

QUALITY ASSURANCE MANAGEMENT PLAN
FOR
EPA REGION 4

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U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 4
61 FORSYTH STREET, SW
ATLANTA, GEORGIA 30303

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APPENDIX A

APPENDIX B

LIST OF ACRONYMS

APTMD - Air, Pesticides and Toxics Management Division
ARCS - Alternative Remedial Contracting Strategy
ASB - Analytical Support Branch
CERCLA - Comprehensive Environmental Response, Compensation and Liability Act
CFR - Code of Federal Regulations
CLP - Contract Laboratory Program
CID - Criminal Investigation Division
CO - Contracting Officer
COE - U.S. Army Corps of Engineers
CSI - Compliance Sampling Inspection
CWA - Clean Water Act
DMRQA - Discharge Monitoring Report Quality Assurance
DQO - Data Quality Objectives
EAB - Ecological Assessment Branch
EIB - Environmental Investigations Branch
ESAT - Environmental Services Assistance Team
ETSD - Enterprise Technology Services Division
FIFRA - Federal Insecticide, Fungicide and Rodenticide Act
GIS - Geographic Information System
GMO - Grants Management Office
IAG - Interagency Agreement
IM - Information Management
NDPD - National Data Processing Division
NEPA - National Environmental Policy Act
NERL - National Environmental/Exposure Research Laboratory
NPL - National Priority List
NPDES - National Pollutant Discharge Elimination System
OIRM - Office of Information and Resources Management
OPM - Office of Policy and Management
OQA - Office of Quality Assurance
PAI - Performance Audit Inspection

PE - Performance Evaluation
PO - Project Officer
QA - Quality Assurance
QAD - Quality Assurance Division, Office of Research and Development
QAMP - Quality Assurance Management Plan
QAPP - Quality Assurance Project Plan
QAWG - Quality Assurance Workgroup
QC - Quality Control
RCRA - Resource Conservation and Recovery Act
RQAM - Regional Quality Assurance Manager
RA - Regional Administrator
SDWA - Safe Drinking Water Act
SESD - Science and Ecosystem Support Division
SOP - Standard Operating Procedure
START - Superfund Technical Assistance and Response Team
TSCA - Toxic Substances Control Act
TEP - Technical Evaluation Panel
TVA - Tennessee Valley Authority
USGS - United States Geological Survey
UST - Underground Storage Tank

1.0 QUALITY ASSURANCE PROGRAM PLAN IDENTIFICATION FORM

Document Title Quality Assurance Program Plan for Region 4
Document Control Number R4QAM-001
Organization Title EPA Region 4
Address 61 Forsyth St., SW , Atlanta, Georgia 30303
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Plan Coverage: This plan covers all monitoring, and measurement, activities mandated through EPA regulations and memoranda. This includes all internal and extramural environmental data generated by activities conducted through regional monitoring programs, grants, contracts, interagency, and cooperative agreements. In addition, the plan covers environmental technology which is funded by the Agency whose purpose is to prevent pollutants from entering the environment or to remove pollutants from the environment.

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2.0 INTRODUCTION

This Quality Assurance Management Plan (QAMP) describes Region 4's quality assurance management system. This document is intended for use by EPA Region 4 managers and staff as well as those organizations producing environmental data under an EPA extramural agreement, i.e., contract, grant, cooperative agreement, and interagency agreement. The document provides a logical connection between Agency QA policy and the implementation of such policies in Region 4.

2.1 Essential Definitions

The following definitions are essential to understanding the roles, responsibilities, policies, and procedures outlined in this document.

- 2.1.1 Quality Assurance Management System - A structured and documented management system describing the quality assurance policies and procedures for (1)ensuring that environmental data are of known and documented quality; and, (2)that environmental technology is designed, constructed and operated in a manner to produce the desired environmental results.
- 2.1.2 Environmental Data - Information collected directly from measurements, produced from models, or compiled from other sources such as data bases or literature, which are used for decision making purposes.
 - 2.1.2.1 Internal Data - Data generated for Region 4 programs with regional staff having primary responsibility for decision making. Region 4's quality assurance management system requirements apply to these data. Regional contracts which produce environmental data fall into this category if Region 4 staff are the primary decision makers.
 - 2.1.2.2 Extramural Data - Data generated by organizations other than Region 4 which are funded by EPA through grants, cooperative agreements, contracts and/or interagency agreements. Overall EPA quality assurance requirements for financial assistance agreements covered in 40 CFR 30.54 and 31.45 apply to these data.

- 2.1.3 Environmental Technology - Pollution control devices and systems, waste treatment processes and storage facilities, and site remediation technologies which are used to remove contaminants from the environment or prevent contaminants from entering the environment.
 - 2.1.4 Quality Assurance (QA) - An integrated system of activities including planning, implementation and assessment to ensure that environmental data are of known and documented quality, and that environmental technology produces the desired results.
 - 2.1.5 Quality Control (QC) - The overall system of technical activities that measure the performance of a process or item against defined standards to ensure that the process or item meets the pre-defined standards of the customer.
 - 2.1.6 Quality Assurance Project Plan (QAPP) - A critical planning document for a project or task, describing how data collection activities are planned, implemented and assessed.
 - 2.1.7 Data Quality Objectives (DQOs) - In data collection activities, DQOs are qualitative and quantitative statements that clarify study objectives, define the appropriate type of data, and specify tolerable levels of decision error.
- 2.2 Importance of Environmental Data

Environmental data are a critical and requisite input to the Agency's decisions to protect human health and the environment. Region 4 is strongly committed to sound science and quality assurance (QA) practices which will produce environmental data of appropriate quality to be used for decision making. This commitment is consistent with the goal of EPA Order 5360.1 (issued April 3, 1984), which states that all environmentally related measurements supported by EPA must produce data of known quality. The quality of environmental data are known when all components associated their derivation (precision, accuracy, completeness, comparability and representativeness) are documented.

3.0 REGIONAL QUALITY ASSURANCE POLICY and GOALS

3.1 Regional QA Policy

It is the policy of Region 4 that there shall be sufficient QA activities conducted by the environmental programs to provide a reasonable assurance that all environmental data generated and processed will be scientifically valid, of adequate statistical quantity, of known precision and accuracy, of acceptable completeness, representativeness, and

comparability and where appropriate, legally defensible. Environmental data quality is the responsibility of all EPA Region 4 staff who are directly or indirectly involved in the generation of internal data. The Region 4 policy is achieved by ensuring that adequate QA procedures are used throughout the entire process (i.e., from initial project planning through project assessment).

