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FY' 21-25

Departmental Quality Management Plan

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION

QUALITY MANAGEMENT PLAN

TITLE:	FY2021-2025 Departmental Quality Management Plan New Jersey Department of Environmental Protection
DOCUMENT:	OQA-QAD-001-07/20 (This document replaces OQA-QAD-001-7/15)
SCOPE:	Quality Management Plan for all environmental measurements and monitoring performed by and for the New Jersey Department of Environmental Protection
ISSUE DATE:	July 1, 2020
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ORGANIZATION:	New Jersey Department of Environmental Protection, 401 East State Street, Trenton, New Jersey 08625

APPROVALS:

Catherine R. McCabe

Catherine McCabe
Commissioner

6/30/2020

Date

I approve the FY21-25 Quality Management Plan (QMP) and all Quality System Responsibilities included in the QMP.

Michele M. Potter

April 6, 2020
Date

Michele M. Potter
NJDEP Quality Assurance Manager
Manager, Office of Quality Assurance

I approve the FY21-25 Quality Management Plan (QMP) and all projects performed under USEPA Region II jurisdiction through regulation, delegation, or funding.

Linda M. Mauel

April 6, 2020
Date

Linda M. Mauel
US EPA Region 2 Scientific Integrity
& Quality Assurance Manager

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TABLE OF CONTENTS

I. Introduction and Purpose

The New Jersey Department of Environmental Protection (NJDEP or Department) has responsibility for supporting New Jersey's citizens through preserving, restoring, sustaining, protecting and enhancing the state's environmental systems to ensure the integration of high environmental quality, public health and economic vitality. The NJDEP's environmental systems activities are guided by both State and Federal requirements. To effectively administer these requirements the NJDEP uses environmental data in nearly all of its decision-making processes. Because the quality of this data has a direct impact on the quality of the NJDEP's decisions, only data that is collected, generated, compiled and reviewed using specific quality assurance/quality control (QA/QC) procedures is considered acceptable for its intended use. Only data that is scientifically valid, of known quality and fully documented is used. The NJDEP's quality system reduces the Department's vulnerabilities and increases the NJDEP's ability to make reliable, cost effective and defensible decisions that are based on sound science.

To meet NJDEP's environmental data needs a Departmental Quality Management Plan (QMP) is generated to guide the Department's quality assurance activities. The QMP documents the NJDEP's quality system and provides its quality assurance policies and procedures, roles, responsibilities and authorities. The guiding documents for the QMP are ANSI/ASQ E4-2014, *Quality Systems for Environmental Information and Technology Programs* and *EPA QA/R-2, March 2001, EPA Requirements for Quality Management Plans.* In EPA QA/R-2, quality assurance is defined as:

> *"An integrated system of management activities involving planning, implementation, documentation, assessment, reporting, and quality improvement to ensure that a process, item, or service is of the type and quality needed and expected by the client."*

The USEPA requires that states receiving federal funding have a QMP with quality assurance (QA) activities consistent with the requirements given in Title 2 Code of Federal Regulations 1500.11. The Code of Federal Regulations lists both general and specific requirements for a state's environmental programs and gives acceptable quality assurance activities for federally funded programs. The Department, recognizing the importance of quality assurance, adopts the QA requirements given in the Code of Federal Regulations and applies them to all of its environmental programs (including "state only" programs, those programs where the USEPA has no jurisdiction).

The preparation and administration of the QMP is assigned to the Office of Quality Assurance (OQA). The FY21-25 QMP has been approved/signed by the NJDEP Commissioner, the NJDEP Quality Assurance Manager, all NJDEP Senior Staff, and the USEPA Regional Quality Assurance Manager. The QMP is valid for 5 years from the official date of publication. After 5 years it shall either be reissued or withdrawn from use by the NJDEP.

II. NJDEP Organizational Structure

The NJDEP's organizational structure has the following 8 Program Areas (see Figure 1):

- Chief of Staff
- Air Quality, Energy, & Sustainability
- Natural and Historic Resources
- Land Use Management
- Site Remediation & Waste Management Programs
- Water Resource Management
- Climate & Flood Resilience
- Compliance and Enforcement

Each Program Area has a Senior Manager (Assistant Commissioner) that reports directly to the Commissioner. Each Program Area is further organized into Divisions, Offices and Bureaus with Middle Managers (Directors, Assistant Directors, Bureau Chiefs and Managers) that report to Senior Managers. Program Areas are supported with facilities throughout the state. Program Areas are centrally located in Trenton, New Jersey with field offices in Camden, Cedar Knolls, Chester, Ewing, Leeds Point, and Toms River. The NJDEP also has responsibility for 52 state parks, recreation areas and marinas. Additionally, the NJDEP has responsibility for 35 historic sites, 19 of which are located in state parks.

III. Performance Partnership Agreement, "PPA"

The Department signs the Performance Partnership Agreement with the Environmental Protection Agency ("EPA") which indicates that it agrees to utilize the philosophies and guiding principles in the National Environmental Performance Partnership System ("NEPPS") process. This system is based on a results-based management which is implemented through environmental priorities and goals; and measures progress for individual states. The environmental goals, indicators and agency commitments are refined and updated based on the timeline outlined in the agreement between the state and their regional EPA counterparts. This fluid approach is informed by the development of the agencies' Strategic Planning documents, the results of the collective actions, and stakeholders' input. The Strategic Plan is articulated by the Department-wide and Agency-wide direction and is the result of both strategies.

The PPA includes, but is not limited to, strategies and potential directions in the areas of Clean Air, Clean and Plentiful Water, Land and Natural Resources, Safe and Healthy Communities, and Compliance and Enforcement.

In an effort to ensure the programs that receive federal funding comply with acceptable quality assurance activities and for the OQA to comply with the requirements of the Quality Assurance program, the Quality Management Plan requires transparency from the programs. This ensures that the OQA is aware of the quality assurance activities that are conducted throughout the Department, and can address questions or concerns pertaining to them, that

may arise during the Quality Assurance program's Federal audits. To this end, one of each program's PPA priorities is to provide the OQA with results of program reviews/audits performed internally, as well as those conducted by the USEPA; to continue to perform all required quality assurance activities as required by the USEPA, copying these activities to the OQA annually; and to inform the OQA of any new quality assurance activities that are implemented either when required by the USEPA or when conducted by the program independently.

IV. Quality System Organizational Structure

To support the quality systems necessary for the Program Areas, the NJDEP has a Quality System Organizational Structure that is designed to be independent of the organizational structure noted above and given in Figure 2. The independence of the NJDEP QA Manager and other QA staff is vitally important to the NJDEP's implementation of its Quality System and is consistent with national and international guidelines. It allows the NJDEP QA Manager the authority to advocate the importance and relevance of quality in the Department's activities. It also allows him/her the ability to serve without any potential conflicts of interest due to the OQA being organizationally located in 1 of the 8 Program Areas.

The Quality System Organizational Structure (QSOS) as outlined in Figure 2 has a 'dotted line' reporting structure that provides for the independence necessary to elevate critical quality-related issues at his/her discretion. The Quality System is overseen by the NJDEP Quality Assurance (QA) Manager and, for the purposes of quality system activities, the NJDEP QA Manager reports directly to Senior Managers.

To support the NJDEP's Quality System, the QA Manager has several Assistant QA Managers. Assistant QA Managers share their time in the Office of Quality Assurance between Quality System and Environmental Laboratory Certification activities. Assistant QA Managers provide oversight and assistance to the NJDEP's Program Areas, to help ensure that technical and administrative policies are consistently applied across organizational boundaries.

To help support the Department's quality system there is a network of QA Specialists located throughout the NJDEP. QA Specialists are selected by senior and/or middle managers at either a program, division or bureau level. QA Specialists are responsible for providing continuous and direct contact with all NJDEP staff in each of their assigned areas. They have primary responsibility for assuring that QA activities remain an ongoing and effective part of all areas of the NJDEP.

V. Departmental Staff Quality System Responsibilities

A. Commissioner (with Senior Management)

The Commissioner (with Senior Management), of the New Jersey Department of Environmental Protection has overall responsibility for the QA Program in the NJDEP.

