



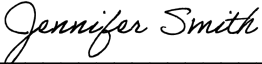
Southeast District Quality Plan

Florida Department of Environmental Protection
Southeast District Office
3301 Gun Club Road, MSC 7210-1
West Palm Beach, FL 33406-3007

April 2015

Signature Page

The undersigned has read and understood this Quality Plan, are charged with managing and improving the quality system and are responsible for ensuring that all staff properly execute the procedures discussed in the plan.

	6/16/15
_____ Jennifer K. Smith, Assistant Director	_____ Date

1. Introduction

The DEP Quality Assurance (QA) program involves the implementation of a management system (planning, review, training, and assessment) to ensure that data collection, generation, interpretation, reporting, evaluation and archiving is of sufficient quality to support Department decisions. The effectiveness of our QA program is dependent upon the actions of all DEP staff, from “front line” employees to management, meaning QA is a function distributed throughout our organization. One aspect of our program is to ensure that Department QA activities are carried out according to commitments made to the Environmental Protection Agency as enumerated in the DEP Quality Management Plan (QMP) (Revision 2/10/14, Revision 7).

The DEP Secretary is committed to implementation of the quality assurance requirements in the QMP and as authorized at 403.0623 F.S. and Chapter 62-160 F.A.C. (the DEP QA Rule). It is the Secretary’s intent to carry out these obligations and requirements as detailed in the Department’s QA Directive (Directive 972, Revision 9-10-2009).

In order to execute the components of the DEP QA Directive, our unit has developed a quality system. This document describes the steps we take to ensure the scientific and legal defensibility of environmental data we generate or use. It details the process of planning, training, execution, assessment and corrective action we undertake to ensure that environmental data meets our established quality criteria.

1A. Basic Elements of Our Quality Plan

Our Quality Plan explains both the process and criteria by which the quality system is managed. The plan is utilized as an instrument of internal communication between Tallahassee and the districts to inform our staff of current and future quality assurance activities. It discusses how specific QA duties are assigned to responsible staff. We will revise our Quality Plan as needed, and pledge to ensure the consistent application of procedures and criteria for the generation or use of our environmental data. The Quality Plan will also be used as a training document for new staff and as a reference for experienced personnel. The plan and its revisions also serve as an archival record of our formal quality system.

The elements of our plan are consistent with the Department’s Quality Management Plan, Quality Assurance Directive and Quality Assurance Rule (62-160 F.A.C.). Our plan addresses all activities associated with data entry, data review and interpretation of any type, including those activities associated with database construction and management. Our plan also discusses how data decisions are made based on data quality assessments.

In order to execute the components of the DEP QA Directive, the Southeast District has developed a quality system. This document describes the steps we've taken to ensure the scientific and legal defensibility of environmental data we generate or use. It details the process of planning, training, execution, assessment and corrective actions we undertake to ensure that environmental data meets our established quality criteria.

Where appropriate, we cite existing internal and external documents, including training manuals, guidance documents, SOPs, Rules, tables, etc.

We expect all staff to understand and follow the procedures and criteria as discussed in this plan, and to carry out his or her assigned responsibilities for effective utilization of our quality system.

1B. Policy Statement

It is the policy of the Southeast District to be strongly committed to sound science and QA practices which will produce environmental data of appropriate quality to be used for permitting, compliance, and enforcement decision making purposes.

It is our unit's policy to:

- Use scientifically valid and legally defensible data for our decisions affecting permitting, compliance and enforcement projects that relate to compliance with ground and surface water quality criteria.
- Have and implement our Quality System described in this document.
- Adaptively manage our Quality System to be consistent with the provisions of the
- Department's Quality Assurance Management Plan.
- Ensure that each individual is properly trained to execute his or her assigned tasks and job functions.
- Implement procedures to evaluate the quality of the data we use to implement corrective actions when data do not meet our Data Quality Objectives.
- Periodically audit the performance and record-keeping practices of data generators we have responsibility for.
- Implement quality assurance procedures for the management of our data repositories.
- Perform a yearly systematic assessment of our quality assurance activities, including any corrective actions, with the findings submitted to the Standards and Assessment Section.

1C. Ethics

All employees of the DEP Southeast District are held to high professional ethical standards in the performance of their duties. All employees are required to read,

understand and sign an 'Ethics Statement' attesting to their commitment to honesty and integrity in performance of their duties. In addition, all employees are required to attend an annual ethics training class. Improper, unethical or illegal actions will be dealt with according to the published Administrative Directives of the Florida Department of Environmental Protection.

