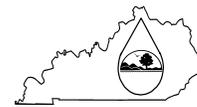


Form A

KENTUCKY POLLUTION DISCHARGE ELIMINATION SYSTEM

Permit Application



Division of Water

NAME OF FACILITY:

AGENCY USE ONLY

PERMIT NO.:

COUNTY:

Form A consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet.

The Basic Application Information packet is divided into three parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 100,000 gallons per day (0.10 million gallons per day or MGD) must also complete Part B.

The Supplemental Application Information packet is divided into four parts and applicants may also need to complete these if they meet the criteria.

BASIC APPLICATION INFORMATION

Part A. Information for All Applicants.

All applicants must complete questions A.1 through A.4. A treatment works that discharges effluent to waters of the Commonwealth must also answer questions A.5 through A.7.

Part B. Additional Information for Applicants with a Design Flow \geq 100,000 gallons per day (0.10 MGD).

All treatment works that have design flows greater than or equal to 100,000 gallons per day (0.10 MGD) must complete questions B.1 through B.5.

Part C. Certification for All Applicants.

All applicants must complete *Part C. Certification for All Applicants*.

SUPPLEMENTAL APPLICATION INFORMATION

Part D. Expanded Effluent Testing Data.

A treatment works that discharges effluent to waters of the Commonwealth 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.

Part 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.

Part F. Industrial User Discharges.

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*. SIUs are defined as:

1. All industrial users subject to Categorical Pretreatment Standards under the Code of Federal Regulations, 40 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 (0.025 MGD) or more of process wastewater to the treatment works (with certain exclusions); or
 - b. Contributes a process wastestream that makes up 5% 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.

Part G. Combined Sewer Systems.

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

PART A
BASIC APPLICATION INFORMATION PACKET

INFORMATION FOR ALL APPLICANTS. All applicants must complete questions A.1 through A.4

A.1. FACILITY INFORMATION

Name of Facility:

Permit No.:

County:

A.2. COLLECTION SYSTEM INFORMATION

Provide information on municipalities and areas served by the facility.

Name of Municipality or Area Served	Type of Collection System and Percent Contributed by Miles	Ownership (Municipal or Private)	Population Served
	<input type="checkbox"/> Combined Sanitary & Sewer %		
	<input type="checkbox"/> Separate Sanitary %		
	<input type="checkbox"/> Combined Sanitary & Sewer %		
	<input type="checkbox"/> Separate Sanitary %		
	<input type="checkbox"/> Combined Sanitary & Sewer %		
	<input type="checkbox"/> Separate Sanitary %		
	<input type="checkbox"/> Combined Sanitary & Sewer %		
	<input type="checkbox"/> Separate Sanitary %		
Total population served:			

A.3. 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.

Design flow rate _____ MGD

	Two Years Ago	Last year	This Year
Annual average daily flow rate	MGD	MGD	MGD
Maximum daily flow rate	MGD	MGD	MGD

A.4. DISCHARGES AND OTHER DISPOSAL METHODS

a. Does the treatment works discharge effluent to waters of the Commonwealth? 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	
ii.	Discharges of untreated or partially treated effluent	
iii.	Combined sewer overflow points	
iv.	Constructed emergency overflows (prior to the headworks)	
v.	Other (specify)	

WASTEWATER DISCHARGES

If you answered yes to question A.4.a, then complete questions A.5 through A.7 for each outfall through which effluent is discharged.

Do not include information on combined sewer overflows in this section.

If you answered no to question A.4.a, then go to Part B. Additional Information for Applicants with a Design Flow ≥ 100,000 gallons per day (0.10 MGD)

A.5. DESCRIPTION OF OUTFALL

a. Outfall Number:

b. Outfall Latitude (Decimal Degrees):

Outfall Longitude (Decimal Degrees):

c. Average Daily Flow Rate: MGD

d. Does this outfall have either an intermittent or a periodic discharge? Yes No

If yes, provide the following information:

i. Number of times per year discharge occurs:

ii. Average duration of each discharge:

iii. Average flow per discharge in million gallons per day:

MGD

iv. Month in which discharge occurs:

e. Is outfall equipped with a diffuser? Yes No

f. Name of receiving water:

A.6. DESCRIPTION OF TREATMENT

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

Primary

Secondary

Advanced

Other (specify):

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

Design BOD₅ removal **or** Design CBOD₅ removal _____ %

Design Suspended Solids removal _____ %

Design Phosphorus removal _____ %

Design Nitrogen removal _____ %

c. What type of disinfection is used for the effluent from this outfall? : _____

If disinfection varies by season, please describe: _____

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

A.7. EFFLUENT TESTING INFORMATION

All applicants that discharge to waters of the Commonwealth must provide effluent testing data for the parameters shown in the table below. Complete once for each outfall discharging effluent to waters of the Commonwealth

Provide the indicated effluent testing results for each outfall through which effluent is discharged.

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.

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.

Do not include information on combined sewer overflows in this section.

OUTFALL NUMBER _____

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)*		s.u.			
pH (Maximum)*		s.u.			
Flow Rate					
Temperature (Winter)					
Temperature (Summer)					

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

Pollutant	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			Analytical Method	ML / MDL
	Concentration	Units	Concentration	Units	Number of Samples		
Biochemical Oxygen Demand (BOD ₅)*							
or							
Carbonaceous Biochemical Oxygen Demand* (CBOD ₅)							
Escherichia coli (E. coli)							
Total Suspended Solids (TSS)							

* Report only one: either BOD₅ or CBOD₅

END OF PART A.

Refer to the general overview on Page 1 or the instructions to determine which other parts of this form you must complete.

PART B

APPLICATION INFORMATION FOR DESIGN FLOW \geq 100,000 GPD (0.10 MGD)

ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREAT THAN OR EQUAL TO 100,000 GALLONS PER DAY (0.10 MGD):

Applicants with a facility design flow \geq 100,000 gallons per day (0.10 MGD) must complete questions B.1 through B.5. All others go to Part C.

B.1. INFLOW AND INFILTRATION.

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

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

B.2. TOPOGRAPHIC MAP

Attach to this application a site location map of the area extending at least one mile beyond facility property boundaries. Provide a topographic map, aerial map, or other map that identifies the site location, and shows the outline of the facility, significant features, 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.

- a. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system.
- b. 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.
- c. Include a brief narrative description of the diagram. _____

B.4. 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 for each.