The Commissioner is committed to ensuring that the Departmental Quality System is developed and administered with adequate resources and authorities to maintain an effective system in each of the NJDEP's Program Areas:

Figure 1
NJDEP Organizational Structure

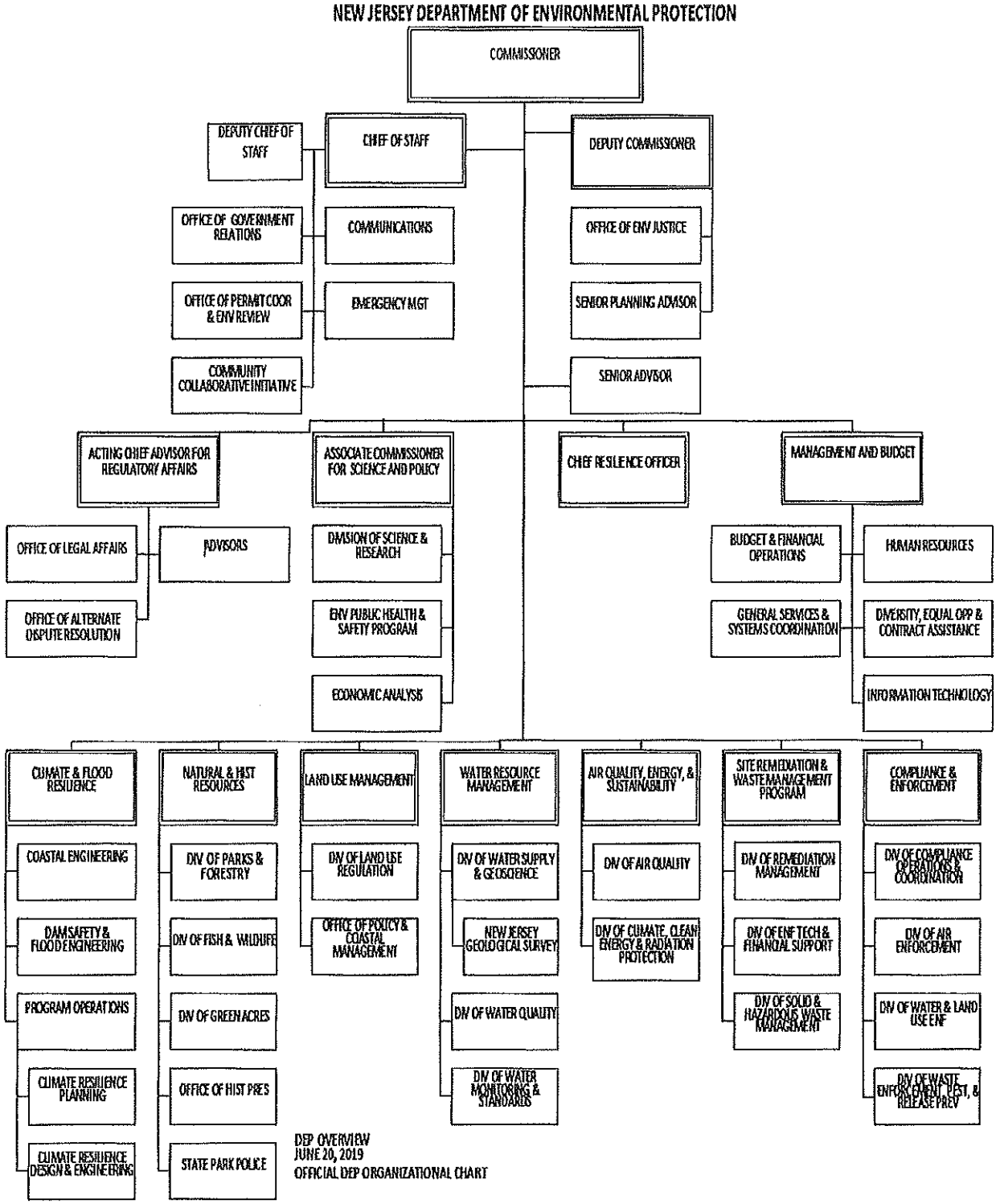
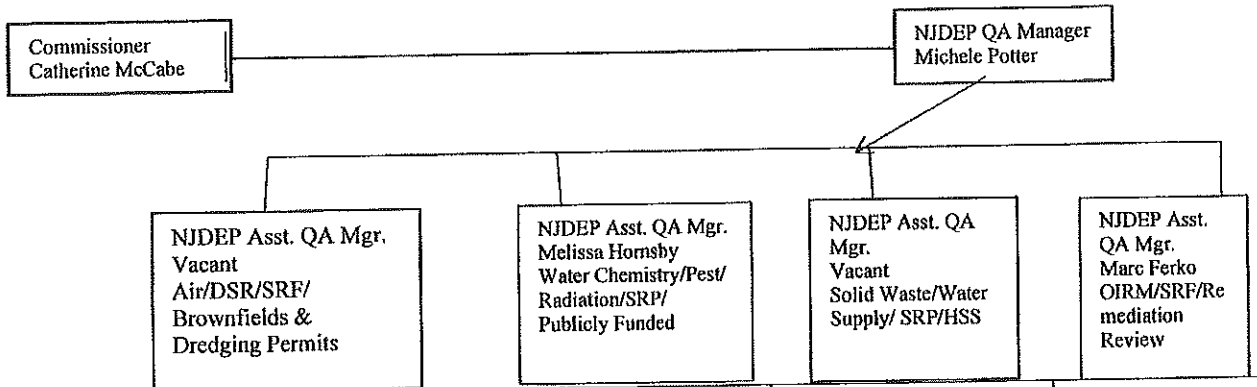


Figure 2
New Jersey Department of Environmental Protection
Quality System Organizational Structure (QSOS)



NJDEP Programs

Air Quality, Energy, & Sustainability	Air Quality Permitting • Technical Services • Operating Permits Air Quality Mgmt. • Mobile Sources • Air Monitoring	Radiation Protection • Nuclear Engineering • X-Ray Compliance • Environmental Radiation	Solid Waste	
Climate & Flood Resilience		Land Use Planning		
Compliance & Enforcement QA Specialist		Opers. & Coordination Pesticide Control Water Field Operations • Ofc. Of Administration	Hazardous Waste Compliance & Enforcement	
Office of Science	Div. of Science & Research			
Site Remediation & Waste Mgmt. QA Spec.	Office of Brownfields Reuse Office of Asst. Commissioner Office of Dredging &Sediment Tech.	Publicly Funded Env. Measure & Assessment Site Mgmt.	Env. Eval. & Risk, Ofc. Data Quality Remedial Action Permit Case Mgmt. Env. Eval. & Risk, Env. Eval. Groundwater Pollution Abatement Case Assignment & Initial Notice	Bureau Field Operations Bureau Inspection & Review
Natural & Historic Resources QA Specialist		Office of Natural Lands Mgmt.		
Water Resource Mgmt. QA Specialist		Water Quality • Pretreatment & Residuals Point Source Permitting Non-Point Pollution Control Water Monitoring • Fresh & Bio Water Monitoring Marine Waters Monitoring Env. Restoration & Stds.	Water Supply & Geological Survey • Safe Drinking Water Water Allocation Water Systems & Wells	
Chief of Staff		•		Information Technology
Land Use Management				

B. NJDEP Quality Assurance Manager (In the Office of Quality Assurance)

The NJDEP Quality Assurance Manager has responsibility for planning, oversight and policy recommendation activities relating to the Departmental Quality System. *The following routine activities are conducted and are not limited to the following:*

1. Primary liaison with the USEPA and all outside agencies on matters dealing with environmental sampling, analytical methodology, and analytical data usability.

2. Determine the programs, divisions, elements, and bureaus to be included in the Departmental Quality Management Plan as part of the department's quality system.

3. Coordinate the development, review, approval and implementation of the Departmental QMP and Quality System procedures.

4. Approve exceptions to requirements contained in the Departmental QMP.

5. Monitor the development and implementation of Quality Assurance Project Plans (QAPP), and corrective actions resulting from Quality System audits.

6. Develop training opportunities to support the Department's Quality System.

7. Act on referrals from all Departmental Program Areas concerning issues with analytical data provided by businesses' either certified and/or approved by the NJDEP to perform environmental analyses.

8. Act on referrals and/or complaints from non-Departmental organizations and private citizens concerning analytical data provided by businesses' either certified and/or approved by the NJDEP to perform environmental analyses.

9. Certify and/or approve all businesses' performing environmental analyses in response to the activities administered by the NJDEP's Program Areas. Including analytical data required to be submitted to the NJDEP or data that is required by Departmental Program Areas but not required to be directly submitted to the Department.

10. Hold periodic meetings, as needed, with NJDEP Assistant QA Managers, QA Specialists and USEPA QA Officers. These meetings may include discussions on new technologies, quality assurance training issues, program improvements and project nonconformance items.

11. Ensure that the Departmental programs create a Quality System Responsibility form and to be reviewed by the Quality Assurance Manager for completeness. If it is determined by the Quality Assurance Manager that there are discrepancies with the form, an internal audit of the program may occur.

C. Assistant QA Managers

NJDEP Assistant QA Managers have responsibility for maintaining continuous contact with NJDEP Program Areas to help assure agency wide consistency of the Departmental Quality System. Moreover, the NJDEP Laboratory Certification program officers and NJDEP Assistant Quality Assurance Managers are in constant communication to ensure the Department has a well-rounded Quality Assurance program. To that end, the NJDEP Assistant QA Managers are assisted by OQA's Laboratory Certification officers routinely for their knowledge on biological, technical, and chemical matters related to New Jersey laboratories. Over the years the amount of time given to these matters may vary and depend on the authorities of the Department.

