avenue, N.W.
Mail Code 3805R
Washington, DC 20460
Email: Meyer.Manuela@epa.gov

PROCESS TO DETERMINE LABORATORY MEMBERSHIP STATUS

This section details the general steps associated with processing an ERLN application and determining laboratory membership status. Note that a laboratory is notified of membership status within 60 days of EPA's receipt of application.

- Laboratory completes and submits ERLN Application Packet to EPA.
- ERLN Team reviews application for completeness
 - Laboratory is notified of missing information and/or documentation. Scoring process cannot be completed until all information/documentation is provided by laboratory.
- ERLN Team initiates application scoring process in accordance with the *Standard Operating Procedure (SOP) for Recommending Laboratories for Environmental Response Laboratory Network (ERLN) Membership* document.
- ERLN Team forwards membership status recommendation to EPA Representative(s). Types of membership status include:
 - Eligible for ERLN Membership
 - Eligible for WLA Membership
 - Not Eligible for ERLN or WLA Membership
- EPA Representative(s) review recommendation and determines laboratory membership status.
- EPA Representative(s) notifies ERLN Team and laboratory of membership status via email.
- EPA Representative(s) may contact laboratory requesting additional information or documentation.
- Laboratory may be requested to enter into a Basic Ordering Agreement (BOA) with EPA.

Policy for Membership in the Environmental Response Laboratory Network (ERLN)

The Homeland Security Laboratory Response Center, located within the U.S. Environmental Protection Agency (EPA) Office of Emergency Management, Office of Solid Waste and Emergency Response, generates and updates criteria for admission into and continued participation of all laboratories in the ERLN. ERLN membership criteria are designed to follow the operational framework key components of the *Environmental Response Laboratory Network (ERLN) Laboratory Requirements Document*. These same criteria also apply to the WLA as a component of the ERLN. The WLA is managed by the U.S. EPA's Office of Water, Water Security Division. The criteria *are as follows*:

- A comprehensive quality system, based on industry-accepted standards, designed to ensure that ERLN data meet their intended use;
- A stable sample management system designed to maintain the integrity of samples at the laboratory;
- An analytical services system designed to identify the laboratories best able to meet a project's analytical, capacity, and data needs; and
- A data reporting requirement designed to provide consistent, reliable data of known and documented quality to its ERLN customers.

Therefore, laboratories applying for ERLN and, as applicable, WLA membership must meet the following basic criteria:

- **Laboratory affiliation.** Full membership in ERLN and WLA will be limited to public and private institutions performing regulatory and/or relevant analytical work. Exceptions are possible and will be determined on a case-by-case basis.
- **Quality.** Must have a quality assurance program in place to ensure the quality of data or other results. Accreditation is not required; however, quality systems should reflect those similar to the International Organization for Standards (ISO) 17025, the National Environmental Laboratory Accreditation Program (NELAP), or other acceptable accreditation or certification systems (e.g., Drinking Water Certification).
 - Proficiency: Must demonstrate proficiency by participating in ERLN-sponsored or accepted proficiency testing programs (combination of ERLN sponsored program and/or other approved program such as the National Environmental Laboratory Accreditation Program and successors).
 - Audits: Must agree to receive on-site audits by ERLN, and as applicable WLA, representatives for the purposes of assessing qualifications for membership, capabilities, capacity, and quality.
 - All documentation relevant to accreditation, proficiency, and audits must be submitted to the Homeland Security Laboratory Response Center.
 - The Homeland Security Laboratory Response Center will review the laboratory's Quality Management System for completeness and accuracy. Failure to comply with a documented Quality Management System may disqualify the laboratory from the ERLN program.
- **Data and Information Security.** Must agree to share data through authorized network channels and only to designated personnel during large scale national incidents. Data and communications related to data should be appropriately secured. Laboratories must be capable of producing an electronic data deliverable (report) which contains the minimum data elements identified in the *Requirements for Environmental Response Laboratory Network (ERLN) Data Submissions* within six (6) months of acceptance into the ERLN.
- **Sample Handling.** Must have sample transport, chain-of-custody, and sample accountability controls to support law enforcement activities. Laboratories should be able to demonstrate that the items/samples examined and reported on were those submitted to the laboratory. A chain-of-

custody record should be maintained from the receipt of items/samples which details each person who takes possession of an item or alternatively the location of that item (e.g., if placed in storage). In addition, procedures should be documented which describe the measures taken to secure exhibits in the process of being examined which must be left unattended.