3.2 Regional QA Goals

The following are the Regional QA goals which serve to support the Regional QA policy:

- 3.2.1 The Regional QA Management System will comply with ANSI/ASQC E-4, “Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs”, 1994, with respect to planning, implementing and assessing quality assurance activities. In addition, all environmental technology constructed for pollution prevention, control or waste remediation will be designed, constructed and operated according to pre-defined specifications. Specific implementation policy for environmental technology quality assurance will be developed as guidance is provided by the Office of Research and Development, Quality Assurance Division.
- 3.2.2 Data quality objectives (DQOs) will be established and documented before data collection activities begin.
- 3.2.3 QA Project Plans (QAPPs) will be developed as planning documents and approved prior to collecting data to assure that data quality issues are addressed. DQOs will be incorporated into QA Project Plans.
- 3.2.4. Extramural organizations’ quality assurance systems will be documented in approved QA Management Plans.
- 3.2.5 Regional managers and staff will receive QA training as appropriate for their responsibilities related to data collection or environmental technology.
- 3.2.6 Communication on QA issues and activities will be maintained among the Regional Quality Assurance Manager, program managers and staff.

- 3.2.7 Assessments will be performed to determine the effectiveness of Regional and extramural QA management systems.
- 3.2.8 QA processes will be designed in the most cost-effective manner without compromising data quality. Continuous improvement in the quality management system will be emphasized.

4.0 REGIONAL ORGANIZATION and QA RESPONSIBILITIES

4.1 Regional Program Organization/Identification

Region 4's organizational structure is shown in Appendix A. Major program elements and activities are shown in Appendix B. The role of each Regional program organizational unit covered by the QA requirements is briefly described below:

4.1.1 Science and Ecosystem Support Division (SESD)

The Division has overall management responsibility for the Regional Quality Assurance program and also provides specialized technical support; conducts special studies and analyzes multi-media environmental samples; processes, and analyzes multi-media environmental data for the program offices. Performs, as necessary, specific QA reviews of selected external environmental monitoring. SESD will prepare QA Project/Study Plans and/or Standard Operating Procedures (SOP) for all monitoring and measurement activities it conducts. These plans will be developed according to QAD and Regional QA requirements and specifications.

4.1.2 Air, Pesticides & Toxics Management Division (APTMD)

The Division has the lead program management and implementation responsibilities for the Clean Air Act (CAA), Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). Serves as the technical/program authority for all monitoring activities associated with the CAA, FIFRA, and TSCA. Ensures that QA matters are reflected in budgets, program plans, and work/operating plans. Manages Federal grants and contract funds. Overviews external environmental monitoring programs.

SESD provides the APTMD with technical assistance relevant to monitoring and data processing activities. QA Project Plans for special ambient studies conducted by the Region will be prepared by SESD. APTMD develops QA Project Plans for FIFRA and TSCA monitoring activities the division conducts. QA

Management/Project/Study Plans developed by State/Tribal/local agencies will be approved by APTMD and the RQAM. QA Management/Project/Study Plans will be developed according to QAD and Regional QA requirements and specifications.

4.1.3 Waste Management Division (Waste Div.)

The Division has the program management and implementation responsibilities for the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), and Emergency Response Programs. Manages Federal grants and contract funds. Ensures that QA matters are properly reflected in budgets, program plans, and work/operating plans. Serves as technical/program authority for all hazardous waste environmental monitoring activities within the geographical boundaries of Region 4. The data arising from these programs are the product of efforts both internal and external to the Region. Overviews external environmental monitoring programs.

SESD provides the Waste Div. with technical assistance relevant to the collection and analyses of environmental samples. This includes regional management of the Contract Laboratory Program (CLP), review of CLP and Regional CLP data, systems audits of state field and laboratory activities, overview of START, ARCS, ESAT contractors, and overview of potentially responsible parties' remedial studies of CERCLA sites. SESD will develop QA Project/Study Plans for CERCLA/RCRA monitoring activities conducted by the Division. Waste Div., or their contractors, will develop QA Project/Study Plans for CERCLA/RCRA and emergency response monitoring activities they conduct. QA Management Program/Project/Study Plans developed by State/Tribal/local agencies will be approved by the Waste Div. and the RQAM. QA Program/project plans will be developed according to QAD and Regional QA requirements and specifications.

4.1.4 Water Management Division (WMD)

This Division has the program and implementation responsibilities for the public water supply, ambient surface and groundwater, underground injection control, estuarine waters, off-shore discharge, and domestic and industrial wastewater treatment programs. Responsible for permitting and compliance as well as enforcement for municipal and industrial wastewater treatment facilities. Manages Federal grants and contract funds. Ensures that QA matters are properly reflected in budgets, program plans, work/operating plans. Serves as the technical/program authority for all water-related environmental monitoring activities within the geographical boundaries of Region 4. The data arising from these programs are

the product of efforts both internal and external to the Region. Overviews external environmental monitoring programs.

SESD provides the WMD with technical assistance relevant to monitoring and data processing activities. This includes oversight of State/Tribal/local fixed, ambient water monitoring networks, special ambient studies, system and performance audits on water and wastewater field monitoring and laboratory operations, NPDES compliance inspections and oversight inspections (CSI's and PAI's). SESD will prepare QA Project/Study Plans for all special studies, compliance monitoring inspections it conducts. WMD will develop QA Project/Study Plans for data collection activities they conduct. QA Management/Project plans developed by State/Tribal/local agencies will be approved by the WMD and the RQAM. QA Program/Project plans will be prepared according to QAD and Regional QA requirements and specifications.

4.1.5 Environmental Accountability Division (EAD)

This Division has the overall planning and accountability responsibility for enforcing the various environmental statutes which the Region implements. These responsibilities include: (1) integrating compliance assurance activities to facilitate multi-media projects at the Regional and State/Tribal/Local levels; (2) performing the planning and targeting necessary for the Region's compliance assurance plan, (3) assisting the media programs in developing strategies and tools for assisting the regulated community in achieving compliance with Agency statutes; (4) assessing the environmental plans developed by other Federal agencies as required by the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act; (5) supporting the environmental compliance activities carried out by Tribal governments; (6) providing legal support for enforcement actions relative to violations of Agency statutes and regulations; and (7) providing legal counsel to the Region's senior management and operating programs.

The legal and technical programs within EAD do not customarily engage in performing monitoring or measurement activities. In limited instances, it may be necessary for EAD to arrange for environmental measurements in order to properly assess the environmental plans submitted by other Federal agencies under NEPA. In these instances, field and laboratory data are collected by EPA contractors in accordance with delivery orders and a QAPP. Such QAPPs will be reviewed and approved by EAD and the RQAM. Also, EAD in limited instances may participate or serve in a coordinating role for community-based projects or environmental equity studies which may include the conduct of certain monitoring or measurement activities by the stakeholders such as State/Tribal and local

governments or community groups. In these situations, EAD will work with the appropriate stakeholders to ensure they are aware of QMP provisions for the collection of external data.

