KPDES FORM 1

✓ AI 2214

RECEIVED JUN 27 2007 By

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT APPLICATION

This is an application to: (check one)

- ☐ Apply for a new permit.
- ☒ Apply for reissuance of expiring permit.
- ☐ Apply for a construction permit.
- ☐ Modify an existing permit.
  Give reason for modification under Item II.A.

A complete application consists of this form and one of the following:
Form A, Form B, Form C, Form F, or Short Form C

For additional information contact:
KPDES Branch (502) 564-3410

I. FACILITY LOCATION AND CONTACT INFORMATION	AGENCY USE	0	0	2	8	8	0	1
A. Name of business, municipality, company, etc. requesting permit Louisville & Jefferson County Metropolitan Sewer District								
B. Facility Name and Location	C. Facility Owner/Mailing Address							
Facility Location Name: Silver Heights STP MSD	Owner Name: Metropolitan Sewer District							
Facility Location Address (i.e. street, road, etc.): 9418 Slayton Court	Mailing Street: 700 West Liberty Street							
Facility Location City, State, Zip Code: Louisville, Kentucky 40229	Mailing City, State, Zip Code: Louisville, Kentucky 40203							
	Telephone Number: (502) 564-6000							

II. FACILITY DESCRIPTION			
A. Provide a brief description of activities, products, etc: Residental & Commercial Wastewater Treatment (non-industry); Publically owned treatment Works			
B. Standard Industrial Classification (SIC) Code and Description			
Principal SIC Code & Description:	4952; Sewage Treatment Fac.		
Other SIC Codes:	6552; Land Subdivision & Land Development		

III. FACILITY LOCATION	
A. Attach a U.S. Geological Survey 7 ½ minute quadrangle map for the site. (See instructions)	
B. County where facility is located: Jefferson	City where facility is located (if applicable): Louisville
C. Body of water receiving discharge: Mud Creek at mile point 1.80	
D. Facility Site Latitude (degrees, minutes, seconds): 38° 06' 43"	Facility Site Longitude (degrees, minutes, seconds): 85° 41' 57"
E. Method used to obtain latitude & longitude (see instructions):	USGS Topographic Map
F. Facility Dun and Bradstreet Number (DUNS #) (if applicable):	

IV. OWNER/OPERATOR INFORMATION

A. Type of Ownership:
☒ Publicly Owned ☐ Privately Owned ☐ State Owned ☐ Both Public and Private Owned ☐ Federally owned

B. Operator Contact Information (See instructions)

Name of Treatment Plant Operator: Mike Stephenson	Telephone Number: (502) 239-7695
Operator Mailing Address (Street): 8405 Cedar Creek Road	
Operator Mailing Address (City, State, Zip Code): Louisville, Kentucky 40291	
Is the operator also the owner? Yes ☐ No ☒	Is the operator certified? If yes, list certification class and number below. Yes ☒ No ☐
Certification Class: III	Certification Number: 9616

V. EXISTING ENVIRONMENTAL PERMITS

Current NPDES Number: KY0028801	Issue Date of Current Permit: April 1, 2003	Expiration Date of Current Permit: December 31, 2007
Number of Times Permit Reissued:	Date of Original Permit Issuance:	Sludge Disposal Permit Number:
Kentucky DOW Operational Permit #:	Kentucky DSMRE Permit Number(s):	

C. Which of the following additional environmental permit/registration categories will also apply to this facility?

CATEGORY	EXISTING PERMIT WITH NO.	PERMIT NEEDED WITH PLANNED APPLICATION DATE
Air Emission Source	N/A	N/A
Solid or Special Waste	N/A	N/A
Hazardous Waste - Registration or Permit	N/A	N/A

VI. DISCHARGE MONITORING REPORTS (DMRs)

KPDES permit holders are required to submit DMRs to the Division of Water on a regular schedule (as defined by the KPDES permit). The information in this section serves to specifically identify the department, office or individual you designate as responsible for submitting DMR forms to the Division of Water.

A. Name of department, office or official submitting DMRs:	Dennis Thomasson
B. Address where DMR forms are to be sent. (Complete only if address is different from mailing address in Section I.)	
DMR Mailing Name:	Cedar Creek Wastewater Plant
DMR Mailing Street:	8405 Cedar Creek Rd
DMR Mailing City, State, Zip Code:	Louisville, Kentucky 40211
DMR Official Telephone Number:	(502) 239-7695

VII. APPLICATION FILING FEE

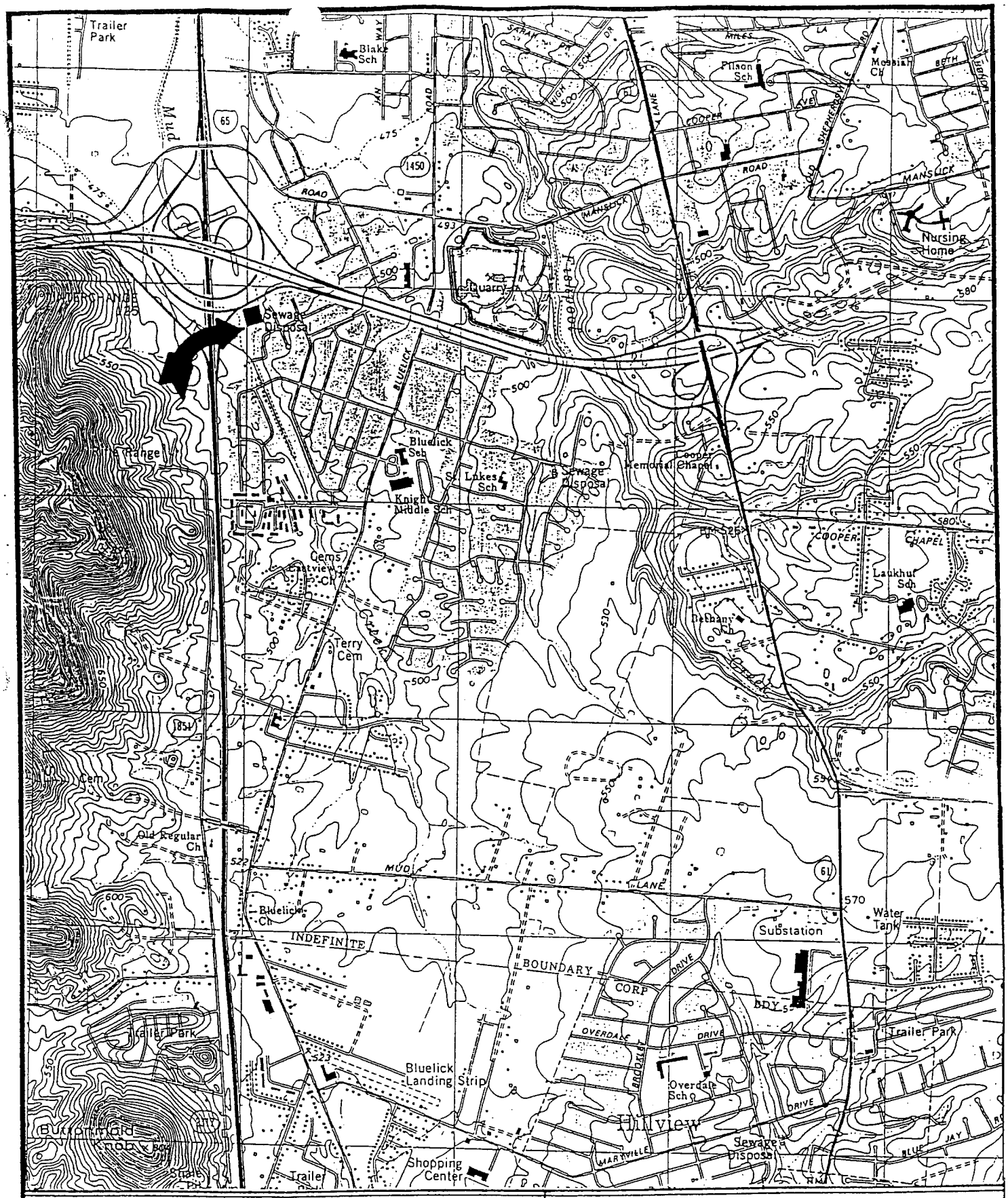
KPDES regulations require that a permit applicant pay an application filing fee equal to twenty percent of the permit base fee. Please examine the base and filing fees listed below and in the Form 1 instructions and enclose a check payable to "Kentucky State Treasurer" for the appropriate amount. Descriptions of the base fee amounts are given in the "General Instructions."

