

**Amendment # 2
to the Sulphur River Basin Authority
Clean Rivers Program FY 2008/2009 QAPP**

**Prepared by the Sulphur River Basin Authority
In Cooperation with the
Texas Commission on Environmental Quality (TCEQ)**

Questions concerning this QAPP should be directed to:

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Effective: **Date to be inserted by TCEQ Lead QA Specialist**

These changes will be incorporated into the QAPP document and TCEQ and the Sulphur River Basin Authority will acknowledge and accept these changes by signing this amendment.

| | |
|--|---------------|
| _____ Nancy Rose, Sulphur River Basin Authority Project Manager | _____ Date |
| _____ Mike Buttram, Sulphur River Basin Authority Quality Assurance Officer | _____ Date |
| _____ Jennifer Delk, CRP Project Manager | _____ Date |
| _____ Jennifer Delk, CRP Project QAS | _____ Date |
| _____ Laurie Curra, CRP Manager | _____ Date |
| _____ Daniel R. Burke, CRP Lead QAS | _____ Date |

The Sulphur River Basin Authority will secure written documentation from each project participant (e.g., subcontractors, other units of government, laboratories) stating the organization’s awareness of and commitment to requirements contained in this quality assurance project plan amendment. The Sulphur River Basin Authority will maintain this documentation as part of the project’s quality assurance records, and will ensure the documentation is available for review.

A4 PROJECT/TASK ORGANIZATION

Description of Responsibilities

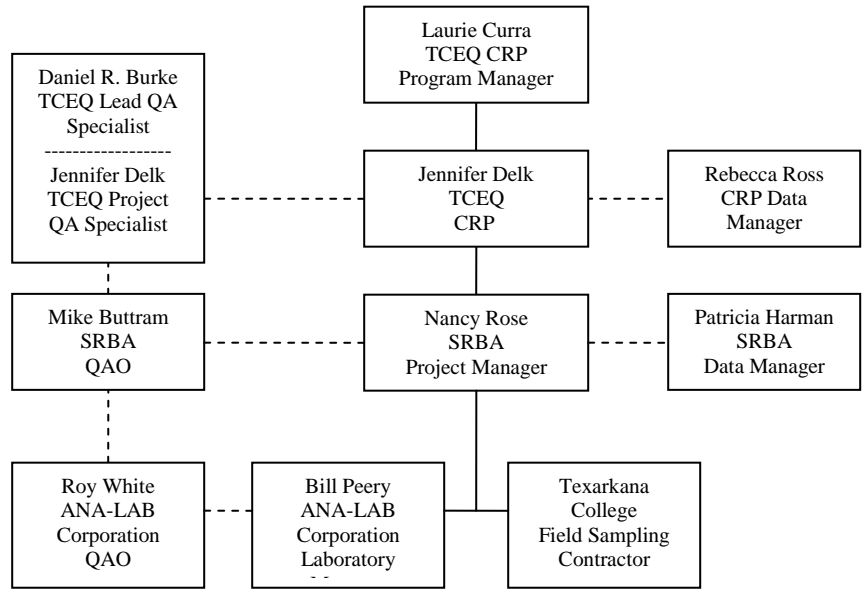
TCEQ

Rebecca Ross

CRP Data Manager

Responsible for coordination and tracking of CRP data sets from initial submittal through CRP Project Manager review and approval. Performs automated data validation routines and coordinates error correction. Provides quality assured data sets to TCEQ Information Resources in compatible formats for uploading to the statewide database. Generates reports to assist CRP Project Managers= data review. Provides training and guidance to CRP and Planning Agencies on technical data issues. Reviews and approves data-related portions of program QMP and project-specific QAPPs. Develops and maintains Standard Operating Procedures for CRP data management.

Figure A4.1. Organization Chart - Lines of Communication



Lines of Management ———
 Lines of Communication - - - - -

Appendix B Sampling Process Design and Monitoring Schedule (plan)

Sample Design Rationale FY 2009

The sample design is based on the legislative intent of the Clean Rivers Program. Under the legislation, the Basin Planning Agencies have been tasked with providing data to characterize water quality conditions in support of the 305(b) assessment, and to identify significant long-term water quality trends. Based on Steering Committee input, achievable water quality objectives and priorities and the identification of water quality issues are used to develop work plans which are in accord with available resources. As part of the Steering Committee process, the Sulphur River Basin Authority coordinates closely with the TCEQ and other participants to ensure a comprehensive water monitoring strategy within the watershed.

The following segments are described extensively in Appendix B of the SRBA FY 2008/2009 QAPP. This amendment, Amendment # 2, updates the information in Appendix B for FY 2009.

