The Town of Collierville, TN
Department of Public Services

Stan Joyner, ***Mayor*** **Molly Mehner,** ***Town Administrator***

May 15, 2023

TDEC-Division of Water Resources
Permit Section
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, TN 37243

Re: Permit # TN0057461 renewal application

To Whom It May Concern,

Attached is the NPDES renewal application for the Collierville STP, Permit # TN0057461. The current permit expires on December 30, 2023. If there are any problems or deficiencies with the application, please contact me at (901) 457-2800 or email jfox@colliervilletn.gov.

Sincerely,

John Fox
Manager of Public Utilities

cc: Donal Davis – Wastewater Manager
Eddy Bouzeid – TDEC Memphis Field Office

RECEIVED
MAY 18 2023
By

Public Services: 500 Keough Road Collierville, Tennessee 38017 (901) 457-2800 Fax: (901) 457-2828
Town Hall: 500 Poplar View Pkwy Collierville, Tennessee 38017 (901) 457-2200 Fax: (901) 457-2258
Web: www.collierville.com

STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES
Water-Based Systems
William R. Snodgrass - Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, TN 37243-1102

PERMIT CONTACT INFORMATION

Please complete all sections. If one person serves multiple functions, please repeat this information in each section.

PERMIT NUMBER: TN0057461 **DATE:** May 15, 2023

PERMITTED FACILITY: Collierville Shelton Road STP **COUNTY:** Shelby

OFFICIAL PERMIT CONTACT:

(The permit signatory authority, e.g. responsible corporate officer, principle executive officer or ranking elected official)

Official Contact: John Fox	Title or Position: Director, Public Utilities		
Mailing Address: 500 Poplar View Parkway	City: Collierville	State: TN	Zip: 38017
Phone number(s): (901) 457-2800	E-mail: jfox@colliervilletn.gov		

PERMIT BILLING ADDRESS (where invoices should be sent):

Billing Contact: John Fox	Title or Position: Director, Public Utilities		
Mailing Address: 500 Poplar View Parkway	City: Collierville	State: TN	Zip: 38017
Phone number(s): (901) 457-2800	E-mail: jfox@colliervilletn.gov		

FACILITY LOCATION (actual location of permit site and local contact for site activity):

Facility Location Contact: John Fox	Title or Position: Director, Public Utilities		
Facility Location (physical street address): 136 East Shelton Road	City: Collierville	State: TN	Zip: 38017
Phone number(s): (901) 457-2800	E-mail: jfox@colliervilletn.gov		

Alternate Contact (if desired):	Title or Position:		
Mailing Address:	City:	State:	Zip:
Phone number(s):	E-mail:		

FACILITY REPORTING (Discharge Monitoring Report (DMR) or other reporting):

Cognizant Official authorized for permit reporting: John Fox	Title or Position: Director, Public Utilities		
Mailing Address: 500 Poplar View Parkway	City: Collierville	State: TN	Zip: 38017
Phone number(s): (901) 457-2800	E-mail: jfox@colliervilletn.gov		
Fax number for reporting: (901) 457-2828	Does the facility have interest in starting electronic DMR reporting? Yes No Currently reporting DMR electronically		

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
TN0057461	TN0057461	Shelton Road STP	

Form 1 NPDES

U.S. Environmental Protection Agency
Application for NPDES Permit to Discharge Wastewater

GENERAL INFORMATION

SECTION 1. ACTIVITIES REQUIRING AN NPDES PERMIT (40 CFR 122.21(f) and (f)(1))

Activities Requiring an NPDES Permit

1.1 Applicants *Not Required* to Submit Form 1

1.1.1	Is the facility a new or existing **publicly owned treatment works?** If yes, STOP. Do NOT complete Form 1. Complete Form 2A. ☐ No	1.1.2	Is the facility a new or existing **treatment works treating domestic sewage?** If yes, STOP. Do NOT complete Form 1. Complete Form 2S. ☐ No

1.2 Applicants *Required* to Submit Form 1

1.2.1	Is the facility a **concentrated animal feeding operation** or a **concentrated aquatic animal production facility?** ☐ Yes → Complete Form 1 ***and*** Form 2B. ☑ No	1.2.2	Is the facility an **existing** manufacturing, commercial, mining, or silvicultural **facility** that **is currently discharging process wastewater?** ☐ Yes → Complete Form 1 ***and*** Form 2C. ☑ No
1.2.3	Is the facility a **new** manufacturing, commercial, mining, or silvicultural **facility** that has **not yet commenced to discharge?** ☐ Yes → Complete Form 1 ***and*** Form 2D. ☑ No	1.2.4	Is the facility a **new or existing** manufacturing, commercial, mining, or silvicultural **facility** that **discharges only nonprocess wastewater?** ☐ Yes → Complete Form 1 ***and*** Form 2E. ☑ No
1.2.5	Is the facility a **new or existing facility** whose discharge is composed entirely of **stormwater associated with industrial activity** or whose discharge is composed of **both stormwater and non-stormwater?** ☐ Yes → Complete Form 1 ***and*** Form 2F unless exempted by 40 CFR 122.26(b)(14)(x) or (b)(15). ☑ No		

SECTION 2. NAME, MAILING ADDRESS, AND LOCATION (40 CFR 122.21(f)(2))

Name, Mailing Address, and Location

2.1 Facility Name

Collierville Shelton Road STP

2.2 EPA Identification Number

TN0057461

2.3 Facility Contact

Name (first and last)	Title	Phone number
John Fox	Director, Public Utilities	(901) 457-2800

Email address
jfox@colliervilletn.gov

2.4 Facility Mailing Address

Street or P.O. box
500 Poplar View Parkway

City or town	State	ZIP code
Collierville	TN	38017

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
TN0057461	TN0057461	Shelton Road STP	

Name, Mailing Address, and Location Continued

2.5 **Facility Location**

Street, route number, or other specific identifier
136 East Shelton Road

County name	County code (if known)	
Shelby		
City or town	**State**	**ZIP code**
Collierville	TN	38017

SECTION 3. SIC AND NAICS CODES (40 CFR 122.21(f)(3))

SIC and NAICS Codes

3.1

SIC Code(s)	Description (optional)
4952	Collection and disposal of wastes conducted through a sewer system, including

3.2

NAICS Code(s)	Description (optional)
221320	Sewage treatment plants or facilities

SECTION 4. OPERATOR INFORMATION (40 CFR 122.21(f)(4))

Operator Information

4.1 **Name of Operator**

John Fox

4.2 Is the name you listed in Item 4.1 also the owner?

☐ Yes ☑ No

4.3 **Operator Status**

☐ Public—federal ☐ Public—state ☑ Other public (specify) municipal

☐ Private ☐ Other (specify) _____

4.4 **Phone Number of Operator**

(901) 457-2800

Operator Information Continued

4.5 **Operator Address**

Street or P.O. Box
500 Keough Road

City or town	State	ZIP code
Collierville	TN	38017

Email address of operator
jfox@colliervilletn.gov

SECTION 5. INDIAN LAND (40 CFR 122.21(f)(5))

Indian Land

5.1 Is the facility located on Indian Land?

☐ Yes ☑ No

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
TN0057461	TN0057461	Shelton Road STP	

SECTION 6. EXISTING ENVIRONMENTAL PERMITS (40 CFR 122.21(f)(6))

Existing Environmental Permits

6.1 **Existing Environmental Permits** (check all that apply and print or type the corresponding permit number for each)

☑ NPDES (discharges to surface water) TN0057461	☐ RCRA (hazardous wastes)	☐ UIC (underground injection of fluids)
☐ PSD (air emissions)	☐ Nonattainment program (CAA)	☐ NESHAPs (CAA)
☐ Ocean dumping (MPRSA)	☐ Dredge or fill (CWA Section 404)	☑ Other (specify) TN0078841 (NPDES)

SECTION 7. MAP (40 CFR 122.21(f)(7))

Map

7.1 Have you attached a topographic map containing all required information to this application? (See instructions for specific requirements.)

☑ Yes ☐ No ☐ CAFO—Not Applicable (See requirements in Form 2B.)

SECTION 8. NATURE OF BUSINESS (40 CFR 122.21(f)(8))

Nature of Business

8.1 Describe the nature of your business.

Municipality providing sewage and waste services to citizens of the Town of Collierville.

SECTION 9. COOLING WATER INTAKE STRUCTURES (40 CFR 122.21(f)(9))

Cooling Water Intake Structures

9.1 Does your facility use cooling water?

☐ Yes ☑ No ➔ SKIP to Item 10.1.

9.2 Identify the source of cooling water. (Note that facilities that use a cooling water intake structure as described at 40 CFR 125, Subparts I and J may have additional application requirements at 40 CFR 122.21(r). Consult with your NPDES permitting authority to determine what specific information needs to be submitted and when.)

SECTION 10. VARIANCE REQUESTS (40 CFR 122.21(f)(10))

Variance Requests

10.1 Do you intend to request or renew one or more of the variances authorized at 40 CFR 122.21(m)? (Check all that apply. Consult with your NPDES permitting authority to determine what information needs to be submitted and when.)