Facility Fee Category:	Filing Fee Enclosed:
Public Owned Treatment Works (No Fee Due)	N/A

VIII. 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, 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.

NAME AND OFFICIAL TITLE (type or print):	TELEPHONE NUMBER (area code and number):
Herbert J. Schardein, Jr Executive Director	(502) 540-6000
SIGNATURE	DATE:
	6/21/07



BROOKS QUADRANGLE
KENTUCKY
7.5 MINUTE SERIES (TOPOGRAPHIC)
SW/4 LOUISVILLE 15' QUADRANGLE

Silver Heights 258

Capacity .500 MGD

MSD
URBAN AREA
400 South Sixth Street
Louisville, Ky. 40202

LATITUDE			LONGTITUDE		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
38°	06'	43"	85°	41'	56"

KPDES FORM A

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT APPLICATION

A complete application consists of this form and Form 1.
For additional information, contact KPDES Branch (502) 564-3410.

APPLICATION OVERVIEW	AGENCY USE							

Form A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form A you must complete.

BASIC APPLICATION INFORMATION:

A. **Basic Application Information for all Applicants.** All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.

B. **Additional Application Information for Applicants with a Design Flow ≥ 0.1 mgd.** All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.

C. **Certification.** All applicants must complete Part C (Certification).

SUPPLEMENTAL APPLICATION INFORMATION:

D. **Expanded Effluent Testing Data.** A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):

1. Has a design flow rate greater than or equal to 1 mgd,
2. Is required to have a pretreatment program (or has one in place), or
3. Is otherwise required by the permitting authority to provide the information.

E. **Toxicity Testing Data.** A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):

1. Has a design flow rate greater than or equal to 1 mgd,
2. Is required to have a pretreatment program (or has one in place), or
3. Is otherwise required by the permitting authority to submit results of toxicity testing.

F. **Industrial User Discharges and RCRA/CERCLA Wastes.** A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:

1. All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
2. Any other industrial user that:
   a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
   b. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
   c. Is designated as an SIU by the control authority.

G. **Combined Sewer Systems.** A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)

BASIC APPLICATION INFORMATION

PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:

All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.

A.1. Facility Information.

Facility name: Silver Heights STP

Mailing Address: 700 West Liberty Street
Louisville, Kentucky 40203

Contact person: James (Jim) Porter

Title: Process Supervisor – Operations

Telephone number: (502) 239-7695

Facility Address (not P.O. Box): 9418 Slayton court
Louisville, Kentucky 40229

A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant name: Louisville and Jefferson County Metropolitan Sewer District

Mailing Address: 700 West Liberty Street
Louisville, Kentucky 40203

Contact person: Daymond Talley

Title: Emergency Response Pretreatment Inspector

Telephone number: (502) 540-6980

Is the applicant the owner or operator (or both) of the treatment works?

☒ Owner ☐ Operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

☐ Facility ☒ Applicant

A.3. Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

KPDES	KY0028801	PSD	
UIC		Other	
RCRA		Other	

A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name	Population Served	Type of Collection System	Ownership
Prospect, Kentucky	637 Connections	Separate	Municipal

Total population served 637 Connections

A.5. Indian Country.

a. Is the treatment works located in Indian Country?

☐ Yes ☒ No

b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

☐ Yes ☒ No

A.6. Flow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

a. Design flow rate 0.500 mgd

	Two Years Ago	Last Year	This Year	
b. Annual average daily flow rate	0.270	0.353	0..548	mgd
c. Maximum daily flow rate	1.360	1.800	0.950	mgd

A.7. Collection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

☒ Separate sanitary sewer 100 %

☐ Combined storm and sanitary sewer ____ %

A.8. Discharges and Other Disposal Methods.

a. Does the treatment works discharge effluent to waters of the U.S.? ☒ Yes ☐ No

If yes, list how many of each of the following types of discharge points the treatment works uses:

i. Discharges of treated effluent 1

ii. Discharges of untreated or partially treated effluent ____

iii. Combined sewer overflow points ____

iv. Constructed emergency overflows (prior to the headworks) ____

v. Other ____ ____

b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.? ☐ Yes ☒ No

If yes, provide the following for each surface impoundment:

Location: ____

Annual average daily volume discharged to surface impoundment(s) ____ mgd

Is discharge ☐ continuous or ☐ intermittent?

c. Does the treatment works land-apply treated wastewater? ☐ Yes ☒ No

If yes, provide the following for each land application site:

Location: ____

Number of acres: ____

Annual average daily volume applied to site: ____ mgd

Is land application ☐ continuous or ☐ intermittent?

d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works? ☐ Yes ☒ No

If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

_____

If transport is by a party other than the applicant, provide:

Transporter name: _____

Mailing Address: _____

_____

Contact person: _____

Title: _____

Telephone number: _____

For each treatment works that receives this discharge, provide the following:

Name: _____

Mailing Address: _____

_____

Contact person: _____

Title: _____

Telephone number: _____

If known, provide the KPDES permit number of the treatment works that receives this discharge. _____

Provide the average daily flow rate from the treatment works into the receiving facility. _____ mgd

e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8.a through A.8.d above (e.g., underground percolation, well injection)? ☐ Yes ☒ No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):

_____

Annual daily volume disposed of by this method: _____

Is disposal through this method ☐ continuous or ☐ intermittent?

WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 **once for each outfall** (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. **If you answered "no" to question A.8.a**, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

A.9. Description of Outfall.

a. Outfall number: 001

b. Location

Louisville	40229
(City or town, if applicable)	(Zip Code)
Jefferson	Kentucky
(County)	(State)
38 deg 06 min 43 sec	85 deg 41 min 56 sec
(Latitude)	(Longitude)

c. Distance from shore (if applicable) _____ ft.

d. Depth below surface (if applicable) _____ ft.

e. Average daily flow rate 0.353 mgd

f. Does this outfall have either an intermittent or a periodic discharge? ☐ Yes ☒ No (go to A.9.g.)