Segment 0302 Wright Patman Lake (From Wright Patman Lake Dam in Bowie/Cass County to a point 1.5 kilometers downstream of Bassett Creek in Bowie/Cass County, up to the normal pool level of 225 feet)

Wright Patman Lake is included in the *2006 Water Quality Inventory* due to non-support of aquatic life use in the 800 acres near the dam, the 300 acres at the International Paper intake, and the 4000 acres in the upper portion of the lake as a result of low dissolved oxygen concentrations. High pH levels result in non-support of general uses in 5 regions of the lake (the northeast corner of the reservoir, the 200 acres in the northwestern tip of lake, the Big Creek arm, the 4000 acres mid-lake, and the 1600 acres in the upper mid-lake). Wright Patman Lake is included on the *Draft 2006 §303(d) List* for these same problems. In addition, concerns with screening levels for ammonia at three sites (the International Paper intake, the northeast corner of the lake, and the upper portion of the lake) and nutrient screening levels for chlorophyll-a at three sites (the International Paper intake, the northeast corner, and the Big Creek arm) are expressed in the *2006 Water Quality Inventory*. The SRBA will continue to study the three sites detailed in the FY 2008 QAPP during FY 2009. The frequency of the 24-hour studies will be increased from four times per year to six.

The Anderson Creek site is a systematic site located approximately 1 mile before it flows into WPL. The stream drains much of the northeast portion of the basin with its headwater near Clarksville in Red River County. It stretches for over forty miles through mostly range and timberland. During periods of high flow it has a major impact on WPL.

Rice Creek merges with Anderson Creek shortly before Anderson Creek enters WPL. Rice Creek is approximately twelve miles long and drains the western portion of New Boston including the large Western Waste landfill. Rice Creek is of interest to a number of our steering committee members and two sites have been included in the FY 2009 monitoring schedule

Segment 0304 Days Creek (From the confluence with Wagoner Creek in Bowie County (Texarkana) to South Stateline where it flows into Arkansas)

Days Creek is on the *2006 Texas Water Quality Inventory* for use concerns due to high concentrations of a variety of polycyclic aromatic hydrocarbons (PAHs) in the sediment. The PAHs include naphthalene, pyrene, phenanthrene, acenaphthene, fluoranthene, chrysene, benz(a)anthracene, and benzo(a)pyrene. This contamination is believed to be the result of creosote discharges from three closed wood treatment plants located upstream of sampling sites. Disturbance of the stream bottom often results in the release of an oily

sheen, which has initiated concern regarding sediment contamination in this area. The urbanized area of Texarkana occupies approximately half the Lower Sulphur River watershed, which also drains the communities of Wake Village and Nash. The Stateline site is below the Texarkana Waste Water Treatment Plant which adds 8-10 million gallons per day of treated effluent to the stream during normal flow. The site is a fixed/routine site that has been monitored by TCEQ for a number of years. SRBA has picked up this site to relieve the travel and time commitment of TCEQ personnel.

Segment 0303b White Oak Creek (unclassified water body) (From the confluence of the Sulphur River north of Naples in Morris County to the upstream perennial portion of the stream east of Sulphur Springs in Hopkins County)

White Oak Creek (Segment 0303B), is included on the *2006 Texas §303(d) List* as a result of depressed dissolved oxygen concentrations along its entire length and bacterial contamination in the upper 25 miles of the segment (Segment 303B_03) due to high concentrations of E. coli. The *2006 Water Quality Inventory* lists this creek as non-supporting for aquatic life use due to depressed dissolved oxygen, and Segment 0303B_03 non-supporting for E. coli with concerns for nutrient screening levels for nitrate, orthophosphate, and total phosphorus. The sites at Rock Creek and White Oak Creek are being retained for a second year of study due to high levels of total-phosphorus and nitrate-nitrogen found in Rock Creek during the first two monitoring events for FY 2008. The White Oak Creek site serves as a good comparison since both streams are very close and merge downstream from the sites.

The FY 2009 monitoring sites are detailed in Table B1.1 (See Attachment # 1). The location of the monitoring sites can be determined from the attached map (See Attachment # 2).

The following changes or additions have been made to the monitoring schedule. These changes have come about because of concerns or requests of steering committee members or monitoring entities.