2. Organization and Responsibilities

2A. Southeast District Organization

Southeast District Office is located centrally in West Palm Beach, and encompasses seven counties including Miami-Dade, Broward, Palm Beach, Martin, St. Lucie, Indian River and Okeechobee.

The geographical area includes portions of the Indian River Lagoon, the nation's most diverse estuary; the Loxahatchee River, one of two National Wild and Scenic Rivers in Florida; one of the nation's largest freshwater lakes, Lake Okeechobee; and the unique Everglades System, including Florida Bay and the Kissimmee River. In addition to these extraordinary natural systems, Southeast Florida contains approximately one-third of Florida's total population with more than 5 million residents. Increasing population, urbanization and industrialization continue to place great stress on our natural resources. We are committed to the protection of our extraordinary natural resources, and we strive to strike a balance between that commitment and responsible economic development.

The Southeast District's Compliance Assurance Program is comprised of professionals and subject matter experts in several disciplines and includes the following sections:

Air: In this section, we focus primarily on compliance issues associated with air pollution-producing facilities; asbestos; fugitive emissions; odors; open burning; excessive dust.

Beaches and Coastal Systems: In the Beaches and Coastal section, we focus on beach construction; management of coastal sediments to reduce erosion stress; restoration and maintenance of critically eroding beaches.

Biosolids: In this section, we deal with proper land management of the disposal of liquid and solid residuals from domestic wastewater treatment.

Brownfields: In the Brownfield Program, we assist communities and land owners with Brownfield designations.

Clean Marina Program: This exciting and successful program brings awareness to marine facilities and boaters regarding environmentally friendly practices.

Domestic Wastewater: Our Domestic Wastewater section focuses on compliance issues associated with domestic (primarily non-industrial) wastewater collection, treatment and disposal from dwellings, business buildings, institutions, etc.

Emergency Response: The Emergency Response section responds to environmental threats or incidents ranging from petroleum spills caused by vehicle accidents to chemical plant explosions to coastal oil spills. Provides technical and on-site assistance in coordination with local public safety officials and emergency response contractors to ensure threats are quickly and effectively addressed.

Environmental Resources: Our Environmental Resource section focuses on impacts to Wetlands, surface waters or state lands; dredge and/or fill activities; stormwater ponds; docks/piers; boat ramps; seawalls and other forms of shoreline stabilization.

Hazardous Waste: In this section, we focus on the management (generation, storage, treatment, transport) of hazardous waste (ignitable, reactive, corrosive, toxic).

Industrial Wastewater: In the Industrial Wastewater section, we examine compliance issues associated with wastewater derived from an industrial or commercial activity.

NPDES Stormwater: Our Stormwater section focuses on compliance issues associated with stormwater discharges from construction and industrial activities.

Petroleum Storage Tanks: The Tanks section examines compliance issues associated with underground or above ground petroleum storage tanks and piping.

Potable Water: The Potable Water section ensures compliance with state and federal drinking water standards.

Solid Waste: In this section, we focus on management of solid waste at the disposal/processing sites (landfills; dumping; waste tires; storm debris).

Underground Injection Control: Our Underground Injection Control section manages compliance issues associated with wells used for disposal of appropriately treated fluid.

Waste Cleanup: This section deals with the cleanup of sites impacted by a wide variety of contaminants that may be present in the groundwater, soil, sediments, and/ or surface waters. These sites include Petroleum, Dry-Cleaner, Solid Waste, Hazardous Waste, or Brownfields Program projects.

In addition to these roles, Program members continually explore outreach opportunities, cross-training activities and discipline development.

2B. Southeast District Responsibilities

Our program responsibilities include the following roles:

- Providing timely inspections, which meet state and federal requirements;
- Overseeing compliance with environmental rules and regulations;
- Providing the regulated community with compliance assistance;
- Coordinating enforcement and emergency response activities;
- Coordinating Power Plant Siting and Clearinghouse planning.

The Southeast District office is responsible for receiving, documenting, entering, and reviewing soil, sediment, groundwater, surface water and other data, as applicable.

