



May 13, 2011

Acting Director of the Division of Enforcement
Department for Environmental Protection
300 Fair Oaks Lane
Frankfort, KY 40601

Chief, Environmental Enforcement Section
Environmental and Natural Resources Division
U.S. Department of Justice
601 D street NW
Washington, DC 20005
DOJ Case No. 90-5-1-1-08591

Chief, Water Program Enforcement Branch
Water Management Division
U.S. Environmental Protection Agency, Region 4
Atlanta Federal Center
61 Forsyth Street, S.W.
Atlanta, Georgia 30303

Re: Consent Decree Case No. 2:05-cv-00199-WOB

Dear Gentlemen:

Pursuant to the above-referenced Consent Decree, Sanitation District No. 1 (SD1) is required to submit an annual report on the implementation of the Pump Station Overflow Elimination Plan, which received regulatory approval on May 14, 2008.

38. Pump Station Plan. The District shall provide an annual report within twelve months of approval of the Pump Station Plan on implementation of these watershed projects. Thereafter and until such projects are complete, the District shall provide an annual report on its implementation progress within sixty days after each anniversary date of the initial report.

A certification as required by the Consent Decree is also enclosed (Consent Decree paragraph 38).

I am confident in the integrity of the enclosed document, and I am certain that the projects detailed in this report help further the mission and vision of SD1 by protecting water resources and enhancing the quality of life in Northern Kentucky.

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If you have any questions or concerns, do not hesitate to contact me at 859-578-6762 or by email at mwurschmidt@sd1.org.

Best regards,

A handwritten signature in cursive script that reads "Mark W. Wurschmidt".

Mark W. Wurschmidt, P.E., BCEE
Interim Executive Director

MWW/vf
Enclosures

Sanitation District No. 1
May 13, 2011

Pump Station Overflow Elimination 2011 Annual Report





CERTIFICATION

Pump Station Overflow Elimination 2011 Annual Report
Consent Decree Case No. 2:05-cv-00199-WOB

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 such information, 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.

Mark W. Wurschmidt
Mark W. Wurschmidt, P.E., BCEE
Interim Executive Director

5/6/11
Date

COMMONWEALTH OF KENTUCKY

COUNTY OF Kenton)ss.

The foregoing instrument was acknowledged before me this 10th day of May, 2011 by Mark W. Wurschmidt, P.E., BCEE, Interim Executive Director of Sanitation District. No. 1.

Suzanne Marie Borino
NOTARY PUBLIC

Kenton County, Kentucky

My commission expires: 7/6/2014

PUMP STATION OVERFLOW ELIMINATION

- 2011 ANNUAL REPORT -

May 13, 2011



Sanitation District No. 1

1045 Eaton Drive
Ft. Wright, KY 41017

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LIST OF ACRONYMS AND ABBREVIATIONS

PSOEP	Pump Station Overflow Elimination Plan
SD1	Sanitation District No. 1

SECTION 1: INTRODUCTION

1.1 Report Purpose

One of the requirements of Sanitation District No.1's (SD1) Consent Decree was to develop a Pump Station Overflow Elimination Plan (PSOEP) that identifies watershed projects to eliminate sanitary sewer overflows at specified pump stations throughout the service area. The names of the pump stations that were required to be included in this plan and their respective deadlines for elimination are contained in Exhibit E of the Consent Decree. The PSOEP was submitted in 2007 and received regulatory approval on May 14, 2008. Now that the PSOEP has been approved, the Consent Decree requires SD1 to provide an annual report on its implementation of the watershed projects included in the original plan. This document serves as the third annual update on implementation of the PSOEP.

1.2 Project Status Updates

Each of the 14 pump stations identified in the PSOEP has a unique set of circumstances that requires a customized solution to address and eliminate its sanitary sewer overflows. The progress of each pump station is at a different point along the path to overflow elimination. A detailed listing of the projects and activities conducted to comply with the requirements of the PSOEP, including schedules and project updates for the current reporting period can be found in Appendix A. To date, 8 out of the 14 pump station overflow elimination projects have been completed.

