



# Town of Collierville

## Department of Public Services

**Stan Joyner**  
*Mayor*

**Molly Mehner**  
*Town Administrator*

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July 28, 2023

Adam Bonomo  
TDEC-Division of Water Resources  
Pretreatment Section  
William R. Snodgrass Tennessee Tower  
312 Rosa L. Parks Avenue, 11<sup>th</sup> Floor  
Nashville, TN 37243

Re: Revised Semi-Annual Report October 2022 to March 2022  
NPDES Permit #TN0057461  
NPEDS Permit # TN0078841

Dear Adam Bonomo,

Attached is the revised semi-annual report for the Town of Collierville WWTP's. The report is for the period covering October 1, 2022 to March 31, 2023. If you have any questions or comments, please contact:

John Fox (901) 457-2800 or email [jfox@colliervilletn.gov](mailto:jfox@colliervilletn.gov)  
Donal Davis (901) 457-2833 or email [ddavis@colliervilletn.gov](mailto:ddavis@colliervilletn.gov)

Sincerely,

John Fox  
Town of Collierville, TN  
Public Utilities Manager

cc: Brittany Gibson, TDEC Memphis EFO (email only)  
Donal Davis, Wastewater Treatment Manager



Tennessee Department of Environment and Conservation  
Division of Water Resources  
401 Church Street, 6<sup>th</sup> Floor L & C Annex  
Nashville, TN 37243-1534  
(615) 532-0625


**CONTROL AUTHORITY PRETREATMENT SEMI-ANNUAL/ANNUAL REPORT**

**Control Authority Identification:**

Control Authority Name :	Town of Collierville, TN			
Report Date :	April 14, 2023			
Reporting Period Covered by this report	From	October 1, 2022	To	March 31, 2023
Reporting Period Covered by previous report	From	April 1, 2022	To	September 30, 2022

Name of Wastewater Treatment Plant(s)	NPDES Permit No.
1. Shelton Rd. Wastewater Treatment Plant	TN0057461
2. Northwest Wastewater Treatment Plant	TN0078841
3.	
4.	
5.	

Person to contact concerning this report: Donal Davis	Title or Position: Wastewater Treatment Manager		
Mailing Address: 500 Keough Rd.	City: Collierville	State: TN	Zip: 38017
Phone number(s): 901.457.2833 (or) 901.457.2800	E-mail (optional): ddavis@colliervilletn.gov		
Fax number (optional): 901.457.2828	Website (optional): www.collierville.com		

<b>Report Certification:</b> (must be signed in accordance with the requirements of Tennessee Rule 1200-4-14-.12(13))	
"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(s) who manage the system or are directly responsible for gathering the information, the submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. A false statement is subject to the penalties of perjury."	
Name: (print or type) John Fox	Title: (print or type) Public Utilities Manager
Signature: 	Date: June 28, 2023

## Pretreatment – Narrative Summary

Carrier Corporation, UTC (metal finisher) - Permit # TOC-001 - This facility manufactures HVAC equipment and pretreats wastewater associated with the manufacturing process. It does not treat domestic waste which is deposited directly into the sewer system. The facility was inspected and samples were collected and tested per the discharge permit. There were no violations associated with this permit during the reporting period.

Carrier Corporation, UTC (SN-ground water remediation) - Permit # TOC-005 - This permit serves the Superfund site for remediating Trichloroethane (TCE) in Town of Collierville's Water Plant #2. Associated well water is pumped through aerators, stripping the TCE before it is discharged to the sewer system and treated at the Northwest Wastewater Treatment Facility due to having greater than acceptable levels of chromium. The remediation system was inspected and samples were collected and tested per the discharge permit. There were no violations associated with this permit during the reporting period. Carrier has recently installed two water wells that will draw at a depth where the greatest concentration of TCE exist. They are expecting to remove several times more mass, with the new wells, than what is currently being removed. Wells are expected to be in service before June 2023.

Carrier Corporation, UTC (other-Soil Vapor Extraction) - Permit # TOC-002 - This permit serves the Superfund site for remediating TCE. Condensate from the vapor extraction process is collected and stored in a tank. When the tanks is filled to the desired level, the contents are pumped through Liquid Phased Carbon Beds before discharging to the sewer system. Recent system updates include new smaller granular activated carbon tanks that are rotated in use while off-service tanks are reclaimed. The remediation system was inspected and samples were collected and tested per the discharge permit. The facility discharged 120 during the reporting period and there were no violations associated with this permit.