Staff evaluate program data using program Data Quality Objectives (DQOs) and Data Quality Indicators (DQIs) and implement corrective actions as directed by the Program Managers according to the procedures discussed below:

- **Review proposed work for conformance with quality criteria**
- **Review and evaluate data**
- **Interpret data or determine compliance with permits and rules**
- **Check calculations**
- **Review documents for errors and completeness**

Submitted data includes:

Water Compliance Assurance Program (WCAP) Discharge Monitoring Report (DMR) data for National Pollution Discharge Elimination System (NPDES) domestic and industrial wastewater facilities and any groundwater monitoring data associated with them.

Potable water Monthly Operating Reports and Potable water analytical testing.

The Solid Waste component of the Compliance Assurance Program consists of water quality data that is submitted by facilities and laboratories and uploaded by the Waste Management Division in Tallahassee to databases. The data is available to review through Water Assurance Compliance System (WACS) and Oculus.

Other Petroleum or Waste Cleanup Site Data in the form of Assessment / Remedial Action Plans and periodic report submittals are reviewed.

2C. District Data Entry Responsibilities

Examples include:

The WCAP program receives DMR data directly from the facilities and is entered into the WAFR data management system. All data interpretation and validation is done manually by district staff at the time of permit renewal or during routine inspections to determine if there are DMR format problems or numeric effluent violations. DMR format problems identified by district staff will work with facilities to get it corrected and re-submitted for data entry. If numeric violations are identified, enforcement may or may not be initiated depending on the frequency and severity of the violations.

At this time, staff and project managers review petroleum and Waste Cleanup Assessment / Remedial Action Plans and Reports submittals by paper copy or on-line and are responsible for entering the report into the Oculus database.

2D. District Process

Any and all data received in the district offices whether DMRs or permit renewal applications need to be reviewed for data quality prior to making permit and/or compliance and enforcement decisions. District review of the data is to determine its reliability and usability for determining compliance with permits, enforcement orders and / or rules. Permit review staff confer with the Compliance Assurance Staff to review, for example, reported effluent sample results submitted on the permit application. In addition, other water quality and biological data submitted with the permit application is reviewed. The review consists of data interpretation as well as a QA review of any submitted lab sheets associated with the permit application. Program managers will periodically coordinate and participate in evaluation and interpretation of program data and provide oversight to staff to ensure that their QA objectives meet department requirements.

2E. Managers Data Responsibilities

Managers are responsible for ensuring that data presentations within their programs are conducted in accordance with the Department policies and comply with the directions established by the Divisions and the Standards and Assessment Section (SAS).

Key responsibilities of managers are to:

- Establish planning policies to ensure that appropriate QA procedures are reflected in program and operating plans.
- Ensure that staff review data submittals to ensure that Data Quality Objectives (DQO's) are met, depending on the program, as applicable (see additional information below).
- Support and reinforce local quality system implementation and assessment.
- Take corrective action on deficiencies identified during local assessments and overviews.
- Ensure that all staff receive appropriate QA training.
- Ensure that all staff follow established QA responsibilities and evaluate each staff's effectiveness during annual performance evaluations.

Additionally, all District staff are available to answer environmental questions and assist the public and local governments.

3. Data Quality System Components

Generally data is reviewed by evaluating the completeness, correctness, conformance and compliance of facility self-monitoring and internally generated data against specific Data Quality Objectives (DQOs), and by incorporating the concepts and criteria established by the program, and found in DEP's **"Process for Assessing Data Usability"**, DEP-EA-001/07.

3A. Data Quality Objectives

The Data Quality Objectives (DQO) process is the systematic planning process, which uses a step-wise system of developing the technical, programmatic and quality assurance requirements specific to a particular project. Staff evaluates program data using program DQOs and implement corrective actions as necessary to remedy deficiencies identified during the review and evaluation process. The following DQOs are designed to ensure that submitted data meets or exceeds the threshold for scientific defensibility and adherence to DEP rules and policies for our program:

- Department approved Standard Operating Procedures (SOPs), and any approved variances are followed for all field sampling and laboratory analyses submitted.
- Laboratory analyses are performed by facilities certified by the Department of Health and accredited under the National Environmental Laboratory Accreditation Conference (NELAC).
- NPDES monitoring data and other data are processed, verified and validated through a WAFR data validation process.
- Solid Waste groundwater monitoring data are processed, verified and validated using the ADaPT software.
- For other data not processed using WAFR or ADaPT software, staff manually checks the quality of the data.
- Corrective action is taken as necessary to ensure data meets established Department quality criteria.
- Data is stored in an electronic format that is easily retrieved for review and verification (e.g., OCULUS™ or the Water Assurance and Compliance System database).