If none, go to question B.5.

a. List the number that was assigned in question A.7 for each outfall that is covered by this implementation schedule.

OUTFALL NUMBER _____

OUTFALL NUMBER _____

OUTFALL NUMBER _____

OUTFALL NUMBER _____

Are the planned improvements or implementation schedule required by local, State or Federal agencies? Yes No

b. If Yes, briefly describe, including new maximum daily inflow rate (if applicable).

c. 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	Required by Local, State, or Federal agency, or Independent	Schedule MM/DD/YYYY	Actual Completion Date MM/DD/YYYY
Begin construction			
End construction			
Begin discharge			
Attain operational level			

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

d. If Yes, briefly describe.

B.5. EFFLUENT TESTING DATA (For applicants with design flow greater than or equal to 100,000 gallons per day (0.10 mgd) only.)

Applicants that discharge to waters of the Commonwealth must provide effluent testing data for the parameters shown in the table below.

Provide the indicated effluent testing for each outfall through which effluent is discharged. 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.

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.

Do not include information on combined sewer overflows in this section.

OUTFALL NUMBER _____

Pollutant	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			Analytical Method	ML / MDL
	Concentration	Units	Concentration	Units	Number of Samples		
Ammonia (as N)							
Chlorine (Total Residual, TRC)							
Dissolved Oxygen (DO)							
Total Kjeldahl Nitrogen (TKN)							
Nitrate Plus Nitrite Nitrogen							
Oil and Grease (O&G)							
Phosphorus (Total P)							
Total Dissolved Solids (TDS)							
Other							

END OF PART B.

Refer to the general overview on Page 1 or the instructions to determine which other parts of this form you must complete.

PART C
CERTIFICATION FOR ALL APPLICANTS

CERTIFICATION. All applicants must complete Part C. Refer to instructions to determine who is an officer for the purposes of signing this certification.

Indicate below which parts of Form A you 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. Check all that apply.

- Part A. Information for All Applicants.
- Part B. Additional Information for Applicants with a Design Flow \geq 100,000 gallons per day (0.10 MGD).
- Part C. Certification for All Applicants.

Supplemental Application Information packet Check all that apply

- Part D. Expanded Effluent Testing Data.
- Part E. Toxicity Testing Data.
- Part F. Industrial User Discharges and RCRA/CERCLA Wastes.
- Part G. Combined Sewer Systems

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.

PRINTED NAME AND TITLE:

SIGNATURE:

DATE:

TELEPHONE NO.

EMAIL:

Return completed application form and attachments to:
Division of Water
Surface Water Permits Branch
300 Sower Boulevard, 3rd Floor
Frankfort, KY 40601

Direct questions to: Surface Water Permits Branch at (502) 564-3410.

END OF BASIC APPLICATION PACKET.

Proceed to Supplemental Application Information packet.
Refer to the general overview on Page 1 or the instructions to determine which parts of Supplemental Application Information packet (Parts D, E, F, and G) you must complete.

SUPPLEMENTAL APPLICATION INFORMATION PACKET

**PART D
EXPANDED EFFLUENT TESTING DATA**

EXPANDED EFFLUENT TESTING DATA FOR APPLICANTS WITH DESIGN FLOW GREATER THAN OR EQUAL TO 1.0 MILLION GALLONS PER DAY (1 MGD) OR 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. Complete once for each outfall discharging effluent to waters of the Commonwealth.

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.

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.

Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form.

Do not include information on combined sewer overflows in this section.

OUTFALL NUMBER _____

POLLUTANT Total Recoverable Metals, Cyanide, Phenols, Hardness, and Chlorida	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					Analytical Method	ML With Units	
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	No. of Samples			
ANTIMONY												
ARSENIC												
ARSENIC												
BERYLLIUM												
CADMIUM												
CHROMIUM												
COPPER												
LEAD												
MERCURY												
NICKEL												
SELENIUM												
SILVER												
THALLIUM												
ZINC												
CYANIDE												
TOTAL PHENOLIC COMPOUNDS												
HARDNESS (AS CaCO ₃)												
CHLORIDE												
Use this space or a separate sheet to provide information on other metals requested by the permit writer.												

OUTFALL NUMBER (continued) _____											
POLLUTANT Volatile Organic Compounds.	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					Analytical Method	ML With Units
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	No. of Samples		
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											
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.											

OUTFALL NUMBER (continued) _____											
POLLUTANT Acid Extractable Compounds.	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					Analytical Method	ML With Units
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	No. of Samples		
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.											
POLLUTANT Base Neutral Compounds	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					Analytical Method	ML With Units
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	No. of Samples		
ACENAPHTHENE											
ACENAPHTHYLENE											
ANTHRACENE											
BENZIDINE											
BENZO(A)ANTHRACENE											
BENZO(A)PYRENE											
3,4 BENZO-FLUORANTHENE											
BENZO(GH)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												
1,2-DICHLOROBENZENE												
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 information overview on Page 1 to determine which other parts of Form A you must complete.

SUPPLEMENTAL APPLICATION INFORMATION PACKET

**PART E
TOXICITY TESTING DATA**

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.

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.

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.

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.2 for previously submitted information.

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.

Do not include information on combined sewer overflows in this section.

E.1. Required Tests.

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

Chronic

Acute

E.2. 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)

E.3. Toxicity Reduction Evaluation

Is the treatment works involved in a Toxicity Reduction Evaluation? Yes No

If Yes, describe.

E.4. 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:	Test number:	Test number:
a. Test Information.			
Test species & test method number			
Age at initiation of test			
Outfall number			
Dates sample collected			
Date test started			
Duration			
b. Give the toxicity test methods followed.			
Manual title			
Edition number and year of publication			
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			
d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)			
Before disinfection			
After disinfection			
After dechlorination			
e. Describe the point in the treatment process at which the sample was collected.			
Sample was collected:			
f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.			
Chronic toxicity			
Acute toxicity			
g. Provide the type of test performed.			
Static			
Static-renewal			
Flow-through			

	Test number:	Test number:	Test number:
h. List the source of dilution water. If laboratory water, specify type; if receiving water, specify source.			
Laboratory Water			
Receiving Water			
i. List the type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.			
Fresh Water			
Salt Water			
j. Give the percentage effluent used for all concentrations in the test series.			
k. For each parameter measured during the test, state whether the parameter meets test method specifications.			
pH			
Salinity			
Temperature			
Ammonia			
Dissolved oxygen			
l. Test Results.			
Acute:			
Percent survival in 100% effluent	%	%	%
LC50			
95% C.I.	%	%	%
Control percent survival	%	%	%
Other (describe)			
Chronic:			
NOEC	%	%	%
IC25	%	%	%
Control percent survival	%	%	%
Other (describe)			

	Test number:	Test number:	Test number:
m. Quality Control/Quality Assurance.			
Is reference toxicant data available?	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO
Was reference toxicant test within acceptable bounds?	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO
What date was reference toxicant test run (MM/DD/YYYY)?			
Other (describe)			

END OF PART E.
Refer to the application information overview on Page 1 to determine which other parts of Form A you must complete.