The following items are performed on a **routine basis by the Quality Assurance Staff with limited activity from the Laboratory Certification Officers**. *The following routine activities are conducted and are not limited to the following:*

1. Review and approve Quality Assurance Project Plans (and similar documents) and Standard Operating Procedures.

2. Assist and train program and project managers in developing Quality Systems.

3. Participate in the process to develop, approve, implement and maintain written Quality System standards (i.e. SOPs, QAPPs)

4. Provide Departmental Program Areas with technical support relating to environmental sampling, field measurements, analytical methodology, analytical data, and laboratory certification program activities.

5. Provide routine and high-level training on Quality Systems and analytical methodology and other technical assistance.

6. Review the Quality Systems Responsibility form submittals from the programs for completion.

7. Conduct Quality System Assessments and Technical System Audits, as resources permit.

8. Work with Citizen Science groups within the State on Quality Assurance/Quality Control topics.

9. Conduct periodic QA Representative meetings.

The following items are performed on a **less frequent basis and performed mainly by the Laboratory Certification Officer with assistance from the Quality**

Assurance Staff. *Examples of said activities include, but are not limited to, the following, or as requested by NJDEP programs:*

10. Conduct non-routine and complex data validation.

11. Provide data usability guidance to Departmental staff on analytical data generated for all environmental matrices.

12. Develop and present Quality System training courses.

13. Conduct Data audits and Data assessments.

14. Assessments of groups within NJDEP Program Areas that generate, compile, review or use environmental data in their decision-making processes.

D. Department Middle Managers

NJDEP Middle Managers have primary responsibility for directing their assigned staff to follow the quality system as outlined in the Department-wide QMP. *The following routine activities are conducted and are not limited to the following:*

1. Ensure that all sampling, analysis and data handling practices are documented in SOPs or other Department approved documents.

2. Require staff to obtain Quality System training.

3. Ensure quality assurance project plans are developed, reviewed, approved and implemented as written.

4. Ensure that all corrective actions to quality assurance project plans are documented and implemented.

E. QA Specialists

NJDEP QA Specialists (in past Department QMP's were identified as Departmental Quality Assurance Representatives) have responsibility for working on a day-to-day basis with the Middle Manager and staff in their assigned organizational area. QA Specialists with their Middle Manager have primary responsibility for defining each organization unit's appropriate QA System; and for monitoring the success of their organization unit's Quality System.

The following items are performed on a **routine basis**. *The following routine activities are conducted and are not limited to the following:*

1. Develop, track and document the progress of the Departmental QMP activities for their organizational area of responsibility.

2. Prepare the annual Quality Systems Responsibility form, as illustrated under Appendix B of this document, showing the success of their Programs QMP activities.

3. Participate in the process to develop, implement and maintain written Quality System standards (i.e. SOPs, QAPPs). If a Quality Assurance Specialist is conducting any of the above-mentioned roles, they cannot by the final approval person for the document.

The following items are performed on a **less frequent basis.** *These work activities are conducted and are not limited to the following, or as resources permit:*

4. Where delegated authority is given by the NJDEP QA Manager, conduct Quality System Assessments, Technical System Audits and Data Usability Assessments in their organizational area of responsibility.

5. Monitor the implementation of corrective actions.

6. Ensure the OQA is copied on all compliance or Memorandum of Agreements, "MOA" correspondences for their organizational areas of responsibility.

7. Conduct internal audits of the Quality System in their organizational area of responsibility.

8. Recommend to Middle Managers that projects be delayed when public health and safety or major project objectives could be compromised. Department approved SOPs will document project delay criteria.

9. Where delegated authority is given by the NJDEP QA Manager, approve Quality Assurance Project Plans and Standard Operating Procedures in their organizational area of responsibility (this is not the same for the Site Remediation program, who uses the LSRP program for approving their QAPPs). Whenever a program has been delegated authority, the quality assurance specialist will conduct an audit of the process within the QMPs effective timeframe, as resources permit.

10. Conduct and document ongoing assessments of sample collection, data review and data collection activities in their organizational areas of responsibility.

11. Provide training and guidance to staff in their organizational area of responsibility.

12. Development of data usability guidance/criteria for their respective program.

13. Assess the effectiveness of the programs Quality Systems.

VI. Graded Approach to Quality Systems

The Department uses a "Graded Approach" to developing and implementing effective Quality Systems. The graded approach provides flexibility when drafting project plans. The graded approach enables project planners to tailor the plans level of detail. Highly complex, costly and high priority programs/projects have Quality Systems more complex than lower level basic programs/projects. The Graded Approach leads to an appropriate level of QA/QC activities and documentation based on the environmental data activity being addressed. In order for the Quality System to have flexibility, the Department Quality Assurance Manager and Assistant Quality Assurance Managers rely on each program/project manager and Quality Assurance Specialists to use the Graded Approach when determining program/project Quality System requirements.

A lower level basic program/project could be a QAPP being developed to support an inexpensive project conducted by a small organization. An example would be for a recycling project where a brief QAPP can provide a sufficient level of documentation. At the other end of the spectrum, an example could be a program/project that is controversial, very influential for making management/environmental decisions, used for confirmatory decisions, used for risk assessment or used for litigation activities. An example of this would be a CERCLA project, which would require greater detail. In other words, the degree of documentation, level of effort, and detail will vary based on the complexity and cost of the project. Appropriate and objective considerations should be given to the significance of the environmental problems to be investigated, the environmental decisions to be made, and the impact on human health and the environment. One constant in this process will be the requirement to obtain approval of a specific QAPP from the Office of Quality Assurance Assistant QA managers *before* the start of the project. This will be discussed further in the "Quality Assurance Project Plans," section of this document.

VII. Systematic Planning

The collection, generation, review and use of environmental data within the Department is subject to a planning process. Close coordination and planning across the Department is essential to ensure that data requirements developed meet acceptance and/or performance criteria mandated by Program Management. This systematic level of planning includes the responsibility to ensure there is agreement between the end data user and the data supplier. Data may be shared between programs but only when adequate and documented review processes are made available to ensure the data is of sufficient quality to support the planned project. The planning process follows the scientific method and is commensurate with the intended use of the data and includes the graded approach, if applicable. The scientific method includes a step-by-step approach to data collection that considers the intent of the project, collects background information, documents the activities needed to accomplish the project, performs necessary activities, analyzes the data collected and determines conclusions.

Department programs that generate environmental data are covered by the QMP, though it is acknowledged that not every program requires the same level of quality assurance in its plans. The QMP outlines the minimum QA requirements available for a program, and each program is encouraged to provide supplemental QA, and to review its QA requirements each year. When requested, the OQA will work with a program to review its programmatic requirements and serve as technical advisors when developing QA procedures or providing scientific information.

A. Assessment of Plans

At the beginning of each fiscal year (Jul 1 – June 30) or prior to project initiation the Department will avail itself, upon request, to aid in the process for establishing assessments of programs or projects. This process for adopting an assessment plan is the responsibility of NJDEP Senior Management. The plan includes the activities that NJDEP Senior Management prioritizes and helps the Department to effectively utilize its resources. It also supports the NJDEP's activities to address conflicting demands and to include those activities relating to its Quality System. The Department's Quality System along with planned assessments, provides the documented activities that the NJDEP uses to ensure the quality and use of environmental data used in its decision processes. The assessment plan is drafted and implemented by Middle Management with input from staff and advisory committees/boards, based on the NJDEP's regulatory requirements and policies.

B. Quality Assurance Project Plans (QAPPs)

The Department's QMP is supported by project specific Quality Assurance Project Plans. A QAPP is the blueprint by which individual projects involving environmental data are planned, implemented and evaluated. A key component of the NJDEPs planning activities is the QAPP. Some NJDEP QA system planning documents equivalent to the QAPP are named differently such as "Sampling Plan". QAPPs are used by programs to help document, in one place, the requirements and expectations of a project. In most cases a Program Manager (Site Manager) or License Site Remediation Professional ("LSRP"), is responsible for developing and monitoring a QAPP. Department Assistant QA Managers are available for technical assistance in planning and developing the QAPP. However, most project and data quality decisions are determined by the program. It is the program's responsibility to properly plan the project to ensure the collection of data is of the right type, quantity, and quality required to support its intended use.

