

**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ)
SURFACE WATER QUALITY MONITORING (SWQM) PROGRAM,
WATER QUALITY STANDARDS (WQS) PROGRAM,
OR
WATER QUALITY ASSESSMENT (WQA) PROGRAM
QUALITY ASSURANCE PLAN (QAP)**

{ *Project Title* }

This quality assurance plan for a TCEQ SWQM, WQS, or WQA Program monitoring project is produced as an addendum to the TCEQ SWQM, WQS, and WQA Programs Quality Assurance Project Plan. QAPs for each program will be kept on file by that program in the TCEQ central office QA files.

PROJECT IS CONDUCTED UNDER QAPP REVISION {##}

TCEQ PROJECT MANAGER NAME/CONTACT INFORMATION:

{Insert contact information here. Include name, TCEQ Program, Region address, phone, fax, and email}

John Doe
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Texas Commission on Environmental Quality
Region 99, Central Office
12100 Park 35 Circle, Bldg. B, MC-234
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PROJECT TITLE

{Title of Project from cover page}

A. GENERAL DESCRIPTION OF SPECIAL STUDY:

Background:

{Clearly define the problem and the environmental questions to be answered by the project/study}

Project Task Description:

{Summarize the work to be performed and the schedule for implementation. Note here if data will not be entered into SWQMIS and the reason why.}

Project Objective:

{State the Project specific objectives and the intended use of the data.}

B. MEASUREMENT AND DATA ACQUISITION

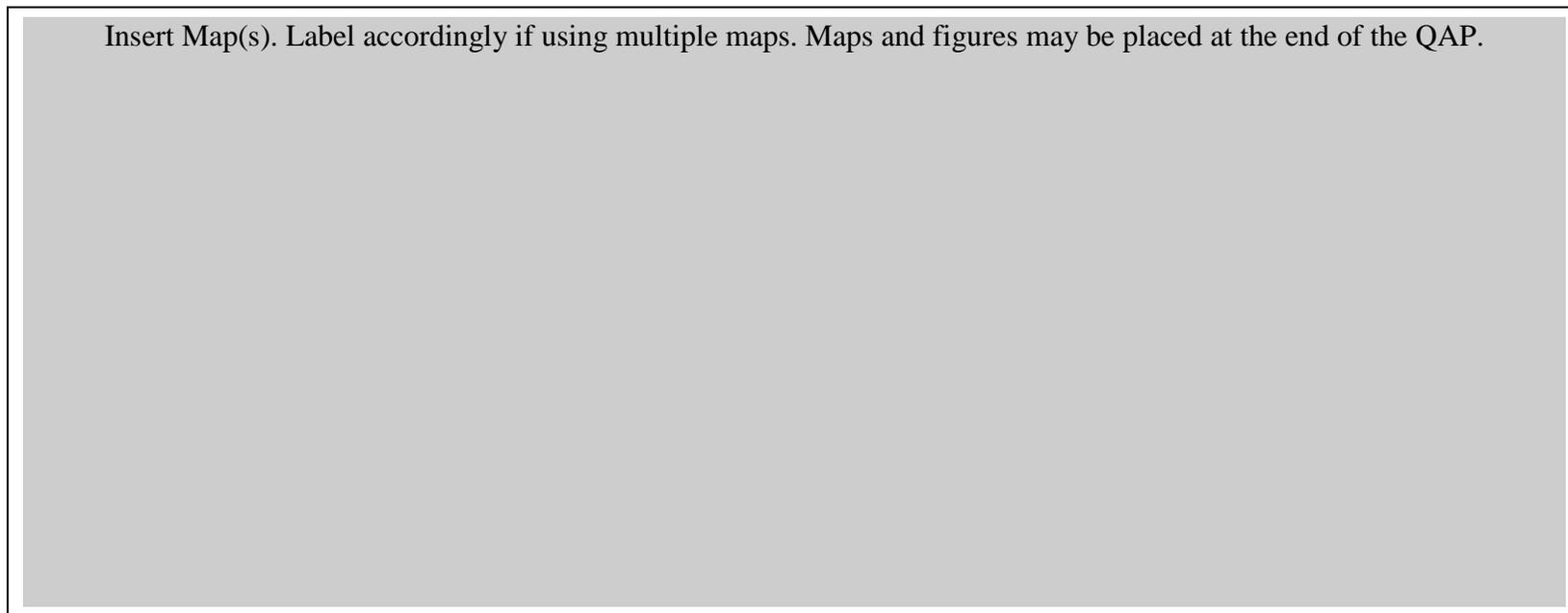
B1. EXPERIMENTAL DESIGN

{Describe the sampling and analytical design for the special study including temporal and geographic limits to the study. Fill out Table B1.1 and provide map(s) of sampling locations. The first 4 columns of Table B1.1 are required; you may remove unnecessary columns.}