SUPPLEMENTAL APPLICATION INFORMATION PACKET

**PART F
INDUSTRIAL USER DISCHARGES**

INDUSTRIAL USER DISCHARGERS

All treatment works receiving discharges from significant industrial users must complete Part F.

GENERAL INFORMATION:

F.1. Pretreatment Program.

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

b. Number of CIUs.

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:

Mailing Address:

City, State, Zip:

F.4. Industrial Processes.

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

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):

Raw material(s):

F.6. Flow Rate.

Does the treatment works have, or is it subject to, an approved pretreatment program? Yes No

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.

_____ gpd 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 Yes No

b. Categorical pretreatment standards Yes No If yes, describe below.

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 No If yes, describe each episode

END OF PART F.

Refer to the application information overview on Page 1 to determine which other parts of Form A you must complete.

SUPPLEMENTAL APPLICATION INFORMATION PACKET

**PART G
COMBINED SEWER SYSTEMS**

COMBINED SEWER SYSTEMS

If the treatment works has a combined sewer system, complete Part G.

GENERAL INFORMATION:

G.1. System Map.

Provide a map indicating the following: (may be included with Basic Application Information)

- a. All Combined Sewer System Overflow (CSO) discharge points.
- b. Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding natural resource waters).
- c. Waters that support threatened and endangered species potentially affected by CSOs.

G.2. System Diagram

Provide a diagram, either on the map provided in G.1. or on a separate drawing, of the combined sewer collection system that includes the following information:

- a. Locations of major sewer trunk lines, both combined and separate sanitary
- b. Locations of points where separate sanitary sewers feed into the combined sewer system.
- c. Locations of in-line and off-line storage structures.
- d. Locations of flow-regulating devices.
- e. Locations of pump stations.

G.3. CSO Outfalls

Complete question G.3 through G.5, once for each CSO discharge point.

a. Outfall Number:

b. Outfall Location (City)

c. Outfall Latitude (Decimal Degrees):

Outfall Longitude (Decimal Degrees):

d. Which of the following were monitored during the last year for this CSO? :

- | | | | | | |
|------|-------------------------------|--------------------------|-----|--------------------------|----|
| i. | Rainfall | <input type="checkbox"/> | Yes | <input type="checkbox"/> | No |
| ii. | CSO flow volume | <input type="checkbox"/> | Yes | <input type="checkbox"/> | No |
| iii. | CSO pollutant concentrations: | <input type="checkbox"/> | Yes | <input type="checkbox"/> | No |
| iv. | Receiving water quality | <input type="checkbox"/> | Yes | <input type="checkbox"/> | No |
| v. | CSO frequency | <input type="checkbox"/> | Yes | <input type="checkbox"/> | No |

e. How many storm events were monitored during the last year?

G.4. CSO EventsComplete question G.3 through G.5, once for each CSO discharge point.

a. Give the number of CSO event in the last year:	<input type="checkbox"/> Actual	<input type="checkbox"/> Approximate
b. Give the average duration per CSO event in <u>hours</u> .	hours <input type="checkbox"/> Actual	hours <input type="checkbox"/> Approximate
c. Give the average volume per CSO event in <u>million gallons</u>	MG <input type="checkbox"/> Actual	MG <input type="checkbox"/> Approximate
d. Give the minimum rainfall that caused a CSO event in the last year.	inches of rainfall	

G.5. CSO OperationsComplete question G.3 through G.5, once for each CSO discharge point.

Describe any known water quality impacts on the receiving water caused by this CSO (e.g., permanent or intermittent beach closings, permanent or intermittent shell fish bed closings, fish kills, fish advisories, other recreational loss, or violation of any applicable State water quality standard).

END OF PART G.

Refer to the application information overview on Page 1 to determine which other parts of Form A you must complete.

KPDES FORM A – INSTRUCTIONS

COMMONLY ASKED QUESTIONS

What if I Need More Space for My Answer?

If you need more room for your answer than is provided on the form, attach a separate sheet called “Additional Information.” At the top of the separate sheet, put the name of your plant, your plant’s NPDES permit number, and the number of the outfall that you are writing about, if applicable. Also, next to your answer, put the question number (from Form A). Provide this information on any drawings or other papers that you attach to your application as well.

How Do I Complete the Forms?

Answer every question on Form A that applies to your treatment works. If your answer to a question requires more room than there is on the form, please attach additional sheets as described above. If a particular question does not apply to your treatment works, write “N/A” (meaning “not applicable”) as your answer to that question. If you need additional guidance on filling out these forms, contact the Surface Water Permits Branch of the Division of Water.

Which Parts of the Form Apply?

Form A is presented in a modular format, consisting of two packets: the Basic Application Information packet and the Supplemental Application Information packet. The Basic Application Information Packet is divided into three parts. All applicants must complete Part A (Basic Application Information For All Applicants) and Part C (Certification). Applicants with a design flow greater than or equal to 0.1 MGD must also complete Part B (Additional Application Information For Applicants With A Design Flow Greater Than Or Equal To 0.1 MGD). Some applicants must also complete the Supplemental Application Information packet. Refer to the Application Overview on page 1 of Form A to determine which parts of the Supplemental Application Information you must complete.

Step-by-Step Instructions

The following section provides clarification and additional information for the questions on Form A. Most of the terms used in Form A are defined in the Kentucky Administrative Regulations at 401 KAR 5:002.

BASIC APPLICATION INFORMATION

Part A (Basic Application Information for All Applicants)

A.1. Facility Information

Provide your plant’s official or legal name and KPDES permit number. Do not use a nickname or short name. Be sure to provide the city or county and state in which the facility is located.