SESD provides EAD with technical assistance upon request by reviewing environmental impact statements and may conduct special studies as requested involving sampling and analyses. SESD will develop QA Project/Study Plans for all special studies it conducts for EAD.

4.1.6 Office of Policy and Management (OPM)

This office has the responsibility for human resources management, budget and finance, procurement and grants administration, information management, and planning and analysis.

Within OPM's Grants and Procurement Branch, the Grants Management Office (GMO) is responsible for the business management aspects associated with financial assistance agreements (grants and cooperative agreements). This includes the review and negotiation of applications, and the award and administration of funded projects (from project initiation through final close-out). GMO is also tasked with the administrative management responsibility of coordinating and controlling the Interagency Agreement (IAG) process within the Region. GMO reviews the Regional program's decision memoranda for both assistance agreements and IAGs to confirm that QA has been addressed whenever the agreements involve environmental measurements or technology in accordance with 40 CFR 30.54 and 31.45. If the scope of work involves environmental measurements or technology, and a QAPP has not been approved by the RQAM, the grant or IAG is conditioned to require a QAPP before any environmental measurements or data collection may begin..

Within the Grants and Procurement Branch, the Procurement Section has the responsibility for contracting for Regional goods and services. The QA requirements in 48 CFR Chapter 15, Part 1546.2 apply to regional procurements involving environmental data. Branch managers and staff will assure that QA Review Forms, with appropriate signatures, are included in every solicitation package. Additionally, the Section will insure that QAPPs are reviewed by the RQAM for those contracts requiring environmental measurements or technology. The Branch is also responsible for ensuring the RQAM is included as a technical evaluation panel (TEP) member on those contracts with a value of \$500,000 or greater, if the contracts involve environmental measurements or technology.

OPM's Information Management Branch is responsible for developing and implementing policies and guidance to ensure information management (IM) resources are efficiently, economically and effectively utilized throughout the Region. The Branch reviews and approves requests for IM acquisitions and services to ensure conformity with policy directives and specifications. This organization also provides management and operational support for the integration of environmental data into Geographic Information Systems (GIS). GIS are software and hardware systems used by media programs and support organizations to more efficiently and accurately analyze and interpret environmental data. While the Information Management Branch does not generate environmental data, it is responsible in cooperation with the appropriate media program, for assuring that the data used in GIS, computer models and databases are suitable for their intended use.

SESD provides OPM with technical assistance by reviewing QA Project/Study Plans, QA Management Plans, and contract Scopes of Work.

4.1.7 Criminal Investigations Division (CID)

This Division is responsible for conducting investigations of criminal violations within Region 4. Prepares criminal cases and takes enforcement actions to attain compliance with environmental laws and EPA regulations. This involves surveillance activities, file searches and the collection of multi-media environmental samples. The OCI will prepare QA Project/Study Plans for environmental monitoring activities it conducts. The plans will be developed according to appropriate QAD and Regional QA requirements and specifications.

SESD provides the CID with technical support relevant to the collection and analyses of environment samples. SESD will prepare QA Project/Study Plans for data collection activities it conducts in support of criminal investigations.

Appendix B further identifies Regional program roles and responsibilities by listing major mission elements (data gathering activities), the responsible Division/Branch, and the SESD Organizations that provide support. It also indicates those programs that have been delegated to the states.

4.2 Assignment of Responsibilities

The following Regional managers and staff have the responsibilities described for the QA Management System.

4.2.1 Regional Administrator (RA)

The RA has the overall responsibility for the development, implementation, and continued operation of the Regional QA Program. The responsibility for managing the QA activities within the Region will be assigned to the Regional Quality Assurance Manager.

4.2.2 Regional Quality Assurance Manager (RQAM)

The RQAM has the authority and responsibility for managing the QA activities within the Region. The RQAM, located in the Office of Quality Assurance (OQA), SESD, currently serves as the Chief of this Office. The OQA Chief reports directly to the Director/Deputy Director of SESD. The RQAM may recommend suspension of environmental data collection projects and request corrective action in the event that data quality/environmental technology QA activities do not meet Agency QA policy or requirements. In the event that the RQAM believes SESD data collection activities do not meet Agency quality assurance policies or requirements, the RQAM shall have the prerogative to meet with the Regional Administrator or Deputy Regional Administrator (RA/DRA) if discussions with SESD senior management fail to resolve the issue(s). A meeting between the RQAM and Regional Administrator (or Deputy Regional Administrator) to discuss QA issues will be preceded by written notification from the RQAM to the SESD Director/Deputy and RA/DRA. The SESD organizational structure is shown in Appendix A. The RQAM:

- 4.2.2.1 Serves as the official Regional contact for all QA matters in the Region.
- 4.2.2.2 Responds to QA needs, resolve problems, and answer request for guidance or assistance.
- 4.2.2.3 Assists in development of internal Regional QA Project/Study Plans with Project Officers and managers. This includes participation in and/or review of the data quality objective process.
- 4.2.2.4 Reviews, comments, and approves all QA Project/Study Plans for internal and external Regional data operations (see section 2.1.2), except where State/Tribal agencies have been granted QAPP approval authority through Regional approval of the State/Tribal organization's QAMP .

Reviews implementation of selected QA plans and adequacy of the data generated from a quality perspective.

- 4.2.2.5 Serves on the Regional Peer Review Panel which has been established (Regional Order 2200.1) to review and approve study plans and reports for major special studies, and other technical documents for publication and distribution. This review process helps ensure that Agency QA requirements are incorporated in all major monitoring activities.
- 4.2.2.6 Assists Regional programs in integrating EPA QA Program requirements into the State/Tribal grants and into contract/IAG scopes of work.
- 4.2.2.7 Assists State/Tribes and other grantees in the development and implementation of QA Management and Project Plans.
- 4.2.2.8 Coordinates and/or conducts System and Performance audits of selected environmental monitoring programs.
- 4.2.2.9 Submits annual QA Status Report and Work Plan to Regional management and QAD.
- 4.2.2.10 Participates in QAD review of Region 4 QA activities.
- 4.2.2.11 Provides training on QA policies and procedures.
- 4.2.2.12 Serves as a Technical Evaluation Panel member for Regional procurements in excess of \$500,000 where environmental data collection activities are involved.

4.2.4 Regional Managers

Division/Office Directors are responsible for ensuring that their internal and extramural data collection activities are conducted in accordance with Agency and Region 4 QA policy. Daily QA management is delegated to the appropriate line managers (i.e., Branch and Section Chiefs). The line managers are responsible for procedures with his/her area of responsibility to ensure the acceptability of data generated and processed and the suitability of environmental technology. The Regional Organizational structure is shown in Appendix A. Key responsibilities of Program Managers are:

- 4.2.4.1 Establish planning policies to ensure that QA matters are reflected in monitoring budgets, program plans, and operating plans.
- 4.2.4.2 Participates in the development of Data Quality Objectives (DQO's) for monitoring activities.
- 4.2.4.3 Review and evaluate internal/external monitoring QA implementation and progress.
- 4.2.4.4 Evaluates the quality of data generated by monitoring projects.
- 4.2.4.5. Take corrective action as required by QA assessment or reviews.
- 4.2.4.6. Overview Project Officer's QA activities.
- 4.2.4.7 Report data quality problems to RQAM.