☐ Fundamentally different factors (CWA Section 301(n))	☐ Water quality related effluent limitations (CWA Section 302(b)(2))
☐ Non-conventional pollutants (CWA Section 301(c) and (g))	☐ Thermal discharges (CWA Section 316(a))
☑ Not applicable	

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
TN0057461	TN0057461	Shelton Road STP	

SECTION 11. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))

Checklist and Certification Statement

11.1 In Column 1 below, mark the sections of Form 1 that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to provide attachments.

Column 1	Column 2
☑ Section 1: Activities Requiring an NPDES Permit	☐ w/ attachments
☑ Section 2: Name, Mailing Address, and Location	☐ w/ attachments
☑ Section 3: SIC Codes	☐ w/ attachments
☑ Section 4: Operator Information	☐ w/ attachments
☐ Section 5: Indian Land	☐ w/ attachments
☑ Section 6: Existing Environmental Permits	☐ w/ attachments
☑ Section 7: Map	☑ w/ topographic map ☑ w/ additional attachments
☑ Section 8: Nature of Business	☐ w/ attachments
☐ Section 9: Cooling Water Intake Structures	☐ w/ attachments
☐ Section 10: Variance Requests	☐ w/ attachments
☑ Section 11: Checklist and Certification Statement	☐ w/ attachments

11.2 **Certification Statement**

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 (print or type first and last name)	Official title
Molly Mehner	Town Administrator
Signature	**Date signed**
Molly Mehner	5/15/2023

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
TN0057461	TN0057461	Collierville Shelton Road STP	

Form 2A NPDES | EPA

U.S. Environmental Protection Agency
Application for NPDES Permit to Discharge Wastewater
NEW AND EXISTING PUBLICLY OWNED TREATMENT WORKS

SECTION 1. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS (40 CFR 122.21(j)(1) and (9))

Facility Information

1.1 Facility name
Collierville Shelton Road STP

Mailing address (street or P.O. box)
500 Poplar View Parkway

City or town	State	ZIP code
Collierville	TN	38017

Contact name (first and last)	Title	Phone number	Email address
John Fox	Director, Public Utilities	(901) 457-2800	jfox@colliervilletn.gov

Location address (street, route number, or other specific identifier) ☐ Same as mailing address
136 East Shelton Road

City or town	State	ZIP code
Collierville	TN	38017

1.2 Is this application for a facility that has yet to commence discharge?
☐ Yes ➔ See instructions on data submission requirements for new dischargers. ☑ No

Applicant Information

1.3 Is applicant different from entity listed under Item 1.1 above?
☐ Yes ☑ No ➔ SKIP to Item 1.4.

Applicant name

Applicant address (street or P.O. box)

City or town	State	ZIP code

Contact name (first and last)	Title	Phone number	Email address

1.4 Is the applicant the facility's owner, operator, or both? (Check only one response.)
☐ Owner ☐ Operator ☑ Both

1.5 To which entity should the NPDES permitting authority send correspondence? (Check only one response.)
☐ Facility ☐ Applicant ☑ Facility and applicant (they are one and the same)

Existing Environmental Permits

1.6 Indicate below any existing environmental permits. (Check all that apply and print or type the corresponding permit number for each.)

Existing Environmental Permits		
☑ NPDES (discharges to surface water) TN0057461	☐ RCRA (hazardous waste)	☐ UIC (underground injection control)
☐ PSD (air emissions)	☐ Nonattainment program (CAA)	☐ NESHAPs (CAA)
☐ Ocean dumping (MPRSA)	☐ Dredge or fill (CWA Section 404)	☑ Other (specify) TN0078841 (NPDES)

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
TN0057461	TN0057461	Collierville Shelton Road STP	

Collection System and Population Served

1.7 Provide the collection system information requested below for the treatment works.

Municipality Served	Population Served	Collection System Type (indicate percentage)	Ownership Status
Collierville, TN	52,000	100 % separate sanitary sewer	☑ Own ☑ Maintain
		____ % combined storm and sanitary sewer	☐ Own ☐ Maintain
		☐ Unknown	☐ Own ☐ Maintain
		____ % separate sanitary sewer	☐ Own ☐ Maintain
		____ % combined storm and sanitary sewer	☐ Own ☐ Maintain
		☐ Unknown	☐ Own ☐ Maintain
		____ % separate sanitary sewer	☐ Own ☐ Maintain
		____ % combined storm and sanitary sewer	☐ Own ☐ Maintain
		☐ Unknown	☐ Own ☐ Maintain
		____ % separate sanitary sewer	☐ Own ☐ Maintain
		____ % combined storm and sanitary sewer	☐ Own ☐ Maintain
		☐ Unknown	☐ Own ☐ Maintain
Total Population Served	52,000		

	Separate Sanitary Sewer System	Combined Storm and Sanitary Sewer
Total percentage of each type of sewer line (in miles)	100 %	%

Indian Country

1.8 Is the treatment works located in Indian Country?

☐ Yes ☑ No

1.9 Does the facility discharge to a receiving water that flows through Indian Country?

☐ Yes ☑ No

Design and Actual Flow Rates

1.10 Provide design *and* actual flow rates in the designated spaces.

Design Flow Rate
3.50 mgd

Annual Average Flow Rates (Actual)		
Two Years Ago	**Last Year**	**This Year**
1.720 mgd	1.705 mgd	1.962 mgd
Maximum Daily Flow Rates (Actual)		
Two Years Ago	**Last Year**	**This Year**
4.537 mgd	4.298 mgd	4.274 mgd

Discharge Points by Type

1.11 Provide the total number of effluent discharge points to waters of the United States by type.

Total Number of Effluent Discharge Points by Type				
Treated Effluent	**Untreated Effluent**	**Combined Sewer Overflows**	**Bypasses**	**Constructed Emergency Overflows**
1	0	0	0	0

Outfalls and Other Discharge or Disposal Methods

Outfalls Other Than to Waters of the United States

1.12 Does the POTW discharge wastewater to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the United States?

☐ Yes ☑ No ➔ SKIP to Item 1.14.

1.13 Provide the location of each surface impoundment and associated discharge information in the table below.

Surface Impoundment Location and Discharge Data

Location	Average Daily Volume Discharged to Surface Impoundment	Continuous or Intermittent (check one)
	gpd	☐ Continuous ☐ Intermittent
	gpd	☐ Continuous ☐ Intermittent
	gpd	☐ Continuous ☐ Intermittent

1.14 Is wastewater applied to land?

☐ Yes ☑ No ➔ SKIP to Item 1.16.

1.15 Provide the land application site and discharge data requested below.

Land Application Site and Discharge Data

Location	Size	Average Daily Volume Applied	Continuous or Intermittent (check one)
	acres	gpd	☐ Continuous ☐ Intermittent
	acres	gpd	☐ Continuous ☐ Intermittent
	acres	gpd	☐ Continuous ☐ Intermittent

1.16 Is effluent transported to another facility for treatment prior to discharge?

☐ Yes ☑ No ➔ SKIP to Item 1.21.

1.17 Describe the means by which the effluent is transported (e.g., tank truck, pipe).

1.18 Is the effluent transported by a party other than the applicant?

☐ Yes ☐ No ➔ SKIP to Item 1.20.

1.19 Provide information on the transporter below.

Transporter Data

Entity name	Mailing address (street or P.O. box)	
City or town	State	ZIP code
Contact name (first and last)	Title	
Phone number	Email address	

Outfalls and Other Discharge or Disposal Methods Continued

1.20 In the table below, indicate the name, address, contact information, NPDES number, and average daily flow rate of the receiving facility.

Receiving Facility Data

Facility name	Mailing address (street or P.O. box)	
City or town	State	ZIP code
Contact name (first and last)	Title	
Phone number	Email address	
NPDES number of receiving facility (if any) ☐ None	Average daily flow rate mgd	

1.21 Is the wastewater disposed of in a manner other than those already mentioned in Items 1.14 through 1.21 that do not have outlets to waters of the United States (e.g., underground percolation, underground injection)?

☐ Yes ☑ No → SKIP to Item 1.23.

1.22 Provide information in the table below on these other disposal methods.

Information on Other Disposal Methods

Disposal Method Description	Location of Disposal Site	Size of Disposal Site	Annual Average Daily Discharge Volume	Continuous or Intermittent (check one)
		acres	gpd	☐ Continuous ☐ Intermittent
		acres	gpd	☐ Continuous ☐ Intermittent
		acres	gpd	☐ Continuous ☐ Intermittent

Variance Requests

1.23 Do you intend to request or renew one or more of the variances authorized at 40 CFR 122.21(n)? (Check all that apply. Consult with your NPDES permitting authority to determine what information needs to be submitted and when.)

☐ Discharges into marine waters (CWA Section 301(h))

☐ Water quality related effluent limitation (CWA Section 302(b)(2))

☑ Not applicable

Contractor Information

1.24 Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor?

☐ Yes ☑ No → SKIP to Section 2.

1.25 Provide location and contact information for each contractor in addition to a description of the contractor's operational and maintenance responsibilities.

Contractor Information

	Contractor 1	Contractor 2	Contractor 3
Contractor name (company name)			
Mailing address (street or P.O. box)			
City, state, and ZIP code			
Contact name (first and last)			
Phone number			
Email address			
Operational and maintenance responsibilities of contractor			

SECTION 2. ADDITIONAL INFORMATION (40 CFR 122.21(j)(1) and (2))

Design Flow

Outfalls to Waters of the United States

2.1 Does the treatment works have a design flow greater than or equal to 0.1 mgd?

☑ Yes ☐ No → SKIP to Section 3.