A.2. Collection System Information

Provide the names of all the cities, towns, and unincorporated areas served by your plant and enter the number of people served by your plant at the time you complete this form. Indicate whether each portion of the collection system is separate or combined storm and sanitary, if known, and note the ownership status of each portion of the system (municipal, private, etc.). If you check both of the collection systems indicated on the form, you must also provide an estimate of what percentage (in terms of miles of pipe) of your entire collection system each type represents. For example, 80 percent separate sanitary sewers would mean that 80 percent of the actual miles of pipes are separate sanitary sewers (and 20 percent are combined sewers).

A.3. Flow

- Design Flow Rate:

Provide your plant’s current design flow rate. Treatment works with a design flow less than 5 MGD must provide the design influent flow rate to two decimal places. Treatment works that are greater than or equal to 5 MGD must report this to 1 decimal place. This is because fluctuations of 0.01 MGD to 0.09 MGD in smaller treatment works represent a significant percentage of daily flow.

- **Annual Average Daily Flow Rate:**
Enter the annual average daily flow rate, in million gallons per day that your plant actually treated this year and each of the past two years for days that your plant actually discharges. 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.
- **Maximum Daily Flow Rate:**
Enter the maximum daily flow rate, in million gallons per day (MGD), that your plant received this year and each of the past two 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.4. Discharges and Other Disposal Methods

- a. Note whether the treatment works discharges effluent to waters of the Commonwealth. If yes, note the number of treated effluent discharge points, untreated or partially treated effluent discharge points, combined sewer overflow points, constructed emergency overflows prior to the headworks, and any other discharge points. Dischargers of effluent to waters of the Commonwealth with flow rates greater than or equal to 0.1 MGD must also complete questions B.1 through B.5 and, in some cases, Part D (Expanded Effluent Testing Data) of Form A. See the Application Overview on page 1 of Form A for more information.
- b. A surface impoundment with no point source discharge (to waters of the Commonwealth) is a holding pond or basin that is large enough to contain all wastewaters discharged into it. It has no places where water overflows from it. It is used for evaporation of water and very little water seeps into the ground. Your plant must report the location of each surface impoundment, the annual average volume discharged to each impoundment, and the frequency of discharge into the surface impoundment (i.e., is the discharge continuous or intermittent). If your plant discharges to more than one surface impoundment, use an additional sheet (or sheets) to give this information for each impoundment. Attach the additional sheet(s) to the application form. The information on the location of the surface impoundment(s) may be referenced on the topographic map prepared under question B.2, if applicable.
- c. Land application is the spraying or spreading of treated wastewater over an area of land. If your plant applies wastewater to land, you must list the site location, the size of the site (in acres), the annual average daily volume applied to the site, and the frequency of application (i.e., is the application continuous or intermittent). If your plant applies wastewater to more than one site, provide the information for each site on a separate sheet (or sheets). Attach the additional sheet(s) to your application form. The information on the location of the land application site may be referenced on the topographic map prepared under question B.2, if applicable.
- d. If your plant discharges treated or untreated wastewater to another treatment works (including a municipal waste transport or collection system), provide the name and location of each treatment works your plant sends wastewater.

A.5. Description of Outfall

- a. Provide the outfall number.
- b. Provide the outfall's longitude and latitude in decimal degrees.
- c. Provide the average daily flow rate in million gallons per day.
- d. Indicate whether this outfall is a periodic or intermittent discharge. A "periodic discharge" is one that happens regularly (for example, monthly or seasonally), but is not continuous all year. An "intermittent discharge" is one that happens sometimes, but not regularly. Discharges from holding ponds, lagoons, etc., may be included as periodic or intermittent. Give the number of times per year a discharge occurs from this outfall. Also tell how long each discharge lasts and how much water is discharged, in million gallons per day. List each month

when discharge happens. If you do not have records of exact months in which such discharges occurred, provide an estimate based on the best available information.

- e. Indicate whether the outfall is equipped with a diffuser.
- f. Give the name of the surface water to which this outfall discharges and the waterbodies to which the discharge will ultimately flow. For example, “Control Ditch A, then into Stream B, then into River C, and finally into River D in River Basin E.”

A.6. Description of Treatment

- a. Indicate the levels of treatment that your plant provides for the discharge from this outfall.
- b. Give the design removal rates, in percent, for biochemical oxygen demand (BOD₅) or carbonaceous biochemical oxygen demand (CBOD₅), suspended solids (SS), phosphorus (P), and nitrogen (N).
- c. Describe the type of disinfection your plant uses (for example, chlorination, ozonation, ultraviolet, etc.) and any seasonal variation in disinfection technique that may occur. If your plant uses chlorination, indicate whether it also dechlorinates.

A.7. Effluent Testing Information

All applicants that discharge effluent to waters of the Commonwealth must provide effluent testing data for each outfall. Refer to the following table to determine which effluent testing information questions you must complete and to determine the number of pollutant scans on which to base your data. See the Application Overview on page 1 of Form A for more information.

Treatment works characteristics	Form A requirements	Minimum number of scans (see Appendix A)
Design flow rate less than 1 MGD and Not required to have (or does not have) a pretreatment program	Question A.7.	3
Design flow rate greater than or equal to 1 MGD or required to have (or has one in place) or otherwise required by the permitting authority to provide data	Question A.7 and Part D of Supplemental Application Information Packet	3

Complete question A.7 once for each outfall through which effluent is discharged to waters of the Commonwealth. Indicate on each page the outfall number (as assigned in question A.5) for which the data are provided. Do not include information about combined sewer overflow discharge points in question A.7. For specific instructions on completing the pollutant tables in question A.7, refer to Appendix A of these instructions.

Part B (Additional Application Information for Applicants For Design Flow Greater Than or Equal to 0.1 MGD)

All applicants with a design flow rate greater than or equal to 0.1 MGD must answer questions B.1 through B.5.

B.1. Inflow and Infiltration

Estimate the average daily flow rate of inflow and infiltration in gallons per day and steps the facility is taking to minimize inflow and infiltration.