4.2.5 Quality Assurance Workgroup (QAWG)

QAWG members serve as the QA contact persons for their Division, Office and/or program. Each Division/Office director will appoint at least one

manager or staff person to the QAWG. Key responsibilities of the QAWG members are:

- 4.2.5.1. Be the official Division/Office contact for quality assurance matters pertinent to the monitoring activities of that Division/Office/Program.
- 4.2.5.2 Attend meetings of the QAWG to keep abreast of QA issues affecting the Region and Agency. Communicate QA issues to Division/Office personnel.
- 4.2.5.3. Overview and coordinate quality assurance activities within the Division/Office and provide updates to the RQAM. Advise the RQAM on changes needed to the Regional QA Management Plan. Coordinate program input for the Regional QA Annual Report submitted by the RQAM to QAD.
- 4.2.5.4 Respond to quality control issues and problems, and respond to requests for guidance or technical direction.
- 4.2.5.5 Work with the Division's staff to develop and maintain an effective QA program.
- 4.2.5.6 Attend Regional QA training provided by the RQAM or QAD in the Region.

4.2.6 Regional Project Officers

Project Officers are responsible for specific internal (see section 5.1) regional environmental data collection projects, and are accountable for the management of the extramural assistance agreements. Therefore, the Project Officer has the principal responsibility for ensuring that project data quality objectives are met. Key responsibilities of the Project Officer are:

- 4.2.6.1 Prepare and/or directs the preparation of QA Project/Study Plan for each project, submit to RQAM for review/approval except in situations where the project is funded through a State/Tribal continuing environmental program grant. If the State/Tribal agency has an approved QAMP describing the QA Project/Study Plan review and approval process, that

agency may be delegated the responsibility for these activities.

- 4.2.6.2 Prepares or approves Data Quality Objectives, specifications, and acceptance criteria for the projects, unless the project is funded through a State/Tribal continuing environmental program grant. If the State/Tribal agency has an approved QAMP, that agency is responsible for these activities.
- 4.2.6.3 Overviews data quality generated from external (see section 5.2) projects funded through financial assistance agreements as required.
- 4.2.6.4 Participates in conducting QA system/performance audits of projects as requested by the RQAM.
- 4.2.6.5 Coordinate review of external QA Program/project plans and submit to RQAM for review/concurrence, except in situations where the State/Tribal agency has review responsibilities under continuing environmental program grants.
- 4.2.6.7 Take corrective action that may be required by audit findings.
- 4.2.6.8 Report data quality problems to regional QA Workgroup representative.
- 4.2.6.9 Attend Regional QA training provided by the RQAM or QAD in the Region.

4.2.7 Regional Program Technical Staff

Technical staff will support the RQAM by providing technical assistance in their area of expertise if requested by the RQAM. This will enhance the QA capability in Region 4. The specific duties which will be assigned to the Technical specialists are as follows:

- 4.2.7.1 Assist RQAM with technical aspects of QA as related to

their expertise in air, water, toxics substance, hazardous waste, engineering, chemistry, biology, microbiology, field operations and data operations.

- 4.2.7.2 Identify QA needs, resolve problems, and answer requests for guidance or assistance in area of expertise.
- 4.2.7.3 Conduct and/or participate in on-site field and laboratory system and technical audits.
- 4.2.7.4 Inform RQAM of need for new or improved methods.
- 4.2.7.5 Participate in technical assistance and training of State/Tribal/local, and private laboratory personnel in EPA methods, instrumental and QA requirements.

5.0 QUALITY ASSURANCE SYSTEM for INTERNAL and EXTRAMURAL DATA

Within the Region, QA data generation activities fall into three broad categories: 1) internal(data generation programs designed and operated by Regional EPA staff), 2) grants and cooperative agreements (data generation under program grants, etc.), and 3) contracts, interagency, and other formal agreements (dedicated Agency contracts, special contract studies, USGS, TVA, COE work, etc). A brief description of QA operations and review procedures in each of these categories follows:

5.1 Internal QA Operation

EPA Program Managers/Project Officers will be responsible for preparing QA Project/Study Plans in accordance with section 6.2 of this document. The RQAM will be available to assist in the development of QA Project/Study Plans. The RQAM shall review and approve all QA Project/Study Plans for internal data prior to data collection unless such projects are of a routine nature (for example, Compliance Sampling Inspections) with sampling and data quality requirements established in the organization's Standard Operating Procedures (SOPs). In such cases, the RQAM shall review and concur on the organization's SOP.

The RQAM shall review and evaluate the implementation of selected plans during the operational phase of the monitoring activity. Within resource constraints, selection of

projects will depend on the following criteria: projects supporting litigation, high visibility projects, and requests from Project Officers. Upon completion of the monitoring activity, the Program Manager/Project Officer shall assess the actual performance of the planned activities and subsequent results. The final project report shall contain the results of this assessment.

5.2 QA Operations for Grants and Cooperative Agreements

5.2.1 State, Local and Tribal Grants and Cooperative Agreements

A substantial amount of environmental data required by EPA statutes and regulations are generated by state, local and tribal agencies receiving continuing environmental program/project grants. To qualify for financial assistance, State, Local and Tribal agencies must meet the QA specifications of 40 CFR Part 31.45, which require that the “grantee shall develop and implement quality assurance practices consisting of policies, procedures, specifications, standards and documentation sufficient to produce data of quality adequate to meet project objectives...”. This requirement is satisfied by the grantee’s submission of its Quality Assurance Management Plan (QAMP) and subsequent approval of the QAMP by the Region 4 QA Manager and the appropriate Program Manager or Project Officer. In order for a grantee’s QAMP to be approved, its QA System must include procedures for the development, review, and approval of Quality Assurance Project Plans for specific data collection projects. If grantees make sub-awards (either sub-grants or procurement) under an assistance agreement, they must ensure that the sub-awards meet the quality assurance requirements of 40CFR 31.45 and 30.54 as appropriate. If a State/Tribal agency is operating under an QAMP approved by Region 4, which contains procedures for reviewing and approving Quality Assurance Project Plans for data collection activities funded under the continuing grant, the State/Tribal QA Manager (Officer) may be delegated the responsibility for reviewing and approving QAPPs.