Inflow and Infiltration

2.2 Provide the treatment works' current average daily volume of inflow and infiltration.

Average Daily Volume of Inflow and Infiltration
184,000 gpd

Indicate the steps the facility is taking to minimize inflow and infiltration.

Capacity Management Operation and Maintenance (CMOM) evaluation was conducted in 2021, completed sewer model update in 2022, completed CIPP 24,375 linear feet of sewer line, completed 11,229 linear feet of SSES, re-energized smoke testing and flow testing programs (purchased a total of eight flow monitors).

Topographic Map

2.3 Have you attached a topographic map to this application that contains all the required information? (See instructions for specific requirements.)

☑ Yes ☐ No

Flow Diagram

2.4 Have you attached a process flow diagram or schematic to this application that contains all the required information? (See instructions for specific requirements.)

☑ Yes ☐ No

Scheduled Improvements and Schedules of Implementation

2.5 Are improvements to the facility scheduled?

☐ Yes ☑ No → SKIP to Section 3.

Briefly list and describe the scheduled improvements.

1.

2.

3.

4.

2.6 Provide scheduled or actual dates of completion for improvements.

Scheduled or Actual Dates of Completion for Improvements

Scheduled Improvement (from above)	Affected Outfalls (list outfall number)	Begin Construction (MM/DD/YYYY)	End Construction (MM/DD/YYYY)	Begin Discharge (MM/DD/YYYY)	Attainment of Operational Level (MM/DD/YYYY)
1.					
2.					
3.					
4.					

2.7 Have appropriate permits/clearances concerning other federal/state requirements been obtained? Briefly explain your response.

☐ Yes ☐ No ☐ None required or applicable

Explanation:

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
TN0057461	TN0057461	Collierville Shelton Road STP	

SECTION 3. INFORMATION ON EFFLUENT DISCHARGES (40 CFR 122.21(j)(3) to (5))

Description of Outfalls

3.1 Provide the following information for each outfall. (Attach additional sheets if you have more than three outfalls.)

	Outfall Number 001	Outfall Number ____	Outfall Number ____
State	TN		
County	Shelby		
City or town	Collierville		
Distance from shore	ft.	ft.	ft.
Depth below surface	ft.	ft.	ft.
Average daily flow rate	1.796 mgd	mgd	mgd
Latitude	35° 5′ 3″ N	° ′ ″	° ′ ″
Longitude	89° 39′ 42″ W	° ′ ″	° ′ ″

Seasonal or Periodic Discharge Data

3.2 Do any of the outfalls described under Item 3.1 have seasonal or periodic discharges?

☐ Yes ☑ No → SKIP to Item 3.4.

3.3 If so, provide the following information for each applicable outfall.

	Outfall Number ____	Outfall Number ____	Outfall Number ____
Number of times per year discharge occurs			
Average duration of each discharge (specify units)			
Average flow of each discharge	mgd	mgd	mgd
Months in which discharge occurs			

Diffuser Type

3.4 Are any of the outfalls listed under Item 3.1 equipped with a diffuser?

☐ Yes ☑ No → SKIP to Item 3.6.

3.5 Briefly describe the diffuser type at each applicable outfall.

Outfall Number ____	Outfall Number ____	Outfall Number ____

Waters of the U.S.

3.6 Does the treatment works discharge or plan to discharge wastewater to waters of the United States from one or more discharge points?

☑ Yes ☐ No → SKIP to Section 6.

Receiving Water Description

3.7 Provide the receiving water and related information (if known) for each outfall.

	Outfall Number 001	Outfall Number ____	Outfall Number ____
Receiving water name	Wolf River at Mile 30.9		
Name of watershed, river, or stream system	Wolf River Watershed		
U.S. Soil Conservation Service 14-digit watershed code			
Name of state management/river basin	Wolf River Basin		
U.S. Geological Survey 8-digit hydrologic cataloging unit code	08010210		
Critical low flow (acute)	cfs	cfs	cfs
Critical low flow (chronic)	cfs	cfs	cfs
Total hardness at critical low flow	mg/L of $CaCO_3$	mg/L of $CaCO_3$	mg/L of $CaCO_3$

Treatment Description

3.8 Provide the following information describing the treatment provided for discharges from each outfall.

	Outfall Number 001	Outfall Number ____	Outfall Number ____
Highest Level of Treatment (check all that apply per outfall)	☑ Primary ☐ Equivalent to secondary ☑ Secondary ☐ Advanced ☐ Other (specify) ____	☐ Primary ☐ Equivalent to secondary ☐ Secondary ☐ Advanced ☐ Other (specify) ____	☐ Primary ☐ Equivalent to secondary ☐ Secondary ☐ Advanced ☐ Other (specify) ____
Design Removal Rates by Outfall			
BOD_5 or $CBOD_5$	90 %	%	%
TSS	90 %	%	%
Phosphorus	☑ Not applicable %	☐ Not applicable %	☐ Not applicable %
Nitrogen	☑ Not applicable %	☐ Not applicable %	☐ Not applicable %
Other (specify) ____	☑ Not applicable %	☐ Not applicable %	☐ Not applicable %

Treatment Description Continued

3.9 Describe the type of disinfection used for the effluent from each outfall in the table below. If disinfection varies by season, describe below.

Continuous UV Disinfection

	Outfall Number 001	Outfall Number ____	Outfall Number ____
Disinfection type	UV Disinfection		
Seasons used	All		
Dechlorination used?	☑ Not applicable ☐ Yes ☐ No	☐ Not applicable ☐ Yes ☐ No	☐ Not applicable ☐ Yes ☐ No

Effluent Testing Data

3.10 Have you completed monitoring for all Table A parameters and attached the results to the application package?

☑ Yes ☐ No

3.11 Have you conducted any WET tests during the 4.5 years prior to the date of the application on any of the facility's discharges or on any receiving water near the discharge points?

☑ Yes ☐ No ➔ SKIP to Item 3.13.

3.12 Indicate the number of acute and chronic WET tests conducted since the last permit reissuance of the facility's discharges by outfall number or of the receiving water near the discharge points.

	Outfall Number 001		Outfall Number ____		Outfall Number ____	
	Acute	Chronic	Acute	Chronic	Acute	Chronic
Number of tests of discharge water	4	0				
Number of tests of receiving water	0	0				

3.13 Does the treatment works have a design flow greater than or equal to 0.1 mgd?

☑ Yes ☐ No ➔ SKIP to Item 3.16.

3.14 Does the POTW use chlorine for disinfection, use chlorine elsewhere in the treatment process, or otherwise have reasonable potential to discharge chlorine in its effluent?

☑ Yes ➔ Complete Table B, including chlorine. ☐ No ➔ Complete Table B, omitting chlorine.

3.15 Have you completed monitoring for all applicable Table B pollutants and attached the results to this application package?

☑ Yes ☐ No

3.16 Does one or more of the following conditions apply?

- The facility has a design flow greater than or equal to 1 mgd.
- The POTW has an approved pretreatment program or is required to develop such a program.
- The NPDES permitting authority has informed the POTW that it must sample for the parameters in Table C, must sample other additional parameters (Table D), or submit the results of WET tests for acute or chronic toxicity for each of its discharge outfalls (Table E).

☑ Yes ➔ Complete Tables C, D, and E as applicable. ☐ No ➔ SKIP to Section 4.

3.17 Have you completed monitoring for all applicable Table C pollutants and attached the results to this application package?

☑ Yes ☐ No

3.18 Have you completed monitoring for all applicable Table D pollutants required by your NPDES permitting authority and attached the results to this application package?

☐ Yes ☑ No additional sampling required by NPDES permitting authority.

Effluent Testing Data Continued

3.19 Has the POTW conducted either (1) minimum of four quarterly WET tests for one year preceding this permit application or (2) at least four annual WET tests in the past 4.5 years?

☑ Yes ☐ No ➔ Complete tests and Table E and SKIP to Item 3.26.

3.20 Have you previously submitted the results of the above tests to your NPDES permitting authority?

☑ Yes ☐ No ➔ Provide results in Table E and SKIP to Item 3.26.

3.21 Indicate the dates the data were submitted to your NPDES permitting authority and provide a summary of the results.

Date(s) Submitted (MM/DD/YYYY)	Summary of Results
05/11/2023	Ceriodaphnia Dubia >48% Pimephales Proelas >48%

3.22 Regardless of how you provided your WET testing data to the NPDES permitting authority, did any of the tests result in toxicity?

☐ Yes ☑ No ➔ SKIP to Item 3.26.

3.23 Describe the cause(s) of the toxicity:

3.24 Has the treatment works conducted a toxicity reduction evaluation?

☐ Yes ☐ No ➔ SKIP to Item 3.26.

3.25 Provide details of any toxicity reduction evaluations conducted.

3.26 Have you completed Table E for all applicable outfalls and attached the results to the application package?

☐ Yes ☑ Not applicable because previously submitted information to the NPDES permitting authority.

