

IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ALABAMA
SOUTHERN DIVISION

R. ALLEN KIPP, et al.,	*
	*
Plaintiffs,	*
	*
CAHABA RIVER SOCIETY,	*
	*
Intervenors,	*
	*
v.	* Case No. 2:93-CV-02492-JFG-PWG
	*
JEFFERSON COUNTY,	*
	*
Defendant.	*

UNITED STATES OF AMERICA,	*
	*
Plaintiff,	*
	*
v.	* Case No. 2:94-CV-02947-JFG
	*
JEFFERSON COUNTY, JEFFERSON	*
COUNTY COMMISSION and STATE	*
OF ALABAMA,	*
	*
Defendants.	*

ORDER

This matter came before the Court on motion made by the Defendant Jefferson County, a political subdivision of the State of Alabama, seeking a partial termination

of the Consent Decree previously entered by this Court on December 9, 1996, requiring, among other things, the County to perform certain remedial work on the sanitary sewer system and to pay a monetary penalty in order to bring it into full compliance with the Clean Water Act.

The Consent Decree permits the Defendant Jefferson County to move for partial termination of the Decree with respect to each individual complete waste treatment system upon completion of the items specified in Section 24, Paragraph (A) of the Decree. In its motion, the County submits that it has met those requirements and that the provisions of the Consent Decree having been satisfied should be terminated with respect to the Prudes Creek Complete Waste Treatment System. It further appears to the Court that there is no opposition to the County's motion.

The Court finds as follows:

1. Defendant Jefferson County has complied with and satisfied the termination provisions contained in Section 24, Paragraph (A) of the Consent Decree applicable to the Prudes Creek Complete Waste Treatment System.

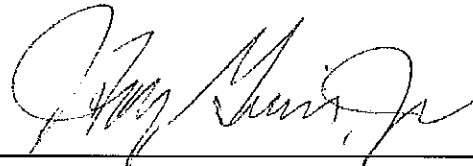
2. The Director of the Jefferson County Environmental Services Department, Mr. David Denard, has certified that the County has achieved and maintained compliance with all applicable provisions contained in the Consent Decree pertinent to the Prudes Creek Complete Waste Treatment System.

3. That the provisions applicable to the remaining complete waste treatment systems covered in the Consent Decree shall remain in full force and effect until such time as the appropriate motion is made to terminate the provisions of the Consent Decree applicable to that system.

NOW THEREFORE it is ORDERED, ADJUDGED and DECREED as follows:

The provisions of the Consent Decree applicable to the Prudes Creek Complete Waste Treatment System are hereby terminated.

DONE and ORDERED 29 April 2009.

A handwritten signature in black ink, appearing to read "J. Foy Guin, Jr.", written over a horizontal line.

UNITED STATES DISTRICT JUDGE
J. FOY GUIN, JR.

JEFFERSON COUNTY, ALABAMA

PRUDES CREEK COMPLETE WASTE
TREATMENT SYSTEM

CONSENT DECREE TERMINATION
PLAN



JEFFERSON COUNTY COMMISSION
ENVIRONMENTAL SERVICES DEPARTMENT

February 24, 2009

PRUDES CREEK COMPLETE WASTE TREATMENT SYSTEM

CONSENT DECREE TERMINATION PLAN

Request for Termination

The Jefferson County Commission, Jefferson County, Alabama, submits this report and seeks termination of Civil Actions No. 93-G-2492-S and No. 93-G-2947-S, Consolidated, hereinafter the Consent Decree, for the Prudes Creek Complete Waste Treatment System. This request is made in accordance with Section XXIV, Termination, paragraph A.1.

This report contains documentation which demonstrates that the County has achieved and maintained compliance with all applicable provisions of Section VII of the Consent Decree.

With respect to compliance with NPDES permit effluent limits, this report contains documentation that demonstrates that the County has achieved and maintained substantial compliance in accordance with Section XXIV A.1.a.

With respect to compliance with the objective of elimination of sewer system overflows (SSOs), this report contains documentation that demonstrates that the County has achieved and maintained substantial compliance in accordance with Section XXIV A.1.b.