- **Test Methods.** Must agree to adhere to ERLN approved testing protocols when testing ERLN samples. The most current version of *Standard Analytical Methods for Environmental Restoration following Homeland Security Events (SAM)* (www.epa.gov/sam) is the standard starting point for such protocols. In those cases where methods are not approved, authorization from appropriately designated officials (e.g., Analytical Services Requestor-ASR) requesting the analysis is imperative prior to performing the analysis.
- **Reporting.** Laboratories must immediately report results to the Data Reviewer or his/her designee. In addition, laboratories must agree to provide results of any and all testing performed for ERLN into a designated data repository or as directed by the Data Reviewer or his/her designee specific to the incident. Laboratories must agree to release test results to authorized personnel only.
- **Laboratory Membership Application for EPA's Environmental Response Laboratory Network (ERLN)** Must acknowledge reviewing the *ERLN Laboratory Requirements Document*, and agree that the ERLN membership application accurately reflects their abilities.
- **Participation in the EPA Compendium of Environmental Testing Laboratories (Lab Compendium).** All member laboratories must maintain current information in the Lab Compendium. The Lab Compendium presents a clearinghouse of much of the information that ERLN member laboratories must make available to other members, including:
 - Laboratory contact names and addresses
 - Alternate contact names and addresses
 - Shipping addresses
 - Laboratory capabilities and capacities
 - Matrices
 - Analytes
 - Analyses
 - Instrumentation
 - Staffing levels
 - General information (e.g., certifications, affiliations)

This information must be updated every six (6) months and will be available as a web-based document. All ERLN member laboratories are required to submit and update their information in a timely manner.

- **Facility Safety and Personnel Security.** Laboratory must have manuals and standard operating procedures which include, but are not limited to, a Quality Manual, Waste Management Plan, Health & Safety Plan, Chemical Hygiene Plan, and Radiation Protection Plan and associated standard operating procedures for radiation monitoring (if applicable). These documents and procedures will be made available to the authorized ERLN, and as applicable WLA, representatives upon request.
- **Specific Requirements for Specialty Laboratories**
 - Select (Biological) Agent Registration Laboratories: Must conform to existing requirements of the USA Patriot Act and current version of 42 CFR Part 73.
 - Other Microbiology Laboratories: Should be at least a Biosafety Level 2 (BSL-2) facility and, at a minimum, have a certified biosafety cabinet.
 - Surety (Chemical Warfare) Agent Laboratories: Must comply with EPA/Department of Defense (DOD) ultra-dilute Interagency Agreement requirements (available upon request); and, have contingency plans for handling, reporting, transferring, or disposing of surety agents and contaminated materials, where applicable. Personnel handling surety

agents will be subject to background checks and must be U.S. citizens or have appropriate documentation. In addition, at least one person in the facility must maintain a security clearance at the secret level.

Laboratories participating as Surety Agent laboratories must meet the following minimal requirements:

- 1) Have briefed all appropriate local and State governmental authorities on the laboratory's storage and use of chemical warfare agent. Must have acceptance from local and state authorities;
- 2) Must have a secure facility to ensure security of agent;
- 3) Must have an isolated locked storage area for agent;
- 4) Must have mechanism for tracking all receipt, use, and disposal of agent. Must track volumes to the microliter level;
- 5) Must have a corporate sponsor and written health and safety plan incorporating health and safety requirements of 29 CFR Part 1910.1450;
- 6) Must have a chemical hygiene plan incorporating the storage, handling, use, and disposal aspects of agent;
- 7) Must have background checks on personnel authorized to work with agent;
- 8) Must designate point of contact for issues involving agent;
- 9) Must ensure adequate hood space and draw capacity to work with agent;
- 10) Must ensure analytical equipment is vented to charcoal filters; and,
- 11) Must agree to be audited by EPA to ensure compliance with EPA/DOD requirements.

These requirements may change with changes to the EPA/DOD agreements.

- Radiological Laboratories: Must satisfy all regulations applicable to radioactive materials licensing and radiation protection, and have mechanism in place to ensure safe receipt, handling, storage, and disposition of radioactive materials and sources and to limit personnel exposure to radioactivity according to the principles of "as low as reasonably achievable" (ALARA). Radiological laboratory staff must be trained in radiation protection practices and ALARA and possess a working knowledge in the recognition of hazards and the prevention of cross contamination of samples and laboratory contamination.
- All Hazards Receipt Facilities: Must have trained personnel who are currently capable of analyzing environmental samples for microbiological, chemical, or radiological contaminants, as appropriate.

**Laboratory Membership Application for EPA's
Environmental Response Laboratory Network (ERLN)**

Contact Information – Please provide the following address information and identify the points of contact you wish to specify for communicating with the ERLN and/or the WLA as appropriate

Laboratory Name:	
Shipping Address:	
City:	
State:	ZIP Code:
Mailing Address:	
City:	
State:	ZIP Code:

Points of Contact:

a. Primary

Title _____

Email _____

Phone No. _____ Fax No. _____

Mobile Phone No. _____ Emergency Phone No. _____

b. Secondary

Title _____

Email _____

Phone No. _____ Fax No. _____

Mobile Phone No. _____ Emergency Phone No. _____

c. Other

Title _____

Email _____

Phone No. _____ Fax No. _____

Mobile Phone No. _____ Emergency Phone No. _____

1. **Accredited Quality System** – Please indicate if your laboratory maintains and operates a documented quality management system. Also indicate if this system has been accredited or certified by one of the listed organizations. (*Documentation required with the Application*).