If yes, provide the following information:

Number of times per year discharge occurs: _____

Average duration of each discharge: _____

Average flow per discharge: _____ mgd

Months in which discharge occurs: _____

g. Is outfall equipped with a diffuser? ☐ Yes ☒ No

A.10. Description of Receiving Waters.

a. Name of receiving water: Mud Creek at mile point 1.80

b. Name of watershed (if known): Pond Creek

United States Soil Conservation Service 14-digit watershed code (if known): _____

c. Name of State Management/River Basin (if known): _____

United States Geological Survey 8-digit hydrologic cataloging unit code (if known): _____

d. Critical low flow of receiving stream (if applicable):
acute _____ cfs chronic _____ cfs

e. Total hardness of receiving stream at critical low flow (if applicable): _____ mg/l of $CaCO_3$

A.11. Description of Treatment.

a. What levels of treatment are provided? Check all that apply.

☒ Primary ☒ Secondary

☐ Advanced ☐ Other. Describe: _____

b. Indicate the following removal rates (as applicable):

Design BOD_5 removal or Design $CBOD_5$ removal _____ %

Design SS removal _____ %

Design P removal _____ %

Design N removal _____ %

Other _____ _____ %

c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

Chlorine

If disinfection is by chlorination, is dechlorination used for this outfall? ☒ Yes ☐ No

d. Does the treatment plant have post aeration? ☐ Yes ☒ No

A.12. Effluent Testing Information. All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 001

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	6.7	s.u.			
pH (Maximum)	7.2	s.u.			
Flow Rate (2006)	1.80	MGD	0.353	MGD	Cont.
Temperature (Winter)					
Temperature (Summer)					

* For pH please report a minimum and a maximum daily value

POLLUTANT		MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
		Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.								
BIOCHEMICAL OXYGEN	BOD-5							
DEMAND (Report one)	CBOD-5	18	Mg/l	3.16	Mg/l	192	SM 5210	1
FECAL COLIFORM		33400	#/100	208	#/100	195	9222 D	1
TOTAL SUSPENDED SOLIDS (TSS)		17	Mg/l	6.3	Mg/l	192	SM 2540D	1

END OF PART A.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM A YOU MUST COMPLETE

BASIC APPLICATION INFORMATION

PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).

All applicants with a design flow rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

B.1. Inflow and Infiltration. Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.

See below gpd

Briefly explain any steps underway or planned to minimize inflow and infiltration.

Currently under evaluation as part of 2005 Wet Weather Consent Decree

B.2. Topographic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.)

a. The area surrounding the treatment plant, including all unit processes.

b. The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.

c. Each well where wastewater from the treatment plant is injected underground.

d. Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.

e. Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.

f. If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

B.3. Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g, chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.

B.4. Operation/Maintenance Performed by Contractor(s).

Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? ☐ Yes ☒ No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: _____

Mailing Address: _____

_____

Telephone Number: _____

Responsibilities of Contractor: _____

B.5. Scheduled Improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.

NA

b. Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.

☐ Yes ☐ No

c If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).

_____

d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

Implementation Stage	Schedule MM / DD / YYYY	Actual Completion MM / DD / YYYY
– Begin construction	_____	_____
– End construction	_____	_____
– Begin discharge	_____	_____
– Attain operational level	_____	_____

e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? ☐ Yes ☐ No

Describe briefly: _____

_____

B.6. EFFLUENT TESTING DATA (GREATER THAN O.1 MGD ONLY).

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall Number: _____

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
AMMONIA (as N)	9.02	Mg/l	0.87	Mg/l	192	SM 4500 NH3 B&C	0.05
CHLORINE (TOTAL RESIDUAL, TRC)	<0.01	Mg/l			96	SM 4500-Cl D	0.01
DISSOLVED OXYGEN			7.0		96	4500G	0.1
TOTAL KJELDAHL NITROGEN (TKN)	NA		NA				
NITRATE PLUS NITRITE NITROGEN	NA		NA				
OIL and GREASE	NA		NA				
PHOSPHORUS (Total)	3.6	Mg/l	1.04	Mg/l	176	EPA 200.7	0.006
TOTAL DISSOLVED SOLIDS (TDS)	NA		NA				
OTHER							

END OF PART B.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM A YOU MUST COMPLETE

BASIC APPLICATION INFORMATION

PART C. CERTIFICATION

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form A, as explained in the Application Overview. Indicate below which parts of Form A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form A you have completed and are submitting:

☒ Basic Application Information packet

Supplemental Application Information packet:

☐ Part D (Expanded Effluent Testing Data)

☐ Part E (Toxicity Testing: Biomonitoring Data)

☐ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)

☐ Part G (Combined Sewer Systems)

ALL APPLICANTS MUST COMPLETE THE FOLLOWING 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, the information 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.

Name and official title: Herbert J. Sharden, Jr., Executive Director

Signature: Herbert J. Sharden Jr.

Telephone number: (502) 540-6000

Date signed: 6/21/07

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

Division of Water, KPDES Branch
Inventory & Data Management Section
Frankfort Office Park
14 Reilly Road
Frankfort, Kentucky 40601

For additional information call: (502) 564-2225, extension 465.