The QAPP describes the activities of projects collecting and using environmental data. It can include activities for directly collecting new environmental data and/or for using data previously collected (secondary data). The Department maintains a policy and documents within program SOPs that no environmental data collection activities are performed by or for the Department until after a QAPP covering those activities has been developed and approved by the OQA's Assistant QA Managers. The only exception is under circumstances requiring immediate action to protect human health and the

environment or operations conducted under police investigations. In Emergency Response or other short-term immediate action events, data collection operations to protect human health or the environment will have their activities detailed in either a Bureau of Emergency Response Spill Fund Package or a Bureau of Emergency Response Field Investigation Report. These reports document what type(s) of sampling and monitoring were performed during the emergency activity and be available for review and assessment. Any additional or continued sampling/monitoring will require a QAPP be prepared. Guidance for developing QAPPs can be found in the following documents:

"Guidance for Quality Assurance Project Plans, EPA QA/G5", EPA/240/R-02/009, December 2002.

"Guidance for the Development of Quality Assurance Project Plans for Environmental Monitoring Projects", USEPA Region 2, April 2004.

"Uniform Federal Policy for Quality Assurance Project Plans", EPA-505-B-04-900A, March 2005 (Used for CERCLA, RCRA, Brownfields projects.)

Field Sampling Procedures Manual, New Jersey Department of Environmental Protection, August 2005.

When developing a QAPP the Project Manager considers the following items to determine the extent of the documentation needed to have an effective plan. Using the Graded Approach not all items may have the same level of detail for each QAPP. However, to obtain QAPP approval, the QAPP must include sufficient information to support the achievement of the project objectives. But at a minimum those items noted below should be considered when developing the QAPP.

1. Title Page
2. Project Name
3. Date of Project Initiation
4. Responsible Program
5. Project Manager
6. Project QA Officer
7. Project Description
8. Project Fiscal Data
9. Schedule of Activities
10. Project Organization
11. Participants and Each of Their Responsibilities
12. Data Quality Requirements and Assessments
13. Sampling Procedures
14. Sample Custody Procedures
15. Calibration Procedures and Preventive Maintenance
16. Documentation, Data Reduction and Reporting
17. Data Validation
18. Training/Certification Requirements

19. Analytical Requirements
20. Indirect Measurement QA
21. Data Usability
22. Performance and System Audits
23. Corrective Action Processes
24. Reports

The Project Manager has primary overall responsibility for the QAPP. The Project Manager assures that an appropriate QAPP is drafted when one is required and that it has necessary organizational approvals, unless the Assistant QA Manager delegates this duty to another party. Said authority may be granted if they have a history of compliance with the Quality Assurance Project Plan guidelines and has met with the Office of Quality Assurance on this matter. This is the case for every program area but the Site Remediation Program ("SRP"). SRP uses the LSRP when reviewing, designing, or preparing QAPPs. Therefore, LSRP Project Manager assures that an appropriate QAPP is drafted when one is required and ensures that all has necessary organizational approvals are obtained.

QAPP approval is mandated by the Department. The approved QAPP must be implemented as written; however, the QAPP may be modified and amended at any time through a documented corrective action process. He/she is also responsible for conducting surveillance activities during the length of the project and for initiating corrective actions as needed. Corrective actions include revising/updating the QAPP. Additionally, he/she assures that revisions/updates receive necessary approvals and that these are distributed to all involved staff. Should a technical difference occur between the Project Manager, OQA Staff and/or other involved Staff Member, resolution is sought at the lowest level of management practicable. When resolution is not attainable at a given level of management, a final decision will be made by either the NJDEP QA Manager or a Senior Staff Member.

C. Field Sampling Procedure manual

This Manual includes information that is used as a guidance document or Standard Operations Procedure, depending on the program area. The 2005 Manual listed above is the one used currently.

This manual helps to standardize how staff across programs and the Department, as a whole, conducts sampling. Moreover, this manual ensures that when writing a QAPP, the appropriate sample matrices, amounts and preservatives will be addressed.

In an effort to incorporate all Department-wide processes, the Field Sampling Procedures Manual ("FSPM") is currently undergoing a major update and is being reviewed by representatives of the entire Department and outside consultants and interested parties. Once completed, this tool will continue to be a valuable resource for all its intended users.

D. Standard Operating Procedure (SOP)

The NJDEP uses SOPs to document activities and processes/procedures that are routine and can be applied to more than one project and/or program responsibility. SOPs are step-by-step, explicitly written procedures that are performed consistently and repeatedly by NJDEP staff or other parties falling under Departmental programs. Additionally, SOPs can be written to ensure that NJDEP regulations, policies and technical guidance documents are consistently followed. There is no "correct" format for SOP development, but the Department uses the USEPA document entitled "Guidance for Preparing Standard Operating Procedures (SOPs), EPA QA/G-6" as a template when writing SOPs. They can also be based on criteria established in the Code of Federal Regulations, the New Jersey Statutes Annotated, The New Jersey Administrative Code, and/or NJDEP guidance documents. SOPs can be developed to assign responsibilities, document tasks and minimize variation along with aid in training of staff.

Middle Managers are responsible for ensuring that SOPs are developed and implemented appropriately. However, all staff are encouraged to identify operations requiring SOPs or revisions to existing SOPs. The OQA may be requested to review and approve Department SOPs. Approved SOPs may be included in QAPPs as appendices or adopted by reference within the text of a QAPP. SOPs can be initially prepared by staff and revised based on a periodic review process usually being every five (5) years or when activities require a change. Current SOPs are available and kept within the operational use for the program and outdated SOPs shall be withdrawn from use by the program.

E. Secondary Environmental Data

Secondary or existing environmental data is information that already exists, such as data from a previous project with a different purpose from the one for which the data was intended to be used. Data could be recent or many years old. Additionally, the data may be collected for a similar project purpose but by a different organization than the Department. It could also be data that is being collected at the same time from another project. In any case, when secondary or existing environmental data is used in a given project the data should be scrutinized the same as data being directly collected and generated for a given project. The development of a QAPP specific to secondary/existing environmental data or the inclusion of activities from accepting Secondary/existing data in a QAPP for a new project shall be considered. Secondary/existing data can also be considered acceptable if it can be verified that the data was generated for the same purpose as the current project being planned. Secondary/existing data is reviewed to ensure the collected dataset meets the metadata quality of the project. Metadata are the data about the data, this includes: why the data was collected, time of data collection and creator of the project data. When a QAPP using secondary data is developed it follows the process as noted above in VI. 2 Quality Assurance Project Plans (QAPPs).

F. Quality Assurance Workgroups

The Department may establish temporary workgroups to address emerging Quality Assurance issues. Each workgroup will have different participants from throughout the Department and will have a specific goal. Ideas for issues are submitted to the Department QA Manager, or other designee for review. As the Senior Staff's manager for QA activities within the Department, the QA Manager obtains Senior Staff approval to establish a workgroup. The workgroup chairperson is either a Department Assistant QA Manager or a Department QA Specialist.

G. Planning Activities Specific to the NJDEP Site Remediation Program

The NJDEP has re-adopted at N.J.A.C. 7:26E, Technical Requirements for Site Remediation (Rule). The Rule sets forth the NJDEP's requirements for remediating New Jersey's contaminated sites. It provides the NJDEP's technical requirements (including requirements for activities such as sampling methods, sample handling techniques, field blanks, field duplicates and trip blanks and outlines the requirements for developing and implementing QAPPs) and is designed to provide predictable and flexible information for investigating and remediating known and suspected contaminated sites. The Rule is used to communicate to the regulated community what is expected when investigating and remediating known and suspected contaminated sites.

On May 7, 2009, the Site Remediation Reform Act ("SRRA") was signed into law. SRRA provides sweeping changes to the way in which sites are remediated in New Jersey. Furthermore, SRRA established a program for the licensing of Licensed Site Remediation Professionals ("LSRPs") who have responsibility for oversight of environmental investigation and cleanup of sites, excluding Federally run programs such as Superfund. While the law changes the process of how sites are remediated, it ensures the same stringent standards required for cleanup remain intact. The NJDEP will retain significant authority over the remediation process and will ensure that responsible parties comply with all applicable regulations, but the day-to-day management of site remediation will be overseen by qualified LSRPs. The law became fully implemented effective May 7, 2012. To that end, the responsible party "side" of the Site Remediation Program (SRP) of the NJDEP was impacted significantly. It will be the LSRPs who are responsible for overseeing the remediation and will be approving all QAPPs (for the responsible party "side" of SRP). The SRP of the NJDEP will perform inspection and review functions to ensure that the LSRPs have quality systems in place and that the quality systems operate to the satisfaction of the program. The responsibilities of each bureau within SRP of the NJDEP are documented on their "Quality System Responsibilities" (QSR) forms which are updated annually and an example of the form can be found under Appendix B of this QMP. SRP will provide an update regarding the oversight of the LSRP activities on the annual quality system responsibilities form.