Jefferson County has paid all currently pending stipulated penalties. No monetary obligations are due except for those related to the Supplemental Environmental Project (SEP) as set forth in Section XXIV A.2 of the Consent Decree.

JEFFERSON COUNTY COMMISSION



BETTYE FINE COLLINS - PRESIDENT
WILLIAM A. BELL, SR.
JIM CARNS
BOBBY HUMPHRYES
SHELIA SMOOT

JIM CARNS--COMMISSIONER
ENVIRONMENTAL SERVICES

Office of

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Director of Environmental Services
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February 25, 2009

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

David Denard, P.E

Director, Environmental Services Department

BACKGROUND

In 1993, Citizen Plaintiffs filed a complaint against Jefferson County, Alabama, alleging that the County violated the Clean Water Act by discharging pollutants to surface waters without the required National Pollutant Discharge Elimination System (NPDES) permits and had violated the terms and conditions of its NPDES permits during periods of wet weather. In 1994, the United States Environmental Protection Agency (EPA) filed a similar complaint and the Cahaba River Society filed a Motion to Intervene and Complaint in Intervention, all of these seeking injunctive relief and the assessment of civil penalties. The allegations focused on permit violations that occurred as the result of automatic bypasses and overflows of untreated wastewater from the County's wastewater collection systems, or sewers, and bypasses at the County's wastewater treatment plants of wastewater that had not received full treatment.

On December 9, 1996, all parties entered into a Consent Decree that outlined actions to be taken by the County in order to comply with the Clean Water Act. The Consent Decree required the County to eliminate bypasses and overflows at all overflow points in the County's wastewater collection systems and at the County's wastewater treatment plants; to unify the various municipal wastewater collection systems discharging to the County's wastewater treatment plants under the ownership, maintenance, and operation of the County; and to design and implement a Supplemental Environmental Project (SEP) to purchase priority-based riparian buffer zones, or greenways, along County streams to enhance water quality. The SEP required the County to set aside and spend \$30,000,000 in the acquisition of the greenways. In addition, the County paid an initial civil penalty of \$750,000 to the United States Treasury on January 7, 1997.

The County began preliminary sewer system analyses of its Complete Waste Treatment Systems in 1995 prior to the filing of the Consent Decree as a good faith effort to show intent to comply with the Clean Water Act during periods of wet weather. Results from these analyses facilitated the planning process to design and implement specific programs that would bring the County into compliance with the Consent Decree and the Clean Water Act. Program activities included repairs and improvements to the County's wastewater collection systems that eliminated all automatic bypasses and reduced infiltration/inflow (I/I) to these systems. Improvements at the County's wastewater treatment plants eliminated bypasses and enabled the full treatment of all wastewater flows received at these plants.

**PRUDES CREEK COMPLETE WASTE TREATMENT SYSTEM
CONSENT DECREE TERMINATION PLAN**

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I. COMPLIANCE WITH SECTION X OF THE CONSENT DECREE

In accordance with Section X of the Consent Decree, the County submitted payment for civil penalty in the amount of \$750,000 on January 7, 1997 via wire transfer directly to the US Treasury.

II. COMPLIANCE WITH SECTION XI OF THE CONSENT DECREE

The County certifies that it has paid all penalties and monetary obligations assessed under the Consent Decree at the time of this submission.

Table II-1				
EPA Demand Date	SSO Date Range		Amount	Result
	From	Through		
10/27/97	11/01/95	08/31/97	\$61,000	Demand Rescinded By EPA
09/26/06	09/01/97	03/31/06	\$339,000	Paid In Full
01/16/08	04/01/06	10/31/07	\$238,000	Paid In Full

Documentation of each payment is included in Appendix I. Jefferson County has not received any other demand notices as of the date of submission of this report.

III. COMPLIANCE WITH SECTION VII

The County certifies that all requirements of Section VII, Remedial Actions, are complete for the Prudes Creek Complete Waste Treatment System. This report addresses the requirements of Section VII with respect to the Prudes Creek Complete Waste Treatment System (Prudes Creek System) and documents the County's performance by categorizing remedial actions into the following items A through E.

