Special Investigation QAPP Template

Addendum 10

(Revision 3)

to the

Quality Assurance Project Plan for the Texas Commission on Environmental Quality Public Water System Supervision Program Relating to the Safe Drinking Water Act

Effective:

May 10, 2026

Introduction and Instructions

The TCEQ Water Supply Division (WSD) collects special request samples and conducts special investigations when needed, often as part of Texas Optimization Program (TOP) activities. These events are "out of the ordinary" and sometimes involve public health and environmental issues of immediate concern. When these events occur, this quality assurance project plan (QAPP) template is used to document the quality assurance requirements associated with environmental data collection activities per the TCEQ Quality Management Plan (QMP).

This QAPP template is designed as a fill-in-the-blank document that can be prepared and signed quickly so that field activities are not delayed.

Note: Directions and guidance for completing the template are included in this document in *italicized text* which will be removed as each section is prepared.

This page and the prior (PWSSP Addendum 10 Template Cover Page) must be removed before finalizing.

Quality Assurance Project Plan for *Name of Special Investigation*

Texas Commission on Environmental Quality
Public Water System Supervision Program

Revision: *##*

Effective: *Date*

This QAPP is effective for a period of one year from effective date.

Group A: Project Management and Information/Data Quality Objectives Elements

A2 Approval Page

This QAPP is authorized for approval under the Public Water System Supervision Program (PWSSP) Quality Assurance Project Plan (QAPP) Addendum 10, Revision 3, Special Investigation QAPP Template. See Section A4 for information on the PWSSP QAPP, including definition of Programmatic QAPP.

Provide the project title, names and key personnel with approval authority. Add management structure (e.g., OW/WSD/EPRS/TOPRT) or other applicable organization description to each signature line.

Approval Signatures

See Section A2 of the Programmatic QAPP for Program Management approval signatures.

Name

Project Manager, OW/WSD/*Section/Team (as applicable)*

Signature: _____ Date: _____

Name

Section Manager, OW/WSD/*Section*

Signature: _____ Date: _____

Name

Team Leader, OW/WSD/Section/Team (if applicable)

Signature: _____ Date: _____

Name

Laboratory *Manager or Representative, Name of Laboratory*

Signature: _____ Date: _____

Name

PWSS Program Lead Quality Assurance Specialist, OW/WSD

Signature: _____ Date: _____

A3 Table of Contents, Figures, and Acronym List

Update table of contents fields before finalizing document.

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A3.2 Table of Figures

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A3.3 List of Acronyms

Update list of acronyms used before finalizing document.

CFR	Code of Federal Regulations

PWS	Public Water System
PWSSP	Public Water System Supervision Program

A4 Project Purpose, Problem Definition, and Background

PWSSP QAPP Revision 15 is organized as a main Programmatic QAPP document that utilizes addenda to describe the individual operations of the PWSSP. This organization is described in Section A4.1 of the Programmatic QAPP.

Note: References to the Programmatic QAPP, for the purposes of the addenda, is a reference to the main document.

This QAPP describes the data quality objectives, field activities, sampling and analysis methods to be used, and the activities for managing the collected data and supporting information. The individuals involved with the investigation will comply with procedures described in this document.

State the specific environmental problem to be investigated. Include brief background information to provide perspective or justification for the investigation. Describe the water quality problem and the historical or regulatory background, as applicable.

A5 Project Task Description

The TCEQ Project Manager maintains the schedule for QAPP activities specified in Table A6. The Project Manager is responsible for communicating the schedule to the project team.

Adapt Table A6 to summarize key activities detailed in this QAPP and the schedule for implementation.

Table 1, A5 Project Task Description

Key Activity	**Start Date**	**End Date**
QAPP development and approval		
Field measurements and sample collection		
Laboratory analysis		
Data review		
Final report development		
Final report approval		
Include additional relevant tasks, as applicable		

A6 Information/Data Quality Objectives and Performance/Acceptance Criteria

A6.1 Objectives and Project Decisions

The objective for the activities described in this QAPP is consistent with the overall objective of the SDWA to protect drinking water and public health.

State the monitoring goal(s).

A6.2 Data Quality Activities and Indicators

The activities and requirements described in this document ensure environmental data and information generated under this QAPP are of a known and defensible quality. This is accomplished through the following activities.