SECTION 4: INDUSTRIAL DISCHARGES AND HAZARDOUS WASTES (40 CFR 122.21(j)(6) and (7))

Industrial Discharges and Hazardous Wastes

4.1 Does the POTW receive discharges from SIUs or NSCIUs?

☑ Yes ☐ No ➔ SKIP to Item 4.7.

4.2 Indicate the number of SIUs and NSCIUs that discharge to the POTW.

Number of SIUs	Number of NSCIUs
1	1

4.3 Does the POTW have an approved pretreatment program?

☑ Yes ☐ No

4.4 Have you submitted either of the following to the NPDES permitting authority that contains information substantially identical to that required in Table F: (1) a pretreatment program annual report submitted within one year of the application or (2) a pretreatment program?

☑ Yes ☐ No ➔ SKIP to Item 4.6.

4.5 Identify the title and date of the annual report or pretreatment program referenced in Item 4.4. SKIP to Item 4.7.

Control Authority Pretreatment Semi-Annual Report (4-14-2023)

4.6 Have you completed and attached Table F to this application package?

☐ Yes ☑ No

Industrial Discharges and Hazardous Wastes Continued

4.7 Does the POTW receive, or has it been notified that it will receive, by truck, rail, or dedicated pipe, any wastes that are regulated as RCRA hazardous wastes pursuant to 40 CFR 261?

☐ Yes ☑ No → SKIP to Item 4.9.

4.8 If yes, provide the following information:

Hazardous Waste Number	Waste Transport Method (check all that apply)	Annual Amount of Waste Received	Units
	☐ Truck ☐ Rail ☐ Dedicated pipe ☐ Other (specify) _____		
	☐ Truck ☐ Rail ☐ Dedicated pipe ☐ Other (specify) _____		
	☐ Truck ☐ Rail ☐ Dedicated pipe ☐ Other (specify) _____		

4.9 Does the POTW receive, or has it been notified that it will receive, wastewaters that originate from remedial activities, including those undertaken pursuant to CERCLA and Sections 3004(7) or 3008(h) of RCRA?

☑ Yes ☐ No → SKIP to Section 5.

4.10 Does the POTW receive (or expect to receive) less than 15 kilograms per month of non-acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e)?

☑ Yes → SKIP to Section 5. ☐ No

4.11 Have you reported the following information in an attachment to this application: identification and description of the site(s) or facility(ies) at which the wastewater originates; the identities of the wastewater's hazardous constituents; and the extent of treatment, if any, the wastewater receives or will receive before entering the POTW?

☐ Yes ☐ No

SECTION 5. COMBINED SEWER OVERFLOWS (40 CFR 122.21(j)(8))

CSO Map and Diagram

5.1 Does the treatment works have a combined sewer system?

☐ Yes ☑ No → SKIP to Section 6.

5.2 Have you attached a CSO system map to this application? (See instructions for map requirements.)

☐ Yes ☐ No

5.3 Have you attached a CSO system diagram to this application? (See instructions for diagram requirements.)

☐ Yes ☐ No

CSO Outfall Description

5.4 For each CSO outfall, provide the following information. (Attach additional sheets as necessary.)

	CSO Outfall Number ____	CSO Outfall Number ____	CSO Outfall Number ____
City or town			
State and ZIP code			
County			
Latitude	° ′ ″	° ′ ″	° ′ ″
Longitude	° ′ ″	° ′ ″	° ′ ″
Distance from shore	ft.	ft.	ft.
Depth below surface	ft.	ft.	ft.

CSO Monitoring

5.5 Did the POTW monitor any of the following items in the past year for its CSO outfalls?

	CSO Outfall Number ____	CSO Outfall Number ____	CSO Outfall Number ____
Rainfall	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
CSO flow volume	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
CSO pollutant concentrations	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Receiving water quality	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
CSO frequency	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Number of storm events	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No

CSO Events in Past Year

5.6 Provide the following information for each of your CSO outfalls.

	CSO Outfall Number ____	CSO Outfall Number ____	CSO Outfall Number ____
Number of CSO events in the past year	events	events	events
Average duration per event	hours ☐ Actual or ☐ Estimated	hours ☐ Actual or ☐ Estimated	hours ☐ Actual or ☐ Estimated
Average volume per event	million gallons ☐ Actual or ☐ Estimated	million gallons ☐ Actual or ☐ Estimated	million gallons ☐ Actual or ☐ Estimated
Minimum rainfall causing a CSO event in last year	inches of rainfall ☐ Actual or ☐ Estimated	inches of rainfall ☐ Actual or ☐ Estimated	inches of rainfall ☐ Actual or ☐ Estimated

CSO Receiving Waters

5.7 Provide the information in the table below for each of your CSO outfalls.

	CSO Outfall Number ____	CSO Outfall Number ____	CSO Outfall Number ____
Receiving water name			
Name of watershed/ stream system			
U.S. Soil Conservation Service 14-digit watershed code (if known)	☐ Unknown	☐ Unknown	☐ Unknown
Name of state management/river basin			
U.S. Geological Survey 8-Digit Hydrologic Unit Code (if known)	☐ Unknown	☐ Unknown	☐ Unknown
Description of known water quality impacts on receiving stream by CSO (see instructions for examples)			

SECTION 6. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))

Checklist and Certification Statement

6.1 In Column 1 below, mark the sections of Form 2A that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to provide attachments.

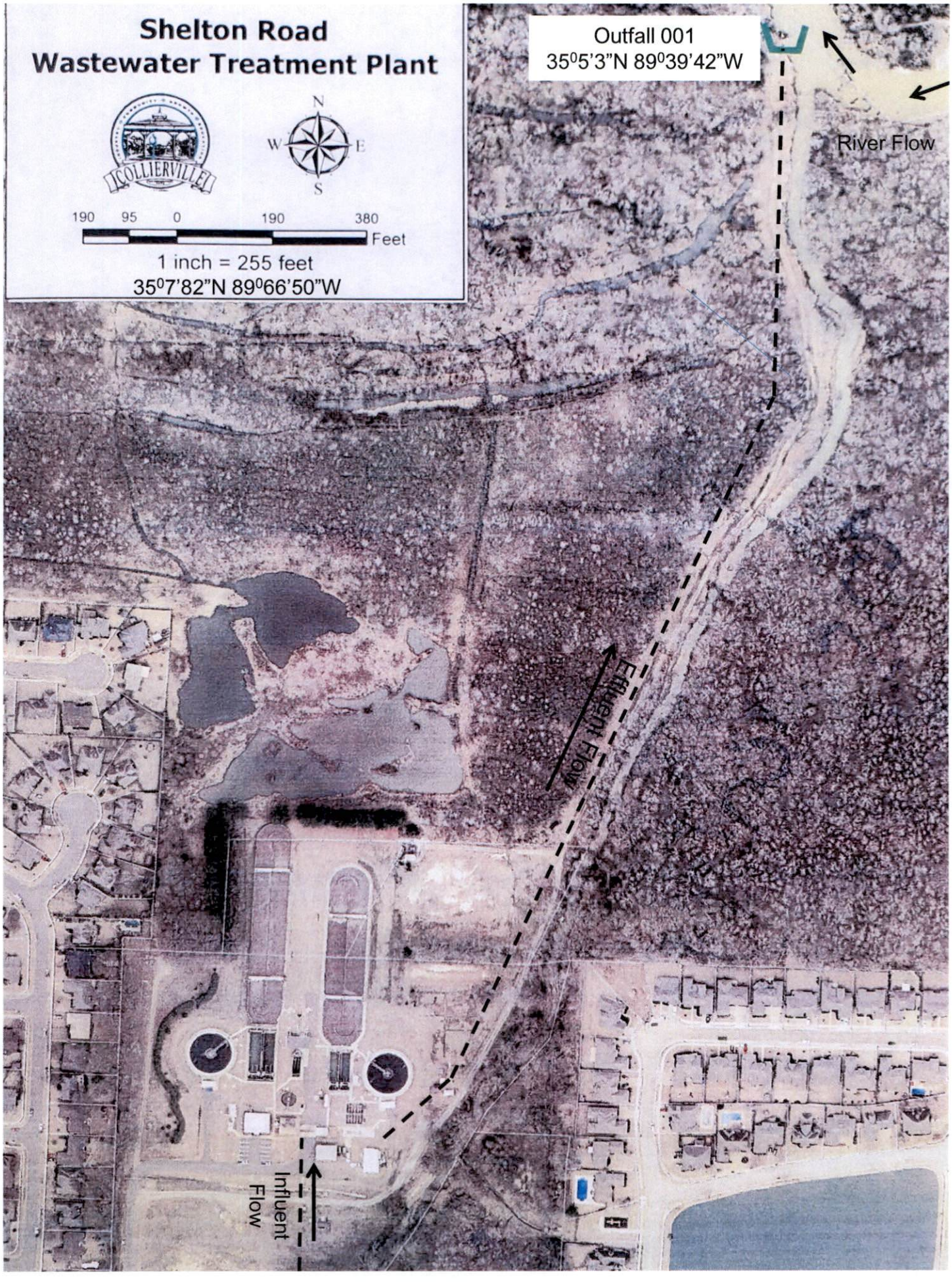
Column 1	Column 2	
☑ Section 1: Basic Application Information for All Applicants	☐ w/ variance request(s)	☐ w/ additional attachments
☑ Section 2: Additional Information	☑ w/ topographic map ☑ w/ additional attachments	☐ w/ process flow diagram
☑ Section 3: Information on Effluent Discharges	☑ w/ Table A ☑ w/ Table B ☑ w/ Table C	☐ w/ Table D ☐ w/ Table E ☑ w/ additional attachments
☑ Section 4: Industrial Discharges and Hazardous Wastes	☐ w/ SIU and NSCIU attachments ☐ w/ additional attachments	☐ w/ Table F
☐ Section 5: Combined Sewer Overflows	☐ w/ CSO map ☐ w/ CSO system diagram	☐ w/ additional attachments
☑ Section 6: Checklist and Certification Statement	☐ w/ attachments	