A. Phase I Planning Documents

Phase I planning documents required as a part of the Section VII, paragraphs B, C, E, G, I, K, L, and N are shown in the Table III-1 with the submittal date to EPA and EPA approval date listed. The Phase I documents were not unique to the Prudes Creek System and were inclusive of each complete waste treatment system operated by the County.

Table III-1		
Phase I Document	Submittal Date	EPA Approval Date
Preliminary Sewer System Analysis (PSSA)	10/30/1995	12/18/1995
Infiltration & Inflow (I/I) Plan	11/20/1995	12/15/1995
Sewer System Evaluation Survey (SSES) Plan	01/02/1996	02/02/1996
Capacity Analysis Plan	11/13/1995	01/18/1996
Comprehensive Performance Evaluation (CPE) Plan	12/15/1995	02/01/1996
Water Quality Monitoring Plan (WQM)	02/26/1996	08/30/1996
Initial Waste Treatment System Capital Improvement Plan (WTSCIP)	01/19/1996	02/15/1996
Unpermitted Discharge Event Program	10/30/1995	1

1 - No approval required

B. Phase II Reports

Phase II reports, plans, and schedules specific to the Prudes Creek System required as a part of Section VII, paragraphs D, F, J, and M are shown in Table III-2 with the submittal date to EPA and EPA approval date listed.

Table III-2		
Phase II Document	Submittal Date	EPA Approval Date
Infiltration & Inflow Report	05/01/1996	06/13/1996
Sewer System Evaluation Survey Report	07/03/2000	12/13/2000
Capacity Analysis Report	10/02/2000	1
Capacity Improvement Schedule	04/02/2001	05/21/2001
Comprehensive Performance Evaluation Report	03/20/1997	03/28/1997
Performance Improvement Plan	2	2
WTSCIP Amendment No. 14	07/31/2002	No Response Received

1 - No approval required

2 - A PIP was not required to be performed for this system.

C. Phase III Implementation

Phase III encompasses the implementation of repairs and improvements (Section VII., paragraphs H, O, and P) identified in Waste Treatment System Capital Improvement Plan (WTSCIP) Amendment No.14 submitted July 31, 2002. The WTSCIP Amendment No. 14 proposed that the itemized sewer rehabilitation recommendations from the approved SSES report be addressed and that all covered manholes should be located and raised to grade. The required work was incorporated into one (1) rehabilitation contract that was complete as of March

31, 2004 prior to the Section VII, Paragraph H.3 deadline of September 1, 2007. Table III-3 summarizes the Phase III work.

The WWTP improvements identified in the Initial Waste Treatment System Capital Improvement Plan submitted January 19, 1996 included piping modifications to eliminate several hydraulic bottlenecks, improvements to the grit removal system, and conversion to ultraviolet (UV) disinfection.

The Improvements to Prudes Creek Wastewater Treatment Plant project was awarded on April 30, 1997 and consisted of modifications and improvements to the existing site grading and drainage, modifications to the existing yard piping, modifications to the existing grit handling facility, installation of covers on the existing aeration rotors, installation of new mixers at the existing aeration basins, modifications to the existing chlorine contact tanks and installation of a new ultraviolet disinfection system, modifications to the existing cascade aeration, removal of two underground fuel storage tanks and installation of two new above ground fuel storage tanks, modifications to the existing pump stations, and construction of a new administration building. Construction was complete as of July 1, 1999, prior to the submittal of WTSCIP Amendment No. 14; therefore, it was not addressed in the document.

Table III-3			
Phase III Contract	Final Contract Value	Construction Completion	Consent Decree Deadline
Improvements to Prudes Creek Wastewater Treatment Plant	\$870,079.48	07/01/1999	09/01/2007
Prudes Creek Collection System Rehabilitation	\$3,652,812.00	03/31/2004	09/01/2007

Phase III also includes submission of the Collection System Operation and Maintenance Plan and implementation of the Water Quality Monitoring Program. Table III-4 summarizes these Phase III remedial actions.