B.2. Topographic Map

Provide a topographic map (or other map if a topographic map is unavailable) extending at least one mile beyond property boundaries of the treatment plant, including all unit processes. In addition, the map must show the following:

- a. Treatment plant area and unit processes;

- b. Major pipes or other structures through which wastewater enters the treatment plant 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 fluids from the treatment plant is injected underground;
- d. Wells, springs, and other surface waterbodies listed in public records or otherwise known to the applicant within one-quarter mile of the treatment works' property boundary;
- e. Sewage sludge management facilities (including on-site treatment, storage, and disposal sites); and
- f. Location at which waste classified as hazardous under RCRA enters the treatment plant by truck, rail, or dedicated pipe.

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. Include a water balance showing all treatment units, including disinfection, and showing 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. Scheduled Improvements and Schedules of Implementation

- a. List each outfall number that is covered by the implementation schedule. The outfall numbers you use must be the same as the ones provided under question A.5.
- b. Indicate whether the planned improvements or implementation schedules are required by local, State, or Federal agencies. Provide a brief description of the improvements to be made for the outfalls listed in question B.4.a, including new maximum daily inflow rate, if applicable.
- c. Provide the information requested for each planned improvement. Supply dates for the following stages of any compliance schedule. For improvements that are planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. If a step has already been finished, give the date when that step was completed. "Begin Construction" means the date you plan to start construction. "End Construction" means the date you expect to finish construction. "Begin Discharge" means the date that you expect a discharge will start. "Attain Operational Level" means the date that you expect the effluent level will meet your plant's implementation schedule conditions.
- d. Note whether your treatment works has received appropriate permits or clearances that are required by other Federal or State requirements. If you have received such permits, describe them.

Part C (Certification for All Applicants)

Before completing the Certification statement, review the Application Overview section on the cover page of Form A to make sure that you have completed all applicable sections of Form A, including any parts of the Supplemental Application Information packet.

All permit applications must be signed and certified. Also indicate in the boxes provided which sections of Form A you are submitting with this application.

An application submitted by a municipality, State, Federal, or other public agency must be signed by either a principal executive officer or ranking elected official. A principal executive officer of a Federal agency includes: (1) The chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

An application submitted by a corporation must be signed by a responsible corporate officer. A responsible corporate officer means: (1) A president, secretary, treasurer, or vice president in charge of a principal business function, or any other person who performs similar policy- or decision-making functions; or (2) the manager of manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

An application submitted by a partnership or sole proprietorship must be signed by a general partner or the proprietor, respectively.

SUPPLEMENTAL APPLICATION INFORMATION PACKET

Form A has been developed in a modular format, consisting of two packets: the Basic Application Information packet and the Supplemental Application Information packet. As directed by the Application Overview section on page 1 of Form A, certain applicants will need to complete one or more parts of the Supplemental Application Information packet in addition to some or all of the Basic Application Information packet. Refer to the Application Overview section to determine which part(s) of Form A you must complete. The Supplemental Application Information packet is divided into the following parts:

- Part D Expanded Effluent Testing Data
- Part E Toxicity Testing Data
- Part F Industrial User Discharges
- Part G Combined Sewer Systems

Part D (Expanded Effluent Testing Data)

A treatment works that discharges effluent to surface waters of the Commonwealth and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data): Has a design flow rate greater than or equal to 1 MGD; is required to have a pretreatment program (or has one in place); or Is otherwise required by the permitting authority to provide the information Refer to the following table to determine which effluent testing information questions you must complete and to determine the number of pollutant scans on which to base your data.

Treatment works characteristics	Form A requirements	Minimum number of scans (see Appendix A)
Design flow rate less than 1 MGD and Not required to have (or does not have) a pretreatment program	Question B.5.	3
Design flow rate greater than or equal to 1 MGD or required to have (or has one in place) or otherwise required by the permitting authority to provide data	Question B.5 and Part D of Supplemental Application Information Packet	3

Complete Part D once for each outfall through which effluent is discharged to waters of the Commonwealth. Indicate on each page the outfall number (as assigned in question A.5 of the Basic Application Information packet) for which the data are provided. Using the blank rows provided on the form, submit any data the facility may have for pollutants not specifically listed in Part D. Note that the permitting authority may require additional testing on a case-by-case basis. For specific instructions on completing the pollutant tables in Part D, refer to Appendix A of these instructions.

Part E (Toxicity Testing Data)

Treatment works meeting one or more of the following criteria must complete Part E (Toxicity Testing Data):

- Treatment works with a design flow rate greater than or equal to one MGD; or
- Treatment works with an approved pretreatment program (as well as those required to have one under 40 CFR Part 403); or

- Treatment works otherwise required by the permitting authority to submit the results of whole effluent toxicity testing.

Applicants completing Part E must submit the results from any whole effluent toxicity test conducted during the past four and one-half years that have not been reported or submitted to the permitting authority for each outfall discharging effluent to the waters of the Commonwealth. Do not include information on combined sewer overflows in this section. If the applicant conducted a whole effluent toxicity test during the past four and one-half years that revealed toxicity, then provide any information available on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted. Test results provided in Part E must be based on multiple species being tested quarterly for a minimum of one year. For multiple species, EPA requires a minimum of two species (e.g., vertebrates and invertebrates). The permitting authority may require the applicant to include other species (e.g., plants) as well. Applicants must provide these tests for either acute or chronic toxicity depending on the range of the receiving water dilution. EPA recommends that applicants conduct acute or chronic toxicity testing based on the following dilutions:

- Acute toxicity testing if the dilution of the effluent is greater than 1,000:1 at the edge of the mixing zone.
- Acute or chronic toxicity testing if the dilution of the effluent is between 100:1 and 1000:1 at the edge of the mixing zone.
- Acute testing may be more appropriate at the higher end of this range (1000:1), and chronic testing may be more appropriate at the lower end of this range (100:1).
- Chronic toxicity testing if the dilution of the effluent is less than 100:1 at the edge of the mixing zone.

All data provided in Part E must be based on tests performed within four and one-half years prior to completing this application. The tests must have been conducted since the last NPDES permit issuance or permit modification under 40 CFR 122.62(a). In addition, applicants only need to submit data that have not previously been submitted to the permitting authority. Thus, if test data have already been submitted (within the last four and one-half years) in accordance with an issued NPDES permit, the treatment works may note the dates the tests were submitted and need not fill out the information requested in question E.4 for that test.