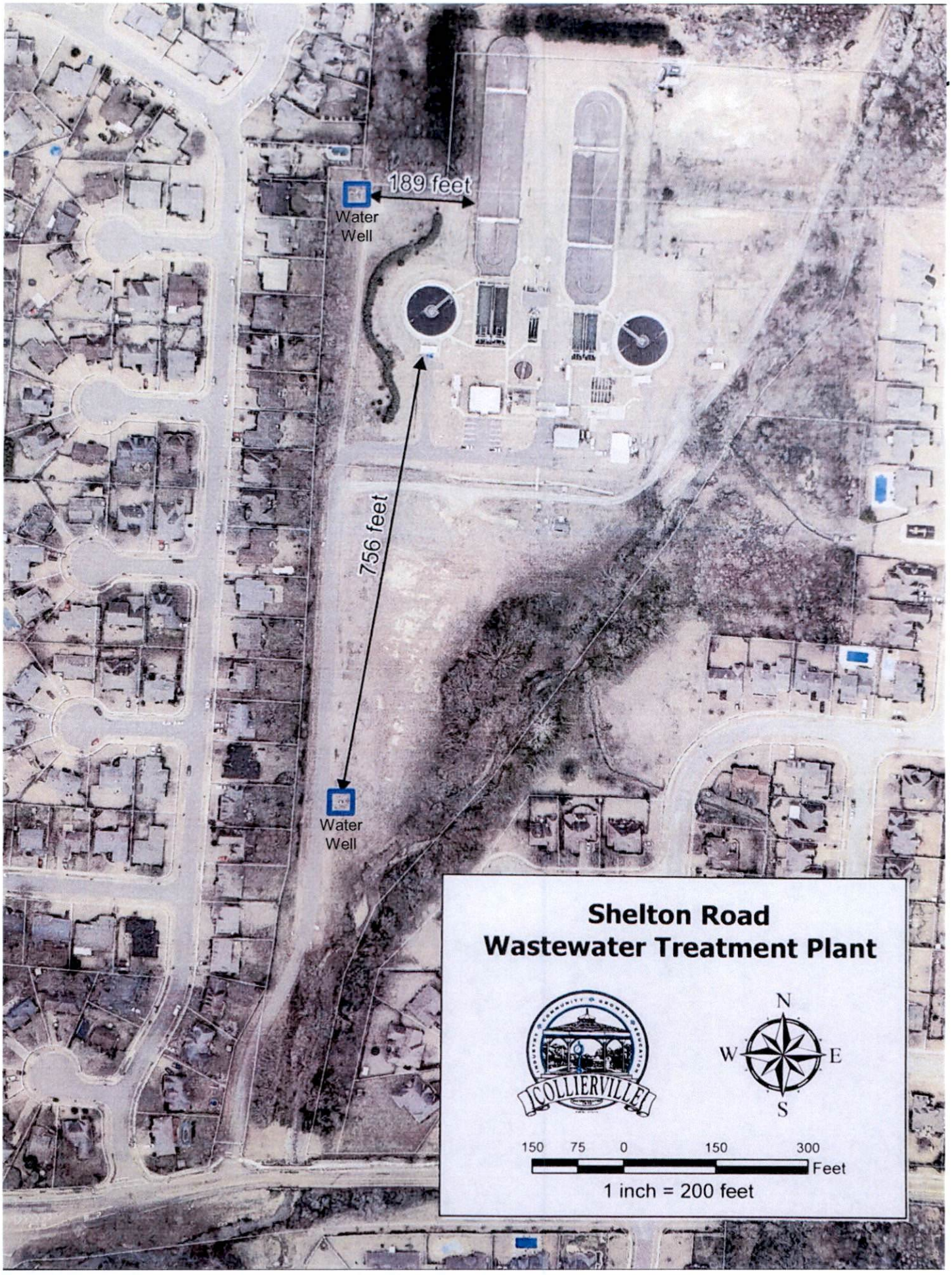
6.2 **Certification Statement**

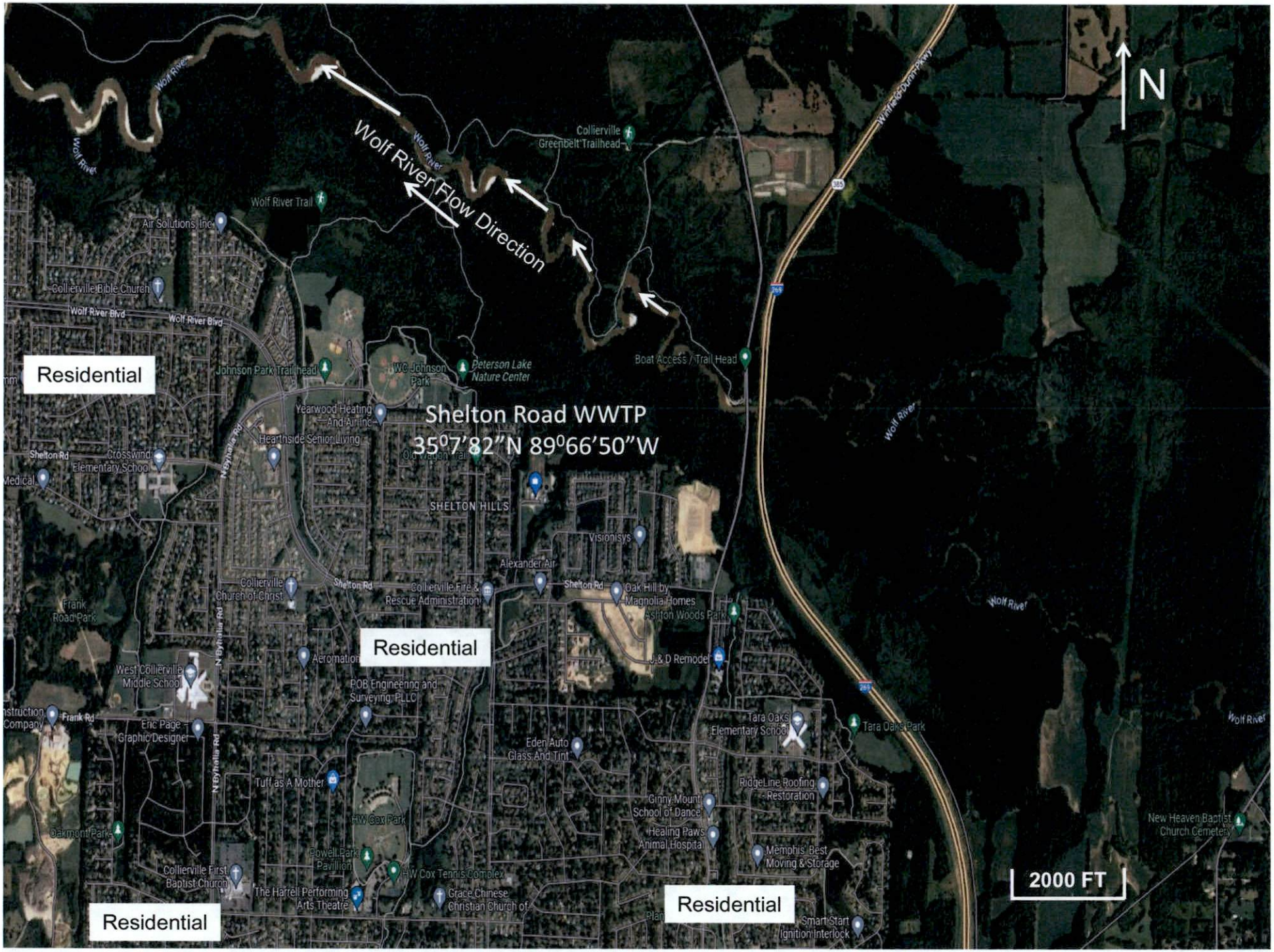
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage 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.