Accredited Quality System	Yes	No	Comments
1.1. Does laboratory have a quality management system?			
1.2. Is laboratory certified by any EPA program? (e.g. Drinking Water Certification)			
1.3. Is laboratory accredited by NELAP?			
1.4. Is laboratory accredited to ISO 17025 standard?			
1.5. Does laboratory agree to submit Quality Management Plan within thirty days of request?			

If your laboratory has a documented quality management system, but is not certified or accredited, please complete Attachment 5, indicating the essential components of your current quality management system.

2. **Plans and Procedures** – Please indicate if your laboratory has documented, comprehensive plans and procedures for the following.

Plans and Procedures	Yes	No	Comments
2.1. Individual Standard Operating Procedures (SOPs) written for each major element listed in the laboratory's quality assurance plan			
2.1.1. Are SOPs available at individual work stations?			
2.2. Health and Safety Plan that ensures the safety of the laboratory personnel as well as support the integrity and security of the samples			
2.3. Chemical Hygiene Plan			
2.4. Security Plan addressing physical security, personnel, policies, and procedures			
2.5. Waste Management Plan			
2.6. Radiation Protection Plan that satisfy all regulations applicable to radioactive materials licensing and radiation protection and which addresses safe receipt, handling, storage and disposition of radioactive materials and sources, if applicable			
2.7. Does the laboratory conduct and document employee training for all of the above applicable plans?			

3. **Sample Management System** – Please indicate if your laboratory has documented procedures and systems that address the following aspects of sample management.

Sample Management System	Yes	No	Comments
3.1. Sample Receiving			
3.2. Sample Identification			
3.3. Sample Security			
3.4. Sample Storage			
3.5. Sample Tracking and Document Control			
3.6. Computer-Resident Sample Data Control			
3.7. Report Organization, Assembly, and Delivery			

4. Facilities for Sample Handling and Storage – Please indicate if your laboratory currently has the following sample handling and storage facilities.

<u>Facilities for Sample Handling and Storage</u>	Yes	No	Comments
4.1. Loading dock/designated sample receiving area			
4.2. Sample receipt area with an exhaust fume hood and sequestering area			
4.3. Screening process to identify and prevent potential laboratory contamination from contaminated samples that are received			
4.4. Remote or shielded sample storage available for samples containing elevated levels of radioactivity, if applicable			
4.5. Secure/access controlled. Refrigerated sample storage area with a minimum of 500 sq. ft storage to house samples awaiting analysis			
4.5.1. Temperature-controlled storage area for organic analyses (including chemical warfare agent analysis)			
4.5.2. Separate temperature-controlled storage area for samples requiring volatile analyses			
4.5.3. Each temperature controlled storage area is monitored daily			
4.6. Chemical fume hoods for the preparation and analysis of samples			
4.7. A BSL 2 (or higher) facility or other certified biosafety cabinet, if applicable			
4.8. Ultra pure (18 meg-ohm) water available for conducting analyses, if applicable			
4.9. Separate area for samples awaiting final disposition and disposal, if applicable			

5. Data Management and Exchange – Please indicate if your laboratory currently has any of the following data management and exchange systems and capabilities.

<u>Data Management and Exchange</u>	Yes	No	Comments
5.1. Systems in place to limit copying, and control distribution and access of secured methods to those individuals who are actively engaged in analysis of environmental samples in the ERLN			
5.2. Systems to maintain integrity of data from tests (i.e., results cannot be changed)			
5.3. Documented system for second party (e.g. second analyst, QA officer, etc) review of data			
5.4. Operational automated laboratory information management system (LIMS)			
5.5. Data system capable of generating an electronic data output meeting the ERLN's Type One electronic and hardcopy data format			
5.6. Procedures to immediately report positive and suspect results to the established ERLN or WLA contact for your laboratory within 1 hour of generation of results			

Data Management and Exchange	Yes	No	Comments
5.7. Deliver electronic data and exchange of information with the established ERLN or WLA contact or other authorized personnel in a variety of report formats to a secure Web site			
5.8. Broadband Internet connection (e.g. DSL, cable, T1, etc.)			
5.9. Provide all calculated results and raw data used to generate results, including Gas Chromatograph/Mass Spectrometer (GC/MS) tuning analyses, calibration analyses, and quality control (QC) analyses			
5.10. Long term archival (up to five years) of results and raw data, and ability to re-generate all results and raw data from archived data			

