KPDES FORM 1

SCANNED / DC AI 4216

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

RECEIVED
MAY 30 2008
DIVISION OF WATER

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 Form SC

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

I. FACILITY LOCATION AND CONTACT INFORMATION	AGENCY USE	0	0	2	8	3	4	7

A. Name of business, municipality, company, etc. requesting permit
City of Williamsburg, Kentucky

B. Facility Name and Location	C. Primary Mailing Address (all facility correspondence will be sent to this address). **Include owner mailing address on a separate sheet if different.**
Facility Location Name: **Williamsburg Wastewater Treatment Plant**	Facility Contact Name and Title: Mr. ☒ Ms. ☐ **Charles A. Fritts, Superintendent**
Facility Location Address (i.e. street, road, etc., **not PO Box**): **425 Cemetery Road**	Mailing Address: **116 North Second Street, P.O. Box 119**
Facility Location City, State, Zip Code: **Williamsburg, Kentucky 40769**	Mailing City, State, Zip Code: **Williamsburg, Kentucky 40769**
	Facility Contact Telephone Number: **(606) 549-6039**

II. FACILITY DESCRIPTION

A. Provide a brief description of activities, products, etc: **Wastewater treatment processes include screening, oxidation ditches, secondary settling (clarification), and ultraviolet disinfection. Solids are processed in sludge holding tanks, dewatered by belt filter press, and hauled to a landfill for disposal. Sludge drying beds used as backup dewatering process.**

B. Standard Industrial Classification (SIC) Code and Description #4952-01

Principal SIC Code & Description:	**N/A**		
Other SIC Codes:			

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: **Whitley**	City where facility is located (if applicable): **Williamsburg**
C. Body of water receiving discharge: **Cumberland River**	
D. Facility Site Latitude (degrees, minutes, seconds): **36°44'55"**	Facility Site Longitude (degrees, minutes, seconds): **84°10'18"**
E. Method used to obtain latitude & longitude (see instructions):	**Topo map coordinates**
F. Facility Dun and Bradstreet Number (DUNS #) (if applicable):	**N/A**

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: **Charles A. Fritts**	Telephone Number: **(606) 549-6039**
Operator Mailing Address (Street): **116 North Second Street, P.O. Box 119**	
Operator Mailing Address (City, State, Zip Code): **Williamsburg, Kentucky 40769**	
Is the operator also the owner? Yes ☒ No ☐	Is the operator certified? If yes, list certification class and number below. Yes ☒ No ☐
Certification Class: **II**	Certification Number: **5948**

V. EXISTING ENVIRONMENTAL PERMITS

Current NPDES Number: **KY0028347**	Issue Date of Current Permit: **June 1, 2005**	Expiration Date of Current Permit: **August 31, 2008**
Number of Times Permit Reissued: **1**	Date of Original Permit Issuance: **1964**	Sludge Disposal Permit Number: **N/A**
Kentucky DOW Operational Permit #: **N/A**	Kentucky DSMRE Permit Number(s): **N/A**	

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). Information in this section serves to specifically identify the name and telephone number of the DMR official and the DMR mailing address (if different from the primary mailing address in Section I.C).

A. DMR Official (i.e., the department, office or individual designated as responsible for submitting DMR forms to the Division of Water):	**City of Williamsburg Wastewater** **Charles A. Fritts - Superintendent**
DMR Official Telephone Number:	**(606) 549-6039**

B. DMR Mailing Address:
- Address the Division of Water will use to mail DMR forms (if different from mailing address in Section I.C), or
- Contact address if another individual, company, laboratory, etc. completes DMRs for you; e.g., contract laboratory address.

DMR Mailing Name:	**Appalachian States Analytical - Attn: Ama Bentley**
DMR Mailing Address:	**P.O. Box 520**
DMR Mailing City, State, Zip Code:	**Shelbiana, Kentucky 41562**

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 (for permit renewals, please include the KPDES permit number on the check to ensure proper crediting). 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):
Mr. ☒ Ms. ☐ **Charles A. Fritts, Superintendent**	**(606) 549-6039**
SIGNATURE	DATE:
	03/04/08

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: Williamsburg Wastewater Treatment Plant

Mailing Address: 116 North Second Street, P.O. Box 119
Williamsburg, Kentucky 40769

Contact person: Charles A. Fritts

Title: Wastewater Superintendent

Telephone number: (606) 549-6039

Facility Address (not P.O. Box): 425 Cemetery Road
Williamsburg, Kentucky 40769

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

Applicant name: _____

Mailing Address: _____

Contact person: _____

Title: _____

Telephone number: _____

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

X owner X operator

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

X 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).

NPDES	KY0028347	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
City of Williamsburg	5,700 (approx.)	Separate Sanitary	Municipal

Total population served 5,700

A.5. Indian Country.

a. Is the treatment works located in Indian Country?

_____ Yes X 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 X 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 2.00 mgd

	Two Years Ago (2005)	Last Year (2006)	This Year (2007)	
b. Annual average daily flow rate	0.864 MGD	0.934 MGD	0.986	mgd
c. Maximum daily flow rate	3.721 MGD	4.717 MGD	3.759	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.? X 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 0

iii. Combined sewer overflow points 0

iv. Constructed emergency overflows (prior to the headworks) 0

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 X 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 X 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 X 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: **N/A**

Transporter name: _____

Mailing Address: _____

_____

Contact person: _____

Title: _____

Telephone number: _____

For each treatment works that receives this discharge, provide the following: **N/A**

Name: _____

Mailing Address: _____

_____

Contact person: _____

Title: _____

Telephone number: _____

If known, provide the NPDES 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 **X** No

If yes, provide the following for each disposal method: **N/A**

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 **00011**

b. Location

City of Williamsburg	**40769**
(City or town, if applicable)	(Zip Code)
Whitley	**Kentucky**
(County)	(State)
36°44'55"	**84°10'18"**
(Latitude)	(Longitude)

c. Distance from shore (if applicable) **N/A** ft.

d. Depth below surface (if applicable) **N/A** ft.

e. Average daily flow rate **0.986** mgd

f. Does this outfall have either an intermittent or a periodic discharge? ____ Yes **X** 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 **X** No

A.10. Description of Receiving Waters.

a. Name of receiving water **Cumberland River** **Mile Point 589.4**

b. Name of watershed (if known) ____

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): **22.0 cfs**[1]

acute ____ cfs chronic ____ cfs

e. Total hardness of receiving stream at critical low flow (if applicable): **116** mg/l of $CaCO_3$

Notes: [1]From KPDES Permit Fact Sheet

A.11. Description of Treatment.