Pump Station Overflow Elimination Plan: Project Status Updates

As of May 2011

Pump Station	Required Overflow Elimination Date	Solution Summary	Current Status
Alex-Licking	December 31, 2010	Overflow elimination through replacement of the station with a new pump station sized to convey peak wet weather flows.	Complete
Allen Fork	December 31, 2014	Western Regional Water Reclamation Facility and the associated conveyance system are scheduled for completion in 2013. Once complete, the Gunpowder Pump Station will be eliminated by a new gravity sewer to the Western Regional conveyance system. The flows from the Burlington Pump Station will then be taken off of the Taylorsport Pump Station service area and redirected to this new gravity sewer. The new discharge route for the Burlington Pump Station will lower its discharge head, which will increase the pump station's capacity. Once the Burlington Pump Station has increased capacity, the Allen Fork Pump Station will also have increased capacity which will eliminate the overflow associated with the PS in a typical year.	Initial Design. I/I rehab work is being done upstream on the sewers as well as some manholes are being rehabbed. An RFP is estimated to go out in the fall of 2011 for the Burlington PS and Allen Fork PS upgrades and forcemain re-routing to the new Western Regional tunnel.
Crestview	December 31, 2014	A final solution will be selected according to the following schedule: 1) Calibrate hydraulic model and develop future condition models by June 12, 2008 (complete); 2) Select alternative solution for design by March 1, 2013, 3) Prepare final design for alternative solution selected by June 1, 2014; 4) Begin construction on selected alternative solution by September 1, 2014; 5) Complete construction by December 31, 2014.	The evaluation of the inspection data to determine the best rehabilitation methods is finished. CIPP lining, point repairs and other public infrastructure rehabilitation work to eliminate I/I began in the spring of 2010. Once this work is complete post-monitoring will be conducted to determine the effectiveness of these measures in eliminating I/I and the overflow at the pump station. If the overflow is still active, private source I/I removal will be examined versus an upsized pump station and force main or storage and the selected alternative will be designed and constructed.
Harrison Harbor	December 31, 2010	Remove this station from the Exhibit E list, as monitoring and documentation show no overflow activity.	Complete
Highland Acres	December 31, 2010	Overflow elimination through pump station removal. Peak wet weather flows are being conveyed to the Kentucky Aire Pump Station through a new gravity sewer. Once the Western Regional system improvements are completed in 2013, flow from the Kentucky Aire Pump Station will be conveyed via a new gravity sewer sized to convey peak wet weather flows under ultimate build-out conditions.	Complete
Kentucky Aire	December 31, 2013	Overflow elimination through pump station removal. Flows will be conveyed to the new Western Regional WRF by a new gravity sewer sized to convey peak wet weather flows under ultimate build-out conditions.	Initial Design. Potential routes and tie-in points to the Western Regional Frogtown Sewer are being evaluated. The pump station and associated overflow will be eliminated when Western Regional improvements are complete and in service in 2013.
Lakeview	The Watershed Plan provides for a delay in the December 31, 2013 Consent Decree deadline to eliminate the bypass at the Lakeview PS. Currently awaiting approval.	The proposed solution includes: 1) Increase in the pump station capacity and reliability to 22.5 MGD through the planned pumps replacement project; 2) Redirect a portion of the Lakeview tributary area to the new Western Regional System and reduce the annual predicted overflow at Lakeview in a typical year by 98% to 1 MG; 3) Conduct SSES investigations and targeted, cost-effective, I/I removal in the area remaining tributary to Lakeview to reduce extraneous wet weather flows.	The status of each component is as follows: 1) The pump replacement project is under design and a bid will go out at the end of 2011 for the project; 2) The Western Regional improvements are all on schedule to be complete and in service in 2013; 3) The priority I/I source identification & removal program is under initial design.
Riley Road No.1	December 31, 2010	Overflow elimination through pump station removal. The new Riley Road Pump Station eliminates both the existing Riley Road No. 1 and Riley Road No. 2 stations.	Complete
Ripple Creek	December 31, 2010	Overflow elimination through pump station removal. A new gravity sewer is conveying peak dry and wet weather flows to the existing Wolpert Pump Station. Storage has been constructed at the Wolpert Pump Station to store excess wet weather flow to ensure capacity is not exceeded during wet weather. Additionally, targeted I/I removal and rehabilitation of the existing sewers upstream of the Ripple Creek Pump Station were conducted.	Complete
South Hampton	March 31, 2013	Overflow elimination through pump station removal. Flows will be conveyed to the new Western Regional WRF by the new Frogtown gravity sewer sized to convey peak wet weather flows under ultimate build-out conditions.	The new Frogtown Western Regional Sewer is under construction. The Pump station and associated overflow will be eliminated and flows tied into the new Frogtown Sewer when Western Regional improvements are complete and in service in 2013.
South Park	December 31, 2010	SSES and flow monitoring work concluded that there are no dry or wet weather capacity-related issues at this station. To date, only two overflows have occurred at the South Park Pump Station and both were due to power outages. To eliminate any potential future overflows due to power outages, a backup power solution will be installed at this pump station.	Complete
Sunset	December 31, 2010	Overflow elimination through new force main which increased the pump station's capacity in order to eliminate the overflow in a typical year. A new diesel driven pump was also installed for backup during power outages.	Complete
Taylorsport ¹	December 31, 2010	Overflow elimination through pump station upgrades to convey wet weather flows.	Complete
Union	March 31, 2013	Overflow elimination through pump station removal. Flows will be conveyed to the new Western Regional WRF by the new Union gravity sewer sized to convey peak wet weather flows under ultimate build-out conditions.	Construction of the new Union sewer is complete. The pump station and associated overflow will be eliminated when Western Regional improvements are complete and in service in 2013.

¹ Taylorsport Pump Station may be experiencing overflows due to temporary construction of SD1's Western Regional Collection System. Please see SD1's Quarterly Report No. 14 for a full explanation.