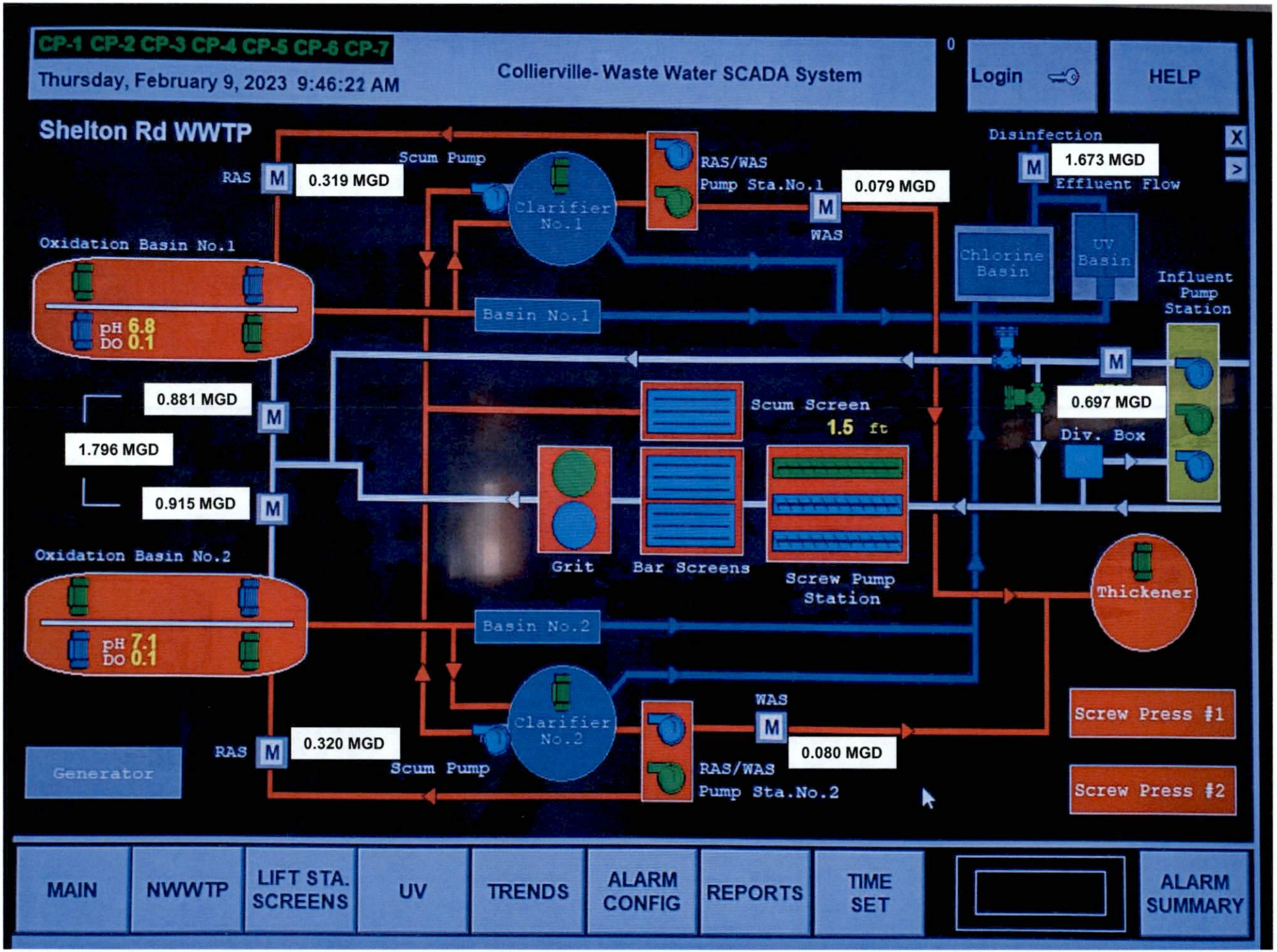
Name (print or type first and last name)	Official title
Molly Mehner	Town Administrator
Signature	**Date signed**
Molly Mehner	5/15/2023


Shelton Road Wastewater Treatment Facility 35°7'82"N 89°66'50"W
N
#2 Oxidation Ditch
#2 Clarifier
#1 Oxidation Ditch
Headworks
Thickener
Screw Presses
#1 Clarifier
UV Disinfection
100 FEET
Influent Pump Station


Shelton Road
Wastewater Treatment Plant
COLLIERVILLE
N
W
E
S
190 95 0 190 380
Feet
1 inch = 255 feet
35°7'82"N 89°66'50"W
Outfall 001
35°5'3"N 89°39'42"W
River Flow
Effluent Flow
Influent Flow


189 feet
Water Well
756 feet
Water Well
Shelton Road
Wastewater Treatment Plant
COLLIERVILLE
N
W
E
S
150 75 0 150 300
Feet
1 inch = 200 feet


Wolf River Flow Direction
Shelton Road WWTP
35°7'82"N 89°66'50"W
Residential
Residential
Residential
Residential
N
2000 FT
Wolf River
Wolf River Trail
Air Solutions, Inc
Collierville Bible Church
Wolf River Blvd
Johnson Park Trailhead
WC Johnson Park
Peterson Lake Nature Center
Collierville Greenbelt Trailhead
Boat Access / Trail Head
Yearwood Heating And Air Inc
Hearthside Senior Living
Crosswind Elementary School
Shelton Rd
SHELTON HILLS
Visionisys
Alexander Air
Collierville Church of Christ
Collierville Fire & Rescue Administration
Oak Hill by Magnolia Homes
Ashton Woods Park
Frank Road Park
Aeromation
J & D Remodel
West Collierville Middle School
POB Engineering and Surveying, PLLC
Frank Rd
Eric Page Graphic Designer
Eden Auto Glass And Tint
Tara Oaks Elementary School
Tara Oaks Park
Tuff as A Mother
RidgeLine Roofing - Restoration
Ginny Mount School of Dance
HW Cox Park
Healing Paws Animal Hospital
Memphis Best Moving & Storage
Oakmont Park
Powell Park Pavillion
HW Cox Tennis Complex
Collierville First Baptist Church
The Harrell Performing Arts Theatre
Grace Chinese Christian Church of
New Heaven Baptist Church Cemetery
Smart Start Ignition Interlock
N Byhalia Rd
Wolf River Flow Direction


CP-1 CP-2 CP-3 CP-4 CP-5 CP-6 CP-7
Thursday, February 9, 2023 9:46:22 AM
Collierville- Waste Water SCADA System
Login
HELP
Shelton Rd WWTP
Disinfection
1.673 MGD
Effluent Flow
RAS
0.319 MGD
Scum Pump
Clarifier No.1
RAS/WAS Pump Sta.No.1
0.079 MGD
WAS
Oxidation Basin No.1
pH 6.8
DO 0.1
Chlorine Basin
UV Basin
Influent Pump Station
Basin No.1
0.881 MGD
1.796 MGD
0.915 MGD
Scum Screen
1.5 ft
0.697 MGD
Div. Box
Grit
Bar Screens
Screw Pump Station
Oxidation Basin No.2
pH 7.1
DO 0.1
Thickener
Basin No.2
Clarifier No.2
WAS
0.080 MGD
RAS
0.320 MGD
Scum Pump
RAS/WAS Pump Sta.No.2
Generator
Screw Press #1
Screw Press #2
MAIN
NWWTP
LIFT STA. SCREENS
UV
TRENDS
ALARM CONFIG
REPORTS
TIME SET
ALARM SUMMARY

NARRATIVE SUMMARY

Collierville Shelton Road STP
NPDES Permit #TN0057461

Shelton Road STP has a design flow of 3.5 MGD. A 24" gravity sewer conveys raw sewage into the facility. An Influent Pump Station collects sewage from the east side of Collierville and pumps directly into the 24" gravity sewer. The pump station has three variable speed pumps rated at 926 gpm each. During high flow events, the pump station flow can be diverted around the STP Headworks, consisting of three 3125 gpm each Screw Pumps, two parallel automatic bar screens, and two parallel grit removal systems. The influent leaves the headworks and flows through a splitter box to two oxidation ditches. The flow is metered before entering the ditches and is considered the plant's total influent flow. #1 Oxidation Ditch has a design capacity of 1.5 MGD and #2 Oxidation Ditch has a design capacity of 2.0 MGD. Each oxidation ditch has four surface brush rotors. Flow exits the ditches and enters secondary clarifiers having capacities of 1.1 MGD each. Each clarifier has two Return Activated Sludge (RAS) pumps, rated at 1,600 gpm each, to pump RAS from the clarifiers back to the ditches. The RAS pumps are variable speed controlled by flow set point. The RAS flow is metered after the pump discharge. A separate pipe, connected to the RAS pump discharge, conveys the Waste Activated Sludge (WAS) to a 45,000 gallons capacity gravity thickener. The WAS flow is metered and controlled by a flow set point. The Secondary Clarifier effluent flows through an Ultraviolet Disinfection system and is metered before discharging to the Wolf River outfall. Thickener WAS is processed through two Screw Presses and disposed of in the Quad County landfill located in Byhalia, MS.

