

Clean Water Act §319(h) Nonpoint Source Grant Program

Development of the Lower Nueces River Watershed Protection Plan On-Site Sewage Facility Inventory

**TSSWCB Project # 12-05
Revision 1**

Quality Assurance Project Plan

Texas State Soil and Water Conservation Board

Prepared by
Nueces River Authority

Effective Period: Upon EPA approval through September 2015
with annual revisions required

Questions concerning this quality assurance project plan should be directed to:

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Approval Sheet

Quality Assurance Project Plan (QAPP) for the *Development of the Lower Nueces River Watershed Protection Plan - On-Site Sewage Facility Inventory*.

United States Environmental Protection Agency (USEPA), Region VI

Name: Curry Jones
Title: USEPA Chief State/Tribal Programs Section

Signature: _____ Date: _____

Name: Henry Brewer
Title: USEPA Texas Nonpoint Source Project Officer

Signature: _____ Date: _____

Texas State Soil and Water Conservation Board (TSSWCB)

Name: Jana Lloyd
Title: TSSWCB Project Manager (PM)

Signature: _____ Date: _____

Name: Mitch Conine
Title: TSSWCB Quality Assurance Officer (QAO)

Signature: _____ Date: _____

Nueces River Authority (NRA)

Name: Rocky Freund
Title: Deputy Executive Director / NRA PM

Signature: _____ Date: _____

List of Acronyms and Abbreviations

BMP	Best Management Practice
CRP	Clean Rivers Program
EPA	United States Environmental Protection Agency
FY	Fiscal Year
NRA	Nueces River Authority
OSSF	On-site Sewage Facility
PM	Project Manager
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QAO	Quality Assurance Officer
QC	Quality Control
TCEQ	Texas Commission on Environmental Quality
TSSWCB	Texas State Soil and Water Conservation Board
WPP	Watershed Protection Plan

SECTION 1.0, PROJECT OBJECTIVES, ORGANIZATION, AND RESPONSIBILITIES

1.1 The purpose of study shall be clearly stated in the QAPP.

NRA will create an inventory of permitted OSSFs in the watershed. Information collection for Nueces and San Patricio Counties was initiated through TSSWCB project 05-14, *Inventory of On-Site Sewage Facilities to Support Watershed Planning in the Lower Nueces River Watershed*, and was completed in FY2012 with funding from a Texas General Land Office (GLO) Coastal Management Program (CMP) Cycle 14 grant. NRA will complete the permitted OSSF inventory for Jim Wells County through the Internet or on-site hard copy retrieval. NRA will input data into a spreadsheet with fields for all necessary information, including required information on TCEQ's Application for On-Site Sewage Facility.

This information will be used to develop a voluntary inspection and assistance management plan. Ultimately, this information will be incorporated into the Lower Nueces River WPP.

1.2 Project objectives shall be clearly stated in the QAPP.

The OSSF inventory for this project will be used to provide additional bacteria loading information for the Lower Nueces River watershed. It will provide information pertaining to watershed characteristics and to the prediction of possible pollution, the sources of this pollution and will provide critical information to assist in identifying management practices to prevent pollution loading in area streams. The data will be incorporated into the WPP and in the development of a voluntary OSSF inspection and financial assistance management plan.

1.3 The secondary data needed to satisfy the project objectives shall be identified in the QAPP. Requirements relating to the type of data, the age of data, geographical representation, temporal representation, and technological representation, as applicable, shall be specified.

NRA will complete the permitted OSSF inventory for Jim Wells County through the Internet or on-site hard copy retrieval. NRA will input data into a spreadsheet with fields for all necessary information, including required information on TCEQ's *Application for On-Site Sewage Facility*. The schedule for completing the inventory is June 2013 through March 2014.

Table 1.3.1 contains the fields and descriptions that are included in the spreadsheet. Not all information is available for all permits. Included in the Column field of Table 1.3.1, where applicable, is the coded format or availability of a drop-down list. The spreadsheet contains fields that may not be necessary, but were included to capture as much information as possible. Removing fields that turn out not to be useful is easier than going back and trying to find additional data at a later date.