Table B1.1 Sampling Sites and Monitoring Frequencies

Segment	Region	Site Description	Station ID	24 HR	Aquatic Habitat	Benthics	Nekton	Metals Water	Organics Water	Metals Sediment	Organics Sediment	Conventional	Amb Tox Wat	Amb Tox Sed	Indicator Bacteria	Inst Flow	Fish Tissue	Field

Figure B1.1 Sampling Site Map



B2. SAMPLING METHODS

The project will be conducted in accordance with the following quality assurance procedures outlined in the most current *TCEQ SWQM, WQS and WQA Programs QAPP*. Field sampling will be conducted according to procedures documented in the *TCEQ Surface Water Quality Monitoring Procedures Volume 1: Physical and Chemical Monitoring Methods for Water, Sediment, and Tissue, October 2008.(RG-415)* and *Volume 2: Methods for Collecting and Analyzing Biological Assemblage and Habitat Data, June 2007 (RG-416)*.

{Describe any deviations from the above referenced documents and manuals in detail for each bullet below (Ex: sediment sampling with a corer device).}

- *Data representativeness*
- *Equipment*
- *Equipment calibration*
- *Sampling and field measurement techniques*

B3. SAMPLE HANDLING AND CUSTODY

Sample handling and custody will be conducted as described in Section B3 of the *TCEQ SWQM, WQS and WQA Programs QAPP*.

Samples analyzed by a sub-contracted laboratory will be documented on a chain of custody (COC) from that laboratory. A copy of the COC and custody procedures from the participating laboratory(ies) is found in Appendix A.

{If a laboratory other than TCEQ Lab or LCRA lab will analyze samples for the project, include the paragraph immediately above, as well as the lab's CoC form as an appendix to this QAP. Include custody procedures if they differ from the QAPP or the SWQM Procedures Manual.

Otherwise, delete the paragraph if there are no deviations from the QAPP. }

B4. ANALYTICAL METHODS AND QUALITY CONTROL

The analytical methods, associated matrices, and performing laboratories are listed in Section A7 of the most current *TCEQ SWQM, WQS and WQA Programs QAPP*. Laboratories reporting data under this QAPP are compliant with the NELAC standards.

- *Analytical methods*
 - *Quality control tests*
 - *Non-Direct Measurements*
- All acquired raw data must be NELAC-certified.

{Complete Table B4.1 and adapt it accordingly for the project if:

1) Any project specific analytical methods, data quality objectives, matrices, laboratories, or QC tests are not included in the SWQM QAPP or SWQM Procedures Manual (Examples: nutrients in sediment, ambient toxicity, extra dilutions requested, performing lab is Zenco Lab, a different LOQ check standard recovery is needed for the project.)

2) A subset of routine analytes is to be measured/analyzed (Examples: only nutrients will be analyzed, or only PAHs will be analyzed)

Otherwise, delete the table if there are no deviations from the QAPP or SWQM Manual.)

Table B4.1 Measurement Performance Specifications

Parameter	Units	Matrix	Method	PARAMETER CODE	AWRL	Limit of Quantitation (LOQ)	PRECISION (RPD of LCS/LCSD)	BIAS (%Rec. of LCS)	LOQ CHECK STANDARD %Rec	Lab
Field Parameters (Water Column)										
pH	pH. units	water	EPA 150.1 and TCEQ SOP	00400	1.0	NA	NA	NA	NA	Field
DO	mg/L	water	SM 4500-O G and TCEQ SOP, V1	00300	1.0	NA	NA	NA	NA	Field
Conductivity	uS/cm	water	EPA 120.1 and TCEQ SOP	00094	1	NA	NA	NA	NA	Field
Flow	cfs	water	TCEQ SOP	00061	NA	NA	NA	NA	NA	Field
Conventional Parameters (Water)										
Ammonia-N	mg/L	water	EPA 350.1 Rev. 2.0 (1993)	00610	0.1	0.02	20	80-120	70-130	WaterLab, INC
T-PO4-P	mg/L	water	EPA 365.3	00665	0.06	0.06	20	80-120	70-130	WaterLab, INC
O-PO4-P	mg/L	water	EPA 365.3	00671	0.04	0.04	20	80-120	70-130	WaterLab, INC
Conventional Parameters (Sediment)										
Total Kjeldahl Nitrogen	mg/Kg dry weight	sediment	SM 4500-N _{org} B or C and SM 4500-NH ₃ B	00627	NA	1.0	20	80-120	70-130	Zenco
Total Phosphorus	mg/Kg dry weight	sediment	modified** EPA 365.3	00668	NA	1.0	20	80-120	70-130	Zenco

B5. DATA MANAGEMENT

The project will be conducted in accordance with the following quality assurance procedures outlined in the most current *TCEQ SWQM, WQS and WQA Programs QAPP*.