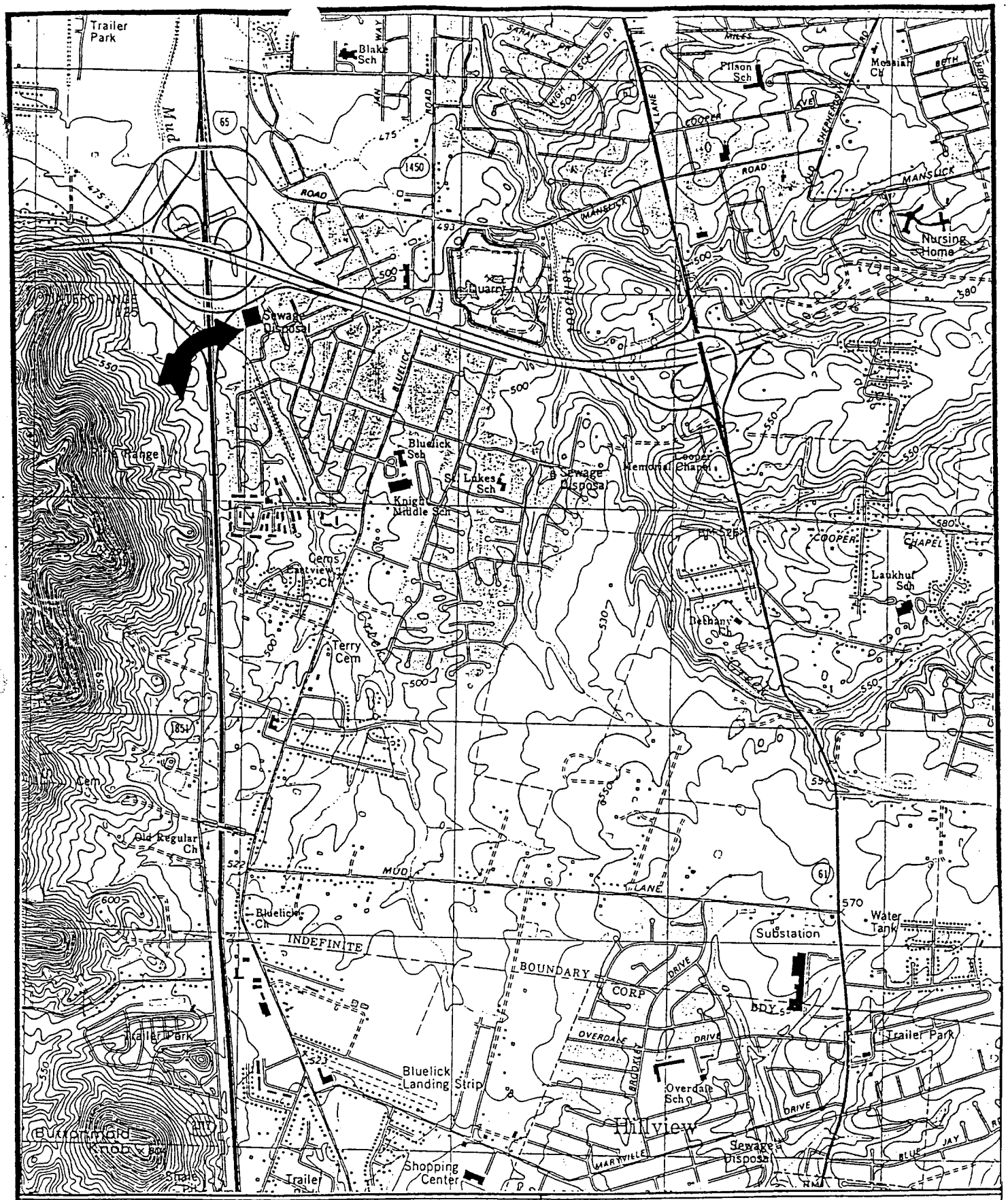
KPDES Permit Application Attachments

Additional Information (Receiving Water and future capital project to eliminate treatment plant

Mud Creek at mile point 1.80

Mud Creek is not listed in either the 2004 Kentucky's 303(d) list of impaired waters or the draft 2006 Integrated Report to Congress on The Condition of Water Resources in Kentucky. Mud Creek flows into Southern Ditch which doesn't meet the Primary Contact Recreation use designation due to Pathogens.

As part of MSD continued approach to regionalization and the elimination of package treatment plants MSD has identified a potential interceptor sewer (Mud Creek/Silver Heights Interceptor 320) that could eliminate the Silver Heights wastewater treatment plant as well as allow residents with problem on-site disposal systems to connect to the sanitary sewer and provide for future collector projects to provide sewer service to unsewered areas. This project is not in the current five (5) year Capital Plan. This project will be evaluated against the 2005 consent decree related projects for prioritization. Proposed projects will be presented in the Sanitary Sewer Discharge Plan that will be submitted to the Kentucky Department for Environmental Protection and the US EPA. Based on preliminary evaluations this project will not result in a high priority score and therefore, will not be considered for elimination within the proposed permit cycle.

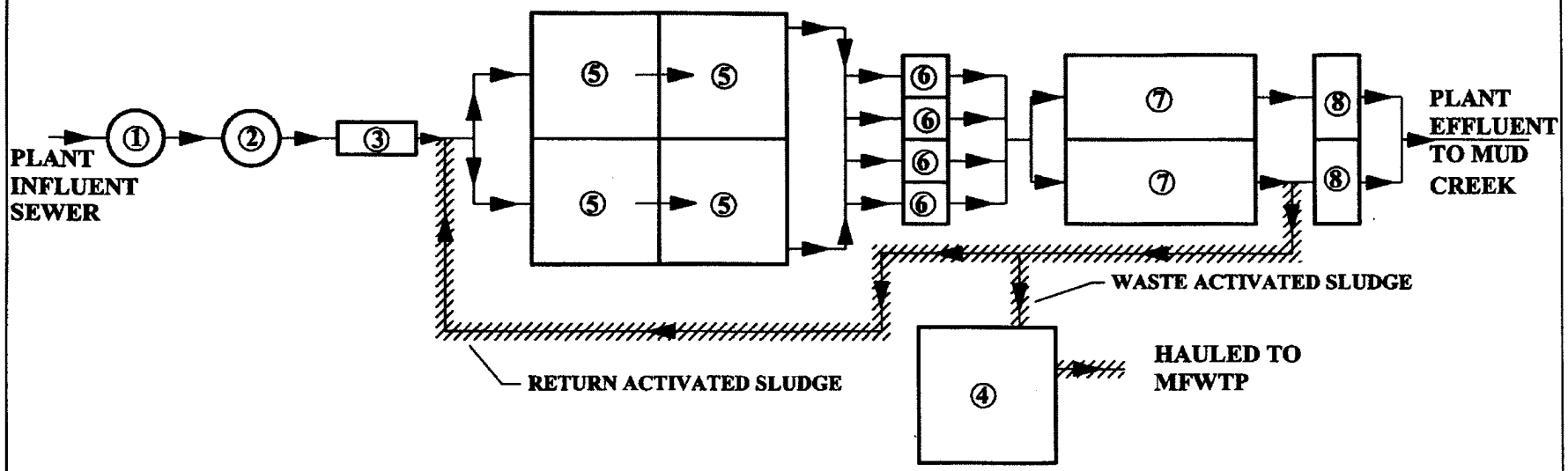


BROOKS QUADRANGLE
KENTUCKY
7.5 MINUTE SERIES (TOPOGRAPHIC)
SW/4 LOUISVILLE 15' QUADRANGLE

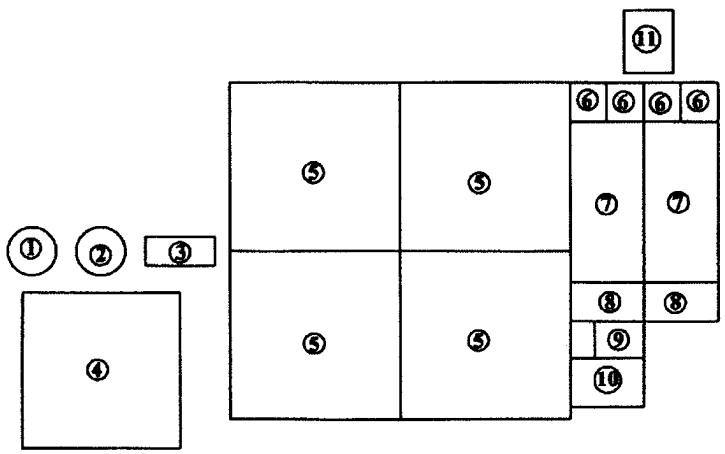
Silver Heights 258
Capacity .500 MGD

MSD
URBAN AREA
400 South Sixth Street
Louisville, Ky. 40202

LATITUDE			LONGTITUDE		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
38°	06'	43"	85°	41'	56"