Additional copies of Part E may be used in submitting the required information. A permittee having no significant toxicity in the effluent over the past year and who has submitted all toxicity test results through the end of the calendar quarter preceding the time of permit application would need to supply no additional toxicity testing data as part of this application. Instead, the applicant should complete question E.2, which requests a summary of bioassay test information already submitted. (See below for more detailed instructions on completing question E.2)

Where test data are requested to be reported, the treatment works has the option of reporting the requested data on Form A or on reports supplied by the laboratories conducting the testing, provided the data requested are complete and presented in a logical fashion. The permitting authority reserves the right to request that the data be reported on Form A.

E.1. Required Tests

Provide the total number of chronic and acute whole effluent toxicity tests conducted in the past four and one-half years. A “chronic” toxicity test continues for a relatively long period of time, often one-tenth the life span of the organism or more. An “acute” toxicity test is one in which the effect is observed in 96 hours or less.

E.2. Summary of Submitted Biomonitoring Test Information

As stated above, applicants that have already submitted the results of biomonitoring test information over the past four and one-half years do not need to resubmit this data with Form A. Instead, indicate in question E.2 the date you submitted each report and provide a summary of the test results for each report. Include in this summary the following information: the outfall number and collection dates of the samples tested, dates of testing, toxicity testing method(s) used, and a summary of the results from the test (e.g, 100% survival in 40% effluent).

E.3. Toxicity Reduction Evaluation

A Toxicity Reduction Evaluation (TRE) is a site-specific study conducted in a stepwise process designed to identify the causative agents of effluent toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in effluent toxicity. If the treatment works is conducting a TRE as part of a KPDES permit requirement or

enforcement order, then you only need to provide the date of the last progress report concerning the TRE in the area reserved for details of the TRE.

E.4. Individual Test Data

Complete E.4 for each test conducted in the last four and one-half years for which data has not been submitted. Use the columns provided on the form for each test and specify the test number at the top of each column. Use additional copies of question E.4 if more than three tests are being reported. The parameters listed on the form are based on EPA-recommended test methods. Permittees may be required by the permitting authority to submit additional test parameter data for the purposes of quality assurance. If the treatment works is conducting whole effluent toxicity tests and reporting its results in accordance with a KPDES permit requirement, then the treatment works may note the dates the tests were submitted and need not fill out the information requested in question E.4 for those tests (unless otherwise required by the permitting authority).

- a. Provide the information requested on the form for each test reported. Under “Test species & test method number,” provide the scientific name of the organism used in the test and the test method number. The “Outfall number” reported must correlate to the outfall numbers listed in question A.5 of the Basic Application Information packet.
- b. Provide the source of the toxicity test methods followed. In conducting the tests, the treatment works must use methods approved in accordance with 40 CFR Part 136. Note: Approved methods are currently under development.
- c. Indicate whether 24-hour composite or grab samples were used for each test. For multiple grab samples, provide the number of grab samples used. Refer to Appendix A of the instructions for a definition of composite and grab samples.
- d. Indicate whether the sample was taken before or after disinfection and/or after dechlorination.
- e. Provide a description of the point in the treatment process at which the sample was collected.
- f. Indicate whether the test was intended to assess chronic or acute toxicity.
- g. Indicate which type of test was performed. A “static” test is a test performed with a single constant volume of water. In a “static-renewal” test, the volume of water is renewed at discrete intervals. In a “flow-through” test, the volume of water is renewed continuously.
- h. Indicate whether laboratory water or the receiving water of the tested outfall was used as the source of dilution water. If laboratory water was used, provide the type of water used.
- i. Indicate whether fresh or salt water was used as the dilution water. For salt water, specify whether the salt water was natural or artificial (specify the type of artificial water used).
- j. For each concentration in the test series, provide the percentage of effluent used.
- k. Provide the minimum and maximum parameters measured during the test for pH, salinity, temperature, ammonia, and dissolved oxygen.
- l. Provide the results of each test performed. For acute toxicity tests, provide the percent survival of the test species in 100 percent effluent. Also provide the LC50 (Lethal Concentration to 50 percent) of the test. “LC50” is the effluent (or toxicant) concentration estimated to be lethal to 50 percent of the test organisms during a specific period. Provide the 95% confidence interval, control percent survival, and any other test results requested by the permitting authority in the space provided. For chronic toxicity tests, provide data at the most sensitive endpoint. While this is generally expressed as a “NOEC” (No Observed Effect Concentration), it may be expressed as an “Inhibition Concentration” (e.g., “IC25”—Inhibition Concentration to 25 percent). The NOEC is the highest measured concentration of an effluent (or a toxicant)

at which no significant adverse effects are observed on the test organisms at a specific time of observation. The IC25 is the effluent (or toxicant) concentration estimated to cause a 25 percent reduction in reproduction, fecundity, growth, or other non-quantal biological measurements. Provide the control percent survival. Indicate any other test results in the space provided.

- m. Note whether reference toxicant data is available and indicate whether the reference toxicant test was within acceptable bounds. Provide the date on which the reference toxicant test was run. Also provide any other quality control/quality assurance information that may be requested by the permitting authority.

Part F (Industrial User Discharges)

All treatment works receiving discharges from significant industrial users (SIUs). A “categorical industrial user” is an industrial user that is subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N, which are technology-based standards developed by EPA setting industry-specific effluent limits. (A list of Industrial Categories subject to Categorical Pretreatment Standards is included in Appendix B.) A “significant industrial user” is defined in 40 CFR 403.3(t) as an industrial user that:

- Is subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N; and
- Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (excluding sanitary, non-contact cooling and boiler blowdown wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment works; or is designated as such by the Control Authority as defined in 40 CFR 403.12(a) on the basis that the industrial user has a reasonable potential for adversely affecting the treatment works operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

An “industrial user” means any industrial or commercial entity that discharges wastewater that is not domestic wastewater. Domestic wastewater includes wastewater from connections to houses, hotels, non-industrial office buildings, institutions, or sanitary waste from industrial facilities. The number of “industrial users” is the total number of industrial and commercial users that discharge to the treatment works.

For the purposes of completing the application form, please provide information on non-categorical SIUs and categorical industrial users separately.

F.1. Pretreatment Program

Indicate whether the treatment works has an approved pretreatment program. An “approved pretreatment program” is a program administered by a treatment works that meets the criteria established in 40 CFR 403.8 and 403.9 and that has been approved by a Regional Administrator or State Director. Note that if this treatment works has or is required to have a pretreatment program, you must also complete Parts D and E of the Supplemental Application Information packet.