Under SRRA, the use of technical guidance is defined: "The licensed site remediation professional shall apply any available and appropriate technical guidelines concerning site remediation as issued by the department. The department shall provide interested

parties the opportunity to participate in the development and review of technical guidelines issued for the remediation of contaminated sites."

As such, SRP, through its involvement in external stakeholder processes, developed numerous technical guidance's addressing many topics dealing with remediation. All technical guidance's are available at the SRP website at:
http://www.nj.gov/dep/srp/guidance/.
With regard to QAPPs, data generation and usability, SRP developed four technical guidance that are currently available for use. The four technical guidance are as follows:

1. Analytical Laboratory Data Generation, Assessment and usability Technical Guidance;
2. Quality Assurance Project Plan Technical Guidance;
3. Data of Known Quality Protocols Technical Guidance; and
4. Data Quality Assessment and Data Usability Evaluation Technical Guidance

These and all technical guidance's used by both SRP staff and the LSRPs assure that the processes related to the remediation of sites are consistent throughout the program.

The elements to be included in a QAPP are specifically addressed in N.J.A.C. 7:26E-2.2 and in the Quality Assurance Project Plan Technical Guidance for various phases of a remediation [such as the Remedial Investigation Workplan (RIW) and the Remedial Action Workplan (RAW)]. Whereas QAPPs are used in the SRP, the distinction is, in select instances, they may not be in a conventional format as SRP has a unique operational need due to the number of sites addressed by the program and the process by which sites are remediated. The information required to be in a QAPP traditionally resides in one complete document where all the elements are addressed with all approvals and one approval date. SRP has different timelines than EPA and as such, the compilation of information contained in a QAPP frequently takes years to obtain all the revisions. However, the interactions, corrective actions and approvals are documented through all processes albeit they may not be included in one document. All pertinent information is available in the case files and whereas a "traditional" QAPP may not be available in all instances, all elements of a QAPP are addressed appropriately to meet the needs of the program. Through the oversight and review, SRP assures all remedial work is performed and systematically documented through the required series of remedial activities, thereby minimizing uncertainties for the decision-making entity (the NJDEP or the LSRP) while providing certainty that all remedial work has met the remedial objectives.

Additionally, most cases are remediated by LSRPs, they are required to develop and implement QAPPs according to all applicable rules and guidance set forth above. Although these QAPPS are developed and implemented without direct SRP input, the QAPPs are available for review by SRP staff upon submission to the program.

VIII. Surveillance Activities

Surveillance activities are part of the Quality System activities once planning has been completed and the initiation of the project/QAPP begins. Surveillance activities mostly include the ongoing assessment of project activities. As resources permit, assessments may be used to monitor activities for determining:

- Adequacy – whether an activity meets the plan;
- Compliance – whether an activity is being performed as planned;
- Effectiveness – whether the activity is meeting desired results;
- Verification – whether corrective actions are being found, responded to and completed.

Data collected in conjunction with these activities should be used to assess and improve both QAPPs and the Department's overall Quality System.

A. Environmental Laboratory Assessments

Environmental laboratory assessments are conducted for laboratories generating analytical data to be submitted directly to the Department or for data that is being generated in response to a Department regulation or policy but is not being submitted directly to the Department. Laboratories having successful assessments are granted "Certified" status under the State of New Jersey's Environmental Laboratory Certification Program. Assessments can be in the form of an on-site, at a laboratory or internally, within the Department. On-site assessments are normally conducted once every 2 to 4 years. For laboratories with NJ-National Environmental Laboratory Accreditation Program (NELAP) accreditation, on-site assessments are normally conducted every 2 years. Internal assessments can occur at any frequency and are normally conducted to respond to reported problems with analytical data quality and/or to expedite a laboratory certification for parameters where an on-site assessment may not be necessary.

B. Quality System Assessment (QSA)

Quality System Assessments are conducted to assess the overall structure of a program's Quality System and/or to assess the adequacy, effectiveness and implementation of a program's documented Quality System. The assessment process requires numerous activities to include appointing an assessor or team of assessors with proper knowledge and experience, reviewing of the program's SOPs, training, interviewing program managers and/or staff, conducting a closing meeting to present preliminary findings, and preparing an assessment report for the program management. The assessed program then prepares a corrective action plan to address the findings in the assessment to the assessor(s).

A Quality System Assessment may be conducted internally by staff/management, NJDEP Assistant QA Managers or externally by a non-NJDEP agency (such as the USEPA). The findings of a Quality System Assessment should be submitted to the NJDEP QA Manager for him/her to evaluate the effectiveness of the overall Departmental Quality

System and Management Plan. A Quality System Assessment can be performed within programs on specific projects within their jurisdiction or by the OQA when requested by Senior Management or NJDEP QA Manager.

C. Technical System Audits (TSA)

A Technical System Audit is a qualitative evaluation of the systems used for activities relating to generating, collecting, reviewing and using data. Many of these activities are those that are documented in a QAPP. Technical Systems Audits may be conducted internally by staff/management within a program, NJDEP QA Specialist, NJDEP Assistant QA Managers when requested by Senior Management or the NJDEP QA Manager, or externally by a non-NJDEP agency (such as the USEPA). These specific audits may vary from year to year and are conducted at the request of the programs, when the Office of Quality Assurance deems it necessary, and as resources permit. When developing a QAPP, the plans for scheduling Technical Systems Audits are considered, and should be included when appropriate. Examples of TSAs include:

- Assessing sample collection procedures such as techniques, preservation and chain-of-custody.
- Assessing data for adherence to the analytical method, to include blanks, standards, accuracy and precision, and other quality control measures.
- Assessing permit application review and permit issuance processes.
- Assessing data review/ validation procedures to assure that data quality objectives are being met.
- Assessing the effectiveness of a completed project.

D. Data Usability Assessments

Data Usability Assessments are used as a final step in a project to assess all data activities that were conducted in order to ensure that the final results can be used for their intended purposes.

Some details of a Data Usability Assessment include:

- The evaluation of the type, quality and quantity of data relative to the original objectives, often called the Data Quality Objectives (DQOs).
- Informing decision-makers about the level of confidence they can have in making their decisions. Answering questions such as "Does more work need to be done" or "Can the decision processes begin?"

Data Usability Assessments are the very last check before giving the data to the decision-makers. This is where everything that happened during the project including mid-course corrections, sampling problems, data validation, and any audit results are considered in determining whether the data may be used and whether any uncertainty needs to be allowed in the decision.

E. Data Review and Validation

Data review and validation is used to help assure that data, prior to its use, has been found to meet the data quality objectives given in a QAPP (or other planning document). Data review and validation is used to help assure that data receives a scientific and statistical evaluation to determine if data obtained from environmental data activities are of the right type, quality and quantity to support their intended use. Data review and validation should be conducted before data is entered into a Departmental database or before it is used as a basis for decision making. The review process is important to the processes for issuing permits, certificates, licenses, enforcement actions and for making environmental policy. The Project Manager should consider data review and validation requirements when developing a QAPP. NJDEP Assistant QA Managers and QA Specialist should also be part of the development process.

Data review and validation procedures should be documented in the QAPP. The detail of these procedures shall document the decision processes and factors governing the qualification of data and the meaning of any qualifier codes that are applied to the data. The decision to qualify the data for their intended use shall be based on reconciliation with the performance measures for a project defined by the data quality requirements. Any limitations on data use should be quantitatively identified to the extent practicable and be fully documented. All data review and validation processes for a project in a given QAPP should apply to both data directly generated for the QAPP and the secondary data collected. Data validation is reserved for a percentage of all Department data to ensure program compliance.

F. USEPA Assessments

USEPA- funded programs are subject to review at any time. Formal assessment of performance under USEPA assistance agreements occurs as part of a comprehensive review and evaluation of NJDEP programs. The process is governed by the "EPA's Policy Concerning Delegation to State and Local Governments", which states evaluations should focus on overall program performance, rather than individual actions and should be based on objective measures and standards agreed to in advance. This agreement is implemented through the USEPA/NJDEP Performance Partnership Agreement. The Policy on Oversight of Delegated Programs provides a framework within which the USEPA and the NJDEP clarifies performance expectations and solve problems through a system of negotiation according to a predictable but flexible set of national guidelines. The policy describes the components of assistance agreements and escalation of significant findings and describes how the USEPA responds to the findings. The latter includes rewarding strong performance, applying corrective action to solve problems, escalating significant conflicts to top management, and, in cases of persistent performance problems, imposing sanctions.

IX. Quality Improvement

Quality System nonconformances are prevented whenever possible. Nonconformances that are found should be documented and corrected in a timely manner. If corrective actions are required, they will be monitored by appropriate Middle Managers to ensure timely and effective actions and efforts are made to continually improve the Quality System.