Two of the fields, TreatmentUnit_Compiled and DisposalSytem_Compiled, were created to reduce the number of different treatment unit and disposal system types by combining similar types: e.g. aerobic sprinklers and surface application are designated as aerobic sprinkler. The original information is still available.

Table 1.3.1 – OSSF Permit Information Spreadsheet Fields and Information.

Column	Field Name	Description/Additional Information
A	FID	Numeric list of records
B	LAT	Latitude (estimated using address and Google Earth)
C (List)	LONG	Longitude (estimated using address and Google Earth)
D (mm/dd/yyyy)	County	
E	PropertyOwnerLastName	Property owner's last name
F	PropertyOwnerFirstName	Property owner's first name
G (1-Char)	PropertyOwnerMI	Property owner's middle initial
H	MailingAddress	Property owner's mailing address – street name and number
I	City	Property owner's mailing address – city
J (2-Char)	State	Property owner's mailing address – state
K (5-digit)	Zip	Property owner's mailing address – zip code
L	SiteAddress911	Property owner's 911 address – street name and number
M	City911	Property owner's 911 address – city
N (2-Char)	State911	Property owner's 911 address – state
O (5-digit)	Zip911	Property owner's 911 address – zip code
P	Phone	Property owner's phone number
Q	Subdivision	
R (Acres N.3)	Acreage	
S (500-Char max)	PhysicalLocation	Plat and/or survey property description
T (List)	WaterServiceType	Public or private water service
U	PublicSupplier	Public water service provider
V (List)	PropertyType	Residential or commercial property
W (Gallons N.2)	DailyWWUsageRate	Daily use in gallons/day
X	WaterSavingDevice	If the system has a water savings device
Y (List)	TreatmentUnit_Compiled	Type of treatment system – combined multiple descriptions from AA-TreatmentUnit
Z	DisposalSytem_Compiled	Type of disposal system – combined multiple descriptions from AC-DisposalTreatmentType
AA	TreatmentUnit	Type of treatment system – as listed on county record
AB (Gallons N.2)	TankSize	Size of septic tank
AC (List)	DisposalTreatmentType	Type of disposal system
AD (Acres N.2)	DisposalSystemArea	Size of disposal area in acres
AE	Installer	Name of OSSF installer
AF	PermitNo	County permit number

AG	Comment	
AH	InWatershed_InFloodPlain_Outside	If the plotted location falls within the 100-yr FEMA floodplain, within the watershed, or outside the water

1.4 The planned approach for evaluating project objectives (i.e., data analysis), including formulas, units, definitions of terms, and statistical analysis, if applicable, shall be included in the QAPP.

NRA consulted with the City of Corpus Christi GIS department to develop a spreadsheet containing recommended attribute information for a GIS map of the OSSFs based on the TCEQ’s OSSF Application. Field lengths, units, significant digits, and drop-down lists of acceptable entries were coded into the spreadsheet where applicable.

1.5 Responsibilities of all project participants shall be identified in the QAPP, meaning that key personnel and their organizations shall be identified, along with the designation of responsibilities for planning, coordination, data gathering, data analysis, report preparation, and quality assurance, as applicable.

EPA – U.S. Environmental Protection Agency, Region 6, Dallas, Texas. Provides project oversight and funding at the federal level.

Henry Brewer, EPA Texas Nonpoint Source Project Officer

Responsible for overall performance and direction of the project at the federal level. Ensures that the project assists in achieving the goals of the Clean Water Act. Reviews and approves the QAPP, project progress, and deliverables.

TSSWCB – Texas State Soil and Water Conservation Board, Temple, Texas. Provides project overview at the State level.

Jana Lloyd, TSSWCB PM

Responsible for ensuring that the project delivers data of known quality, quantity, and type on schedule to achieve project objectives. Tracks and reviews deliverables to ensure that tasks in the workplan are completed as specified. Reviews and approves QAPP and any amendments or revisions and ensures distribution of approved/revised QAPPs to TSSWCB participants.