3B. Critical Documents

Generally the Compliance Assurance program relies on critical documents to define the project-specific QA requirements and may refer to the critical documents using different terms such as Groundwater Monitoring Plan, Sampling and Analysis Plan, General Study Plan, or a permit may stipulate QA criteria for a particular project or site. However named, the critical document will contain the necessary elements to meet the threshold of compliance with the data review

procedures described in this Quality Plan. The content and implementation of the critical documents is overseen by the data user or project manager.

In other cases, Department rules or standard operating procedures lay out the framework and requirements for meeting the threshold of compliance. For example, on February 15, 2007, the Petroleum Remediation Program (PRP, formerly Bureau of Petroleum Storage Systems, BPSS) issued the memorandum “BPSS Enforcement of Laboratory NELAP Certification Requirements,” which requires contractors to submit a written statement prior to performing the work, attesting that they have verified that the laboratories to be used are certified by the DOH ELCP for the matrix / method / analyte combinations that will be performed.

On May 14, 2007, the BPSS issued the memorandum “Quality Assurance and Related Issues” reminding laboratories of the Chapter 62-160, F.A.C. reporting requirements, and listing some specific reporting requirements for contractors to summarize analytical data on the tables provided by the PRP.

One aspect of the Permitting and Compliance Assistance program is to ensure that BSHW QA activities are carried out according to commitments made to the Environmental Protection Agency (EPA) as enumerated in the Department’s QMP.

Programs which are funded by the EPA must also comply with EPA’s Region 4 “November 2007 Science and Ecosystem Support Division Field Branches Quality System and Technical Procedures” document. Additionally, the CERCLA Site Screening Subsection will adhere to the Superfund Site Assessment Program Quality Assurance Plan, February 2009.

3C. Data Processing

Data processing includes collection, validation and archival. Data collection is almost exclusively performed by staff or contractors of the regulated entity. The audit procedures described in Section 6 of this QA Plan are used to ensure data collection errors are kept to a minimum.

3D. Automated Data Processing

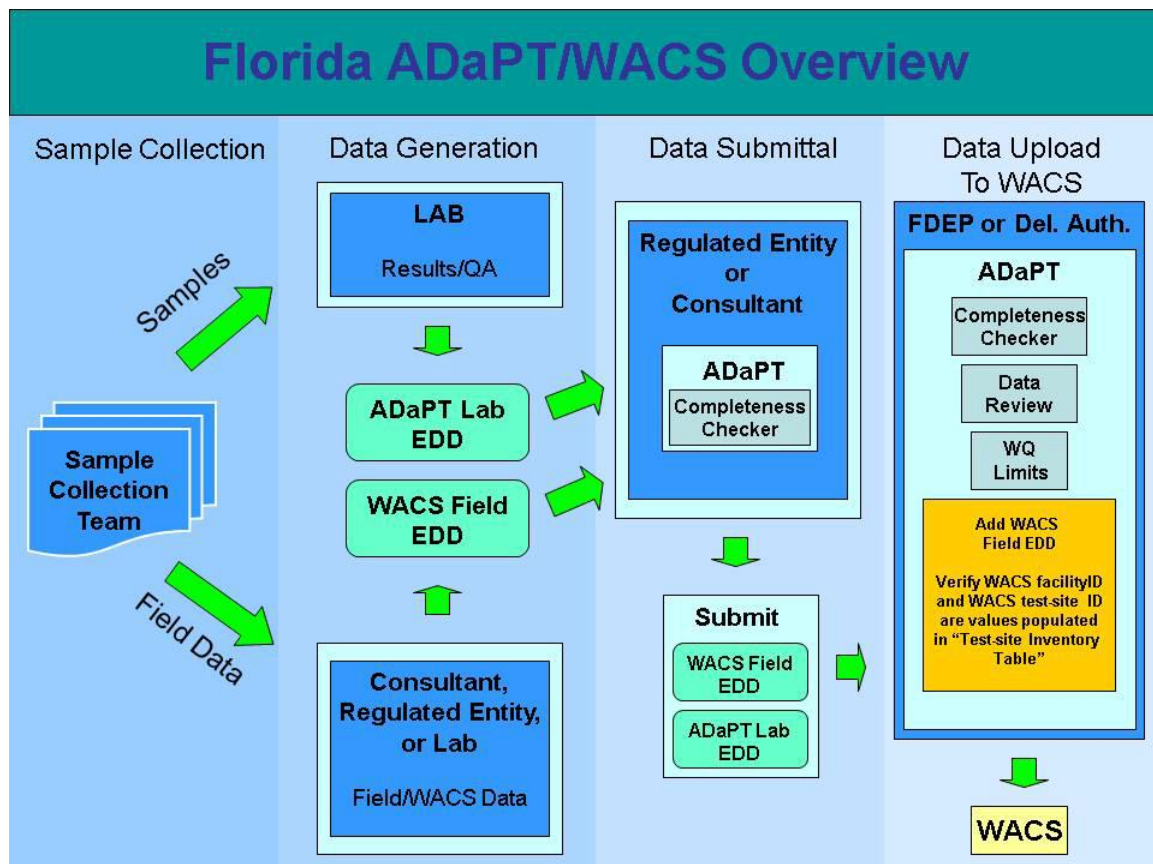
Within the Wastewater Program, data collection is almost exclusively performed by the regulated entity and less so by the department. The verification process for NPDES monitoring data has been automated using an electronic validation process. Non-NPDES monitoring data must go through a manual validation process to verify and validate that the data is complete and accurate.