6. ICLN Laboratory – Please indicate if your laboratory participates in any of the following Integrated Consortium of Laboratory Networks (ICLN) member networks:

Affiliation and Membership	Yes	No	Comments
6.1. Food Emergency Response Network (FERN)			
6.2. Laboratory Response Network (LRN) - Chemical			
6.3. Laboratory Response Network (LRN) - Biological			
6.4. National Animal Health Laboratory Network (NAHLN)			
6.5. National Plant Diagnostic Network (NPDN)			

Laboratory Acknowledgment of ERLN Membership Requirements

I confirm that our laboratory has thoroughly reviewed the ERLN Laboratory Requirements Document, Policy for Membership in the ERLN, and Laboratory Membership for EPA's ERLN. I understand the requirements stated in this documentation. Responses in this application reflect our current capabilities to meet these requirements. Therefore, I accept the responsibilities of the ERLN Laboratory Membership.

I also accept the responsibilities of the WLA Laboratory Membership: Yes No N/A

Signature of Laboratory Director

Date

Printed Name, Title

Coversheet for Submitting ERLN Membership Application

Date Submitted:

Laboratory Name:

Laboratory Address:

Application Completed By:

Type of Laboratory (circle one)

Public
(Federal, State, Local)

Private
(Commercial)

This checklist is to be completed by the laboratory to assure all necessary information is provided to properly process the ERLN application.

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>APPLICATION COMPONENTS</u>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Complete and verify contact information on membership application
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Complete and verify Sections 1 – 6 of membership application
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sign and date Laboratory Acknowledgement of ERLN Membership Requirements
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Updated copy of the laboratory information in EPA Compendium of Environmental Testing Laboratories Submission Summary
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Provided supporting documentation associated with laboratory's accredited quality system for membership application
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Performed review of application

NOTES:

Checklist for Reviewing Quality Management System

Please use this checklist to identify the elements present in your laboratory's Quality Management System. Note: This checklist is required only if your laboratory does not have accredited or certified quality system.¹

Quality Management System	Yes	No	Comments
1. Training documentation			
2. Preventative maintenance			
3. Sample control			
4. Equipment monitoring			
5. Equipment calibration			
6. Quality control checks and frequency			
7. Data reporting, review, and approval			
8. Managerial review			
9. Internal audits			
10. Corrective action contingencies			
11. Organization and personnel			
11.1 Policy and objectives			
11.2 Management			
11.2.1 Organization			
11.2.2 Assignment of quality assurance/quality control (QA/QC) responsibilities			
11.2.3 Reporting relationships			
11.2.4 QA document control procedures			
11.2.5 QA Program Assessment Procedures - the process used to plan, implement, and assess the work performed			
12. Key personnel			
12.1 Resumes			
12.2 Education and experience			
12.3 Training records and progress			
13. Facilities and equipment			
13.1 Instrumentation and backup alternatives			
13.2 Maintenance activities and schedule			
14. Document control			
14.1 Laboratory notebook policy			
14.2 Sample tracking/custody procedure			
14.3 Logbook maintenance and archiving procedures			
14.4 Sample group file organization, preparation, and review procedures			
14.4.1 Procedures for preparation, approval, review, revision, and distribution of standard operating procedures			
14.4.2 Process for revision of technical or documentation procedures			
15. Analytical methodology			

Quality Management System	Yes	No	Comments
15.1 Calibration procedures and frequency			
15.2 Sample preparation/extraction procedures			
15.3 Sample analysis procedures			
15.4 Standards preparation procedures			
15.5 Decision processes, procedures, and responsibility for initiation of corrective action			
16. Data generation			
16.1 Data collection procedures			
16.2 Data reduction procedures			
16.3 Data validation procedures			
16.4 Data reporting and authorization procedures			
17. Quality control			
17.1 Solvent, reagent, and adsorbent ² check analysis			
17.2 Reference material analysis			
17.3 Internal QC checks			
17.4 Corrective Action and Determination of QC limit procedures			
18. Quality assurance			
18.1 Data QA			
18.2 Systems/internal audits			
18.3 Performance/external audits			
18.4 Corrective action procedure			
18.5 QA reporting procedures			
18.6 Responsibility designation			

Note:

¹ This checklist has been harmonized with the requirements of a quality system as agreed upon by members of the Integrated Consortium of Laboratory Networks.

² Adsorbent Check Analysis – An adsorbent solution is typically used to trap a gaseous form of an analyte for further analysis. These could be impinger solutions used to sample for gaseous compounds in the field if originally prepared by the laboratory, or adsorbent solutions used in preparing a sample for analysis. An example use in the laboratory would be the alkali solution used to trap cyanide distilled as HCN from a sample for subsequent colorimetric analysis.

Office of Emergency Management
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www.epa.gov/oem/