WATER BALANCE

Influent Pump Station = 0.697 mgd
Total Influent Flow = 1.796 mgd
#1 Oxidation Ditch = 0.881 mgd
#2 Oxidation Ditch = 0.915 mgd
#1 Secondary Clarifier RAS = 0.319 mgd
#2 Secondary Clarifier RAS = 0.320 mgd
#1 Waste Activated Sludge = 0.079 mgd
#2 Waste Activated Sludge = 0.080 mgd
Effluent/Disinfection = 1.673 mgd

Flow is not metered between Oxidation Ditches and Secondary Clarifiers

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
TN0057461	TN0057461	Collierville Shelton Road STP	001

Form Approved 03/05/19
OMB No. 2040-0004

TABLE A. EFFLUENT PARAMETERS FOR ALL POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Biochemical oxygen demand ☑ BOD_5 or ☐ $CBOD_5$ (report one)	32.0	mg/L	9.0	mg/L	13	5210B-2016	5 mg/L ☐ ML ☐ MDL
~~Fecal coliform~~ E Coli	866.4	cfu/100mL	54.0	cfu/100mL	12	EPA 1603	1.0 cfu/10 ☐ ML ☐ MDL
Design flow rate	4.077	MGD	1.628	MGD	31	[redacted]	
pH (minimum)	6.1	SU	[redacted]				
pH (maximum)	7.5	SU					
Temperature (winter)	16.7	deg C	12.6	deg C	12		
Temperature (summer)	27.2	deg C	25.2	deg C	15		
Total suspended solids (TSS)	23.0	mg/L	7.3	mg/L	12	2540D-2011	2.0 mg/L ☐ ML ☐ MDL

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
TN0057461	TN0057461	Collierville Shelton Road STP	001

TABLE B. EFFLUENT PARAMETERS FOR ALL POTWS WITH A FLOW EQUAL TO OR GREATER THAN 0.1 MGD

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Ammonia (as N)	2.880	mg/L	0.893	mg/L	12	4500NH3D-2011	0.100mg/l ☐ ML ☐ MDL
Chlorine (total residual, TRC)[2]	0.13	mg/L	0.09	mg/L	17	4500 Cl G-2011	0.02mg/L ☐ ML ☐ MDL
Dissolved oxygen	8.8	mg/L	6.2	mg/L	14	4500 OG-2011	0.05mg/L ☐ ML ☐ MDL
Nitrate/nitrite	4.71	mg/L	1.22	mg/L	20	EPA-300.0	0.100mg/l ☐ ML ☐ MDL
Kjeldahl nitrogen	18.30	mg/L	4.09	mg/L	20	4500NORGD-2011	1.00mg/L ☐ ML ☐ MDL
Oil and grease	1.7	mg/L	1.5	mg/L	3	1664B	1.40mg/L ☐ ML ☐ MDL
Phosphorus	5.85	mg/L	2.16	mg/L	20	365.4	0.500mg/l ☐ ML ☐ MDL
Total dissolved solids	248	mg/L	223	mg/L	3	2540C-2015	51.0mg/L ☐ ML ☐ MDL

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

[2] Facilities that do not use chlorine for disinfection, do not use chlorine elsewhere in the treatment process, and have no reasonable potential to discharge chlorine in their effluent are not required to report data for chlorine.

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
TN0057461	TN0057461	Collierville Shelton Road STP	001

Form Approved 03/05/19
OMB No. 2040-0004

TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Metals, Cyanide, and Total Phenols							
Hardness (as $CaCO_3$)	49.30	mg/L	45.87	mg/L	4	200.7	0.100mg/l ☐ ML ☐ MDL
Antimony, total recoverable	<0.001	mg/L	<0.001	mg/L	3	EPA 200.8	0.001mg/l ☐ ML ☐ MDL
Arsenic, total recoverable	0.0009	mg/L	0.000667	mg/L	3	EPA 200.8	0.0005mg, ☐ ML ☐ MDL
Beryllium, total recoverable	<0.0005	mg/L	<0.0005	mg/L	3	EPA 200.8	0.0005mg, ☐ ML ☐ MDL
Cadmium, total recoverable	<0.0001	mg/L	<0.0001	mg/L	3	EPA 200.8	0.0001mg, ☐ ML ☐ MDL
Chromium, total recoverable	0.0013	mg/L	0.001	mg/L	10	EPA 200.8	0.001mg/l ☐ ML ☐ MDL
Copper, total recoverable	0.0103	mg/L	0.004444	mg/L	10	EPA 200.8	0.0005mg, ☐ ML ☐ MDL
Lead, total recoverable	0.00052	mg/L	0.0005	mg/L	10	EPA 200.8	0.0005mg, ☐ ML ☐ MDL
Mercury, total recoverable	0.0000121	mg/L	0.0000022	mg/L	10	1631E	0.000000[illegible] ☐ ML ☐ MDL
Nickel, total recoverable	0.00196	mg/L	0.0012787	mg/L	10	EPA 200.8	0.0005mg, ☐ ML ☐ MDL
Selenium, total recoverable	<1.00	mg/L	<1.00	mg/L	3	EPA 200.8	0.001mg/l ☐ ML ☐ MDL
Silver, total recoverable	<0.0001	mg/L	<0.0001	mg/L	10	EPA 200.8	0.0001mg, ☐ ML ☐ MDL
Thallium, total recoverable	<0.0002	mg/L	<0.0002	mg/L	3	EPA 200.8	0.0002mg, ☐ ML ☐ MDL
Zinc, total recoverable	0.0765	mg/L	0.05878	mg/L	10	EPA 200.8	0.020mg/l ☐ ML ☐ MDL
Cyanide	<0.005	mg/L	<0.005	mg/L	10	4500CNE-2011	0.005mg/l ☐ ML ☐ MDL
Total phenolic compounds	0.0142	mg/L	0.006	mg/L	10	420.1	0.005mg/l ☐ ML ☐ MDL
Volatile Organic Compounds							
Acrolein	<20.0	ug/L	<20.0	ug/L	3	624.1	20.0ug/L ☐ ML ☐ MDL
Acrylonitrile	<20.0	ug/L	<20.0	ug/L	3	624.1	20.0ug/L ☐ ML ☐ MDL
Benzene	<1.00	ug/L	<1.00	ug/L	3	624.1	1.00ug/L ☐ ML ☐ MDL
Bromoform	<1.00	ug/L	<1.00	ug/L	3	624.1	1.00ug/L ☐ ML ☐ MDL

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
TN0057461	TN0057461	Collierville Shelton Road STP	001

TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Carbon tetrachloride	<1.00	ug/L	<1.00	ug/L	3	624.1	1.00ug/L ☐ ML ☐ MDL
Chlorobenzene	<1.00	ug/L	<1.00	ug/L	3	624.1	1.00ug/L ☐ ML ☐ MDL
Chlorodibromomethane	<1.00	ug/L	<1.00	ug/L	3	624.1	1.00ug/L ☐ ML ☐ MDL
Chloroethane	<1.00	ug/L	<1.00	ug/L	3	624.1	1.00ug/L ☐ ML ☐ MDL
2-chloroethylvinyl ether	<5.00	ug/L	<5.00	ug/L	3	624.1	5.00ug/L ☐ ML ☐ MDL
Chloroform	1.91	ug/L	1.30	ug/L	3	624.1	1.00ug/L ☐ ML ☐ MDL
Dichlorobromomethane	<1.00	ug/L	<1.00	ug/L	3	624.1	1.00ug/L ☐ ML ☐ MDL
1,1-dichloroethane	<1.00	ug/L	<1.00	ug/L	3	624.1	1.00ug/L ☐ ML ☐ MDL
1,2-dichloroethane	<1.00	ug/L	<1.00	ug/L	3	624.1	1.00ug/L ☐ ML ☐ MDL
trans-1,2-dichloroethylene	<1.00	ug/L	<1.00	ug/L	3	624.1	1.00ug/L ☐ ML ☐ MDL
1,1-dichloroethylene	<1.00	ug/L	<1.00	ug/L	3	624.1	1.00ug/L ☐ ML ☐ MDL
1,2-dichloropropane	<1.00	ug/L	<1.00	ug/L	3	624.1	1.00ug/L ☐ ML ☐ MDL
1,3-dichloropropylene	<1.00	ug/L	<1.00	ug/L	3	624.1	1.00ug/L ☐ ML ☐ MDL
Ethylbenzene	<1.00	ug/L	<1.00	ug/L	3	624.1	1.00ug/L ☐ ML ☐ MDL
Methyl bromide	<1.00	ug/L	<1.00	ug/L	3	624.1	1.00ug/L ☐ ML ☐ MDL
Methyl chloride	<1.00	ug/L	<1.00	ug/L	3	624.1	1.00ug/L ☐ ML ☐ MDL
Methylene chloride	<10.00	ug/L	<10.00	ug/L	3	624.1	10.00ug/L ☐ ML ☐ MDL
1,1,2,2-tetrachloroethane	<1.00	ug/L	<1.00	ug/L	3	624.1	1.00ug/L ☐ ML ☐ MDL
Tetrachloroethylene	<1.00	ug/L	<1.00	ug/L	3	624.1	1.00ug/L ☐ ML ☐ MDL
Toluene	<5.00	ug/L	<5.00	ug/L	3	624.1	5.00ug/L ☐ ML ☐ MDL
1,1,1-trichloroethane	<1.00	ug/L	<1.00	ug/L	3	624.1	1.00ug/L ☐ ML ☐ MDL
1,1,2-trichloroethane	<1.00	ug/L	<1.00	ug/L	3	624.1	1.00ug/L ☐ ML ☐ MDL

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
TN0057461	TN0057461	Collierville Shelton Road STP	001