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

X Primary X Secondary

Advanced Other. Describe: _____

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

Design BOD_5 removal or Design $CBOD_5$ removal	85	%
Design SS removal	88	%
Design P removal	0	%
Design N removal	20	%
Other _____		%

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

Ultraviolet

If disinfection is by chlorination, is dechlorination used for this outfall? ____ Yes X No

d. Does the treatment plant have post aeration? ____ Yes X 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 dat collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At 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: 00011

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	6.33	s.u.			
pH (Maximum)	7.59	s.u.			
Flow Rate	3.759	MGD	0.986	MGD	Continuous
Temperature (Winter)	4°C[1]		9°C		156
Temperature (Summer)	31°C		25°C		156

* 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	20	mg/L	4.5	mg/L	156	COMP	
DEMAND (Report one)	CBOD-5							
FECAL COLIFORM		129.27	#/100 ML	11.3	#/100 ML	156	GRAB	
TOTAL SUSPENDED SOLIDS (TSS)		227	mg/L	110	mg/L	156	COMP	

END OF PART A.

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

Notes: [1]Minimum Daily Value

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.

560,000 gpd

Briefly explain any steps underway or planned to minimize inflow and infiltration. **N/A**

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.

Raw wastewater is pumped to the WWTP through a 16-inch force main from the River Road Pump Station (0.95 MGD), and a 10-inch force main from the Watts Creek Pump Station (0.05 MGD). An average flow of 1.0 MGD was used for the flow diagram. Wastewater flows through the mechanical bar screen (manual bypass) and then to Flow Splitter No. 1 where it is divided between the two oxidation ditches. Oxidation ditch effluent flows to Flow Splitter No. 2 and is divided between Clarifiers No. 1 and No. 2. Clarifier effluent flows to the ultraviolet (UV) disinfection channel and then through a Parshall flume before being discharged through a 24-inch pipe to the Cumberland River. Return activated sludge (RAS) is pumped through a 12-inch line to the head of the WWTP at a rate between 50% and 150% of the average daily flow.

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 __X__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.) **N/A**

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

_____

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: **00011**

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)	**11.5**	**mg/L**	**1.4**	**mg/L**	**156**	**COMP**	
CHLORINE (TOTAL RESIDUAL, TRC)							
DISSOLVED OXYGEN	**2.53[1]**	**mg/L**	**4.40**	**mg/L**	**328**	**GRAB**	
TOTAL KJELDAHL NITROGEN (TKN)							
NITRATE PLUS NITRITE NITROGEN							
OIL and GREASE	**34.6**	**mg/L**	**1.6**	**mg/L**	**8**	**GRAB**	
PHOSPHORUS (Total)	**4.95**	**mg/L**	**2.89**	**mg/L**	**7**	**COMP**	
TOTAL DISSOLVED SOLIDS (TDS)							
OTHER							

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

Notes: [1]Minimum daily concentration

APPALACHIAN STATES ANALYTICAL LLC

PO Box 520
Shelbiana, KY 41562

City of Williamsburg
PO Box 119
Williamsburg, KY 40769

ATTN: Charles Fritts

Date Received 5/16/08
Date Reported 5/16/08
Order Number 2008-04305

TEST DESCRIPTION	RESULT	UNITS	METHOD	MDL	DATE	TECH
Fraction 2008-04305001						
Sample I.D Effluent						
Date Sampled 5/16/2008						
Chlorine, Residual	<0.01	mg/l	SM 4500 Cl-G		5/16/2008	CLT

* May not be within monthly permit requirements.

Submitted By:

APPALACHIAN STATES ANALYTICAL, L.L.C.

PO Box 520
Shelbiana, KY 41562

City of Williamsburg
PO Box 119
Williamsburg, KY 40769

ATTN: Charles Fritts

Date Received 5/14/08
Date Reported 5/22/08
Order Number 2008-04263

TEST DESCRIPTION	RESULT	UNITS	METHOD	MDL	DATE	TECH
Fraction	2008-04263001					
Sample I.D	Williamsburg Effluent					
Date Sampled	5/14/2008					
Total Kjeldahl Nitrogen	2.8	mg/l	SM 4500 NorgB,NH3-B,E		5/19/2008	TT
Total Dissolved Solids	402	mg/l	SM 2540C	3	5/15/2008	SM
Nitrate-Nitrite	19.00	mg/l	SM 4500NO3-E	0.01	5/21/2008	JL
Flow	0.5740	mgd			5/14/2008	CLT
pH, Field	6.74	std	SM 4500 H+ -B		5/14/2008	CLT
Dissolved Oxygen, Field	5.32	mg/l	SM 4500 O-G		5/14/2008	CLT
Temperature	17.4	C	SM 2550 B	0.4	5/14/2008	CLT
Chlorine, Residual	UV	mg/l	SM 4500 Cl-G		5/14/2008	CLT

* May not be within monthly permit requirements.

Submitted By:

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 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:

__X__ Basic Application Information packet

Supplemental Application Information packet:

__X__ Part D (Expanded Effluent Testing Data)

__X__ Part E (Toxicity Testing: Biomonitoring Data)

__X__ 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: **Charles A. Fritts, Wastewater Superintendent**

Signature: Charles A. Fritts

Telephone number: **(606) 549-6039**

Date signed: 03/04/08

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:

SUPPLEMENTAL APPLICATION INFORMATION

PART D. EXPANDED EFFLUENT TESTING DATA

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

Effluent Testing: 1.0 mgd and Pretreatment Treatment Works. If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information 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 analyses conducted using 40 CFR Part 136 methods. In addition, these 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. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. 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: **00011** complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS, AND HARDNESS.											
ANTIMONY											
ARSENIC	0.001	mg/L			<0.001	mg/L			7	COMP	
BERYLLIUM											
CADMIUM	<0.005	mg/L			<0.005	mg/L			7	COMP	
CHROMIUM	<0.02	mg/L			<0.02	mg/L			7	COMP	
COPPER	<0.01	mg/L			<0.01	mg/L			7	COMP	
LEAD	0.06	mg/L			<0.05	mg/L			7	COMP	
MERCURY	0.0000 0909	mg/L			0.0000 0477	mg/L			7	COMP	
NICKEL	<0.02	mg/L			<0.005	mg/L			7	COMP	
SELENIUM	<0.002	mg/L			<0.002	mg/L			7	COMP	
SILVER	<0.005	mg/L			<0.005	mg/L			7	COMP	
THALLIUM											
ZINC	0.073	mg/L			0.028	mg/L			7	COMP	
CYANIDE	<0.01	mg/L			<0.01	mg/L			7	GRAB	
TOTAL PHENOLIC COMPOUNDS	0.045	mg/L			<0.04	mg/L			7	GRAB	
HARDNESS (AS $CaCO_3$)											
Use this space (or a separate sheet) to provide information on other metals requested by the permit writer.											
CHLORIDE	61.0	mg/L			43.2	mg/L			7	COMP	
IRON	0.18	mg/L			0.07	mg/L			7	COMP	
CHROMIUM VI	<0.02	mg/L			<0.02	mg/L			7	COMP	
SULFIDE	14	mg/L			8	mg/L			3	COMP	

Outfall number: 00011 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
VOLATILE ORGANIC COMPOUNDS. N/A											
ACROLEIN											
ACRYLONITRILE											
BENZENE											
BROMOFORM											
CARBON TETRACHLORIDE											
CLOROBENZENE											
CHLORODIBROMO-METHANE											
CHLOROETHANE											
2-CHLORO-ETHYLVINYL ETHER											
CHLOROFORM											
DICHLOROBROMO-METHANE											
1,1-DICHLOROETHANE											
1,2-DICHLOROETHANE											
TRANS-1,2-DICHLORO-ETHYLENE											
1,1-DICHLOROETHYLENE											
1,2-DICHLOROPROPANE											
1,3-DICHLORO-PROPYLENE											
ETHYLBENZENE											
METHYL BROMIDE											
METHYL CHLORIDE											
METHYLENE CHLORIDE											
1,1,2,2-TETRACHLORO-ETHANE											
TETRACHLORO-ETHYLENE											
TOLUENE											

Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
1,1,1-TRICHLOROETHANE											
1,1,2-TRICHLOROETHANE											
TRICHLORETHYLENE											
VINYL CHLORIDE											
Use this space (or a separate sheet) to provide information on other volatile organic compounds requested by the permit writer.											
ACID-EXTRACTABLE COMPOUNDS											
P-CHLORO-M-CRESOL											
2-CHLOROPHENOL											
2,4-DICHLOROPHENOL											
2,4-DIMETHYLPHENOL											
4,6-DINITRO-O-CRESOL											
2,4-DINITROPHENOL											
2-NITROPHENOL											
4-NITROPHENOL											
PENTACHLOROPHENOL											
PHENOL											
2,4,6-TRICHLOROPHENOL											
Use this space (or a separate sheet) to provide information on other acid-extractable compounds requested by the permit writer.											
BASE-NEUTRAL COMPOUNDS.											
ACENAPHTHENE											
ACENAPHTHYLENE											
ANTHRACENE											
BENZIDINE											
BENZO(A)ANTHRACENE											
BENZO(A)PYRENE											

Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
3,4 BENZO-FLUORANTHENE											
BENZO(GHI)PERYLENE											
BENZO(K)FLUORANTHENE											
BIS (2-CHLOROETHOXY) METHANE											
BIS (2-CHLOROETHYL)-ETHER											
BIS (2-CHLOROISO-PROPYL) ETHER											
BIS (2-ETHYLHEXYL) PHTHALATE											
4-BROMOPHENYL PHENYL ETHER											
BUTYL BENZYL PHTHALATE											
2-CHLORONAPHTHALENE											
4-CHLORPHENYL PHENYL ETHER											
CHRYSENE											
DI-N-BUTYL PHTHALATE											
DI-N-OCTYL PHTHALATE											
DIBENZO(A,H) ANTHRACENE											
1,2-DICHLOROBENZENE											
1,3-DICHLOROBENZENE											
1,4-DICHLOROBENZENE											
3,3-DICHLOROBENZIDINE											
DIETHYL PHTHALATE											
DIMETHYL PHTHALATE											
2,4-DINITROTOLUENE											
2,6-DINITROTOLUENE											
1,2-DIPHENYLHYDRAZINE											

Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
FLUORANTHENE											
FLUORENE											
HEXACHLOROBENZENE											
HEXACHLOROBUTADIENE											
HEXACHLOROCYCLO-PENTADIENE											
HEXACHLOROETHANE											
INDENO(1,2,3-CD)PYRENE											
ISOPHORONE											
NAPHTHALENE											
NITROBENZENE											
N-NITROSODI-N-PROPYLAMINE											
N-NITROSODI- METHYLAMINE											
N-NITROSODI-PHENYLAMINE											
PHENANTHRENE											
PYRENE											
1,2,4-TRICHLOROBENZENE											
Use this space (or a separate sheet) to provide information on other base-neutral compounds requested by the permit writer.											
Use this space (or a separate sheet) to provide information on other pollutants (e.g., pesticides) requested by the permit writer.											

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

SUPPLEMENTAL APPLICATION INFORMATION

PART E. TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. 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.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

E.1. Required Tests.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

____chronic 23 acute

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

Test number: 704313-1 Test number: 704313-2 Test number: 800247-1

a. Test information.

Test species & test method number	Ceriodaphnia dubia	Pimephales promelas	Ceriodaphnia dubia
Age at initiation of test	<24 hours	6 days	<24 hours
Outfall number	00011	00011	00011
Dates sample collected	1/15/08 – 1/16/08	1/15/08 – 1/16/08	10/16/07 – 10/17/07
Date test started	1/17/08	1/17/08	10/18/07
Duration	48 hours	48 hours	48 hours

b. Give toxicity test methods followed.

Manual title	Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms		
Edition number and year of publication	Fifth Ed. 2002	Fifth Ed. 2002	Fifth Ed. 2002
Page number(s)			

c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.