PROCESS FLOW DIAGRAM



WTP Site Key Map

LEGEND

- Wastewater Flow
- Biosolids Flow
- ① Wet Well
- ② Lift Station
- ③ Comminutor
- ④ Sludge Holding Tank
- ⑤ Aeration Tank
- ⑥ Clarifier
- ⑦ Settling Tank
- ⑧ Chlorine Contact
- ⑨ Chlorine Room
- ⑩ Control Room
- ⑪ Pump House

MSD
Louisville and Jefferson County
Metropolitan Sewer District
700 West Liberty Street
Louisville, Kentucky 40203-1913

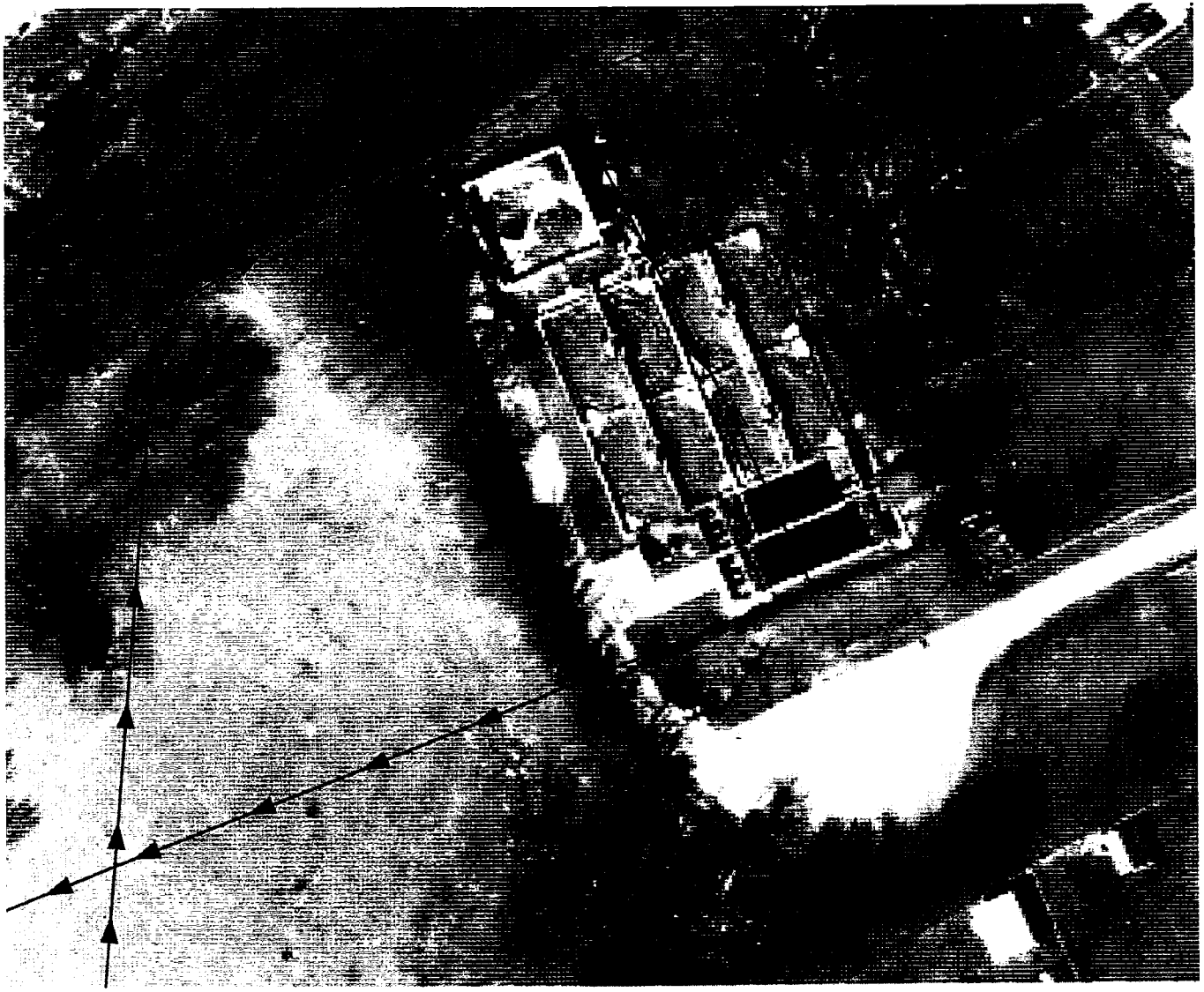
SILVER HEIGHTS WTP PROCESS FLOW PLAN

KPDES #: KY 0028801

Scale = None	Drawn By: ELN	Date: 11/01/06

silver heights wtp flow.dwg

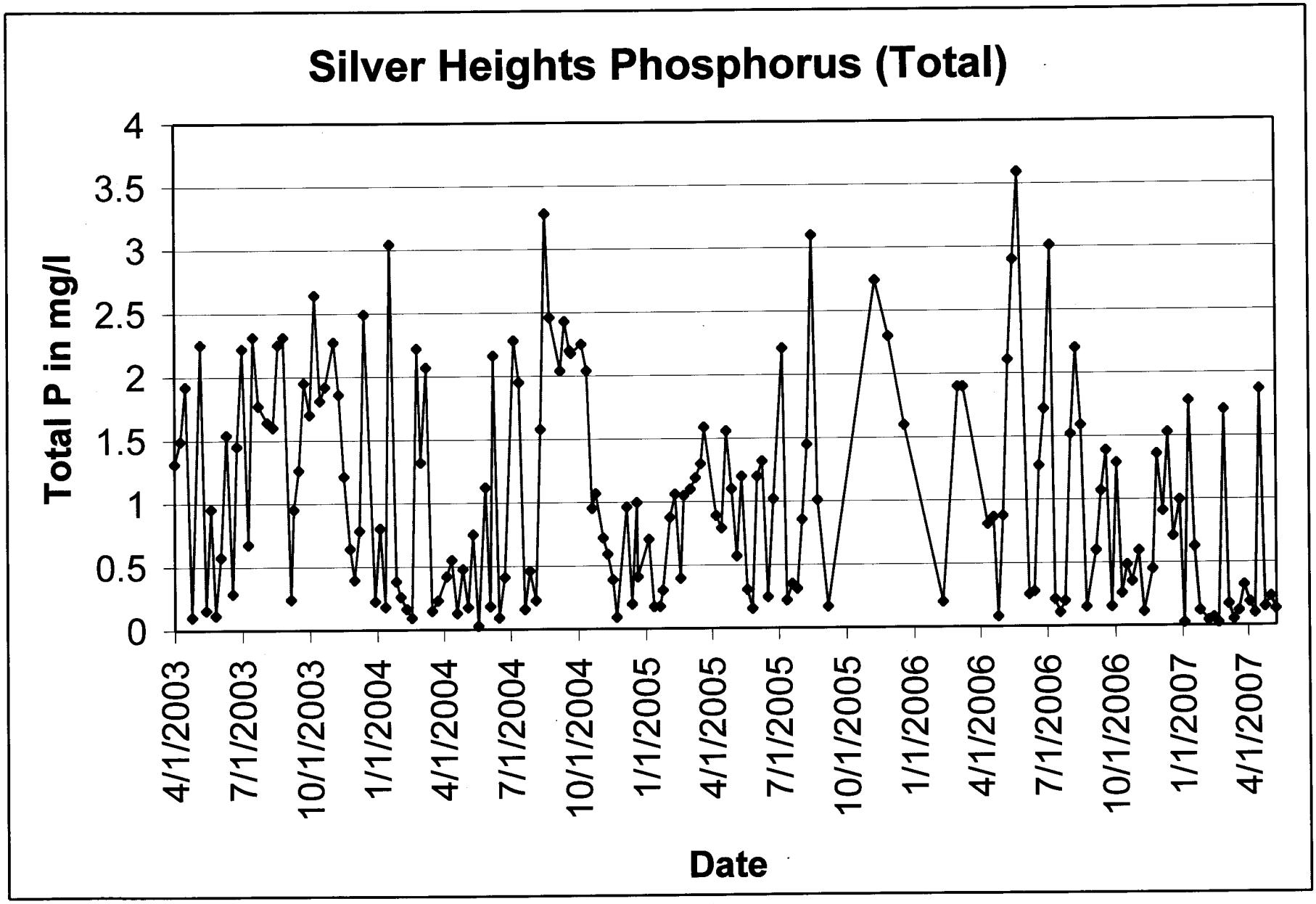
KY0028801 Silver Heights STP



★ Sample Locations
● Sewernd
Sewer
Treatment Plants
Text Street Names
Drainage Lines
Streams

N
W E
S

0.02 0 0.02 0.04 Miles


Silver Heights Phosphorus (Total)
Total P in mg/l
4
3.5
3
2.5
2
1.5
1
0.5
0
4/1/2003
7/1/2003
10/1/2003
1/1/2004
4/1/2004
7/1/2004
10/1/2004
1/1/2005
4/1/2005
7/1/2005
10/1/2005
1/1/2006
4/1/2006
7/1/2006
10/1/2006
1/1/2007
4/1/2007
Date

KY0028801 Silver Heights STP Total Phosphorus Data

4/1/2003	EPA 200.7	Phosphorus	1.31	mg/L	MSD
4/9/2003	EPA 200.7	Phosphorus	1.49	mg/L	MSD
4/16/2003	EPA 200.7	Phosphorus	1.92	mg/L	MSD
4/24/2003	EPA 200.7	Phosphorus	0.099	mg/L	MSD
5/6/2003	EPA 200.7	Phosphorus	2.25	mg/L	MSD
5/13/2003	EPA 200.7	Phosphorus	0.154	mg/L	MSD
5/20/2003	EPA 200.7	Phosphorus	0.953	mg/L	MSD
5/26/2003	EPA 200.7	Phosphorus	0.114	mg/L	MSD
6/2/2003	EPA 200.7	Phosphorus	0.572	mg/L	MSD
6/10/2003	EPA 200.7	Phosphorus	1.54	mg/L	MSD
6/18/2003	EPA 200.7	Phosphorus	0.285	mg/L	MSD
6/24/2003	EPA 200.7	Phosphorus	1.45	mg/L	MSD