- project management
- training and certifications (as applicable)
- adherence to timelines
- data and information management processes
- corrective action and response procedures
- Include any additional activities or objectives, as applicable.

The data quality objectives (DQOs) listed and described in Section A6 of the Programmatic QAPP document relate to the quality required to generate known and defensible data under this QAPP.

Adapt the language in the following sections to be specific for the project.

Precision

Precision is the degree to which a set of observations or measurements of the same property, obtained under similar conditions, conform to themselves. It is a measure of agreement among replicate measurements and is an indication of random error. Precision is controlled by the use of duplicate samples. Requirements for field duplicates are defined in the TCEQ Drinking Water Sampling Guide. Analytical requirements for precision in the test methods are followed. Results are compared against criteria defined in the methods and used during the evaluation of analytical performance.

Bias

Bias refers to the systematic distortion of a measurement which makes it different from the true value. A measurement is considered unbiased when the value reported does not differ from the true value. Bias is controlled by the use of proficiency test (PT) samples,

calibration standards, quality control samples, blanks (field and laboratory), laboratory fortified sample matrices, etc. Specific project field QC requirements for field blanks are defined in the TCEQ Drinking Water Sampling Guide. Otherwise, requirements in the test methods are followed. Results are compared against criteria defined in the methods and used during the evaluation of analytical performance.

Completeness

The completeness of the data is a relationship of how much of the data are available for use compared to the total potential data. All of the data must be available for review in this investigation. However, sample or data loss may occur due to accidents, insufficient sample volume, broken or lost samples, laboratory issues, etc. In such cases, samples will be recollected.

Representativeness

Representativeness refers to the degree to which the data accurately represents the frequency distribution of a specific variable in the population. Site selection, the appropriate sampling regime, adherence to the sampling schedule defined in this QAPP, and use of approved analytical methods as defined in the TCEQ Drinking Water Sampling Guide will ensure data are representative of the population being sampled.

Comparability

Comparability refers to the degree in which methods or data sets are considered to be similar. Confidence in the comparability of data sets for this project is based on sampler training and use of approved sampling and analysis methods and quality assurance protocols in accordance with requirements and described in this QAPP. Comparability is also guaranteed by standard reporting protocols.

Sensitivity

Sensitivity refers to the ability of an instrument or method to discriminate between different levels of an analyte by producing a different response. Sensitivity requirements specific to this project include the method detection limit (MDL) and method reporting limit (MRL) for the analytical data. Requirements in the test methods for MDLs and MRLs are followed. Results are compared against criteria defined in the methods and used during the evaluation of analytical performance.

Data Integrity

Data collected and reported for this project are managed in such a way to ensure the confidentiality, integrity, and availability of data and information. Data management policies and procedures ensure data and information are recoverable and only used for their intended purposes.

Measurement performance for quality control requirements are addressed in Section B4 of this QAPP.

A7 Distribution List

The Project Manager ensures this QAPP, and any subsequent revisions, are distributed to the individuals listed in Table A3.

Table 2, A7 Distribution List

Key Personnel	Role	Contact Information
Name	Project Manager	*Email Address*
Name	*Team Leader*	*Email Address*
Name	Section Manager	*Email Address*
Name	Laboratory Manager	*Email Address*
Name	PWSS Program Lead Quality Assurance Specialist	*Email Address*
Name	*Include additional roles, as applicable*	*Email Address*

The TCEQ Project Manager and PWSS Program Lead Quality Assurance Specialist maintain a copy of this QAPP in accordance with TCEQ records retention policies (see Programmatic QAPP[1]).

A8 Project Organization

Section A8 of the Programmatic QAPP document describes roles and responsibilities of TCEQ individuals in WSD management positions, including the PWSS Program Lead Quality Assurance Specialist, PWSSP Program Manager, Deputy Directors, Section Managers, etc. The roles and responsibilities of key individuals performing work on this special investigation/data collection activity are addressed below.

Adapt roles and responsibilities for key project individuals, as needed. Include additional roles and responsibilities, if applicable.

A8.1 Project Manager

Performs project management work activities related to this QAPP per the TCEQ QMP, including but not limited to; developing and maintaining this QAPP and distributing it to all project participants; verifying the QAPP is implemented as written to ensure timelines and project QA and QC requirements are met; elevating problems and issues requiring resolution to supervisor; coordinating with laboratory, enforcing corrective action measures as needed; and developing and reviewing data, reports, and other deliverables.