Table III-4		
Phase III Remedial Action	Submittal Date	Implementation Date
Collection System O&M Plan	1/18/2001	7/12/2001
Water Quality Monitoring Program	2/26/1996	12/02/1996

D. Reporting Requirements

In accordance with Section VII, Paragraph Q., Reporting Requirements, and subparagraphs Q.1, K.4, and N.4, the County has complied with the requirements to submit Quarterly Reports, monthly summaries of Unpermitted Discharge Events, and has performed all requirements set forth in the Water Quality Monitoring program and submitted all associated data.

E. Sewer Collection System Unification

In accordance with Section VII, Paragraph R., Municipalities, the County has complied with the requirements to create a unified system which includes all Collection Systems served by any of the County's Wastewater Treatment Plants. Table III-5 below lists the municipal systems served by County WWTP's and the date of transfer of those systems to the County.

Table III-5	
Municipality	Effective Date
Brighton	March 1, 1998
Fultondale	March 1, 1998
Gardendale	March 1, 1998
Graysville	March 1, 1998
Homewood	March 1, 1998
Hoover	March 1, 1998
Hueytown	March 1, 1998
Lipscomb	March 1, 1998
Mountain Brook	March 1, 1998
Pleasant Groove	March 1, 1998
Tarrant	March 1, 1998
Trussville	March 1, 1998
Vestavia Hills	March 1, 1998
Birmingham	May 1, 1998
Adamsville	August 1, 1998
Bessemer	August 1, 1998
Fairfield	August 1, 1998
Irondale	August 1, 1998
Leeds	August 1, 1998
Midfield	August 1, 1998
Warrior	August 1, 1998

IV. COMPLIANCE WITH SECTION VIII OF THE CONSENT DECREE

In accordance with Section VIII of the Consent Decree, the County has performed all obligations and has observed or fulfilled all conditions with respect to the Supplemental Environmental Project (SEP) Greenways Project. The County submitted the SEP Master Plan Final Report on July 19, 1999, and began its implementation including the establishment of the Black Warrior /Cahaba Land Trust (hereinafter the Land Trust) to direct and oversee purchases of prioritized parcels along Jefferson County stream corridors. The SEP Final Report was submitted on December 9, 2006, outlining SEP activities and expenditures completed in accordance with the Master Plan. A 12-month extension was granted to the County and the Land Trust to complete remaining activities including the transfer of SEP parcels and funds between the County and the Land Trust, completing all pending property transactions and parcel site inventories, and performing initial property maintenance and site security measures. These activities were formalized in a Memorandum of Agreement (MOA) between the County and the Land Trust and documented in two amendments to the Final Report (See Table IV-1).

To date all SEP expenditures and activities are complete, including the Five Mile Creek Constructed Wetlands Project, of which the Land Trust oversaw the design, construction and completion of this project. The County has also agreed to perform Benthic Macroinvertebrate Assessments at six approved stream-sites annually through calendar year 2011. Reports for these assessments will be submitted to EPA Region IV annually on or before December 31st through 2011. The final report on the Five Mile Creek Constructed Wetlands Project was submitted to EPA along with the 2008 Benthic Macroinvertebrate Assessment on December 23, 2008.

Table IV – 1	
SEP Document	Submittal Date
Final Master Plan	July 19, 1999
Final Report	December 9, 2006
Amendment No. 1	June 9, 2007
Amendment No. 2	December 9, 2007 ¹
Five Mile Creek Constructed Wetlands Final Report	December 23, 2008
Benthic Macroinvertebrate Assessment – 2008	December 23, 2008

1- EPA accepted amendment 1/18/08

V. VERIFICATION

Although not required in the Consent Decree, EPA has requested that the County verify that the repairs recommended by the Sewer System Evaluation Survey (SSES) were completed. This section describes the County's verification methodology and summarizes the results. Detail is provided in Appendix II.