7/1/2003	EPA 200.7	Phosphorus	2.22	mg/L	MSD
7/9/2003	EPA 200.7	Phosphorus	0.672	mg/L	MSD
7/16/2003	EPA 200.7	Phosphorus	2.31	mg/L	MSD
7/23/2003	EPA 200.7	Phosphorus	1.77	mg/L	MSD
8/4/2003	EPA 200.7	Phosphorus	1.64	mg/L	MSD
8/12/2003	EPA 200.7	Phosphorus	1.6	mg/L	MSD
8/19/2003	EPA 200.7	Phosphorus	2.25	mg/L	MSD
8/26/2003	EPA 200.7	Phosphorus	2.31	mg/L	MSD
9/5/2003	EPA 200.7	Phosphorus	0.239	mg/L	MSD
9/9/2003	EPA 200.7	Phosphorus	0.951	mg/L	MSD
9/16/2003	EPA 200.7	Phosphorus	1.26	mg/L	MSD
9/23/2003	EPA 200.7	Phosphorus	1.95	mg/L	MSD
10/1/2003	EPA 200.7	Phosphorus	1.7	mg/L	MSD
10/8/2003	EPA 200.7	Phosphorus	2.64	mg/L	MSD
10/15/2003	EPA 200.7	Phosphorus	1.81	mg/L	MSD
10/22/2003	EPA 200.7	Phosphorus	1.92	mg/L	MSD
11/3/2003	EPA 200.7	Phosphorus	2.27	mg/L	MSD
11/10/2003	EPA 200.7	Phosphorus	1.86	mg/L	MSD
11/17/2003	EPA 200.7	Phosphorus	1.21	mg/L	MSD
11/25/2003	EPA 200.7	Phosphorus	0.64	mg/L	MSD
12/1/2003	EPA 200.7	Phosphorus	0.393	mg/L	MSD
12/8/2003	EPA 200.7	Phosphorus	0.78	mg/L	MSD
12/15/2003	EPA 200.7	Phosphorus	2.49	mg/L	MSD
12/29/2003	EPA 200.7	Phosphorus	0.223	mg/l	MSD
1/5/2004	EPA 200.7	Phosphorus	0.799	mg/l	MSD
1/12/2004	EPA 200.7	Phosphorus	0.18	mg/l	MSD
1/19/2004	EPA 200.7	Phosphorus	3.04	mg/l	MSD
1/27/2004	EPA 200.7	Phosphorus	0.38	mg/l	MSD
2/2/2004	EPA 200.7	Phosphorus	0.258	mg/l	MSD
2/10/2004	EPA 200.7	Phosphorus	0.163	mg/l	MSD
2/17/2004	EPA 200.7	Phosphorus	0.091	mg/l	MSD
2/25/2004	EPA 200.7	Phosphorus	2.22	mg/l	MSD
3/1/2004	EPA 200.7	Phosphorus	1.32	mg/l	MSD
3/9/2004	EPA 200.7	Phosphorus	2.07	mg/l	MSD
3/16/2004	EPA 200.7	Phosphorus	0.147	mg/l	MSD