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs)

Provide the number of SIUs and the number of CIUs that discharge to the treatment works. Significant Industrial User (SIU) Information. All treatment works that receive discharges from SIUs must complete questions F.3 through F.8. If your treatment works receives wastewater from more than one SIU, complete questions F.3 through F.8 once for each SIU.

F.3. Significant Industrial User Information

Provide the name and mailing address of each SIU. Submit additional pages as necessary.

F.4. Industrial Processes

Describe the actual process(es) (rather than simply listing them) at the SIU that affect or contribute to the SIU’s discharge. For example, in describing a metal finishing operation, include such information as how the product is

cleaned prior to finishing, what type of plating baths are in operation (e.g., nickel, chromium), how paint is applied, and how the product is polished. Attach additional sheets if necessary.

F.5. Principal Product(s) and Raw Materials(s)

List principal products that the SIU generates and the raw materials used to manufacture the products.

F.6. Flow Rate

“Process wastewater” means any water that, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product. Indicate the average daily volume, in gallons per day, of process wastewater and non-process wastewater that the SIU discharges into the collection system. Specify whether the discharges are continuous or intermittent.

F.7. Pretreatment Standards

Indicate whether the SIU is subject to local limits and categorical pretreatment standards. “Local limits” are enforceable local requirements developed by treatment works to address Federal standards as well as state and local regulations. “Categorical pretreatment standards” are national technology-based standards developed by EPA, setting industry-specific effluent limits. These standards are implemented by 40 CFR 403.6. If the treatment works is subject to categorical pretreatment standards, indicate the category and subcategory.

F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU

Provide information concerning any problems the treatment works has experienced that are attributable to discharges from the SIUs. Problems may include upsets or interference at the plant, corrosion in the collection system, or other similar events in the past three years.

Part G (Combined Sewer Systems)

A combined sewer system collects a mixture of both sanitary wastewater and storm water runoff.

G.1. System Map

Indicate on a system map all CSO discharge points. For each such point, indicate any sensitive use areas and any waters supporting threatened or endangered species that are potentially affected by CSOs. Sensitive use areas include beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding natural resource waters.

Applicants may provide the information requested in question G.1 on the map submitted in response to question B.2 in the Basic Application Information packet, if applicable.

All maps should be either on paper or other material appropriate for reproduction. If possible, all sheets should be approximately letter size with margins suitable for filing and binding. As few sheets should be used as necessary to show clearly what is involved. All discharge points should be identified by outfall number. Each sheet should be labeled with the applicant’s name, KPDES permit number, location (city, county, or town), date of drawing, and designation of the number of sheets of each diagram as “page ____ of ____.”

G.2. System Diagram

Diagram the location of combined and separate sanitary major sewer trunk lines and indicate any connections where separate sanitary sewers feed into the combined sewer system. Clearly indicate the location of all in-line and off-line storage structures, flow regulating devices, and pump stations.

The drawing should be either on paper or other material appropriate for reproduction. If possible, all sheets should be approximately letter size with margins suitable for filing and binding. As few sheets should be used as necessary to show clearly what is involved. All discharge points should be identified by outfall number. Each sheet should be labeled with the applicant’s name, KPDES permit number, location (city, county, or town), date of drawing, and designation of the number of sheets of each diagram as “page ____ of ____”.

CSO Outfalls. Fill out a copy of questions G.3 through G.6 once for each CSO discharge point. Attach additional pages as necessary.

G.3. Description of Outfall

Provide the outfall number and location (including city and latitude and longitude in decimal degrees). Indicate whether rainfall, CSO flow volume, CSO pollutant concentrations, receiving water quality, or CSO frequency were monitored during the past 12 months. In addition, provide the number of storm events monitored during the past 12 months.

G.4. CSO Events

- a. Provide the number of CSO events that have occurred in the past 12 months. Indicate whether this is an actual or approximate number.
- b. Provide the average duration (in hours) per CSO event. Indicate whether this is an actual or approximate value.
- c. Provide the average volume (in million gallons) of discharge per CSO incidents over the past 12 months. Indicate whether this is an actual or approximate number.
- d. Provide the minimum amount of rainfall that caused a CSO incident in the past 12 months.

G.5. CSO Operations

Provide a description of any known water quality impacts on the receiving water caused by CSOs from this discharge point. Water quality impacts include, but are not limited to, permanent or intermittent beach closings, permanent or intermittent shell fish bed closings, fish kills, fish advisories, other recreational loss, or violation of any applicable State water quality standard.

APPENDIX A – GUIDANCE FOR COMPLETING THE EFFLUENT TESTING INFORMATION; ALL TREATMENT WORKS

All applicants must provide data for each of the pollutants in question A.7 of the Basic Application Information packet. Some applicants must also provide data for the pollutants in question B.5 of the Basic Application Information packet and Part D of the Supplemental Application Information packet. All applicants submitting effluent testing data must base this data on a minimum of three pollutant scans. All samples analyzed must be representative of the discharge from the sampled outfall.

If you have existing data that fulfills the requirements described below, you may use that data in lieu of conducting additional sampling. If you measure more than the required number of daily values for a pollutant and those values are representative of your wastestream, you must include them in the data you report. In addition, use the blank rows provided on the form to provide any existing sampling data that your facility may have for pollutants not listed in the appropriate sections. All data provided in the application must be based on samples taken within three years prior to the time of this permit application.

Sampling data must be representative of the treatment works' discharge and take into consideration seasonal variations. At least two of the samples used to complete the effluent testing information questions must have been taken no fewer than 4 months and no more than 8 months apart. For example, one sample may be taken in April and another in October to meet this requirement. Applicants unable to meet this time requirement due to periodic, discontinuous, or seasonal discharges can obtain alternative guidance on this requirement from their permitting authority.

The collection of samples for the reported analyses should be supervised by a person experienced in performing wastewater sampling. Specific requirements contained in the applicable analytical methods should be followed for sample containers, sample preservation, holding times, and collection of duplicate samples. Samples should be taken at a time representative of normal operation. To the extent feasible, all processes that contribute to wastewater should be in operation and the treatment system should be operating properly with no system upsets. Samples should be

collected from the center of the flow channel (where turbulence is at a maximum), at a location specified in the current KPDES permit, or at any location adequate for the collection of a representative sample.