Most of the data processing steps for Solid Waste sites, have been automated using a software tool called the Automated Data Processing Tool (ADaPT).

ADaPT is designed to perform quality assurance checks on the correctness and completeness of the data based on a broad range of relevant quality assurance criteria such as method numbers used for laboratory analyses, spike recovery and duplicate precision numerical targets, detection limits, laboratory quality control holding times, laboratory certification and blank contamination rules. ADaPT is also used to check for compliance with numerous other user selectable criteria and standards. Detailed information on the use of ADaPT is available in the DEP's "ADaPT User's Guide." The ADaPT user process is shown schematically in **Figure 1**.

The ADaPT software has the capability to create customized project libraries set up by the user (i.e., laboratory, project manager, data generator, governing entity, or partnership between any of these groups) to validate the data using their own specific requirements. The program areas have created a master library based on Rule 62-777, 62-520, 62-550, 62-302 and 62-160, F.A.C. requirements. The ADaPT libraries stipulate analytical methods, target analytes and quality control and data review requirements for any project.

Figure 1. Process flow diagram showing the ADaPT user process.



3E. Data Transfer and Reduction

Precautions are taken each time the data is recorded, calculated, and transcribed to prevent the introduction of errors and the loss of information. Data transfer and reduction steps are kept to a minimum and when such steps are implemented, the data transfer is conducted using an automated and consistent process. These automated procedures ensure the correctness of data reduction processes to include all processes that change either the form of expression or quantity of data items. A typical workflow scheme used to minimize transfer and reduction errors involves the following steps:

- The Division and appropriate District Office will receive the electronic data deliverable (EDD) submittal in a format conforming to the Cross-Media Electronic Reporting Regulation (CROMERR) standards or on disk, CD, or other magnetic or optical media on compact disc or flash drive media.
- The technical staff will review the data submittal including any field sampling sheets or logs for potential problems in the sample collection protocol.
- The technical staff will notify the Permittee or consultant for explanations, corrections, or changes as needed.
- The technical staff will process the EDD using ADaPT.
- Finally, the data is uploaded directly from ADaPT to an archival database. A check is made to ensure that no information is lost in the transfer.

3F. Data Archival

As an example, the Solid Waste data collection for the Southeast District Compliance Assurance Program stores data processed through ADaPT. The ADaPT software is designed to upload processed data to an electronic archival database. A final data set will be maintained with the project file in the Division's electronic document management system (OCULUS™). A description of procedures for inserting documents to OCULUS™ are described in the OCULUS™ user guide available on-line for download. Additionally, the Waste Management Division has developed business processes whereby documents created and received by the Division or District Office are entered into OCULUS™ in the same manner each time, and indexed in accordance with a Standard Indexing Taxonomy using established quality control (QC) steps throughout the defined business process. This ensures that information on documents is captured in a consistent manner. These clearly defined QC steps combine to provide the quality assurance that all information entered into OCULUS™, whether in the Tallahassee office or in any of the District Offices is accurate. The OCULUS™ QA Plan may be found at: DWM Document Management QA Plan. ADaPT is used to upload the quality checked data to the Water Assurance and Compliance System (WACS) database that is available to the general public. To ensure the data upload process is accurate and maintains the quality of the data, WACS runs auditing checks upon upload. The Department also has security checks and requires password access before a file can be uploaded by file transfer protocol to WACS. Once upload is initiated, the upload process matches the WACS ID to a specific sampling location, makes

sure the WACS ID is valid, checks the matrix, analyte, reporting units and STORET codes and checks for duplicate records.