5.2.2 Academic, Hospital, and Non-Profit Grants and Cooperative Agreements

40 CFR Part 30.54, contains QA requirements for grants and cooperative agreements with institutions of higher education, hospitals and other non-profit organizations. Section 30.54 states that “If the Project Officer determines that the grantee’s project involves environmentally related measurements or data generation, the grantee shall develop and implement quality assurance practices consisting of policies, procedures, specifications, standards and documentation sufficient to produce data of quality adequate to meet project objectives...”. This requirement is satisfied by the grantee’s submission of its Quality Assurance

Management Plan (QAMP) and subsequent approval of the QAMP by the Region 4 QA Manager and the appropriate Project Officer. In order for a grantee's QAMP to be approved, it's QA System must include procedures for the development, review and approval of Quality Assurance Project Plans for specific data collection projects.

5.2.3 Quality Assurance Project Plan Approval

QAPPs will be approved by the Region 4 QA Manager and the appropriate Program Manager(s) or designee(s). It is recommended that QAPPs be approved prior to award of the financial assistance. However if the QAPP is not approved prior to award, then the assistance agreement will be conditioned to require an approved QAPP before data collection begins. If grantees make sub-awards (either sub-grants or procurement) under an assistance agreement, they must ensure that the sub-awards meet the quality assurance requirements of 40CFR 31.45 and 30.54 as appropriate.

5.2.4 Quality Assurance Management Plan Requirements

The following procedures will be followed by those organizations submitting QAMPs to Region 4 for grants and cooperative agreements:

- 5.2.3.1 The QAMP must address the main topic areas covered in "EPA Requirements for Quality Management Plans", EPA QA/R-2, Draft Interim Final, August, 1994, or most recent version.
- 5.2.3.2 QAMPs should include a description of review and approval process for specific QA Project/Study Plans covered by their grant. QAMPs will be reviewed by the RQAM in consultation with the appropriate program staff. QAWG members will coordinate the review of the QAMP for their specific Division or program. State/Tribal and local QAMPs shall be approved for a period of no more

than five years. The RQAM will provide the QAWG members with a listing of approved QAMPs and their expiration dates.

- 5.2.3.3 While State, tribal and local agencies are responsible for managing the QA programs under their grants, the Region retains overview responsibilities. The major overview functions are work plan reviews and program evaluations. QA input for these overview functions include QA Management Plan review/approval and on-site QA audits of field and laboratory operations. State program overview is the primary responsibility of the individual regional program division/office with input from SESD personnel.

5.3 QA Operations for Contracts and Interagency and Formalized Agreements

The originating Program Office shall notify the RQAM of all contracts and interagency/formalized agreements involving environmental data collection during the planning phase. The Project and Contracting Officer (PO and CO) shall ensure that all requests for proposals will contain an acceptable description of the QA requirements if the contracts require data collection. In addition, the PO/CO shall ensure that a QA Review Form has been completed in accordance with 48 CFR Chapter 15, Part 1546.2 and EPA Order 1900, the Contracts Management Manual. The PO is also responsible for including the RQAM as a technical evaluation panel (TEP) member on those contracts with a value of \$500,000 or greater, if the contracts involve environmental measurements or technology. For interagency agreements, before environmental measurements or data collection activities begin, EPA Region 4 and other involved federal agencies must have agreed upon the QA requirements for the project. The RQAM shall ensure that QA Management/Project Plans are acceptable prior to recommending award of the contract or inter-agency/ formalized agreement. The QA Management/Project Plans shall be reviewed, and as appropriate, approved by the RQAM. The Program Manager/Project Officer shall review and evaluate the use of these Plans. Upon completion of the monitoring activities, the Program Manager/Project Officer shall assess the data quality of the planned activity.

6.0 QUALITY ASSURANCE SYSTEM COMPONENTS

In order to effectively conduct environmental data collection and environmental technology activities, planning, implementation and assessment of the activities is necessary. The steps described below are to be used for planning Regional environmental projects requiring data collection (internal data)..

6.1 Data Quality Objectives

Data quality objectives (DQOs) are qualitative and quantitative statements of the quality of data needed to support specific decisions or regulatory actions. Detailed guidance for developing DQOs is provided in “Guidance for the DQO Process”, EPA QA/G-4, September, 1994 and “Guidance for Data Quality Assessment - Practical Methods for Data Analysis”, EPA QA/G-9, January, 1998.

Having identified the need for an environmental investigation, the decision maker/data user (i.e., Division Director, Branch Chief, Project Manager, etc.) is responsible for initiating the DQO development process. During the early planning phase of the investigation, the data user must clearly establish the intended use of the data, time and resource constraints, and in general terms the quality of data needed. The project officer/manager is responsible for development of DQOs that will facilitate the generation of sufficient data of the quality needed by the ultimate data user/decision maker. The DQO process requires meaningful interaction between the project manager, field and laboratory technical staff, QA staff, and secondary data users as appropriate. The DQOs developed will be used for the detailed design of the investigation and preparation of the QA project plan/study plan.

The RQAM will be the focal point for providing guidance and review of DQO development. The RQAM will consult with other Regional technical staff on DQO issues outside the technical expertise available within the Office of Quality Assurance. A rigorous treatment of the statistical hypotheses and decision error portion of DQOs may require consultation with a statistician. Tracking DQO development and implementation will occur as a part of the QA project plan/study plan review process.

Note: Many data collection activities mandated by EPA already have data quality indicators (such as precision, accuracy and comparability) specified in the applicable regulations or in the methodology required by the regulations. In these instances it may not be necessary to proceed thru all phases of formal DQO development. Regional staff having questions related to the development of DQOs should consult with the Regional Quality Assurance Manager.

6.2 Quality Assurance Project/Study Plan Contents

Region 4 relies on QA Project Plans (also known commonly within the Region as “Study Plans”) coupled with detailed SOP's to define specific project QA/QC requirements. This approach identifies the critical measurements to be performed, and discusses the QA activities to be conducted during the sampling, analytical, and validation phases of the project. The document entitled “EPA Requirements for Quality Assurance Project Plans”, EPA QA/R-5, Draft Final, November, 1997 provides detailed instructions for preparing

QA Project/Study Plans. The content of Regional QA Project/Study Plans shall adhere to the requirements of EPA QA/R-5, most recent version.

All Regional monitoring projects must have an approved QA Project/Study Plan prior to data collection. The RQAM shall review all QA Project/Study Plans, provide input, recommend changes, and approve final plans. Upon request, technical staff shall peer review QA Project/Study Plans with regard to their area of expertise. QA activities are tracked by the appropriate Project Officer.