24-Hour composite			
Grab	2	2	2

d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)

Before disinfection			
After disinfection	X	X	X
After dechlorination			

	Test number: 704313-1	Test number: 704313-2	Test number: 800247-1
e. Describe the point in the treatment process at which the sample was collected.			
Sample was collected:	**at final discharge**	**at final discharge**	**at final discharge**
f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.			
Chronic toxicity			
Acute toxicity	X	X	X
g. Provide the type of test performed.			
Static	X	X	X
Static-renewal			
Flow-through			
h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.			
Laboratory water	**X synthetic**	**X synthetic**	**X synthetic**
Receiving water			
i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used.			
Fresh water	X	X	X
Salt water			
j. Give the percentage effluent used for all concentrations in the test series.			
	Control, 20, 40, 60, 80, 100%	**Control, 20, 40, 60, 80, 100%**	**Control, 20, 40, 60, 80, 100%**
k. Parameters measured during the test. (State whether parameter meets test method specifications)			
pH	X	X	X
Salinity			
Temperature	X	X	X
Ammonia			
Dissolved oxygen	X	X	X
l. Test Results.			
Acute:			
Percent survival in 100% effluent	**100%**	**100%**	**100%**
LC_{50}	**>100**	**>100**	**>100**
95% C.I.	**UL:N/A LL:N/A%**	**UL:N/A LL:N/A %**	**UL:N/A LL:N/A %**
Control percent survival	**100%**	**100%**	**100%**
Other (describe)			

Chronic: **N/A**			
NOEC	%	%	%
IC_{25}	%	%	%
Control percent survival	%	%	%
Other (describe)			
m. Quality Control/Quality Assurance.			
Is reference toxicant data available?	**Yes**	**Yes**	**Yes**
Was reference toxicant test within acceptable bounds?	**Yes**	**Yes**	**Yes**
What date was reference toxicant test run (MM/DD/YYYY)?	**1/9/08 – 1/11/08**	**1/9/08 – 1/11/08**	**10/10/07 – 10/12/07**
Other (describe)			

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

____Yes__X__No If yes, describe: _____

_____

_____

E.4. Summary of Submitted Biomonitoring Test Information. If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

Date submitted: _____ (MM/DD/YYYY)

Summary of results: (see instructions)

The dates of biomonitoring tests completed by the Williamsburg WWTP between 10/03 and 1/07 and submitted to the Kentucky Division of Water are as follows:

10/15/03

1/20/04

4/20/04

7/20/04

10/19/04

1/18/05

4/19/05

7/19/05

10/25/05

1/24/06

5/2/06

7/18/06

10/17/06

All test results were passing.

SUPPLEMENTAL APPLICATION INFORMATION

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

	Test number: 800247-2	Test number: 702908-1	Test number: 702908-2
a. Test information.			
Test species & test method number	**Pimephales promelas**	**Ceriodaphnia dubia**	**Pimephales promelas**
Age at initiation of test	**5 days**	**<24 hours**	**3 days**
Outfall number	**00011**	**00011**	**00011**
Dates sample collected	**10/16/07 – 10/17/07**	**7/17/07 – 7/18/07**	**7/17/07 – 7/18/07**
Date test started	**10/18/07**	**7/19/07**	**7/19/07**
Duration	**48 hours**	**48 hours**	**48 hours**
b. Give toxicity test methods followed.			
Manual title	**Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms**		
Edition number and year of publication	**Fifth Ed. 2002**	**Fifth Ed. 2002**	**Fifth Ed. 2002**
Page number(s)			
c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.			
24-Hour composite			
Grab	**2**	**2**	**2**
d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)			
Before disinfection			
After disinfection	X	X	X
After dechlorination			

	Test number: 800247-2	Test number: 702908-1	Test number: 702908-2
e. Describe the point in the treatment process at which the sample was collected.			
Sample was collected:	**at final discharge**	**at final discharge**	**at final discharge**
f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.			
Chronic toxicity			
Acute toxicity	X	X	X
g. Provide the type of test performed.			
Static	X	X	X
Static-renewal			
Flow-through			
h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.			
Laboratory water	**X synthetic**	**X synthetic**	**X synthetic**
Receiving water			
i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used.			
Fresh water	X	X	X
Salt water			
j. Give the percentage effluent used for all concentrations in the test series.			
	Control, 20, 40, 60, 80, 100%	**Control, 20, 40, 60, 80, 100%**	**Control, 20, 40, 60, 80, 100%**
k. Parameters measured during the test. (State whether parameter meets test method specifications)			
pH	X	X	X
Salinity			
Temperature	X	X	X
Ammonia			
Dissolved oxygen	X	X	X
l. Test Results.			
Acute:			
Percent survival in 100% effluent	**100%**	**100%**	**100%**
LC_{50}	**>100**	**>100**	**>100**
95% C.I.	**UL:N/A LL:N/A%**	**UL:N/A LL:N/A %**	**UL:N/A LL:N/A %**
Control percent survival	**100%**	**100%**	**100%**
Other (describe)			

Chronic: **N/A**			
NOEC	%	%	%
IC_{25}	%	%	%
Control percent survival	%	%	%
Other (describe)			
m. Quality Control/Quality Assurance.			
Is reference toxicant data available?	**Yes**	**Yes**	**Yes**
Was reference toxicant test within acceptable bounds?	**Yes**	**Yes**	**Yes**
What date was reference toxicant test run (MM/DD/YYYY)?	**10/10/07 – 10/12/07**	**7/11/07 – 7/13/07**	**7/17/07 – 7/19/07**
Other (describe)			

SUPPLEMENTAL APPLICATION INFORMATION

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

	Test number: 701647-1	Test number: 701647-2	Test number: 700273-1
a. Test information.			
Test species & test method number	Ceriodaphnia dubia	Pimephales promelas	Ceriodaphnia dubia
Age at initiation of test	<24 hours	5 days	<24 hours
Outfall number	00011	00011	00011
Dates sample collected	4/17/07 – 4/18/07	4/17/07 – 4/18/07	1/16/07 – 1/17/07
Date test started	4/19/07	4/19/07	1/18/07
Duration	48 hours	48 hours	48 hours
b. Give toxicity test methods followed.			
Manual title	Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms		
Edition number and year of publication	Fifth Ed. 2002	Fifth Ed. 2002	Fifth Ed. 2002
Page number(s)			
c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.			
24-Hour composite			
Grab	2	2	2
d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)			
Before disinfection			
After disinfection	X	X	X
After dechlorination			