[1] www.tceq.texas.gov/drinkingwater/pwss.html#pwssp-qapp-links

Include additional roles and responsibilities, if applicable.

A8.2 Section Manager

Manages activities related to this QAPP. Maintains lines of communication with WSD management and elevates problems and issues when identified. Per the TCEQ QMP, management is responsible for planning, monitoring, executing, evaluating, and improving quality-related work performed by staff under their supervision.

Include additional roles and responsibilities, if applicable.

A8.3 Team Leader (as applicable)

Supervises activities related to this QAPP. Maintains lines of communication with WSD management and elevates problems and issues when identified. Per the TCEQ QMP, management is responsible for planning, monitoring, executing, evaluating, and improving quality-related work performed by staff under their supervision.

Include additional roles and responsibilities, if applicable.

A8.4 Laboratory Manager or Representative

Ensures laboratory or facility maintains TNI accreditation and/or laboratory approval to analyze samples; adheres to applicable requirements described in this QAPP; coordinates with project manager to receive and analyze special investigation samples, and reports results per this QAPP; and immediately reports deviations from this QAPP to TCEQ project manager, and initiates corrective action(s) as required

Include additional roles and responsibilities for laboratory representative(s), if applicable.

A9 Project Quality Assurance Manager Independence

The Project Quality Assurance Manager (QAM) is the PWSSP Lead QAS. The project QAM independence is described within the Programmatic QAPP.

A10 Project Organizational Chart and Communications

Described within the Programmatic QAPP.

A11 Personnel Training/Certification

TCEQ staff performing work on this project are qualified/trained to perform their assigned work per the TCEQ QMP and Section A11 of the Programmatic QAPP document.

Include all applicable roles that require special training or certification before performing work under this QAPP (i.e., sampler or contractor training requirements).

Laboratory/Facility Approval and Accreditation

Laboratories and/or facilities who perform analyses under this QAPP are approved or accredited by the TCEQ depending on rule-specific requirements. Accreditation must be through TCEQ, and all analytes collected under this QAPP are accredited under the drinking water matrix. Section A8 of the QAPP main document describes the TCEQ Programs for laboratory approval and laboratory accreditation.

Include additional requirements or certifications, as needed.

A12 Documents and Records

A12.1 QA Project Plan Distribution

The distribution of the QAPP is specified in Section A7 of this QAPP.

A12.2 Documentation and Records

Identify project records that will be generated and how/where the records will be stored. This includes information generated in the field (e.g., field forms, chain-of-custody forms) as well as laboratory records. The table below includes example records, adapt accordingly.

Table 3, A12 Documentation and Records

Documentation/Record Name	Description	Location
Completed COC	*Form completed and signed by sampler and laboratory to ensure sample integrity as well as legal and defensible data*	*TCEQ network drives, project files.*
Sample collection records/field notes	*Notes taken by individual samplers of each sample collected to document field activities. Required for all field visits. Documents calibrations and records of all samples collected, including date and time; unusual conditions, etc. Handwritten notes must be legible; scratch-outs must be initialed and dated.*	*TCEQ network drives, project files.*
Laboratory records including but not limited to bench sheets; calibration/ maintenance records'.	*Records documenting the performance of laboratory activities and requirements including this QAPP.*	*TCEQ network drives, project files.*
Laboratory test reports	*Analytical results reported to the TCEQ in electronic and hard copy formats according to Appendix J of the DWSG so*	*TCEQ network drives, project files.*

	the TCEQ can use the data for compliance determinations.	
Special Investigation QAPP	*Official copy of final, signed QAPP.*	*TCEQ network drives, QA files.*

A12.3 Project Reports

Describe interim and final project reports, who they will be provided to, format (i.e. report of summarized data, excel or access report, etc), and required content.

Group B: Implementing Environmental Information Operations

B1 Identification of Project Environmental Information Operations

Detail the overall environmental information operations that will be conducted for this project, how it will satisfy the project purpose, data quality objectives, and performance criteria described in Sections A4 and A6.

B2 Methods for Environmental Information Acquisition

The field measurements and laboratory analyses performed under this QAPP are conducted in the field or in appropriate laboratories (i.e., TCEQ-approved or accredited) as described in Section A11. Laboratories follow internal SOPs to analyze samples in accordance with the analytical methods and requirements listed in the table.