3G. Documentation

Since accurate documentation is an important factor for determining the success of QA activities, record-keeping procedures are followed to ensure appropriate documentation is kept. The ADaPT electronic deliverable files, error logs, compliance checking reports and other groundwater monitoring report related documents for each facility will be maintained in OCULUS™. The responsible technical staff will insert the data submittal into OCULUS™ upon receipt. Copies of correspondence for corrective actions and responses will also be archived in OCULUS™.

3H. Corrective Action

Procedures are implemented to assure early and effective corrective action is taken when a laboratory's data quality falls outside established DQOs, data acceptance criteria, or quality assurance requirements. The Corrective Action process relates to the overall QA management scheme in terms of who is responsible for taking corrective actions when corrective actions are required, and who follows-up to verify that corrective actions have been taken and that they have produced the desired results. This is usually accomplished through the routine inspection process or enforcement process if necessary for externally generated data. Problems are listed in deliverable review letters, or other appropriate correspondence, and delivered to the responsible party. Depending on the severity of the problem, data may be rejected. When requested, the Quality Assurance Section provides feedback and suggestions for corrective actions. The corrective action process keeps management informed when corrective actions are necessary.

A typical workflow scheme used to identify the need for and implement corrective action involves the following steps:

- The Division and appropriate District Office technical staff will evaluate whether environmental data samples were collected properly by verifying that samples were collected in accordance with the appropriate SOP, samples were free from tampering or adulteration and samples have a verifiable chain of custody. In certain cases it may be necessary to collect a new sample or reanalyze an existing sample.
- The Division and appropriate District Office technical staff will review EDD submittals for certification, and ensure no critical errors exist and non-critical errors are justified. If any non-critical errors exist that need additional explanation, the technical staff, will communicate directly with the laboratory and copy the other stakeholders.

- The technical staff will follow-up with the laboratory on corrections and explanations, if needed, in order to finalize the EDD. If the laboratory is nonresponsive after two attempts, appropriate enforcement action may be taken.
- When the EDD submittal is finalized and the data archived, the final data file will be inserted into OCULUS™.

4. Training

All staff are trained to perform their duties as well as new staff as they are hired. Supervisors periodically assess and verify that staff performance conforms with the established policies and procedures established by the Department.

The training procedures include the following:

- Training staff in specific QA functions;
- Annual ethics policy course;
- Maintain, update, and provide specific training materials for routine program requirements and QA activities.
- Provide routine refresher courses to staff on updated information and procedures.

5. Data Review

The Southeast District understands the need to evaluate the quality and usefulness of environmental data prior to making decisions. We conduct the following review procedures to determine the usability of data for determination of compliance with permits or rules, etc. These procedures are based on our established Data Quality Objectives and Data Quality Indicators, and incorporate the concepts and criteria found in DEP's "Process for Assessing Data Usability", DEP-EA-001/07.

6. Documentation

Since accurate documentation is an important factor for determining the success of QA activities, our unit carries out the following record-keeping procedures for the indicated activities to ensure appropriate documentation:

- Sampling,
- field-testing,
- data review,
- calculation checks,
- data archiving,
- checks of database entries,
- Document control and maintenance,
- Record generation, retention, and storage procedures.

7. Contract Management

The Southeast District ensures that the DEP contracts that we administer are properly managed to assure appropriate data quality. As such, we conduct the following activities related to contract development and review:

- Description of process for review of contracts, work plans, and QA plans for sampling and analysis tasks, etc.
- Periodic program audits.

8. Audits

Audits provide objective feedback concerning the effectiveness of the Compliance Assurance Program's quality system, and may identify areas in need of improvement. In addition, successful implementation of the QA Program relies heavily on the submission of valid data, which begins with proper sampling, handling, and data analysis and interpretation.

9. Report Compilation

Provide the SAS section with information regarding DEP's ongoing QA efforts and to compile the results of all appropriate QA activities, and relay it to the Standards and Assessment Section for an annual report.

Future adaptive management concerning our QA program is based on findings from audits and data reviews.