	Test number: 701647-1	Test number: 701647-2	Test number: 700273-1
e. Describe the point in the treatment process at which the sample was collected.			
Sample was collected:	**at final discharge**	**at final discharge**	**at final discharge**
f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.			
Chronic toxicity			
Acute toxicity	X	X	X
g. Provide the type of test performed.			
Static	X	X	X
Static-renewal			
Flow-through			
h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.			
Laboratory water	**X synthetic**	**X synthetic**	**X synthetic**
Receiving water			
i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used.			
Fresh water	X	X	X
Salt water			
j. Give the percentage effluent used for all concentrations in the test series.			
	Control, 20, 40, 60, 80, 100%	**Control, 20, 40, 60, 80, 100%**	**Control, 20, 40, 60, 80, 100%**
k. Parameters measured during the test. (State whether parameter meets test method specifications)			
pH	X	X	X
Salinity			
Temperature	X	X	X
Ammonia			
Dissolved oxygen	X	X	X
l. Test Results.			
Acute:			
Percent survival in 100% effluent	**100%**	**95/100%**	**90/95%**
LC_{50}	**>100**	**>100**	**>100**
95% C.I.	**UL:N/A LL:N/A%**	**UL:N/A LL:N/A %**	**UL:N/A LL:N/A %**
Control percent survival	**100/95%**	**95%**	**100%**
Other (describe)			

Chronic: **N/A**			
NOEC	%	%	%
IC_{25}	%	%	%
Control percent survival	%	%	%
Other (describe)			
m. Quality Control/Quality Assurance.			
Is reference toxicant data available?	**Yes**	**Yes**	**Yes**
Was reference toxicant test within acceptable bounds?	**Yes**	**Yes**	**Yes**
What date was reference toxicant test run (MM/DD/YYYY)?	**4/18/07 - 4/20/07**	**4/18/07 - 4/20/07**	**1/5/07 – 1/7/07**
Other (describe)			

SUPPLEMENTAL APPLICATION INFORMATION

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

	Test number: 700273-2	Test number:	Test number:
a. Test information.			
Test species & test method number	**Pimephales promelas**		
Age at initiation of test	**3 days**		
Outfall number	**00011**		
Dates sample collected	**1/16/07 – 1/17/07**		
Date test started	**1/18/07**		
Duration	**48 hours**		
b. Give toxicity test methods followed.			
Manual title	**Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms**		
Edition number and year of publication	**Fifth Ed. 2002**		
Page number(s)			
c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.			
24-Hour composite			
Grab	**2**		
d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)			
Before disinfection			
After disinfection	X		
After dechlorination			

	Test number: 700273-2	Test number:_____	Test number:_____
e. Describe the point in the treatment process at which the sample was collected.			
Sample was collected:	**at final discharge**		
f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.			
Chronic toxicity			
Acute toxicity	X		
g. Provide the type of test performed.			
Static	X		
Static-renewal			
Flow-through			
h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.			
Laboratory water	**X synthetic**		
Receiving water			
i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used.			
Fresh water	X		
Salt water			
j. Give the percentage effluent used for all concentrations in the test series.			
	Control, 20, 40, 60, 80, 100%		
k. Parameters measured during the test. (State whether parameter meets test method specifications)			
pH	X		
Salinity			
Temperature	X		
Ammonia			
Dissolved oxygen	X		
l. Test Results.			
Acute:			
Percent survival in 100% effluent	**100/95%**		
LC_{50}	**>100**		
95% C.I.	**UL:N/A LL:N/A%**		
Control percent survival	**100%**		
Other (describe)			

Chronic: **N/A**			
NOEC	%	%	%
IC_{25}	%	%	%
Control percent survival	%	%	%
Other (describe)			
m. Quality Control/Quality Assurance.			
Is reference toxicant data available?	**Yes**		
Was reference toxicant test within acceptable bounds?	**Yes**		
What date was reference toxicant test run (MM/DD/YYYY)?	**1/5/07 – 1/7/07**		
Other (describe)			

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

SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

GENERAL INFORMATION:

F.1. Pretreatment Program. Does the treatment works have, or is it subject to, an approved pretreatment program?

__X__ Yes ____ No

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. ___1___

b. Number of CIUs. ___1___

SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: Firestone Industrial Products

Mailing Address: 1 Firestone Boulevard
Williamsburg, KY 40769

F.4. Industrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge.

Rubber manufacturing

F.5. Principal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): Rubber air springs

Raw material(s): Natural and synthetic rubber

F.6. Flow Rate.

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

12,874 gpd (__X__ continuous or ____ intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

_____ gpd (____ continuous or ____ intermittent)

F.7. Pretreatment Standards. Indicate whether the SIU is subject to the following:

a. Local limits __X__ Yes ____ No

b. Categorical pretreatment standards __X__ Yes ____ No

If subject to categorical pretreatment standards, which category and subcategory?

428.66 Rubber Manufacturing

F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU. Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

____Yes __X__No If yes, describe each episode.

_____

_____

RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:

F.9. RCRA Waste. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe? ____Yes __X__No (go to F.12.)

F.10. Waste Transport. Method by which RCRA waste is received (check all that apply):

_____Truck _____Rail _____Dedicated Pipe

F.11. Waste Description. Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste Number	Amount	Units

CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:

F.12. Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

____Yes (complete F.13 through F.15.) __X__No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

F.13. Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

_____

_____

_____

F.14. Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

_____

_____

F.15. Waste Treatment.

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

____Yes ____No

If yes, describe the treatment (provide information about the removal efficiency):

_____

_____

b. Is the discharge (or will the discharge be) continuous or intermittent?

____Continuous ____Intermittent If intermittent, describe discharge schedule.

_____

SUPPLEMENTAL APPLICATION INFORMATION

SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: Pilot Travel Center

Mailing Address: 5508 Lonas Road
Knoxville, TN 37909

F.4. Industrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge.

Truck stop – windshield rinse water and potential diesel fuel spills

F.5. Principal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): N/A

Raw material(s): N/A

F.6. Flow Rate.