A minimum of four grab samples must be collected for pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, E. coli, and enterococci. For all other pollutants, 24-hour composite samples must be collected. However, a minimum of one grab sample, instead of a 24-hour composite, may be taken for effluent from holding ponds or other impoundments that have a retention period greater than 24 hours.

Grab and composite samples are defined as follows:

- Grab sample: an individual sample of at least 100 milliliters collected randomly for a period not exceeding 15 minutes.
- Composite sample: a sample derived from two or more discrete samples collected at equal time intervals or collected proportional to the flow rate over the compositing period. The composite collection method may vary depending on pollutant characteristics or discharge flow characteristics.

The permitting authority may allow or establish appropriate site-specific sampling procedures or requirements, including sampling locations, the season in which sampling takes place, the duration between sampling events, and protocols for collecting samples under 40 CFR Part 136. Contact the State permitting authority for detailed guidance on sampling techniques and for answers to specific questions. The following instructions explain how to complete each of the columns in the pollutant tables in the effluent testing information sections of Form A.

Maximum Daily Discharge

For composite samples, the daily discharge is the average pollutant concentration and total mass found in a composite sample taken over a 24-hour period. For grab samples, the daily discharge is the arithmetic or flow-weighted total mass or average pollutant concentration found in a series of at least four grab samples taken during the operating hours of the treatment works during a 24-hour period.

To determine the maximum daily discharge values, compare the daily discharge values from each of the sample events. Report the highest total mass and highest concentration level from these samples.

- “Concentration” is the amount of pollutant that is present in a sample with respect to the size of the sample. The daily discharge concentration is the average concentration of the pollutant throughout the 24-hour period.
- “Mass” is calculated as the total mass of the pollutant discharged over the 24-hour period.
- All data must be reported as both concentration and mass (where appropriate). Use the following abbreviations in the columns headed “Units.”

ppm—parts per million

gpd—gallons per day

MGD—million gallons per day

su—standard units

mg/l—milligrams per liter

ppb—parts per billion

ug/l—micrograms per liter

lbs—pounds

ton—tons (English tons)

mg—milligrams

g—grams

kg—kilograms

T—tonnes (metric tons)

Average Daily Discharge

The average daily discharge is determined by calculating the arithmetic mean daily pollutant concentration and the arithmetic mean daily total mass of the pollutant from each of the sample events within the three years prior to this permit application. Report the concentration, mass, and units used under the Average Daily Discharge column, along with the number of samples on which the average is based. Use the unit abbreviations shown above in “Maximum Daily Discharge.”

If data requested in Form A have been reported on the treatment works’ Discharge Monitoring Reports (DMRs), you may compile such data and report it under the maximum daily discharge and the average daily discharge columns of the form.

Analytical Method

All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. Applicants should use methods that enable pollutants to be detected at levels adequate to meet water quality-based standards. Where no approved method can detect a pollutant at the water quality-based standards level, the most sensitive approved method should be used. If the applicant believes that an alternative method should be used (e.g., due to matrix interference), the applicant should obtain prior approval from the permitting authority. If an alternative method is specified in the existing permit, the applicant should use that method unless otherwise directed by the permitting authority. Where no approved analytical method exists, an applicant may use a suitable method but must provide a description of the method. For the purposes of the application, “suitable method” means a method that is sufficiently sensitive to measure as close to the water quality-based standard as possible.

Indicate the method used for each pollutant in the “Analytical Method” column of the pollutant tables. If a method has not been approved for a pollutant for which you are providing data, you may use a suitable method to measure the concentration of the pollutant in the discharge, and provide a detailed description of the method used or a reference to the published method. The description must include the sample holding time, preservation techniques, and the quality control measures used. In such cases, indicate the method used and attach to the application a narrative description of the method used.

Reporting Levels

The applicant should provide the method detection limit (MDL), minimum level (ML), or other designated method endpoint reflecting the precision of the analytical method used.

All analytical results must be reported using the actual numeric values determined by the analysis. In other words, even where analytical results are below the detection or quantitation level of the method used, the actual data should be reported, rather than reporting “non-detect” (“ND”) or “zero” (“0”). Because the endpoint of the method has also been reported along with the test results, the permitting authority will be able to determine if the data are in the “non-detect” or “below quantitation” range.

For any dilutions made and any problems encountered in the analysis, the applicant should attach an explanation and any supporting documentation with the application. For GC/MS, report all results found to be present by spectral confirmation (i.e., quantitation limits or detection limits should not be used as a reporting threshold for GC/MS).

Total Recoverable Metals

Total recoverable metals are measured from unfiltered samples using EPA methods specified in 40 CFR Part 136.3. A digestion procedure is used to solubilize suspended materials and destroy possible organic metal complexes. The method measures dissolved metals plus those metals recovered from suspended particles by the method digestion.

**APPENDIX B – INDUSTRIAL CATEGORIES SUBJECT TO NATIONAL CATEGORICAL
PRETREATMENT STANDARDS**

Industrial Categories with Pretreatment Standards in Effect

Aluminum Forming
Asbestos Manufacturing
Battery Manufacturing
Builder's Paper and Board Mills
Carbon Black Manufacturing
Coil Coating
Copper Forming
Electrical and Electronic Components
Electroplating
Feedlots
Ferroalloy Manufacturing
Fertilizer Manufacturing
Glass Manufacturing
Grain Mills Manufacturing
Ink Formulating
Inorganic Chemicals
Iron and Steel Manufacturing
Leather Tanning and Finishing
Metal Finishing
Metal Molding and Casting
Nonferrous Metals Forming and Metal Powders
Nonferrous Metals Manufacturing
Organic Chemicals, Plastics and Synthetic Fibers
Paint Formulating
Paving and Roofing
Pesticide Manufacturing
Petroleum Refining
Pharmaceutical Manufacturing
Porcelain Enameling
Pulp, Paper and Paperboard
Rubber Manufacturing
Soap and Detergents Manufacturing
Steam Electric Power Generating
Sugar Processing
Timber Products Manufacturing
Industrial Categories with Effluent Guidelines Currently Under
Development
Pulp, Paper, and Paperboard
Pesticide Formulating, Packaging, and Repackaging
Centralized Waste Treatment
Pharmaceutical Manufacturing
Metal Products and Machinery, Phase I
Industrial Laundries
Transportation Equipment Cleaning
Landfills and Incinerators
Metal Products and Machinery, Phase II