6.3 Standard Operating Procedures

Standard Operating Procedures (SOP's) are documented methods for performing certain routine repetitive tasks. These tasks frequently involve such operations as sample tracking, analysis, instrument or method calibrations, preventive and corrective maintenance, internal quality control, and data reduction and analysis. The SOPs shall be prepared in document control format by the user as required and will be maintained on permanent file by the RQAM. The following are considerations involved in the development and utilization of Standard Operating Procedures.

6.3.1 Standard Operating Procedures Objectives

- 6.3.1.1 Adequate to establish traceability of standards, instrumentation, samples, and environmental data.
- 6.3.1.2 Simple, so a user with basic education, experience and/or training can properly use them.
- 6.3.1.3 Complete enough so the user/reader follows the directions in a systematic manner through the sampling, analysis, and data-handling process.
- 6.3.1.4 Consistent with sound scientific/engineering principles.
- 6.3.1.5 Consistent with current EPA regulations and guidelines.

6.3.1.6 Consistent with the instrument manufacturers' specific instruction manuals.

6.3.2 Items to be addressed in Standard Operating Procedures

6.3.2.1 General sampling design.

6.3.2.2 Specific sampling-site selection.

6.3.2.3 Sampling and analytical methodology.

6.3.2.4 Probes, collection devices, storage containers, and sample additives such as preservatives.

6.3.2.5 Special precautions, such as holding times and protection from heat, light, reactivity, and combustibility.

6.3.2.6 Federal reference, equivalent, and alternate test procedures.

6.3.2.7 Instrumentation selection and use.

6.3.2.8 Calibration and standardization.

6.3.2.9 Preventative and remedial maintenance.

6.3.2.10 Duplicate, spiked, blank samples and analysis.

6.3.2.11 Quality control procedures such as inter- and intra- field laboratory activities.

6.3.2.12 Documentation, sample custody, transportation, and handling procedures.

6.3.2.13 Safety.

6.3.2.14 Data handling and assessment procedures.

6.3.2.15 Precision, accuracy, completeness, representativeness, and comparability.

6.3.2.16 Service contracts.

6.3.2.17 Document control.

6.3.3 Preparation of SOPs

SOPs are prepared by the regional user organization (usually located in SESD). In SESD, each Branch has a person designated as the focal point for preparation and revisions of SOPs. The SOPs are reviewed by appropriate senior staff in the user organization, the QA staff, and at times by technical specialists in other organizations. The Branch Chief approves the SOP for use. SOPs are dynamic documents that are revised as needed. These revisions are the result of changes in regulations, changes or additions in instruments and equipment, or by inadequacies noted during implementation and/or audits. Revisions are reviewed and approved as described above.

6.3.4 Data Processing and Verification

Data processing includes collection, validation, storage, transfer, and reduction. Precautions shall be taken each time the data are reduced, recorded, calculated, and transcribed to prevent the introduction of errors and the loss of information. Data processing requirements:

- 6.3.4.1 Collection--Each SOP shall address the checks which must be used to avoid errors in the data collection process.
- 6.3.4.2 Validation--Data validation is defined as "the process whereby data are accepted or rejected based on a set of criteria". Since this aspect of QA may include various forms of manual or computerized checks, criteria for data validation shall be specified in the applicable SOP.
- 6.3.4.3 Storage--Each SOP shall indicate how specific types of data will be stored.
- 6.3.4.4 Transfers--Each SOP shall describe procedures which shall be used to ensure that data transfer is error-free, and that no information is lost in the transfer. Data transfer steps shall be kept to a minimum.

6.3.4.5 Reduction--Each SOP shall contain procedures for ensuring the correctness of data reduction processes. Data reduction includes all processes which change either the form of expression or quantity of data items. It is distinct from data transfer in that it entails a reduction in size (or dimensionality) of the data set. Each SOP shall describe procedures for verifying the accuracy of the data reduction process.

6.4 Data Quality Assessment

Each QA Project Plan shall include procedures for assessing the quality of all environmental data generated and processed for accuracy, precision, completeness, comparability and representativeness. Detailed guidance for assessment may be found in Guidance for Data Quality Assessment, EPA QA/G-9, January 1998.

6.5 Corrective Action

Each QA Project Plan shall include provisions for written requirements establishing and maintaining QA reporting or feedback channels to the management responsible to ensure that early and effective corrective action can be taken when data quality falls outside established data quality objectives (acceptance criteria). Each QA Project Plan shall also include provisions to keep management informed of the performance of all data collection when corrective actions are necessary. Corrective action shall relate to the overall QA management scheme: who is responsible for taking corrective actions, when are corrective actions to be taken, and who follows-up to see that corrective actions have been taken and that they have produced the desired results.

6.6 Information Management

EPA's Office of Information Resources Management (OIRM) and the Enterprise Technology Services Division (ETSD) are responsible for managing the hardware, software and communications components which form the foundation of the Agency's information technology. ETSD, in cooperation with OIRM, has established the hardware and software standards with which the Region must conform. Region 4 managers and staff will observe all hardware and software standards as detailed in the National Data Processing Division Guidance on Hardware and Software Standards, USEPA OIRM, November 8, 1993. This document is applicable for the personal computer (PC) platform, local area network and server platforms, open systems platforms, Agency electronic mail service, IBM Compatible Mainframe Platform, and Supercomputer Platform.

Region 4 will procure Agency-approved hardware and software that conformed with Agency-wide information management structure. Region 4's Information Management

Branch will assess significant changes in the Agency's hardware and software policy to determine the effect on the Region. In the event changes are required, IMB managers will work with regional managers to plan and implement appropriate modifications.

In the event that a Regional organization has a need to purchase or develop application software which is not on Agency contract, the software will be evaluated prior to purchase or during development. Software evaluation should be performed against written performance/capability standards developed by the PC site coordinators and/or system administrators. Vendors must comply with the Agency standards in OIRM's National Data Processing Division Guidance on Hardware and Software Standards. Regional PC site coordinators and/or system administrators are responsible for evaluating software to determine its performance capabilities and documentation.

7.0 QUALITY ASSURANCE SYSTEM ASSESSMENT

7.1 Assessment Management

An effective QA System requires periodic assessment of data quality to establish a basis for corrective action. To ensure that a reference document exists to conduct the assessment, all data collection activities in the Region shall have an approved QA Project Plan/Study Plan (see section 6.2 for details).

The QA Project/Study Plan shall ensure that:

- 7.1.1 The level of data quality required will be determined and stated in terms of precision, accuracy, completeness, comparability and representativeness, before the data collection effort begins.
- 7.1.2 All environmental data generated and processed will be of the quality and integrity established by each QA Project/Study Plan.

7.2 Data Quality Assessment

Oversight of the data generation activities in Region 4 will be tailored to the nature of the activity and the associated management and administrative system. Assessments are the principal means in Region 4's QA Program to determine compliance with established QA Management/Project Plans/Study Plans. Different types of Assessments are used to verify that measurement systems are operating properly to assess whether data quality information is adequately documented, and to evaluate the management of QA programs. Detailed guidance for assessment may be found in Guidance for Data Quality Assessment, EPA QA/G-9, January 1998. The RQAM has the primary responsibility for conducting

audits.