1. The Smackover Creek site (20101) and the Horse Creek Site (20100) will not be monitored in FY 2009. These are systematic sites and only one year of study was originally planned.
2. The White Oak Creek site (20099) and the Rock Creek site (10200) have been retained for a second year of study due to high total-phosphate concentrations found in the first and second monitoring events of FY 2008 at Rock Creek.
3. Two new systematic sites on Rice Creek (15947 and 18555) are included in the FY 2009 schedule. These two sites were selected due to concerns of members of the steering committee. Rice Creek has been of concern to residents because it drains the area covered by the large landfill west of New Boston, Texas.
4. The number of 24-hour studies for the three sites on Wright Patman Lake has been increased from four to six. This reflects TCEQ's interest in data collected during the fall and spring or outside the index period.

Attachment # 1

Monitoring Sites for FY 2009

The sample design for surface water quality monitoring is shown in Table B1.1 below.

Table B1.1 Sample Design and Schedule, FY 2009

| Segment | Region | Site Description | Station ID | Monitoring Resp (1) | Monitoring Type (2) | 24 HR | Aquatic Habitat (5) | Benthics (5) | Nekton (5) | Conventional (3) | Inst Flow | Field (4) |
|---------|--------|--|------------|---------------------|---------------------|-------|---------------------|--------------|------------|------------------|-----------|-----------|
| 302 | 5 | WRIGHT PATMAN LAKE AT SH 8 BOWIE COUNTY | 10214 | SU/TC | BS | 4 | | | | | | |
| 302 | 5 | WRIGHT PATMAN LAKE AT SH 8 BOWIE COUNTY | 10214 | SU/TC | RT | | | | | 4 | | 6 |
| 302 | 5 | WRIGHT PATMAN LAKE AT NORTH SHORE | 15061 | SU/TC | BS | 4 | | | | | | |
| 302 | 5 | WRIGHT PATMAN LAKE AT NORTH SHORE | 15061 | SU/TC | RT | | | | | 4 | | 6 |
| 302 | 5 | RICE CREEK AT FM 1840 | 15947 | SU/TC | BS | 2 | 2 | 2 | | | 2 | |
| 302 | 5 | RICE CREEK AT FM 1840 | 15947 | SU/TC | RT | | | | | 4 | 4 | 4 |
| 302 | 5 | WRIGHT PATMAN LAKE ADJACENT TO IP INTAKE | 16859 | SU/TC | BS | 4 | | | | | | |
| 302 | 5 | WRIGHT PATMAN LAKE ADJACENT TO IP INTAKE | 16859 | SU/TC | RT | | | | | 4 | | 6 |
| 302 | 5 | ANDERSON CREEK AT BOWIE CR 4126 | 16863 | SU/TC | RT | | | | | 4 | 4 | 4 |
| 302 | 5 | RICE CREEK AT BOWIE COUNTY RD 4125 | 18555 | SU/TC | BS | 2 | 2 | 2 | | | 2 | |
| 302 | 5 | RICE CREEK AT BOWIE COUNTY RD 4125 | 18555 | SU/TC | RT | | | | | 4 | 4 | 4 |
| 303b | 5 | ROCK CREEK AT FM 69.8 IN HOPKINS COUNTY | 10200 | SU/TC | BS | 2 | 2 | 2 | | | 2 | |
| 303b | 5 | ROCK CREEK AT FM 69.8 IN HOPKINS COUNTY | 10200 | SU/TC | RT | | | | | 4 | 4 | 4 |
| 303b | 5 | WHITE OAK CREEK AT FM 69 IN HOPKINS COUNTY | 20099 | SU/TC | BS | 2 | 2 | 2 | | | 2 | |
| 303b | 5 | WHITE OAK CREEK AT FM 69 IN HOPKINS COUNTY | 20099 | SU/TC | RT | | | | | 4 | 4 | 4 |

| | | | | | | | | | | | | |
|-----|---|---|-------|-------|----|--|--|--|--|---|---|---|
| 304 | 5 | DAYS CREEK AT STATELINE RD IN BOWIE COUNTY | 10226 | SU/TC | RT | | | | | 4 | 4 | 4 |
|-----|---|---|-------|-------|----|--|--|--|--|---|---|---|

(1) SU=Sulphur River Basin Authority, TC=Texarkana College

(2) RT=Routine, BS=Biased-Season

(3) Conventional = TSS, TDS, sulfate, chloride, chlorophyll-a, ammonia, nitrate-N, nitrite-N, Kjeldahl-N and total phosphate-P

(4)Field = pH, DO, conductivity, temperature, Secchi depth, and observations

(5) TCEQ Surface Water Quality Monitoring Procedures volume 2: Methods for Collecting and Analyzing Biological Community and Habitat Data, 2005 (RG-416), outlines voucher requirements for benthic and nekton sampling.

Critical vs. non-critical measurements

All data taken for CRP and entered into the SWQMIS database are considered critical

Attachment # 2

Monitoring Sites FY 2009