Form Approved 03/05/19
OMB No. 2040-0004

TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Trichloroethylene	<1.00	ug/L	<1.00	ug/L	3	624.1	1.00ug/L ☐ ML ☐ MDL
Vinyl chloride	<1.00	ug/L	<1.00	ug/L	3	624.1	1.00ug/L ☐ ML ☐ MDL
Acid-Extractable Compounds							
p-chloro-m-cresol	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
2-chlorophenol	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
2,4-dichlorophenol	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
2,4-dimethylphenol	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
4,6-dinitro-o-cresol	<10.00	ug/L	<10.00	ug/L	3	625.1	10.00ug/L ☐ ML ☐ MDL
2,4-dinitrophenol	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
2-nitrophenol	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
4-nitrophenol	<10.00	ug/L	<10.00	ug/L	3	625.1	10.00ug/L ☐ ML ☐ MDL
Pentachlorophenol	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
Phenol	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
2,4,6-trichlorophenol	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
Base-Neutral Compounds							
Acenaphthene	<2.00	ug/L	<2.00	ug/L	3	625.1	2.00ug/L ☐ ML ☐ MDL
Acenaphthylene	<2.00	ug/L	<2.00	ug/L	3	625.1	2.00ug/L ☐ ML ☐ MDL
Anthracene	<2.00	ug/L	<2.00	ug/L	3	625.1	2.00ug/L ☐ ML ☐ MDL
Benzidine	<20.00	ug/L	<20.00	ug/L	3	625.1	20.00ug/L ☐ ML ☐ MDL
Benzo(a)anthracene	<2.00	ug/L	<2.00	ug/L	3	625.1	2.00ug/L ☐ ML ☐ MDL
Benzo(a)pyrene	<2.00	ug/L	<2.00	ug/L	3	625.1	2.00ug/L ☐ ML ☐ MDL
3,4-benzofluoranthene	<2.00	ug/L	<2.00	ug/L	3	625.1	2.00ug/L ☐ ML ☐ MDL

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
TN0057461	TN0057461	Collierville Shelton Road STP	001

Form Approved 03/05/19
OMB No. 2040-0004

TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Benzo(ghi)perylene	<2.00	ug/L	<2.00	ug/L	3	625.1	2.00ug/L ☐ ML ☐ MDL
Benzo(k)fluoranthene	<2.00	ug/L	<2.00	ug/L	3	625.1	2.00ug/L ☐ ML ☐ MDL
Bis (2-chloroethoxy) methane	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
Bis (2-chloroethyl) ether	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
Bis (2-chloroisopropyl) ether	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
Bis (2-ethylhexyl) phthalate	<10.0	ug/L	<10.0	ug/L	3	625.1	10.00ug/L ☐ ML ☐ MDL
4-bromophenyl phenyl ether	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
Butyl benzyl phthalate	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
2-chloronaphthalene	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
4-chlorophenyl phenyl ether	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
Chrysene	<2.00	ug/L	<2.00	ug/L	3	625.1	2.00ug/L ☐ ML ☐ MDL
di-n-butyl phthalate	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
di-n-octyl phthalate	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
Dibenzo(a,h)anthracene	<2.00	ug/L	<2.00	ug/L	3	625.1	2.00ug/L ☐ ML ☐ MDL
1,2-dichlorobenzene	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
1,3-dichlorobenzene	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
1,4-dichlorobenzene	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
3,3-dichlorobenzidine	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
Diethyl phthalate	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
Dimethyl phthalate	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
2,4-dinitrotoluene	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
2,6-dinitrotoluene	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
TN0057461	TN0057461	Collierville Shelton Road STP	001

Form Approved 03/05/19
OMB No. 2040-0004

TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
1,2-diphenylhydrazine	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
Fluoranthene	<2.00	ug/L	<2.00	ug/L	3	625.1	2.00ug/L ☐ ML ☐ MDL
Fluorene	<2.00	ug/L	<2.00	ug/L	3	625.1	2.00ug/L ☐ ML ☐ MDL
Hexachlorobenzene	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
Hexachlorobutadiene	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
Hexachlorocyclo-pentadiene	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
Hexachloroethane	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
Indeno(1,2,3-cd)pyrene	<2.00	ug/L	<2.00	ug/L	3	625.1	2.00ug/L ☐ ML ☐ MDL
Isophorone	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
Naphthalene	<2.00	ug/L	<2.00	ug/L	3	625.1	2.00ug/L ☐ ML ☐ MDL
Nitrobenzene	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
N-nitrosodi-n-propylamine	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
N-nitrosodimethylamine	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL
N-nitrosodiphenylamine	<10.0	ug/L	<10.0	ug/L	3	625.1	10.00ug/L ☐ ML ☐ MDL
Phenanthrene	<2.00	ug/L	<2.00	ug/L	3	625.1	2.00ug/L ☐ ML ☐ MDL
Pyrene	<2.00	ug/L	<2.00	ug/L	3	625.1	2.00ug/L ☐ ML ☐ MDL
1,2,4-trichlorobenzene	<5.00	ug/L	<5.00	ug/L	3	625.1	5.00ug/L ☐ ML ☐ MDL

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
TN0057461	TN0057461	Collierville Shelton Road STP	

Form Approved 03/05/19
OMB No. 2040-0004

TABLE D. ADDITIONAL POLLUTANTS AS REQUIRED BY NPDES PERMITTING AUTHORITY

Pollutant (list)	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
☑ No additional sampling is required by NPDES permitting authority.							
							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL
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							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

Pace Analytical®
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August 24, 2022

William McCrae
Collierville STP-Shelton Rd
500 Poplar View Pkwy
Collierville, TN 38017

Biomonitoring Results
Pace National Identification #: L1514742-01,-02,-03,-04

Attached are the results for toxicity test performed: July 14-16, 2022

A summary of the findings is presented below:

Test Species	***Ceriodaphnia dubia***	***Pimephales promelas***
EPA Method	EPA Method 2002.0	EPA Method 2000.0
Test Concentrations	3%, 6%, 12%, 24%, 48%	3%, 6%, 12%, 24%, 48%
Permit Limit	12%	12%
Test Endpoint	48-hr LC50	48-hr LC50
Test Result	**> 48%**	**> 48%**
	effluent successfully meets permit requirements for the Ceriodaphnia	effluent successfully meets permit requirements for the minnows
Next Test Date	**Week of January 15, 2023**	
Comments	**Collierville STP-Shelton Rd** **TN0057461**	

If you have any questions or comments concerning the enclosed report, please do not hesitate to contact us.

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December 2, 2022

William McCrae
Collierville STP-Shelton Rd
500 Poplar View Pkwy
Collierville, TN 38017

Biomonitoring Results
Pace National Identification #: L1550894-01,-02,-03,-04

Attached are the results for toxicity test performed: October 27-29, 2022

A summary of the findings is presented below:

Test Species	*Ceriodaphnia dubia*	*Pimephales promelas*
EPA Method	EPA Method 2002.0	EPA Method 2000.0
Test Concentrations	3%, 6%, 12%, 24%, 48%	3%, 6%, 12%, 24%, 48%
Permit Limit	12%	12%
Test Endpoint	48-hr LC50	48-hr LC50
Test Result	**> 48%**	**> 48%**
	effluent successfully meets permit requirements for the Ceriodaphnia	effluent successfully meets permit requirements for the minnows

Next Test Date	**Week of January 16, 2023**
Comments	**Collierville STP-Shelton Rd** **TN0057461**

If you have any questions or comments concerning the enclosed report, please do not hesitate to contact us.

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January 19, 2023

William McCrae
Collierville STP-Shelton Rd
500 Poplar View Pkwy
Collierville, TN 38017

Biomonitoring Results
Pace National Identification #: L1575222-01,-02,-03,-04

Attached are the results for toxicity test performed: January 12-14, 2023

A summary of the findings is presented below:

Test Species	*Ceriodaphnia dubia*	*Pimephales promelas*
EPA Method	EPA Method 2002.0	EPA Method 2000.0
Test Concentrations	3%, 6%, 12%, 24%, 48%	3%, 6%, 12%, 24%, 48%
Permit Limit	12%	12%
Test Endpoint	48-hr LC50	48-hr LC50
Test Result	**> 48%**	**> 48%**
	effluent successfully meets permit requirements for the Ceriodaphnia	effluent successfully meets permit requirements for the minnows
Next Test Date	**frequency: semi-annual**	
Comments	**Collierville STP-Shelton Rd** **TN0057461**	

If you have any questions or comments concerning the enclosed report, please do not hesitate to contact us.

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May 5, 2023

William McCrae
Collierville STP-Shelton Rd
500 Poplar View Pkwy
Collierville, TN 38017

Biomonitoring Results
Pace National Identification #: L1602438-01,-02,-03,-04

Attached are the results for toxicity test performed: April 6-8, 2023

A summary of the findings is presented below:

Test Species	***Ceriodaphnia dubia***	***Pimephales promelas***
EPA Method	EPA Method 2002.0	EPA Method 2000.0
Test Concentrations	3%, 6%, 12%, 24%, 48%	3%, 6%, 12%, 24%, 48%
Permit Limit	12%	12%
Test Endpoint	48-hr LC50	48-hr LC50
Test Result	**> 48%**	**> 48%**
	effluent successfully meets permit requirements for the Ceriodaphnia	effluent successfully meets permit requirements for the minnows

Next Test Date	**Contact the lab to schedule next test date.**
Comments	**Collierville STP-Shelton Rd** **TN0057461**

If you have any questions or comments concerning the enclosed report, please do not hesitate to contact us.

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