KY0028801 Silver Heights STP Total Phosphorus Data

3/24/2004	EPA 200.7	Phosphorus	0.228	mg/l	MSD
4/5/2004	EPA 200.7	Phosphorus	0.418	mg/l	MSD
4/12/2004	EPA 200.7	Phosphorus	0.548	mg/l	MSD
4/19/2004	EPA 200.7	Phosphorus	0.128	mg/l	MSD
4/27/2004	EPA 200.7	Phosphorus	0.475	mg/l	MSD
5/4/2004	EPA 200.7	Phosphorus	0.173	mg/l	MSD
5/11/2004	EPA 200.7	Phosphorus	0.75	mg/l	MSD
5/18/2004	EPA 200.7	Phosphorus	0.027	mg/l	MSD
5/28/2004	EPA 200.7	Phosphorus	1.12	mg/l	MSD
6/3/2004	EPA 200.7	Phosphorus	0.181	mg/l	MSD
6/8/2004	EPA 200.7	Phosphorus	2.16	mg/l	MSD
6/15/2004	EPA 200.7	Phosphorus	0.091	mg/l	MSD
6/23/2004	EPA 200.7	Phosphorus	0.409	mg/l	MSD
7/6/2004	EPA 200.7	Phosphorus	2.28	mg/l	MSD
7/13/2004	EPA 200.7	Phosphorus	1.95	mg/l	MSD
7/20/2004	EPA 200.7	Phosphorus	0.158	mg/l	MSD
7/27/2004	EPA 200.7	Phosphorus	0.458	mg/l	MSD
8/4/2004	EPA 200.7	Phosphorus	0.226	mg/l	MSD
8/11/2004	EPA 200.7	Phosphorus	1.58	mg/l	MSD
8/18/2004	EPA 200.7	Phosphorus	3.28	mg/l	MSD
8/24/2004	EPA 200.7	Phosphorus	2.46	mg/l	MSD
9/7/2004	EPA 200.7	Phosphorus	2.04	mg/l	MSD
9/13/2004	EPA 200.7	Phosphorus	2.43	mg/l	MSD
9/20/2004	EPA 200.7	Phosphorus	2.2	mg/l	MSD
9/22/2004	EPA 200.7	Phosphorus	2.18	mg/l	MSD
10/6/2004	EPA 200.7	Phosphorus	2.25	mg/l	MSD
10/13/2004	EPA 200.7	Phosphorus	2.04	mg/l	MSD
10/20/2004	EPA 200.7	Phosphorus	0.952	mg/l	MSD
10/25/2004	EPA 200.7	Phosphorus	1.07	mg/l	MSD
11/4/2004	EPA 200.7	Phosphorus	0.719	mg/l	MSD
11/10/2004	EPA 200.7	Phosphorus	0.591	mg/l	MSD
11/17/2004	EPA 200.7	Phosphorus	0.387	mg/l	MSD
11/22/2004	EPA 200.7	Phosphorus	0.092	mg/l	MSD
12/6/2004	EPA 200.7	Phosphorus	0.961	mg/l	MSD
12/13/2004	EPA 200.7	Phosphorus	0.195	mg/l	MSD
12/20/2004	EPA 200.7	Phosphorus	0.997	mg/l	MSD
12/21/2004	EPA 200.7	Phosphorus	0.409	mg/l	MSD
1/5/2005	EPA 200.7	Phosphorus	0.705	mg/l	MSD
1/12/2005	EPA 200.7	Phosphorus	0.174	mg/l	MSD
1/20/2005	EPA 200.7	Phosphorus	0.176	mg/l	MSD
1/24/2005	EPA 200.7	Phosphorus	0.301	mg/l	MSD
2/3/2005	EPA 200.7	Phosphorus	0.878	mg/l	MSD
2/10/2005	EPA 200.7	Phosphorus	1.06	mg/l	MSD
2/17/2005	EPA 200.7	Phosphorus	0.396	mg/l	MSD
2/22/2005	EPA 200.7	Phosphorus	1.05	mg/l	MSD
3/3/2005	EPA 200.7	Phosphorus	1.1	mg/l	MSD
3/10/2005	EPA 200.7	Phosphorus	1.19	mg/l	MSD

KY0028801 Silver Heights STP Total Phosphorus Data

3/17/2005	EPA 200.7	Phosphorus	1.3	mg/l	MSD
3/22/2005	EPA 200.7	Phosphorus	1.59	mg/l	MSD
4/7/2005	EPA 200.7	Phosphorus	0.89	mg/l	MSD
4/14/2005	EPA 200.7	Phosphorus	0.791	mg/l	MSD
4/21/2005	EPA 200.7	Phosphorus	1.56	mg/l	MSD
4/28/2005	EPA 200.7	Phosphorus	1.1	mg/l	MSD
5/5/2005	EPA 200.7	Phosphorus	0.57	mg/l	MSD
5/12/2005	EPA 200.7	Phosphorus	1.2	mg/l	MSD
5/19/2005	EPA 200.7	Phosphorus	0.306	mg/l	MSD
5/26/2005	EPA 200.7	Phosphorus	0.156	mg/l	MSD
6/2/2005	EPA 200.7	Phosphorus	1.2	mg/l	MSD
6/9/2005	EPA 200.7	Phosphorus	1.32	mg/l	MSD
6/16/2005	EPA 200.7	Phosphorus	0.247	mg/l	MSD
6/24/2005	EPA 200.7	Phosphorus	1.02	mg/l	MSD
7/7/2005	EPA 200.7	Phosphorus	2.21	mg/l	MSD
7/12/2005	EPA 200.7	Phosphorus	0.219	mg/l	MSD
7/19/2005	EPA 200.7	Phosphorus	0.349	mg/l	MSD
7/26/2005	EPA 200.7	Phosphorus	0.311	mg/l	MSD
8/2/2005	EPA 200.7	Phosphorus	0.856	mg/l	MSD
8/9/2005	EPA 200.7	Phosphorus	1.45	mg/l	MSD
8/16/2005	EPA 200.7	Phosphorus	3.1	mg/l	MSD
8/23/2005	EPA 200.7	Phosphorus	1.01	mg/l	MSD
9/6/2005	EPA 200.7	Phosphorus	0.169	mg/l	MSD
11/10/2005	EPA 200.7	Phosphorus	2.74	mg/l	MSD
11/28/2005	EPA 200.7	Phosphorus	2.3	mg/l	MSD
12/19/2005	EPA 200.7	Phosphorous	1.6	mg/l	MSD
2/9/2006	EPA 200.7	Phosphorous	0.2	mg/l	MSD
3/2/2006	EPA 200.7	Phosphorous	1.9	mg/l	MSD
3/9/2006	EPA 200.7	Phosphorous	1.9	mg/l	MSD
4/11/2006	EPA 200.7	Phosphorous	0.81	mg/l	MSD
4/19/2006	EPA 200.7	Phosphorous	0.864	mg/l	MSD
4/25/2006	EPA 200.7	Phosphorous	0.081	mg/l	MSD
5/2/2006	EPA 200.7	Phosphorous	0.876	mg/l	MSD
5/9/2006	EPA 200.7	Phosphorous	2.11	mg/l	MSD
5/16/2006	EPA 200.7	Phosphorous	2.9	mg/l	MSD
5/23/2006	EPA 200.7	Phosphorous	3.59	mg/l	MSD
6/6/2006	EPA 200.7	Phosphorous	0.254	mg/l	MSD
6/13/2006	EPA 200.7	Phosphorous	0.276	mg/l	MSD
6/20/2006	EPA 200.7	Phosphorous	1.27	mg/l	MSD
6/27/2006	EPA 200.7	Phosphorous	1.72	mg/l	MSD
7/6/2006	EPA 200.7	Phosphorous	3.01	mg/l	MSD
7/11/2006	EPA 200.7	Phosphorous	0.213	mg/l	MSD
7/18/2006	EPA 200.7	Phosphorous	0.11	mg/l	MSD
7/25/2006	EPA 200.7	Phosphorous	0.199	mg/l	MSD
8/2/2006	EPA 200.7	Phosphorous	1.52	mg/l	MSD
8/9/2006	EPA 200.7	Phosphorous	2.2	mg/l	MSD
8/16/2006	EPA 200.7	Phosphorous	1.59	mg/l	MSD