Four specific kinds of assessments will be used at appropriate times by Region 4 to determine the status of measurement systems, the adequacy of the data collection systems, the completeness of documentation of data collection activities and the abilities of program management to meet mandated data collection and data quality objectives. These four audit types are respectively, performance audits, technical system audits, data quality system audits, and management system audits. Each type of audit is described below:

- 7.2.1 Performance Audits are quantitative audits of the ability of an analytical system to obtain reliable data. These audits involve submission of performance evaluation (PE) samples as unknowns to laboratories or other analytical systems. For the most part, these are routine audits that are part of national audits such as the Water Supply PE Studies, Water Pollution PE Studies, DMR QA Studies, Air Intercomparison Studies, etc. These audits are used for QA overview of State/Tribal and local grantees, NPDES Permittees, certified drinking water laboratories, and as support for state laboratory certification programs. The Region 4 SESD laboratory routinely participates in these audits. Special audits may be requested by a regional program (i.e., audit of a laboratory to be used for a Potentially Responsible Party lead remedial investigation of CERCLA site).
- 7.2.2 Technical system audits are on-site environmental data gathering activities. The audits are qualitative assessments of personnel, equipment, facilities, procedures, and QA activities. These audits are conducted at least biennially at state agencies and cover ambient air, water quality/water quality enforcement, drinking water, and hazardous wastes monitoring activities. Audits (known as Performance Audit Inspections (PAIs)) of NPDES permittees are conducted routinely in delegated and non-delegated states. PAI candidates are chosen by EPA and the states; performance in the DMR QA Studies is one of the criteria used. Other audits are conducted at RCRA facilities and CERCLA investigations at the request of the program division. The Region 4 SESD biology, chemistry and microbiology laboratory activities are audited every three years by EMSL-Cincinnati. Audits of regional intramural activities are

not routinely conducted by the RQAM; however, randomly selected activities are audited as resources permit or a particular activity is audited if there is evidence of inadequate performance.

- 7.2.3 Data quality audits are quantitative audits in which data are reviewed and evaluated following collection to determine the quality and useability of the data. These audits are conducted by Office of Quality Assurance staff on all contract laboratory program (CLP) data for CERCLA and for other programs upon request. Audits of intramural data are not routinely scheduled but may be triggered by the peer review process, differences in split sample data, disputes between the Region and a grantee or permittee, etc.
- 7.2.4 A management system review (MSR) is an assessment of an organization's ability to implement and manage an effective QA program. Reviews may be conducted of any regional program or State/Tribal and local programs with delegated data gathering activities. These audits are not routinely scheduled but will be conducted when results of other audits indicate management problems.

Results of these audits are reported to the appropriate Division Director, Branch Chief, Project Officer, etc., with recommendations for corrective action. Tracking of corrective action may be conducted in a number of ways (i.e., the mid-year review process for delegated programs, scheduling additional audits, or submitting additional PE samples).

8.0 QA COMMUNICATION/REPORTING/WORK PLAN

The purpose of communication is to ensure that staff in different monitoring programs can effectively develop and implement programs, perform activities, and resolve problems. One responsibility of the QA Program is to facilitate communications through the establishment of guidance documents and the issuance of procedures. QAD shall be considered by the Region as the Agency's environmental monitoring QA clearinghouse. As such, all QA items of interest or need to the Region shall be provided by the QAD to RQAM. Regional needs will be forwarded by the RQAM to QAD for review and action. The RQAM shall exchange QA information with the Regional QA Workgroup, Regional Program Managers, Regional Staff, QA Officers of NERLs, EPA Laboratories, Headquarters Program Offices, and other Regions.

8.1 Regional Communication

The RQAM shall exchange information with Regional Programs Managers, Project Officers, QAWG, Technical Staff, and State/Tribal QA Officers.

8.1.1 A primary means of communication among Regional staff is the QA Work Group. The duties and responsibilities of the Work Group are described in section 4.2.5 of this document.

8.1.2 A primary method of RQAM communication with the State/Tribal QA community is annual meetings of State/Tribal Laboratory and QA personnel sponsored by SESD. The State/Tribal QA Officers communicate with appropriate environmental monitoring personnel, the local Agency QA Officers, and industrial QA Officers.

8.2 Annual Report and Work Plan

By November 1 of each year, the RQAM shall submit a QA Annual Report and Work plan to Regional Management and to the Director of QAD. This report shall reflect the implementation status of the Region 4 QA Program. The Work Plan will describe all planned QA activities for the fiscal year beginning in October.

The QA Report shall contain as a minimum the following types of information:

8.2.1 Implementation Status of Regional QA Program.

8.2.2 Revisions to Regional QA Management Plan.

8.2.3 Significant QA-related needs i.e., new policies, changes to existing policies, guidance documents, audit protocols, etc.

8.2.4 Data Quality Objectives.

8.2.5 Status of QA Program/Projects and Standard Operating Procedures.

8.2.6. Assessments conducted

8.2.7 QA Program resources

8.2.8 QA training received and provided

8.3 QA Work Plan

The QA Workplan shall contain as a minimum the following types of information:

- 8.3.1 Total proposed EPA full time employees (FTE) for supporting QA management activities in Region 4.
- 8.3.2 Total proposed EPA FTEs for QA/QC support activities.
- 8.3.3 Total dollar amounts proposed for QA travel for oversight and audits.
- 8.3.4 Total dollar amounts proposed for QA training.
- 8.3.5 Brief description of major QA/QC activities.

8.4 QAD Meetings

In addition to the regular communication/reporting activities described above, the RQAM shall participate in QAD Annual QA Management/Technical meetings.

8.5 Resources

Through the workload models, Headquarters recommends funding levels for QA activities in each of the monitoring programs. Distribution of QA-related resources will be determined by the Regional Administrator and regional Program Managers. The SESD Director with input from the RQAM will recommend staffing requirements.

9.0 **PEER REVIEW**

Two Peer Review protocols exist within the Region. The first, Region 4 Order 2200.1, entitled Review and Clearance of Materials for Public Distribution was issued April 15, 1982. The second protocol, entitled Region 4 Standard Operating Procedures for Peer Review, October 1, 1995 - September 30, 1996, was established in response to the EPA Administrator's June 7, 1994 Peer Review Policy Statement.