This certification is in addition to the oversight and certificates provided during construction by Jefferson County and contracted consulting engineers at the project level. The following describes the steps and levels of protocol for an item of work to be included for payment and to be ultimately shown as work completed on as-as-constructed drawing:

A repair is completed by a Contractor. The repair details are then recorded by the Consultant and/or Jefferson County Inspector in a field diary. The field diary entries are used to compose the Consultant Engineer's project work summary. A work order is generated by the Consultant in SIMS. At the end of the month the Consultant Engineer and Inspector(s) meet to discuss quantities for that month. Following this meeting the Inspector(s) meet with the Contractor to discuss monthly quantities. An invoice is then generated by the Contractor. The invoice is then reviewed and certified by the Consultant Engineer and subsequently reviewed by the County Engineer. The invoice is then signed by the ESD Director for authorization for payment. At the end of the Contract, as-constructed drawings are created according to the methodology described in the following definition.

A. Methodology

The following definitions apply to the verification procedure herein described.

1. Definitions

As-Constructed Drawings: The Engineer's record drawing of all work performed in a specific contract. These documents are typically created by a Consultant CAD Technician from Consultant and/or County Inspector field diaries and notes and maps from the Consultant Engineer of Record.

Document Control Log (DCL): A summary of verified repairs for each complete waste treatment system.

Document Verification Form: A form used by a Jefferson County Engineer to verify SSES recommended repairs (from existing documentation) for the purposes of this termination request.

Engineer's Project Work Summary: A binder of record, separated by type of repair, organized by mini-system and manhole number showing all pertinent information for each SSES recommended repair. This document is composed by the Consultant Engineer and Inspector of Record (Consultant or County) and is generated from the inspector's field diaries.

Field Check: A site visit by a Jefferson County Inspector used to verify work completed. This may be done by direct visual inspection or remote television inspection.

Field Diary: A bound document, composed daily during a contract, filled out by the on-site inspector, showing work completed. This document is used by the Consultant Engineer and County and/or Consultant Inspector of Record to generate monthly invoice quantities.

Inspector Field Verification Form: A form used by a Jefferson County Inspector to verify SSES recommended repairs (from field inspection) for the purposes of this termination request.

Other Construction Records: For flow chart simplicity, this item may include but not be limited to: field diaries, SIMS manhole photographs, etc....

SIMS Manhole Photograph: This is a photograph of a manhole showing at least one permanent feature in the background, the compass direction in which the picture was taken and the manhole number.

SIMS Work Order: A database created within the Sewer Infrastructure Management System (SIMS) to catalog completed repair information, searchable through line and manhole selection. Work orders are created by the Consultant from Inspector's field diary information or by County employees after a repair has been completed.

2. Verification Procedure

This verification procedure will serve to demonstrate that the SSES recommended sewer rehabilitation work was performed in accordance with the Consent Decree for the Prudes Complete Waste Treatment System.

a) Statistical Analysis

The SSES recommended repairs were placed into separate Excel spreadsheets according to their complete waste treatment system. Within each complete waste treatment system spreadsheet, every SSES recommended repair for that system was assigned a number corresponding to the row in which it was located. The specific repairs to be confirmed were randomly selected via an Excel random number generator from the spreadsheet containing a list of all SSES recommended repairs, in this case, for the Prudes Complete Waste Treatment System.

A statistical analysis was used to determine an appropriate number of random samples to be examined in order to verify that the SSES

recommended repairs were addressed in the Prudes Complete Waste Treatment System.

The number of samples selected to represent the collection system were based on a formula put forth by Krejcie and Morgan (1970) for determining sample sizes for research activities. Calculations were based on the following formula for a known population size:

$$\text{Sample Size} = \frac{X^2NP(1-P)}{d^2(N-1) + X^2P(1-P)}$$
$$\text{Sample Size} = \frac{(3.841)*(128)*(0.95)*(1-0.95)}{(0.05)^2*(128-1) + (3.841)*(0.95)*(1-0.95)} = 46.71 \approx 47$$

Where:

X^2 is the table value of Chi-Square at 1 degree of freedom for a 95 percent confidence level (3.841). N is the population size (total number of recommended repairs for a collection system). P is the population proportion, which is the minimum percentage of SSES recommended repairs assumed to be performed in each individual complete waste treatment system basin. And d is the degree of accuracy expressed as a proportion (0.05 was used to represent 95% accuracy).