Complete table B2, as applicable.

Table 4, B2 Methods for Environmental Information

Parameter	**Analytical Method**	**Units for Reporting**	**Laboratory Data Reporting Turn-Around time (optional)**

Note: Laboratory data turn-around-time may be an important element to specifically define given possible health implication of the special investigation.

Acquired (Non-direct measurement) Data

Identify any data needed for this project that will be obtained from non-direct measurement sources such as computer databases, literature files, etc., and specify any limitations on the use of the data.

B3 Integrity of Environmental Information

Following sample collection, samplers handle samples in accordance with sampling procedures (see Table B2). The sample handling and custody requirements addressed in this document must include, but are not limited to, the following items:

- COC documentation
- sample labels
- sample storage
- sample transport

Adapt sample handling and custody descriptions accordingly.

Sample Delivery and Custody Transfer

Following sample collection, samplers ship or deliver samples to the laboratory where custody is relinquished to a sample custodian or designee. The custodian carefully inspects the sample(s) and sample documentation at the time of receipt for any issues which may necessitate sample rejection. After the sample custodian inspects and approves the sample documentation, sample delivery personnel and the laboratory custodian sign and date the COC with the date and time it was delivered.

Laboratories then follow internal sample acceptance/receipt procedures as described within internal laboratory SOPs.

Adapt sample delivery and custody transfer descriptions accordingly.

B4 Quality Control

Samplers and laboratories implement QC practices to ensure the data/information generated and reported under this QAPP conforms to the DQOs/DQIs specified in Section A6. Laboratories follow internal SOPs to control and document measurement performance so that DQOs/DQIs are achieved.

Adapt quality control descriptions accordingly.

B5 Instrument/Equipment Calibration, Testing, Inspection and Maintenance

TCEQ personnel follow maintenance procedures described in *Name of SOP* to ensure field instruments/equipment are appropriate for use.

Laboratories follow internal SOPs to ensure instrument/equipment maintenance requirements are implemented.

Adapt instrument maintenance descriptions accordingly.

B6 Inspection/Acceptance of Supplies and Services

TCEQ personnel inspect and accept supplies and consumables used to generate and report data under this QAPP when received to ensure they are appropriate for use.

Laboratories follow internal SOPs to ensure requirements for supplies and consumables are implemented.

Adapt inspection of supplies descriptions accordingly.

B7 Environmental Information Management

List and describe the steps involved in managing the data, including how the analytical results (and any additional information) are transferred from the sampler and laboratory (i.e., electronic or hardcopy format), merged with field data, reviewed, evaluated, and stored.

Group C: Assessment, Response Actions and Oversight

C1 Assessments and Response Actions

Assessments and oversight associated with water quality parameter compliance monitoring is discussed in Section C1 of the Programmatic QAPP. Types of TCEQ audits and oversight applicable to this Addendum include the following activities.

- Project oversight
- Peer review and coordination
- Laboratory accreditation audits

Corrective Action (CA)

Descriptions of PWSS Program assessments and corrective action procedures are

provided in Section C of the Programmatic QAPP.

C2 Oversight and Report to Management

Descriptions of how PWSSP management and the EPA are kept informed of project oversight and assessment are provided in Section C of the Programmatic QAPP.

Describe type, frequency, and contents of status reports that will be provided to management.

Group D: Environmental Information Review and Usability Determination

D1 Environmental Information Review

This section defines the review processes to ensure data and information are of known and defensible quality consistent with program objectives. For the purpose of this QAPP, the review of data/information generated and reported under this QAPP involves verification and validation as defined below.

Verification: Evaluating the completeness, correctness, and conformance/compliance of specific data/information against method and procedural requirements described/referenced in this QAPP.

Validation: A sample and analyte-specific process that extends the evaluation of data/information beyond method and procedural compliance (i.e., data verification) to determine the quality of specific data sets.

Adapt review, verification, and validation descriptions accordingly. Describe the measures you will take to review the data.

Sampler's review and verify the field data they collect in accordance with the field sampling procedure specified in Table B2.

The laboratory reviews and verifies the data they report before submittal in accordance with internal SOPs.

D2 Useability Determination

Identify the data users. Describe your approach to converting the raw measurements and data into meaningful results. In other words, describe how results will be reconciled with user requirements.