{ Describe any deviations from the QAPP or SWQM Manuals in detail for each bullet below. This includes field or lab contractors. }

- *Data management*
 Submitting Entity, Collecting Entity, and Monitoring Type Codes associated with each sample type are listed in Table B5.1.

{ Complete Table B5.1 with project specific information }

Table B5.1. Submitting Entity, Collecting Entity, and Monitoring Type Codes

Data Description	Submitting Entity	Collecting Entity	Monitoring Type
Ex: Conventional Water	WC	FO	RT
Ex: 24-hour physicochemical data	WC	FO	BS
Ex: Instantaneous Field	WC	FO	RT
Ex: Benthic data	WC	FO	BS

- *Data review, verification, and validation*
- *Data completeness*
- *Documentation and records*

- *Annual quality assurance review for the sample collector and laboratory(ies) and any necessary corrective action.*

C. ROLES AND RESPONSIBILITIES

{Include both internal and external (lab, field, data management) primary participants and their responsibilities. Suggestions are offered below.}

TCEQ

{Name}

Project Manager

Tracks, reviews, and approves deliverables. Participates in the development, approval, implementation, and maintenance of written quality assurance standards. Verifies QAP is being followed by project participants and that the project is producing data of known quality. Coordinates project planning with the Project Manager. Reviews and approves data and reports. Ensures data reports are complete and comply with project requirements prior to submission to SWQMIS. Notifies QA Specialist of circumstances which may adversely affect the quality of data derived from the collection and analysis of samples. Develops, enforces, and monitors corrective action measures to ensure contractors meet deadlines and scheduled commitments. Responsible for contract management of all entities associated with the project.

{Name}

Data Manager

Responsible for coordination and tracking of data sets from initial submittal through the Project Manager review and approval. Ensures that data are reported as outlined in the most current *Surface Water Quality Monitoring Data Management Reference Guide*. Runs automated data validation checks in SWQMIS and coordinates data verification and error correction with the Project Manager. Generates SWQMIS summary reports to assist the Project Manager's data review. Provides training and guidance on technical data issues as needed. Reviews QAPs for valid stream monitoring stations. Checks validity of parameter codes, submitting entity code(s), collecting entity code(s), and monitoring type code(s).

{Name}

Lab Manager

Responsible for supervision of laboratory personnel involved in generating analytical data for this project. Responsible for ensuring that laboratory personnel involved in generating analytical data have adequate training and a thorough knowledge of the SS-QAP, pertinent sections of the *TCEQ SWQM, WQS and WQA Programs QAPP*, and all SOPs specific to the analyses or task performed and/or supervised. Responsible for oversight of all laboratory operations, ensuring that all QA/QC requirements are met, and documentation related to the analysis is completely and accurately reported. Responsible for ensuring laboratory corrective actions are implemented, documented, reported and verified. Enforces corrective action, as required.

D. TIME FRAME AND DELIVERABLES

{If outside entities are involved, reference contracts as applicable.}

Sampling for the project will be conducted during fiscal year {enter year(s)}. A summary of the sampling phase of the study will be submitted to the TCEQ SWQM Team by August 31 of the fiscal year in which the sampling is conducted. Data will be submitted electronically to TCEQ as outlined in the current *SWQM Data Management Reference Guide*.

{If a publication will result from the project, add the following paragraph.}

A draft final report will be prepared for the project during the fiscal year following the sampling phase. The draft final report will be submitted to the TCEQ Project Manager August 31 of fiscal year {enter year}. The draft report will then undergo peer review. Any necessary revisions will be made, and the final report will be published. The time frame for the final report to be published is dependent upon the nature and extent of comments on the draft report and the agency's publication schedule.

E. SIGNATURES AND APPROVALS

{SIGNATURES SHOULD INCLUDE ANY OUTSIDE ENTITIES PARTICIPATING IN THE PROJECT.}

{Name},
Project Manager
{Program}

Date

{Name},
Project Manager's Team Leader
{Program}

Date

Nancy Ragland
Team Leader
Data Management & Analysis

Date

Robin Cypher,
Quality Assurance Specialist
Surface Water Quality Monitoring Team

Date

Daniel Burke
SWQM Program Quality Assurance Specialist
Quality Assurance Section

Date