The activities described in this document summarize the approach taken by the NJDEP to plan, organize, implement, monitor and assess its QA System for environmental programs. All staff working in the NJDEP environmental programs are encouraged to identify, plan, implement, and evaluate quality improvement activities in their areas. All staff, middle managers and senior managers should help to prevent quality problems and to provide suggestions for opportunities for improvement as well as quality problems as they are identified.

A. Corrective Actions

Nonconformance's should be reported by NJDEP personnel in writing to supervisory (1st level supervisors, middle managers and/or senior management) staff. Supervisory personnel should ensure that reports of nonconformances are forwarded to the appropriate project manager, Assistant QA Manager and QA Specialist. QA Specialists should notify their Programmatic Management of all changes, requests, matters related to the Quality Management Plan for their programs.

Items to be considered and documented when reporting a nonconformance include:

- Root cause;
- Program impact;
- Suggested corrective action to include suggestions to prevent recurrences;
- Means by which corrective actions are documented and verified;
- Timetables, and
- Individuals responsible for implementing adopted corrective actions.

Once a nonconformance is found and reported to the Project Manager, the Project Manager should document the corrective actions adopted. The Project Manager should forward this information to supervisory staff, Assistant QA Managers and QA Specialists. For significant nonconformances, Assistant QA Managers through the NJDEP QA Manager should notify Middle and Senior Management. Supervisory staff shall ensure that the adopted corrective actions are implemented as planned.

QA Specialists should monitor the implementation of corrective actions and should advise appropriate Project Managers, Middle Managers and QA Specialists when they are not implemented as planned. For significant corrective actions, QA Specialists through the NJDEP QA Manager should notify the appropriate Middle Manager and/or Senior Manager. This same process should be used when corrective actions are completed.

B. QMP Reporting and summary annual report

Every year, Assistant QA Managers and QA Specialists should review quality related deficiencies, nonconformances and program improvements and advise the NJDEP QA Manager and Middle Management of any significant trends to help the Department's quality system stay current. Additionally, every year the NJDEP QA Manager shall review quality related deficiencies and program improvements relating to the Quality Management Plan and advise Senior Management of any significant trends affecting the Quality System. Also, every year the NJDEP QA Manager should prepare a report summarizing the status of the Department's Quality System Program and submit the report to Department Senior Management and with their approval, to the USEPA. The information is captured on the "Quality Systems Responsibility" form, which is located under Appendix B of this plan.

Once the annual report is finalized a copy of the report with the completed QSRs will be submitted to the EPA Region 2. The annual reports include all organizational changes. Any personnel changes noted during the annual review will be retained on file with the OQA for reference and all changes will be incorporated into the next QMP revision. A copy of the personnel changes will also be provided to the EPA Region 2 RQAM and applicable NJDEP programs.

C. Work Interruptions

Middle and/or Senior Managers or their designees may interrupt work activities as necessary to safeguard program objectives, worker safety, public health and environmental protection.

Middle and/or Senior Managers or their designees may refuse to accept analytical data and analyses from certified laboratories to ensure compliance with program requirements and specifications. The Department's Office of Quality Assurance may withdraw the "Certified" status of any laboratory which no longer satisfies the requirements of the State of New Jersey's Environmental Laboratory Certification Program.

X. Support Functions

A. Training

For the QMP to be effectively implemented it must be understood by the Department staff responsible for its implementation. To help ensure this, Quality training is given to the Department's Middle Managers and QA Specialists in a course titled "The Quality Systems Approach for Managing Data at NJDEP." Continued training will be performed throughout the length of this QMP.

The Department views training as a necessary part of its commitment to "Invest in Our Workforce." Training needs are determined at least annually throughout the Department by staff and management. Management may recommend training needs based on

program needs and/or individual needs. Individual training needs are developed through the Performance Agreement Report (PAR). The PAR is a semi-annual review of staff goals and expectations.

The Department has a training fund and various procedures to provide for equal access to these training opportunities. The Department requires its staff to only perform tasks in which they have been trained, unless they are working under the supervision of a qualified staff member. For instance, Department training is available to all staff on the New Jersey Environmental Management System (NJEMS) and Geographic Information System (GIS). Training in these areas enables all staff to keep current and take full advantage of the benefits NJEMS and GIS have to offer. The Department encourages staff to expand their educational opportunities and provides tuition reimbursements when funding is available. The Department maintains training records of all staff and each individual staff person has access to their records on the Department employee information Website (MYDEP).

All Department staff that performs quality functions related to the generation of environmental data has either formal or practical quality assurance training. The Office of Quality Assurance provides and/or coordinates arrangements for that ongoing training. OQA technical staff has functions within the office as Laboratory Certification Officers and as Assistant QA Managers. Additionally, as a Laboratory Certification Officer involved in the National Environmental Laboratory Accreditation Program (NELAP), mandatory training is required. This includes both basic initial training and continual refresher training. These training records are office/program specific and copies of all these training records are kept within OQA's training filed records.

Assistant QA Managers hold meetings with QA Specialists throughout the year to share information and ideas. Part of these meetings includes training opportunities and also discussions of training needs. Departmental staff also attends seminars or workshops held by the USEPA, USGS, other government agencies and private vendors, to remain current.

The Department requires all Compliance and Enforcement staff to work with senior level experienced staff before performing inspections and has developed a "Basic Inspector Training Program" to increase competency of all inspectors. The Site Remediation and Waste Management Programs, and the Interstate Technology and Regulatory Council (ITRC) provide continued training on new remediation technologies. The Department also contracts with Rutgers University to bring courses or training to staff on numerous topics. Within each program 1st level and Middle Managers determine when staff requires initial or refresher training. The Department has a Training Advocate Officer to coordinate all training and maintain records, other information can be found on the Quality System Responsibility form, Item #7.

Additionally, the Department's Office of Quality Assurance may provide training courses in quality systems, analytical chemistry, quality assurance, quality control, microbiology, radiochemistry, statistics, and toxicity testing. These courses, plus others may be offered

throughout the year. The courses are presented either live or webinars by the OQA and other Departmental staff.

B. Documents and Data Records Control

The Department has a policy and procedure for access/inspection and storage of records based on State of New Jersey law. Records custodians are appointed by Senior Management and receive training from New Jersey's Division of Law. Training includes guidance relating to duties and requirements for records retention based on N.J.S.A. 13:1 B-4 and N.J.S.A. 47:1A. On July 7, 2002, the Department implemented the Open Public Records Act (OPRA) as signed into law on January 8, 2002. Training on this new law and its requirements was initially given in June 2002 and is ongoing.

Records available for review include, but are not limited to, field sampling, chain-of-custody, analytical results, permits, audit/inspection reports, data validation reports and training records. Enforcement investigations concerning ongoing matters and personnel files are confidential and may not be subject to public inspection. Each organizational program (division or bureau) is assigned record keeping responsibility based on its functional responsibilities and duties. The Department maintains a "Record Retention Schedule"; the objective is to maintain records that serve their purpose and to provide for proper disposition after they have served their purpose. Additionally, records designated as "Confidential Business Information" by entities regulated by the Department are not subject to public inspection.

OQA is responsible for developing and maintaining the Department's Quality Management Plan and all audit reports and corrective actions which are associated with the Department QMP.

C. Contracts, Grants, Cooperative and Interagency Agreements

Department grants, contracts, cooperative and interagency agreements that generate environmental data include requirements for establishing planning processes. Training courses are offered to contract awardees. The Department's grant, contract, agreement manager is responsible for obtaining Department approval from the NJDEP Quality Assurance Manager or his/her designee before any data generation begins. When a project is performed using total or partial USEPA funding, the program shall comply with USEPA Order CIO 2105.0 (formally known as EPA Order 5360.1) The USEPA Order 5360.1 provides requirement for the conduct of quality management practices, including quality control for environmental data collection and environmental technology programs. The order includes that a Quality Assurance Project Plan be developed and approved before any environmental measurements or data collection activities can be performed.

Bidders should submit a data package that demonstrates they can perform the activities of each task included in the bid. Department staff review submitted material to ensure compliance with State of New Jersey and NJDEP requirements, including technical

validity and data reporting structure. Additionally, all requests to modify a contract, grant or agreement are approved by the Department prior to them being implemented.

As part of the process, all analytical services sought should come from a business having New Jersey Environmental Laboratory Certification, if certification for the parameter is offered by the Department. An Assistant QA Manager or QA Specialist should verify certification status before a contract, grant or agreement is approved.

D. Competency Policy to Assure Environmental Data Submitted to Department is Useable

The NJDEP policy requires that all data generated or used within the Department and for USEPA funded projects includes documentation of competency. The Department's main activity for demonstrating competency is to require that analytical data, whether produced in a laboratory or in the field, be generated by a business having environmental laboratory certification granted by the NJDEP. The Department requires that where environmental laboratory certification is available, a business producing analytical data for the purpose of establishing compliance with any regulatory program shall have a status as a certified environmental laboratory/environmental measurement firm. Data supplied by a business not having certification status cannot be used to establish compliance with an NJDEP compliance program. Additionally, when analyzing compliance samples, a business shall perform only those tests for which it has certification.