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

1,254 gpd (_____-continuous or _X_ intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

_____ gpd (_____continuous or _____intermittent)

F.7. Pretreatment Standards. Indicate whether the SIU is subject to the following:

a. Local limits _X_ Yes ___ No

b. Categorical pretreatment standards ____ Yes _X_ No

If subject to categorical pretreatment standards, which category and subcategory?

_____

F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU. Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

____Yes __X__No If yes, describe each episode.

_____

_____

RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:

F.9. RCRA Waste. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe? ____Yes __X__No (go to F.12.)

F.10. Waste Transport. Method by which RCRA waste is received (check all that apply):

_____Truck _____Rail _____Dedicated Pipe

F.11. Waste Description. Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste Number	Amount	Units

CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:

F.12. Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

____Yes (complete F.13 through F.15.) __X__No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

F.13. Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

_____

_____

_____

F.14. Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

_____

_____

F.15. Waste Treatment.

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

____Yes ____No

If yes, describe the treatment (provide information about the removal efficiency):

_____

_____

b. Is the discharge (or will the discharge be) continuous or intermittent?

____Continuous ____Intermittent If intermittent, describe discharge schedule.

_____

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

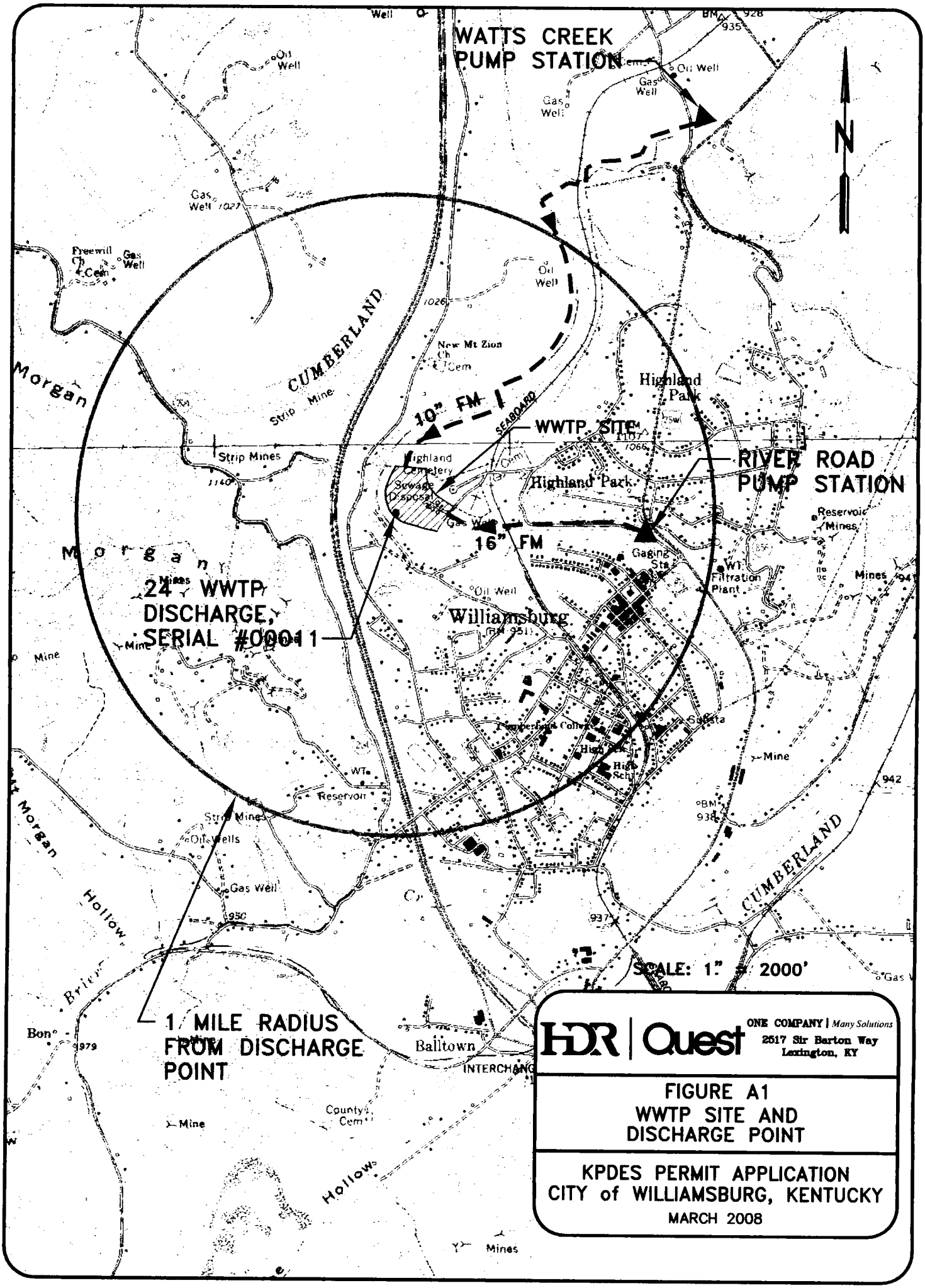

FIGURE A1
WWTP SITE AND DISCHARGE POINT

KPDES PERMIT APPLICATION
CITY of WILLIAMSBURG, KENTUCKY
MARCH 2008

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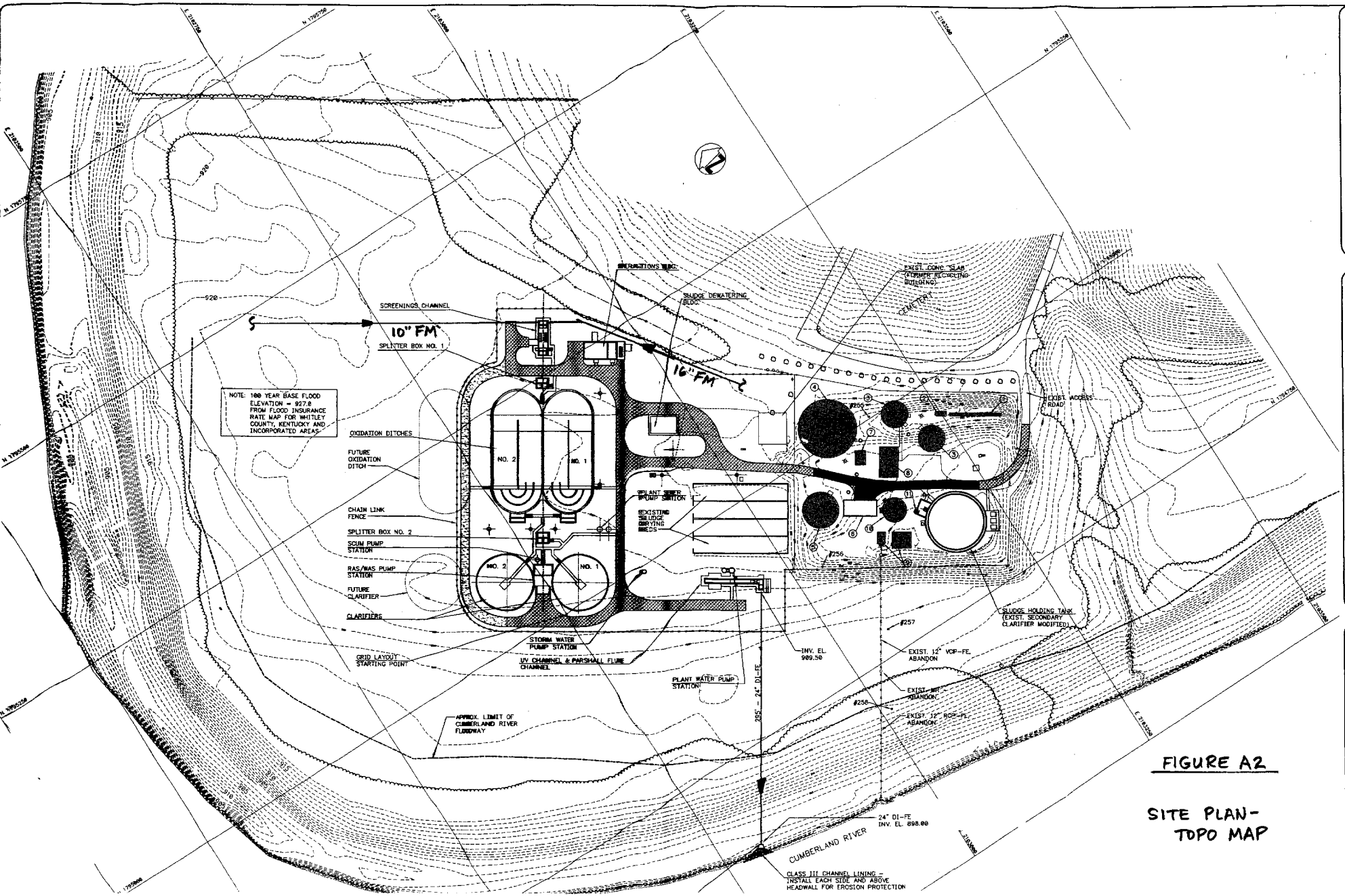