KY0028801 Silver Heights STP Total Phosphorus Data

8/23/2006	EPA 200.7	Phosphorous	0.151	mg/l	MSD
9/5/2006	EPA 200.7	Phosphorous	0.598	mg/l	MSD
9/12/2006	EPA 200.7	Phosphorous	1.07	mg/l	MSD
9/19/2006	EPA 200.7	Phosphorous	1.39	mg/l	MSD
9/26/2006	EPA 200.7	Phosphorous	0.153	mg/l	MSD
10/3/2006	EPA 200.7	Phosphorous	1.29	mg/l	MSD
10/10/2006	EPA 200.7	Phosphorous	0.26	mg/l	MSD
10/17/2006	EPA 200.7	Phosphorous	0.482	mg/l	MSD
10/24/2006	EPA 200.7	Phosphorous	0.353	mg/l	MSD
11/2/2006	EPA 200.7	Phosphorous	0.594	mg/l	MSD
11/9/2006	EPA 200.7	Phosphorous	0.113	mg/l	MSD
11/21/2006	EPA 200.7	Phosphorous	0.45	mg/l	MSD
11/27/2006	EPA 200.7	Phosphorous	1.36	mg/l	MSD
12/5/2006	EPA 200.7	Phosphorous	0.908	mg/l	MSD
12/12/2006	EPA 200.7	Phosphorous	1.53	mg/l	MSD
12/19/2006	EPA 200.7	Phosphorous	0.71	mg/l	MSD
12/28/2006	EPA 200.7	Phosphorous	0.994	mg/l	MSD
1/3/2007	EPA 200.7	Phosphorous	0.026	mg/l	MSD
1/10/2007	EPA 200.7	Phosphorous	1.78	mg/l	MSD
1/17/2007	EPA 200.7	Phosphorous	0.626	mg/l	MSD
1/24/2007	EPA 200.7	Phosphorous	0.12	mg/l	MSD
2/5/2007	EPA 200.7	Phosphorous	0.044	mg/l	MSD
2/12/2007	EPA 200.7	Phosphorous	0.066	mg/l	MSD
2/19/2007	EPA 200.7	Phosphorous	0.023	mg/l	MSD
2/27/2007	EPA 200.7	Phosphorous	1.71	mg/l	MSD
3/5/2007	EPA 200.7	Phosphorous	0.17	mg/l	MSD
3/12/2007	EPA 200.7	Phosphorous	0.051	mg/l	MSD
3/19/2007	EPA 200.7	Phosphorous	0.118	mg/l	MSD
3/26/2007	EPA 200.7	Phosphorous	0.321	mg/l	MSD
4/3/2007	EPA 200.7	Phosphorous	0.186	mg/l	MSD
4/10/2007	EPA 200.7	Phosphorous	0.1	mg/l	MSD
4/17/2007	EPA 200.7	Phosphorous	1.87	mg/l	MSD
4/24/2007	EPA 200.7	Phosphorous	0.15	mg/l	MSD
5/2/2007	EPA 200.7	Phosphorous	0.231	mg/l	MSD
5/9/2007	EPA 200.7	Phosphorous	0.131	mg/l	MSD

ERNIE FLETCHER
GOVERNOR

ENVIRONMENTAL AND PUBLIC PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
14 REILLY ROAD
FRANKFORT, KENTUCKY 40601
www.kentucky.gov

TERESA J. HILL
SECRETARY

May 31, 2007

JUN 25 2007

SECOND NOTICE

Mr. Daymond Talley
Louisville Jefferson County MSD
700 West Liberty Street
Louisville, Kentucky 40203-1913

RE: KPDES No. KY0028801
Silver Heights
Jefferson County, Kentucky

Dear Mr. Talley:

Our records indicate that your Kentucky Pollutant Discharge Elimination System (KPDES) permit is due to expire on December 31, 2007. According to the KPDES Regulation 401 KAR 5:060, "any person with a currently effective permit shall submit a new application at least 180 days before the expiration of the existing permit..." **The due date for your permit renewal application is July 5, 2007.**

Please complete the enclosed application forms and return to the KPDES Branch, Division of Water, at the above address by the indicated due date. Applications received after the due date are in violation of 401 KAR 5:060, Section 1, which could result in enforcement action being taken.

If you have any questions regarding the completion of these forms, please contact me at (502) 564-8158, extension 470, or Ann Workman at extension 528.

Sincerely,

Vickie L. Prather

Vickie L. Prather, Acting Supervisor
Inventory and Data Management Section
KPDES Branch
Division of Water

VLP:ASW:asw

Enclosures

C: Louisville Regional Office
Division of Water Files

ERNIE FLETCHER
GOVERNOR

ENVIRONMENTAL AND PUBLIC PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
14 REILLY ROAD
FRANKFORT, KENTUCKY 40601-1190
www.kentucky.gov

TERESA J. HILL
SECRETARY

July 10, 2007

Herbert J. Schardein, Jr., Executive Director
Metropolitan Sewer District
700 West Liberty Street
Louisville, Kentucky 40203

Re: Complete KPDES Permit Application
KPDES No.: KY0028801
Silver Heights STP
Jefferson County, Kentucky

Dear Mr. Schardein:

Your Kentucky Pollutant Discharge Elimination System (KPDES) permit application for the above-referenced facility was received by the Division of Water on June 27, 2007, and has been determined complete. As per 401 KAR 5:075, Section 1(7), the official effective date of your application has been determined as July 10, 2007, the date of this notice.

If this application is for new construction, appropriate plans and specifications must be submitted and a construction permit issued before construction may begin. For new facilities, the review of this application may be coordinated in accordance with 401 KAR 5:300, Section 4(1).

A technical review of your permit application will commence in the near future. Please be aware that you may be asked to provide additional information to clarify, modify, or supplement your application material. A request for this additional information will not render your application incomplete.

If you have any questions concerning this matter, please contact Barry Elmore at (502) 564-8158, extension 459.

Sincerely,

Nancy Green

Nancy Green, Program Coordinator
Inventory and Data Management Section
KPDES Branch
Division of Water

NG:ng
c: Division of Water Files

MSD

Louisville and Jefferson County Metropolitan Sewer District
700 West Liberty Street
Louisville Kentucky 40203-1911
502-540-6000
www.msdlouky.org

June 25, 2007

Vickie L. Prather, Acting Supervisor
Division of Water
Inventory and Data Management Section
KPDES Branch
14 Reilly Road
Frankfort, Kentucky 40601

Subject: Renewal Application KPDES No. KY0028801
Silver Heights Wastewater Treatment Plant

Dear Ms. Prather:

Enclosed are the completed applications (Form 1 and Form A) for the renewal of Silver Heights Wastewater Treatment Plant KPDES permit KY0028801.

If you have any questions please contact Daymond Talley at (502) 540-6980 or at talley@msdlouky.org.

Sincerely,

Herbert J. Schardein, Jr.
Executive Director

HJS/dmt

cc: D. Guthrie
D. Thomasson
J. Kessel
R. Shaw (eB)
A. Akridge
D. Talley
M. Jenkins