The Department adheres to the USEPA policy known as the "Policy to Assure the Competency of Organizations Generating Environmental Measurement Data Under Agency-Funded Assistance Agreements" (Agency Policy Directive Number FEM-2012-02), approved on March 13, 2013. The Policy requires that organizations generating or using environmental data under certain EPA funded assistance agreements shall submit documentation of their competency prior to beginning any work involving the generation or use of environmental data. This includes the activities of environmental sampling, field measurements, and or laboratory analyses which have USEPA funding. The Project Officer is responsible for implementing the requirements under the Policy and ensuring that appropriate provisions and terms and conditions are meet. Documentation for environmental sampling and field measurements will be addressed in individual project/program QAPPs which are reviewed and approved in accordance with Section VI.2 Quality Assurance Project Plans, above.

E. Computer Hardware and Software

The Department Chief Director of Information Technology assigns a single NJDEP Project Manager (PM) to manage the process of identifying Management Information Technology (IT) needs and to develop a cost-effective Management Information System to identify needs. The PM is assisted by a Core Group of technical representatives consisting of representatives from each Departmental program and media. The PM is responsible for providing standard operating procedures and the Core Group is

responsible for identifying and prioritizing the IT needs of Departmental programs. The Group also evaluates proposed changes that have potential cross-program impacts.

After the Core Group identifies and prioritizes Departmental needs it then coordinates with selected vendors to organize the delivery of appropriate systems. The process includes a workplan that specifies requirements, responsibilities and schedules. To ensure quality, the process is controlled by interim deliverable reviews and monthly written reports outlining necessary changes. The Department also conducts Regression Testing during the acceptance-testing phase of software development. Identified issues are logged, evaluated and corrective actions implemented as needed.

All hardware and software solutions are evaluated prior to purchase using industry best practices, experience from other agencies and demonstrated performance. The Department follows all mandatory state procurement procedures to ensure value.

The Department uses the Core Group to help ensure that the effectiveness and quality of information produced from or collected by the Department Information System (New Jersey Environmental Management System – NJEMS) is uniform. This maximizes the use of information management in the Department. It also improves cross program data access, improves data extraction activities and improves the public access of computerized data.

XI. Quality System Process (Responsibilities)

The type of activities within the Department varies significantly from program to program, office to office and bureau to bureau. Because of the diverse nature of Department activities, it is not possible to have one quality system with identical nomenclature that can be used as a model that must be followed by all. What fits with a permitting program may not fit for a site cleanup program, an enforcement program may not fit for a research program, an ambient monitoring program may not fit for a dredging program. But it is the Department's intention to have quality system functions that must be performed to have a continuously improving organization that meets its missions and goals. The Department activities that are pre-planned and have a document that meets the criteria as expected in a Quality Assurance Project Plan, that have a Standard Operating Procedure to describe routine activities and has a system that identifies where areas of improvements are identified as they are needed, and a root cause analysis is considered in order to effectively implement change.

The Department has identified ten basic quality system responsibilities that are to be part of most of its activities and are outlined in the "Quality System Responsibilities" form (*located in Appendix B*). These responsibilities include participation in the Departmental Quality Management Plan, the steps to be used for developing, using and monitoring Quality Assurance Project Plans (or document of a similar nature), the steps to be used for having Standard Operating Procedures, and use of internal quality system assessment functions. To address these responsibilities various types of activities that can be used to have an effective quality system are given throughout the previous sections of this Departmental Quality Management Plan.

XII. DIRECTORY OF THE DEPARTMENT'S QUALITY ASSURANCE PERSONNEL

QUALITY ASSURANCE MANAGER

Michele Potter (1)(2), Manager
Tel (609) 292-3950
Fax (609) 777-1774

ASSISTANT QUALITY ASSURANCE MANAGERS

QA Personnel:	Divisions/Programs Served:
Melissa Hornsby	Water Programs, Pesticides, Responsible Party Site Remediation, Radiation
(To Be Determined)	Air, Office of Science, Site Remediation & Waste Management
(To Be Determined)	Hazardous Site Science, Water Supply, Hazardous Waste
Jenna Majchrzak (1)	Office of Information Resource Management, Site Remediation, Solid Waste

Note:
(1) EPA Certified as Drinking Water Organic and Inorganic Chemistry Certification Officer
(2) EPA Certified as Drinking Water Microbiology Certification Officer

LABORATORY CERTIFICATION OFFICERS

LC Personnel:	Services:
Paula Blaze (1)(2) *	Laboratory Certification Officer, Chemistry, and Micro
Michael Carpinona (2)(4)(5)	Laboratory Certification Officer, Inorganic Chemistry, Micro, Cryptosporidium, and Asbestos
Melissa Hornsby	Quality Assurance Officer
Martin Hackman (1)	Laboratory Certification Officer, Chemistry
Ryan Compton, PhD (1),	Laboratory Certification Officer, Chemistry
Jenna Majchrzak (1)	Laboratory Certification Officer, Chemistry
Michele Potter (1)(2)	Laboratory Certification Officer, Whole Effluent Toxicity, Chemistry, and Micro
Robert Royce (1)(2)	Laboratory Certification Officer, Chemistry, and Micro
Debra Waller (1)(4)(2) *	Laboratory Certification Officer, Chemistry, Cryptosporidium, and Micro, Asbestos
Greg Raspanti, PhD (1)(3)	Laboratory Certification Officer Chemistry
Caitie Van Sciver (1)	Laboratory Certification Officer, Chemistry
Ryan Larum (2)	Laboratory Certification Officer Micro
Rachel Ellis (1) *	Laboratory Certification Officer, PT's, and Chemistry

Note:

(1) EPA Certified as Drinking Water Organic and Inorganic Chemistry Certification Officer
(2) EPA Certified as Drinking Water Microbiology Certification Officer
(3) Radiochemistry Certification Officer
*Team Leader
(4) Cryptosporidium
(5) EPA Certified as Drinking Water Inorganic Chemistry Certification Officer

QUALITY ASSURANCE SPECIALISTS

Program and QA Specialist		Telephone
Compliance and Enforcement		
Barbara Eisner	Pesticide Evaluation & Monitoring	(609) 963-3313
John Dotterweich	Water & Land Use Compliance & Enforcement Bureau of Compliance Support & Pollution Prevention Hazardous Waste Compliance and Enforcement	(609) 439-9726
Melissa Hornsby	Office of Quality Assurance	(609) 777-1747
Michael Klein	Emission Measurement Section	(609) 963-6900
Climate & Flood Resilience		
Elizabeth Semple	Office of Coastal and Land Use Planning	(609) 633-1349
Air Quality, Energy & Sustainability		
Debbie Wenke	Radiation Protection/Agreement State Program	(609) 984-5509
Rob Schell	Air Monitoring Bureau of Motor Vehicle Inspection	(609) 292-3196
Luis Lim	Air Monitoring	(609) 633-1151
Paul Schwartz	Bureau of Nuclear Engineering	(609) 984-7539
Ramona Chambus	Bureau of X-ray Compliance	(609) 984-5359
Richard Peros	Radon Certification	(609) 984-5522
Anita Kopera	Bureau of Environmental Radiation	(609) 984-5543
Danny Wong	Bureau of Stationery Services	(609) 984-2608
Natural and Historic Resources		
Kathleen Walz	Office of Natural Lands Management	(908) 879-7262
Water Resource Management		
Gabe Mahon	Bureau of NonPoint Pollution Control	(609) 292-5493

Victor Poretti	Bureau of Freshwater and Biological Monitoring	(609) 633-1092
Ray Bousenberry	NJ Geological and Water Survey	(609) 984-6587
Kelley Meccia	Bureau of Safe Drinking Water & Bureau of Water System Engineering	(609) 633-0716
Robert Schuster	Bureau of Marine Water Monitoring	(609) 748-2000
Stephen Seeberger	Bureau of Point Source Permitting	(609) 292-4860
Valentin Kouame	Bureau of Pretreatment & Residuals	(609) 292-0579
Biswarup Guha	Bureau of Environmental Analysis Restoration & Standards	(609) 292-1592
Yvens Dessalines	Bureau of Water Allocation & Well Permitting	(609) 777-0668
Site Remediation & Waste Management Program		
Michael Gaudio	Bureau of Remedial Action Permitting	(609) 984-5868
Frank Sorce	Bureau of Environmental Measurements and Site Assessment	(609) 376-9434
Bridget Sweeney	Bureau of Env. Evaluation & Risk Assessment	(609) 777-1392
Greg Toffoli	Office of Data Quality	(609) 633-2356
Maurice Migliarino	Bureau of Case Management	(609) 633-1455
Thomas K. O'Neill	Bureau of Site Management	(609) 292-2150
Kristin Pointin-Hahn	Bureau of Case Assignment and Initial Notice	(609) 292-1252
Yacoub Yacoub	Bureau of Field Operations	(973) 631-6403
William Lindner	Office of Brownfield Reuse	(609) 633-1223
Joel Fradel	Bureau of Ground Water Pollution Abatement	(609) 777-0125
Mark Gruzlovic	Unregulated Heating Oil Tank Program	(609) 777-0275
Matthew Turner	Bureau of Inspection and Review	(609) 984-1742
Wayne Howitz	Remediation Oversight Element-Hudson County	(609) 984-1351