Consequently, the number of randomly-selected repairs checked demonstrates that at least 95% of the total numbers of repairs were performed at a confidence level of 95%.

In addition to the sample size generated by the above referenced process, an additional sample pool consisting of twenty-five (25) random repairs is generated to form a secondary sample pool. The purpose of this pool is described in the following section *Records and Field Review*.

b) Records and Field Review

The following records were used in the verification process:

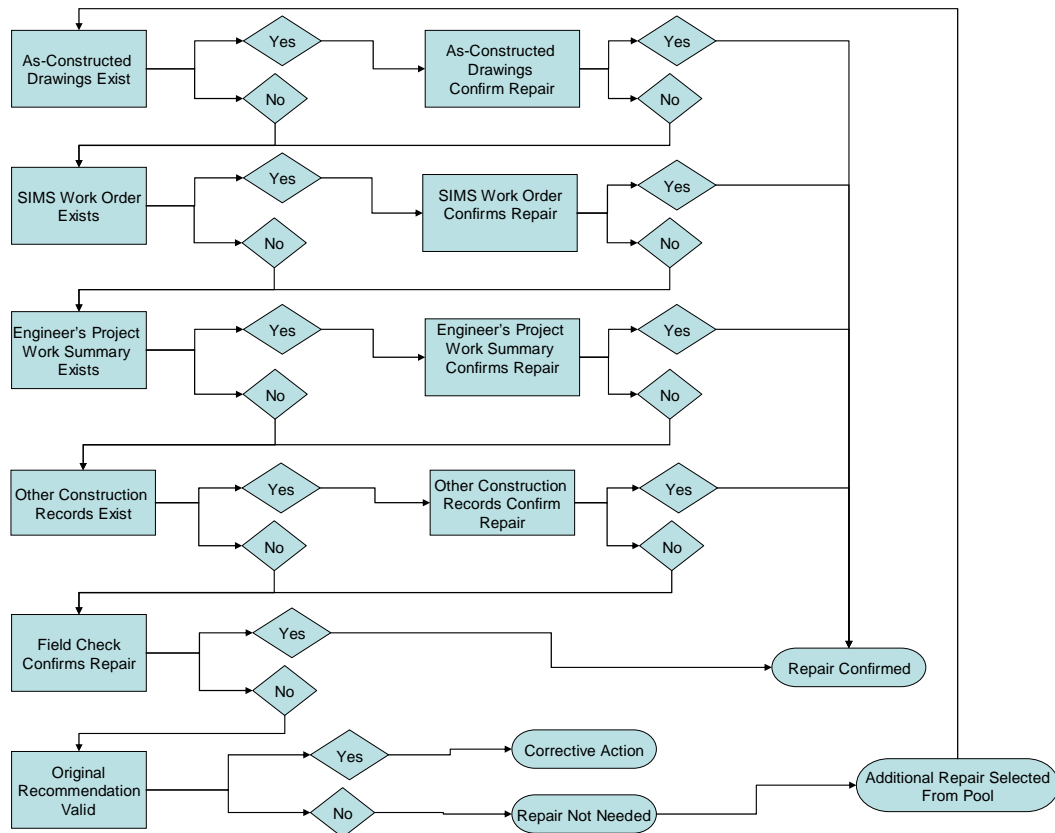
1. As-Constructed Drawings – Document Verification Form
2. SIMS Work Orders – Document Verification Form
3. SIMS Manhole Photograph – Document Verification Form

4. Field Diary – Document Verification Form
5. Field Checks – Inspector Field Verification Form

The verification process was performed based on the decision flow chart in Figure V-1. This process was documented via a document control log and associated forms where applicable. The aforementioned forms identified the randomly selected repair, with an attached photocopy of the documentation of the repair from records 1, 2, 3 and 4. If no documentation of the repair was found in these records, a field check was performed to confirm that the repair was addressed. The field checks were made by County staff at the site of the recommended repair as visual verification of the current status of the recommended repair. A form signed by the field inspector confirming the status of the repair is included for documentation.