9.1 Internal Peer Review

Regional Order 2200.1 establishes a protocol for peer review of technical reports, study plans, and documents intended for public release. The purpose of this protocol is to ensure that such materials are based on sound scientific, technical, legal, and policy principals. Division and Office Directors are responsible for initiation of review and

clearance of applicable documents generated within their respective areas. This peer review process is an internal Region 4 review conducted by a Peer Review Panel composed of the following members:

Deputy Regional Administrator, Chairman
Director, Science and Ecosystem Support Division
Assistant Regional Administrator for Policy & Management
Director, Office of Regional Counsel
Director, Office of Congressional and External Affairs
Director, Air, Pesticides and Toxics Management Division
Director, Waste Management Division
Director, Water Management Division
Regional Quality Assurance Manager

9.2 External Peer Review

Region 4 Standard Operating Procedures for Peer Review, October 1, 1995 - September 30, 1996, provides for an objective, critical review of a specific Agency major scientific and/or technical work product by independent peer reviewer(s). An independent peer reviewer is an expert not associated with the generation of the specific work product, either directly by the substantial contribution to its development, or indirectly by consultation during the development of the specific product. The purpose of an independent peer review is to disclose any technical problems or unresolved issues in a preliminary work product in order to revise the work product. The peer review process will allow the final work product to reflect sound scientific and/or technical information. Each Division/Office Director has the responsibility for selecting major work products subject to independent peer review. A Regional Peer Coordinator responsible for leading the peer review activities is appointed each year by the Regional Administrator. Specific roles and responsibilities are detailed in the Peer Review SOP.

10.0 **TRAINING**

Each monitoring program manager will ensure that all personnel performing tasks and functions related to data quality will have the needed education, training, and experience. This includes laboratory technicians, analysts, maintenance technicians supervisors, principal investigators, statisticians, project officers, and Regional QA staff. Training needs will be identified during performance evaluations and through career development plans. The RQAM training needs are not static, but are a dynamic function of program requirements. Therefore, training needs of the RQAM and OQA staff will be addressed in the Region's Annual QA Report/Work Plan. The Report/Work plan shall be submitted annually to the Director of QAD for review.

At least annually, the Office of Quality Assurance, in collaboration with the SESD Enforcement and Investigations Branch, will present a one day training course on Basic Quality Assurance Principles. This course is based on QAD's publication, EPA QA/G-0, and covers the EPA Quality System, Region 4 QA Management Plan, QA Project Plans, DQOs and QA Assessments. If demand for the basic QA training is sufficient, OQA will provide additional training in basic QA principles beyond the once-a-year offering. Also, the RQAM or an OQA staff member, will provide a one hour presentation on QA for Financial Assistance Agreements to each Grants Project Officer training course. The Grants PO training is required of all new personnel assuming PO responsibility for financial assistance agreements and is usually presented at least annually. In addition to the Basic and Grants QA training courses, SESD's Enforcement and Investigations Branch will present a two day course on DQOs. The DQO course will first be offered in the summer of 1998 and on a periodic basis, at least once every two years, after the initial offering.

Due to limited resources for QA training, the Region's plan of action will be to present training to Region 4 personnel prior to providing training to the States and Tribes. As more Regional personnel receive QA training, the courses will be opened to State and Tribal personnel who desire this type of training.

11.0 IMPLEMENTATION REQUIREMENTS AND SCHEDULE

Implementation of the Agency's Mandatory QA Program requires that each major milestone be identified and scheduled for accomplishment. Major National/Regional milestones shall be identified, scheduled, and progress reported in the Region 4 Annual QA Report/Work Plan.

APPENDIX A

REGION 4 ORGANIZATIONAL CHARTS

<http://www.epa.gov/region4/organ.html>

Appendix B

REGION 4

MAJOR PROGRAM ELEMENTS

Appendix B MAJOR PROGRAM ELEMENTS

ACTIVITY	APPLICABLE LAW	RESPONSIBLE DIVISION	SESD BRANCH PROVIDING SUPPORT
Ambient Air Monitoring for Criteria Pollutants -- Delegated to the states. The Region has an overview/ technical assistance role. Special studies (i.e., Air Toxics) are conducted to support state programs.	CAA	APTMD	EIB, ASB
Stationary Source Enforcement -- Delegated to the states. The Region has an overview/technical assistance role.	CAA	APTMD	EIB, ASB
Mobile Source Inspections and Maintenance -- Delegated to the states. The Region has an overview/ technical assistance role.	CAA	APTMD	EIB, ASB
Pesticide Use/Misuses -- Delegated to the states. The Region has an overview/ technical assistance role. The states regulate and monitor the manufacture, sale, and use of pesticides.	FIFRA	APTMD	EIB, ASB, OQA
PCB and Dioxin Inspections -- Inspections are conducted at transformer stations, substations, etc. Program inspectors conduct sampling; analyses are conducted by SESD and contract laboratories.	TSCA	APTMD	EIB, ASB
Asbestos Inspections -- Overview of asbestos removal from schools and overview of renovation and demolition of buildings. Sampling and analyses are conducted by contractors.	TSCA	APTMD	OQA
Water Quality Monitoring -- Most programs delegated to the states. Activities involve both fixed station networks and intensive studies. The Region has an overview/technical assistance role which includes special studies to support state programs.	CWA	WMD	EIB, EAB, ASB, OQA

ACTIVITY	APPLICABLE LAW	RESPONSIBLE DIVISION	SESD BRANCH PROVIDING SUPPORT
Water Quality Enforcement -- Delegated to all states. Several types of compliance inspections are conducted as overview for delegated states.	CWA	WMD	EIB, EAB, ASB, OQA
Dredge and Fill -- Investigations are conducted by SESD to support permitting decisions by the Region and for enforcement actions by the Department of Justice.	CWA	WMD	EIB, EAB, ASB, OQA
RCRA Enforcement -- The program is delegated to the states. Several types of inspections are conducted by SESD and contractors. These include inspections of generators, transporters, and disposal facilities.	RCRA	Waste Div.	EIB, ASB, OQA
Investigations of Uncontrolled Hazardous Waste Site -- Several types of investigations are conducted to support listing of sites on the NPL and for remedial actions (immediate removal or clean-up activities). Investigations are conducted by contractors, by states under cooperative agreements, by potentially responsible parties under consent orders and by SESD. The Region overviews all extramural investigations.	CERCLA	Waste Div.	EIB, EAB, ASB, OQA
Monitoring of Public Water Supplies -- Program is delegated to the states. The Region has an overview/technical assistance role. SESD conducts special studies in support of state programs.	SDWA	WMD	EIB, ASB, OQA
Underground Injection Control -- Program is delegated to the states. The Region has an overview/technical assistance role. SESD conducts special studies in support of the state programs.	SDWA	WMD	EIB, ASB
Investigations of Leaking Underground Storage Tanks -- The RCRA program (UST) is delegated to the states. The Region has primary responsibility for the UST program in Georgia and overviews the other seven state programs.	RCRA	WMD, Waste Div.	EIB, ASB