Susan Dietrick	Office of Dredging & Sediment Technology	(609) 292-2023
Victoria Goldman	Bureau of Solid Waste Permitting	(609) 963-2617
Evan Aleksejczyk	Bureau of Recycling & Hazardous Waste	(609) 633-0730
Fredrik Khayati	Bureau of Planning & Licensing	(609) 984-2064
Information Technology		
Joseph Feast, Jr	Division of Information Technology	(609) 292-4610
Office of Science		
R. Lee Lippincott	Division of Science & Research	(609) 984-4699

XIII. Quality System Responsibilities (QSR) Form description

Each organizational unit included in the Departmental Quality Management Plan will annually complete a **Q**uality **S**ystem **R**esponsibilities form (See Appendix B). The form identifies the actual staff and/or management person responsible for each of the listed twenty-one quality system activities. This assignment of responsibilities provides each organizational unit the flexibility to establish the quality system most appropriate for its assigned program. The form provides a description of each program, office or bureau and includes the signature of each person responsible for the necessary quality system activities. Approval is by the program/office/bureau's Quality Assurance Specialist, Responsible Middle Manager (Director, Assistant Director, Manager or Bureau Chief), Assistant NJDEP Quality Assurance Manager and the NJDEP Quality Assurance Manager.

Additionally, the forms are separated into two sections. One for programs/offices/bureaus for which the USEPA has no jurisdiction and another for those which the USEPA has some/limited jurisdiction. The USEPA has delegated authority to operate many federal environmental programs to the State of New Jersey. This delegation process includes permitting, inspections, monitoring, enforcement, and standards setting in the Hazardous Waste Act (Resource Conservation and Recovery Act), Clean Water Act. (National Pollutant Discharge Elimination System), Clean Air Act and Safe Drinking Water Act. The operation of partial or full control over one or more of these federal programs is known as delegation. It is these programs located in Appendix A which the USEPA has delegated authority to New Jersey and is entitled to review how the programs are operated to ensure that NJDEP is at least as stringent as the federal standard and has all the resources in place to run the program. The programs located at the end of Appendix A are not delegated programs from the USEPA and therefore may not be included in a review as a program in its entirety. However, these programs may receive federal funding/grants for projects, which the USEPA can review to ensure the funds were spent appropriately and the proper documentation and quality assurance was developed and maintained. Therefore, those programs will also fill out a QSR form.

The NJDEP Quality Assurance program will refer to these forms for information regarding the program's activities and therefore, programs are encouraged to give as much detail as possible when explaining their specific activities. Programs are encouraged to contact the NJDEP Office of Quality Assurance with questions or if guidance is needed when completing the QSRs. It is important to note that, all QSR forms will be reviewed by the Assistant NJDEP Quality Assurance Manager, the NJDEP Quality Assurance Manager; and upon request, the USEPA Region II Quality Assurance & Scientific Integrity Manager for completion.

APPENDIX A

Quality System Responsibility Participants
By
Program/Office/Bureau

NJDEP Programs – State and USEPA Jurisdiction

Bureau of Pesticide Compliance & Enforcement-C&E
Water & Land Use Compliance & Enforcement-C&E
Bureau of Compliance Support & Pollution Prevention-C&E
Bureau of Hazardous Waste Compliance and Enforcement-C&E
Office of Quality Assurance & Environmental Monitoring-C&E
Office of Coastal and Land Use Planning-CFR
Air Monitoring-AQES
Bureau of Environmental Radiation- AQES
Bureau of Mobile Sources- AQES
Bureau of Stationery Services- AQES
Emission Measurement Section- C &E
Bureau of Hazardous Waste Permitting-SRWM
Historic Preservation Office-NHR
Bureau of NonPoint Pollution Control-WRM
Bureau of Freshwater and Biological Monitoring-WRM
NJ Geological and Water Survey Element-WRM
Bureau of Safe Drinking Water-WRM
Bureau of Water System Engineering-WRM
Bureau of Marine Water Monitoring-WRM
Bureau of Point Source Permitting-WRM
Bureau of Pretreatment & Residuals-WRM
Bureau of Environmental Analysis & Restoration & Standards-WRM
Bureau of Water Allocation & Solid Waste Permitting-WRM
Bureau of Remedial Action Permitting-SRWM
Bureau of Environmental Measurements & Site Assessment-SRWM
Bureau of Env. Evaluation & Risk Assessment-SRWM
Office of Data Quality-SRWM
Bureau of Case Management-SRWM
Bureau of Site Management-SRWM
Bureau of Solid Waste Planning & Licensing-SRWM
Bureau of Field Operations-SRWM
Office of Brownfield Reuse-SRWM
Bureau of Ground Water Pollution Abatement-SRWM
Unregulated Heating Oil Tank Program-SRWM
Bureau of Inspection and Review-SRWM
Remediation Oversight Element-Hudson County-SRWM
Office of Dredging & Sediment Technology-SRWM
Bureau of Solid Waste Permitting-SRWM
Radiation Protection/Agreement State Program-AQES
Air Monitoring -AQES
Division of Information Technology-IT

Division of Science & Research-S&P

NJDEP Programs – State Jurisdiction Only

Bureau of Case Assignment and Initial Notice - SRWM
Bureau of Nuclear Engineering - AQES
Bureau of X-Ray Compliance - AQES
Bureau of Water Allocation and Well Permitting-WRM
Information Technology -DC

Program Areas Reference Key

AQES-Air Quality, Energy & Sustainability
C&E - Compliance and Enforcement
DC – Deputy Commissioner
CFR-Climate & Flood Resilience
NH – Natural and Historic Resources
SRWM – Site Remediation & Waste Management Program
WRM – Water Resource Management
IT-Information Technology
S&P-Office of Science

APPENDIX B

New Jersey Department of Environmental Protection Quality System Responsibilities Questionnaire

Program: Click or tap here to enter text.	**Office Name:** Click or tap here to enter text.
Person Preparing: Click or tap here to enter text.	**Date:** Select from dropdown.

Program Description: Click or tap here to enter text. Please limit response to no longer than 6 lines.

Activity	Yes	No	N/A	Other	Description of Quality System Implementation When Required (If "Yes" or "Other" selected)
1. Are quality assurance project plans (QAPPs) developed? If yes, how many were developed in Fiscal Year (FY) _____ and what were they?	☐	☐	☐	☐	Click or tap here to enter text.
2. Are QAPPs approved? If yes, how many were approved in FY _____ and for what projects?	☐	☐	☐	☐	Click or tap here to enter text.
3. Are QAPP activities monitored with nonconformance identified and corrective actions implemented?	☐	☐	☐	☐	Click or tap here to enter text.
4. Are standard operating procedures (SOPs) prepared? If yes, is there a review process performed prior to	☒	☐	☐	☐	Click or tap here to enter text.

Activity	Yes	No	N/A	Other	Description of Quality System Implementation When Required (If "Yes" or "Other" selected)
implementation?					
5. Are SOPs reviewed to assure compliance with quality assurance and quality control policies to assure they reflect actual activities? If yes, are corrective actions implemented if review determines any deviation from procedure?	☐	☐	☐	☐	Click or tap here to enter text.
6. Are data review/validation and data usability assessments conducted? If yes, list which projects underwent such review in FY_____.	☐	☐	☐	☐	Click or tap here to enter text.
7. Is quality assurance guidance and training provided to the NJDEP and outside organizations? If yes, explain any training conducted in FY _____.	☐	☐	☐	☐	Click or tap here to enter text.
8. Are quality assurance audits conducted? If yes, are deficiencies noted and corrective actions developed and implemented?	☐	☐	☐	☐	Click or tap here to enter text.
9. Are quality assurance requirements included in contracts and grants?	☐	☐	☐	☐	Click or tap here to enter text.
10. Is the EPA dealt with directly for routine monitoring and reviews?	☐	☐	☐	☐	Click or tap here to enter text.

Activity	Yes	No	N/A	Other	Description of Quality System Implementation When Required (If "Yes" or "Other" selected)
If so, who at the EPA is information reported to?					