In addition when an SSES recommended repair has been investigated and found to be “not warranted”, an additional SSES recommended repair is selected from the next sequential random repair from the secondary sample pool. The substituted random repair is then investigated in the same manner as that of the original sample set.

Figure V-1.



B. Summary of Verification Results

The verification procedure was successful in confirming the 95% confidence level for SSES repair work performed in the Prudes collection system in that forty-seven (47) repairs within the forty-seven (47) repair sample have been addressed. Of the forty-seven (47) random repairs within the sample pool, thirty-two (32) were confirmed by record documents and fifteen (15) were confirmed through field inspections. Nine (9) of the SSES recommended repairs were determined through field inspections to be insignificant and not in need of repair (therefore addressing the original SSES recommendation).

Because nine (9) recommended repairs in the original sample set were found to be “not warranted”, nine (9) additional recommended repairs were selected from the secondary sample pool. Four (4) were confirmed through record documents and five (5) were confirmed through field inspection. Three (3) of the SSES recommended repairs were determined through field inspection to be insignificant and not in need of repair.

Because three (3) recommended repairs in the secondary sample set were found to be “not warranted”, three (3) additional recommended repairs were selected from the secondary sample pool. The three (3) additional recommended repairs were confirmed by record document.

In summary, a total of fifty-nine (59) SSES recommended repairs were investigated as a part of the verification procedure. Forty-seven (47) recommended repairs were documented as performed and twelve (12) recommended repairs were determined to be not warranted. The verification procedure was successful in confirming the 95% confidence level for SSES repair work performed in the Prudes collection system.

Detailed documentation relevant to this summary is included in Appendix II.

VI. SUBSTANTIAL COMPLIANCE WITH SECTION XXIV OF THE CONSENT DECREE

The County has complied with the requirements to achieve and maintain substantial compliance with respect to NPDES permit limitations and with the objective of elimination of Sewer System Overflows. The period of substantial compliance is identified and the support documentation is described below.

A. Substantial Compliance Period

Section XXIV A.1 of the Consent Decree establishes that the County is to achieve and maintain

... compliance with all applicable provisions of Section VII ... (for each complete waste treatment system for a period of)... twelve (12) consecutive months, provided that during that 12-month period the County can establish that precipitation has been average or greater. In the absence of evidence of average or greater than average precipitation during a 12-month period, the County shall be permitted to demonstrate compliance at such Complete Waste Treatment System during a 24-month period.

The County used the period from January 1, 2006 through December 31, 2006 as the 12 consecutive months that exhibits substantial compliance in accordance with Section XXIV.A.1. of the Consent Decree. This 12-month consecutive period had above average rainfall of 56.56 inches for the Birmingham/Prudes Creek area as indicated by National Weather Service records.

The County used rainfall data compiled by the National Weather Service Observation Station at the Birmingham, Alabama, International Airport to establish average rainfall for the Prudes Creek system. The 30-year average rainfall at this weather observation station (1971-2000) was 53.99 inches. This rainfall amount was used as the basis for establishing the substantial compliance period of consecutive 12-months of average precipitation. The 12-month substantial compliance period for the Prudes Creek Complete Waste Treatment System was determined to be for a period of average to above-average precipitation for the Birmingham/Prudes Creek area after the recommended work in the Consent Decree was completed. All recommended sewer rehabilitation work for the Prudes Creek Complete Waste Treatment System was completed on March 31, 2004.

B. NPDES Permit Effluent Limits

In accordance with Section XXIV.A.1.a., the County has complied with the requirements to achieve and maintain substantial compliance with respect to NPDES permit limitations at the Prudes Creek Wastewater Treatment Plant (WWTP) for the consecutive twelve (12) month period of January 1, 2006 through December 31, 2006. There were no permit violations during the evaluation period.