FIGURE A2

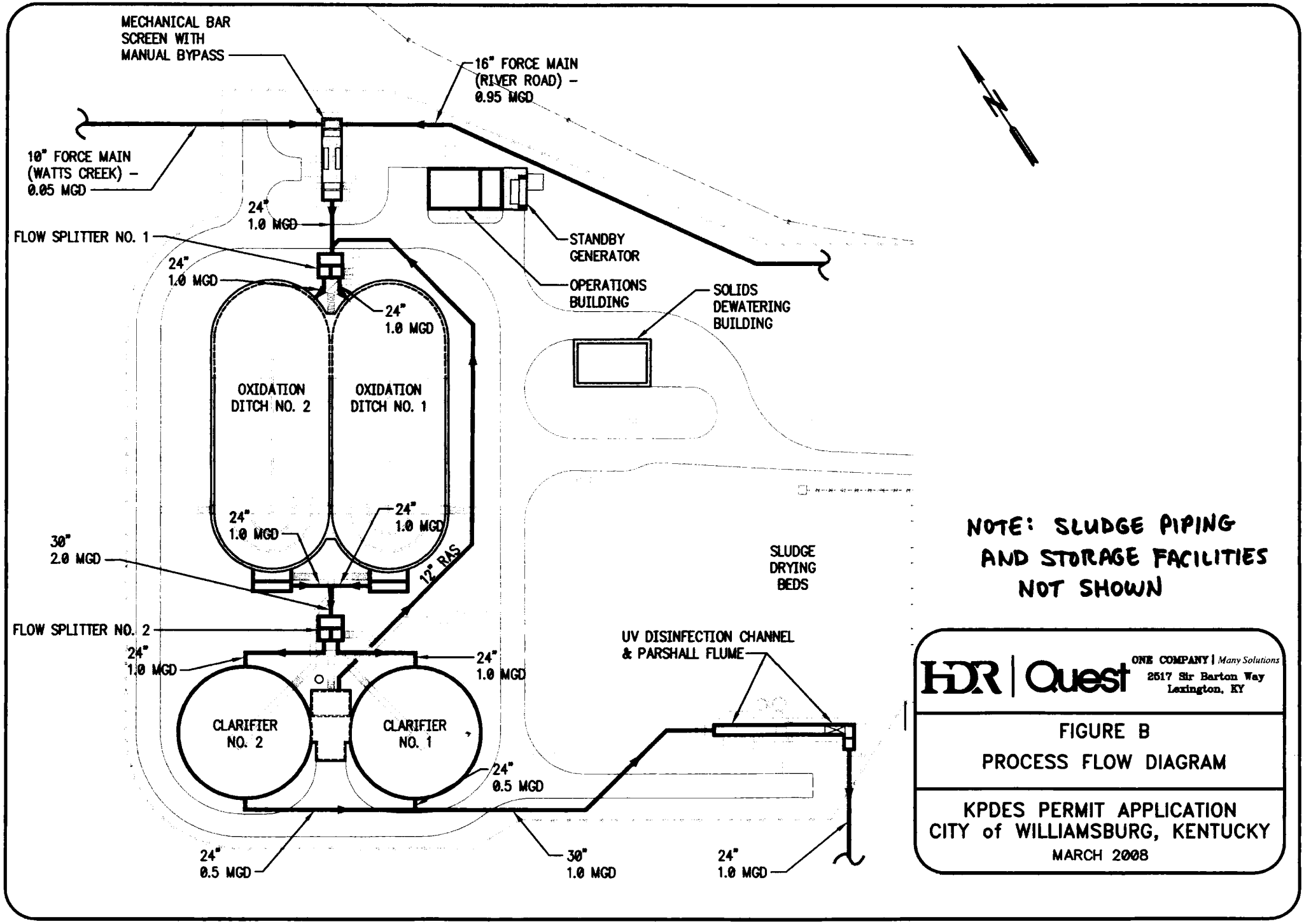
SITE PLAN-
TOPO MAP

Quest Engineers, Inc.
Lexington, Kentucky

CONTRACT NO. 1
WASTEWATER TREATMENT PLANT EXPANSION
WILLIAMSBURG, KENTUCKY
GENERAL SITE PLAN

SCALE:	1"=50'
DATE:	JAN. 2002
JOB NO.:	98262
DESIGNED:	RKS/DL
DRAWN:	EEE
CHECKED:	RKS
Q/C:	
OWNER APPROV.	
BY:	
TITLE:	
REVISIONS:	
NO.:	DATE:

L:\2008\57641-00314_WILLIAMSBURG\FIG_B.DWG, 3/4/2008 2:24:49 PM, TGRAMMER



ENVIRONMENTAL AND PUBLIC PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

Ernie Fletcher
Governor

Frankfort Office Park
14 Reilly Road
Frankfort, Kentucky 40601
www.kentucky.gov

LaJuana S. Wilcher
Secretary

May 8, 2006

Mr. Charles Fritts
City of Williamsburg
P.O. Box 119
Williamsburg, Kentucky 40769

Re: Local Limits Reevaluation
Williamsburg WWTP
KPDES No.: KY0029347
Whitley County, Kentucky

Dear Mr. Fritts:

The Division of Water has reviewed the reevaluation of your pretreatment program's local limits for the city of Williamsburg. The limits proposed in your reevaluation will provide adequate protection of water quality, wastewater treatment plant operations, and sludge quality for Williamsburg sludge as defined in 401 KAR 45:100. The following revised limitations are approved:

Pollutant	**Daily Maximum** (Milligrams per liter)
Arsenic	0.28
Cadmium	0.10
Chromium, Total	2.50
Copper	1.00
Cyanide	0.34
Lead	0.35
Mercury	0.002
Nickel	2.35
Selenium	2.27*
Silver	0.31
Zinc	2.10

Since the changes to the local limits include the asterisked parameter are more stringent than your present local limits; this adoption is not considered a major modification to your pretreatment program. Public notice will not be necessary from our office. You will need to follow standard local ordinance amendment/adoption procedures. Submit a record of their adoption to this office by **September 30, 2006**.

If you have any questions regarding this matter, please contact Abigail Rains of my staff at (502) 564-2225, extension 170.

Sincerely,

Barry Elmore

Barry Elmore, Supervisor
Municipal Section
KPDES Branch
Division of Water

BDE:ALR:alr

c: Richard Smith, Quest Engineers, Inc.
London Regional Office
Division of Water Files

CITY OF WILLIAMSBURG, KENTUCKY
ORDINANCE NO. 2006-006

AN ORDINANCE AMENDING THE SEWER SYSTEM USE REGULATION ORDINANCE TO INCLUDE SELENIUM AS A PARAMETER AND AMENDING THE WATER, SEWER AND GARBAGE RATE ORDINANCE TO INCLUDE A SURCHARGE OF 150% OF THE COST REMOVAL OF POLLUTANTS LISTED IN THE SEWER SYSTEM USE REGULATION ORDINANCE.