Mitch Conine, TSSWCB QAO

Reviews and approves QAPP and any amendments or revisions. Responsible for verifying that the QAPP is followed by project participants. Monitors implementation of corrective actions. Coordinates or conducts audits of modeling procedures. Determines that the project meets the requirements for planning, quality assurance (QA), quality control (QC), and reporting under the TSSWCB Clean Water Act §319(h) NPS Grant Program.

NRA – Nueces River Authority, Corpus Christi, Texas. Provides project coordination and administration, coordinates QA and modeling.

Rocky Freund, Deputy Executive Director, NRA

Responsible for ensuring the smooth operation of the project, timely delivery of quality deliverables and general project coordination and administration at the local level.

Coordinates contractor activities and inclusion of modeling and survey results into the watershed protection plan (WPP). Facilitates the watershed steering committee and development of the WPP. Responsible for the development of a geographic information system inventory of the project watershed. Responsible for creating an inventory of on-site sewage facilities (OSSF).

SECTION 2.0, SOURCES OF SECONDARY DATA

2.1 The required source(s) of the secondary data must be specified in the QAPP. If a hierarchy of sources exists for the gathering of secondary data, that hierarchy must be specified in the QAPP.

NRA will populate the OSSF spreadsheet with information acquired from the Jim Wells County Health Department. Personnel will need to coordinate with the county to gain access to the information. Coordinate data using Google Earth and permit addresses will be added.

2.2 The rationale for selecting the source(s) identified shall be discussed in the QAPP.

The Jim Wells County Health Department maintains OSSF permit information for Jim Wells County. This information was provided by the TCEQ Region 14 designated representative.

2.3 The QAPP shall state that the sources of secondary data gathered will be identified in any project deliverable.

The final report will contain OSSF permit information for the area of Jim Wells County within the watershed. The data fields were derived from the TCEQ's *Application for On-Site Sewage Facility*. The information for Jim Wells County will be acquired from the Jim Wells County Health Department.

SECTION 3.0, QUALITY OF SECONDARY DATA

3.1 Quality requirements of the secondary data must be specified in the QAPP. These requirements must be appropriate for their intended use. Accuracy, precision, representativeness, completeness, and comparability need to be addressed, if applicable. (If appropriate, a related QAPP containing this information can be referenced.)

The data entered on the OSSF permits are assumed to be correct. Information on older permits may only be available from paper copies; more recent information may be available electronically.

3.2 The procedures for determining the quality of the secondary data shall be described in the QAPP.

The data will be reviewed for consistency, reasonableness, proper units, significant digits, field length, and valid entries. OSSF permit applications have evolved over time, so the same information may be recorded differently at different times. For example, drainage area could be recorded as either square feet or as acres.

3.3 If no quality requirements exist, this shall be stated in the QAPP. If no quality requirements exist or if the quality of the secondary data cannot be determined, the QAPP shall require that a disclaimer be added to any project deliverable to indicate that the quality of the secondary data is unknown. The wording for the disclaimer shall be included in the QAPP.

This section not applicable to the project.

SECTION 4.0, DATA REPORTING, DATA REDUCTION, AND DATA VALIDATION

4.1 Data reduction procedures specific to the project shall be described, including calculations and equations.

This section not applicable to the project.

4.2 The data validation procedures used to ensure the reporting of accurate project data shall be described.

The completed spreadsheet will be reviewed and data formats corrected if necessary for consistency. Coordinate data will be added using Google Earth and the permit address. Additional comments will be added as appropriate.

4.3 The expected product document that will be prepared shall be specified (e.g., journal article, final report, etc.).

Quarterly progress reports developed by the NRA PM will note activities conducted in connection with the OSSF inventory subtask, items or areas identified as potential problems, and any variations or supplements to the QAPP.

A final report will be submitted to the established stakeholder group and utilized in the WPP development.

The final report for this project will be a technical report detailing the results of all work conducted under this QAPP. Items in this report will include a very brief description of

methodologies utilized and assumed initial conditions, a detailed narrative regarding specific findings and a discussion/conclusions section that highlights the implications of these findings. The final report will also include a discussion as to how the findings will be used to complete the WPP and implement identified BMPs and post WPP activities.