The Prudes Creek WWTP has undergone significant construction over the past several years. The former plant was a 600,000 gallon average daily design capacity facility that was originally constructed in 1986. From April 1997 to June 1999, a project was completed that addressed the improvements identified in the Initial Waste Treatment System Capital Improvement Plan. A description of the

scope of work is included in Section III.C of this termination plan. Construction began in July 2004 on a \$5,767,000 project to upgrade the plant and increase the design capacity to improve the plant's treatment capabilities under peak flow conditions. As a part of the work, a new headworks, a third aeration basin, third final clarifier, deep bed sand filters, additional drying beds, SCADA upgrades, and electrical improvements were added to the plant. The upgraded plant was substantially complete in January 2006 and the plant now has a 900,000 gallon average daily design flow capacity and a daily peak flow capacity of 3.5 million gallons per day. See Appendix III for the flow schematic and process flow narrative for the WWTP.

In Appendix IV, the County has included copies of the Prudes Creek NPDES Permit Discharge Monitoring Reports (DMRs) for this period to verify substantial compliance with NPDES permit effluent limits as established in Section XXIV.A.1.a. of the Consent Decree.

C. Bypasses

In accordance with Section VII.B.4. of the Consent Decree, the County has complied with the elimination of all automatic bypasses including Hurricane Branch, Horsefarm, Barton Branch, Tarrant Branch, and Watkins Branch, and the County has complied with the elimination of bypasses at all wastewater treatment plants.

There were zero (0) occurrences of bypasses, as defined by the Consent Decree, within the Prudes Creek Complete Waste Treatment System during the evaluation period.

D. Sanitary Sewer Overflows (SSO's)

In accordance with Section XXIV.A.1.b, the County has complied with the objective of elimination of sewer system overflows and has achieved and maintained substantial compliance for the consecutive twelve (12) month period of January 1, 2006 through December 31, 2006 for the Prudes Creek Complete Waste Treatment System.

The County has implemented a Management, Operation, and Maintenance (MOM) Program integrated with an aggressive Grease Control Program to achieve and maintain the objective of elimination of sewer system overflows. There were three (3) overflows in the Prudes Creek Complete Waste Treatment System during the evaluation period. Appendix VIII contains the details regarding any overflow(s).

1. Management, Operation, and Maintenance Program

The County's Management, Operation, and Maintenance (MOM) Program ensures the appropriate operation of the sanitary sewer collection system by

implementing effective management and maintenance practices. The MOM Program document outlines these management and maintenance practices and is used by County staff to direct operations to meet the objective of substantial compliance in all applicable areas.

The Prudes Creek Complete Waste Treatment System has been operating under the County's Collection System Operation and Maintenance (O&M) Plan as approved by EPA in July 2001. By utilizing the programs outlined in the O&M Plan, the County has been able to achieve the objective of substantial compliance for the Prudes Creek collection system. In order to continue to achieve and maintain substantial compliance, the County has updated its O&M Plan and created a Collection System Management, Operations, and Maintenance (MOM) Program. This is a strategic planning document that is updated as the MOM Program evolves. The current version of the County's MOM Plan is included in Appendix V for reference.

In addition, the County has developed a Capacity Assurance Program (CAP), initially submitted to EPA on June 25, 2008 and revised by letter on November 13, 2008, which is applicable to all the County's complete waste treatment systems. Like the MOM, the CAP is a strategic planning document that is updated as the program evolves. The CAP is currently in the early stages of implementation. The current version of the County's CAP is included in Appendix VII for reference.

2. Grease Control Program

The Jefferson County Commission adopted a Grease Control Ordinance in October 2006 as part of a comprehensive plan to achieve the objective of the elimination of sewer system overflows due to grease blockages. The Grease Control Program (GCP) operates out of the County's Barton Laboratory Monitoring and Compliance Division and utilizes a permitting and inspection process to monitor Food Service Facility (FSF) discharges to the County's sanitary sewer collection systems. The GCP permits require FSFs to install and maintain grease handling devices in order to reduce grease discharges to the sewer. The GCP operates in conjunction with the County's Line Maintenance Division in identifying chronic grease problems. The above-mentioned divisions work together to report, inspect, repair, and prevent grease blockages in the sewer. These objectives are achieved via a joint communication, reporting, and inspection system, utilizing the County's Sewer Infrastructure Management System (SIMS) and a Cityworks database. Detail may be found in the County's MOM. A copy of the Grease Control Program Ordinance is included as Appendix VI.