WHEREAS, the Commonwealth of Kentucky, Environmental and Public Protection Cabinet, Department for Environmental Protection, Division of Water, has reviewed the reevaluation of the City of Williamsburg pretreatment program local limits and has directed that a daily maximum concentration for selenium of 2.27 milligrams per liter be included in the sewer system use regulations ordinance.

NOW THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF WILLIAMSBURG, KENTUCKY as follows:

1. Section 13.12.200.K of the Sewer System Use Regulation Ordinance is hereby amended to include a parameter of selenium with daily maximum concentration of 2.27 milligrams per liter.
2. Section 13.08.070.D.3.A of the Water, Sewer and Garbage Rate Ordinance is hereby amended to include a surcharge of 150% of the cost of removal of all pollutants listed in 13.12.200.K which exceed the daily maximum concentrations listed therein.
3. This ordinance shall take effect immediately upon passage and publication.

CITY OF WILLIAMSBURG, KENTUCKY

BY: MAYOR, RODDY HARRISON

ATTEST:

TERESA BLACK, CITY CLERK

First Reading: 6-12-06

Second Reading: 6-15-06

HDR ONE COMPANY | *Many Solutions*

HDR | Quest

SCANNED

March 5, 2008

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

RECEIVED
MAR 05 2008
DIVISION OF WATER

Re: KPDES No. KY0028347
Williamsburg Wastewater Treatment Plant
Whitley County, Kentucky

Dear Ms. Prather:

On behalf of the City of Williamsburg, we submit the following for the KPDES permit renewal for the above facility:

- KPDES Permit Application Checklist
- Copy of letter signed by Mayor Roddy Harrison
- KPDES Form 1
- KPDES Form A with Supplemental Parts D, E, and F
- Figure A1 – Location Map
- Figure A2 – Site Plan – Topo Map
- Figure B – Process Flow Diagram
- Copy of Division of Water letter dated May 8, 2006 approving the re-evaluation of the pretreatment program local limits
- Copy of City of Williamsburg Ordinance No. 2006-006 adopting the revised local limits

If you have questions or need additional information to process the application, please contact me at (859) 223-3755 or Charles Fritts with the City of Williamsburg at (606) 549-6039.

Sincerely,

Richard K. Smith, P.E.
Project Manager

Cc: Charles Fritts

HDR | Quest
HDR Engineering, Inc.

2517 Sir Barton Way
Lexington, KY 40509-2275

Phone: (859) 223-3755
Fax: (859) 223-3150
www.hdrinc.com