Carrier Corporation, UTC (other-Cooling Towers) - Permit # TOC-009 - This permit is for the facility's cooling tower blow down water. A portion of the effluent flow from Permit # TOC-005 is diverted to the cooling towers, saving on water consumption. The permit is required due to effluent water from Permit # TOC-005 being used. The blow down water is not pretreated prior to entering the sewer system. The system was inspected and samples were collected and tested per the discharge permit. Only one half of the system was operated at the time of sampling. There were no violations associated with this permit during the reporting period.

Floratine (other-Custom Fertilizer Products) - Permit # TOC-007 - Floratine custom blends specialty fertilizer products. The batch tank rinse water flows through a series of settling tanks, removing heavy solids. The final tank is pH adjusted before discharging to the sewer system. There was one violation associated with this permit during the reporting period. On March 8, 2022, Floratine violated the permitted limit for Zinc = 66.8 mg/L (limit 38.89 mg/L). Causes of the violations were identified, acceptable corrective actions were completed, and mitigations ensuring no future problems were taken.

Currently approved EPA methods for the detection of the analyte naphthalene all have Method Detection Limits (MDL) that exceed the current passthrough limit.



## Form 1a

### Results of Sampling at Control Authority

Sample Date(s): October 17-18, 2022: Collierville Shelton Rd. STP TN0057461

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Parameter	Influent (µg/l)	Protection criteria (µg/l)	Effluent (µg/l)	Pass Through Limit (µg/l)	Removal Rate (%)
Bis(2-Chloroethoxy)methane			<5.00		
Bis(2-Chloroethyl)ether			<5.00		
Bis(2Chloroisopropyl) ether			<5.00		
*Bis(2-ethylhexyl)phthalate		64.50	<10.00	64.50 <small>(*Total Phthalates limit)</small>	
4-Bromophenyl phenyl ether			<5.00		
*Butyl benzyl phthalate			<5.00		
2-Chloronaphthalene			<5.00		
4-Chlorophenyl phenyl ether			<5.00		
Chrysene			<2.00		
*Di-n-butyl phthalate			<5.00		
Di-n-octyl phthalate			<5.00		
Dibenz(a,h)anthracene			<2.00		
1,2-Dichlorobenzene			<5.00		
1,3-Dichlorobenzene			<5.00		
1,4-Dichlorobenzene			<5.00		
3,3-Dichlorobenzidine			<10.00		
*Diethyl phthalate			<5.00		
Dimethyl phthalate			<5.00		
2,4-Dinitrotoluene			<5.00		
2,6-Dinitrotoluene			<5.00		
1,2-Diphenylhydrazine			<5.00		
Fluoranthene			<2.00		
Fluorene			<2.00		
Hexachlorobenzene			<5.00		
Hexachlorobutadiene			<5.00		

Include any parameters sampled in the reporting period including the routine semiannual sampling as well as the effluent sampling specified in Section III of the National Pollution Discharge Elimination System (NPDES) permit, including applicable toxic organics (i.e., toluene, benzene, 1,1,1 – trichloroethane and chloroform).

**You must sample for all parameters in your NPDES Permit at the required frequency (See Part 3 of your NPDES permit for required pretreatment monitoring).**

## Form 1a

### Results of Sampling at Control Authority

Sample Date(s): October 17-18, 2022: Collierville Shelton Rd. STP TN0057461

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Parameter	Influent (µg/l)	Protection criteria (µg/l)	Effluent (µg/l)	Pass Through Limit (µg/l)	Removal Rate (%)
Hexachlorocyclopentadiene			<5.00		
Hexachloroethane			<5.00		
Indeno(1,2,3-cd)pyrene			<2.00		
Isophorone			<5.00		
Naphthalene		4.55	<2.00	1.00	
Nitrobenzene			<5.00		
N-Nitrosodi-n-propylamine			<5.00		
N-Nitrosodimethylamine			<5.00		
N-Nitrosodiphenylamine			<10.0		
Phenanthrene			<2.00		
Pyrene			<2.00		
1,2,4-Trichlorobenzene			<5.00		
2,4,6-Trichlorophenol			<5.00		
Phenol			<5.00		
Acenaphthene			<2.00		
Acenaphthylene			<2.00		
Anthracene			<2.00		
Benzidine			<20.0		
Benzo(a)anthracene			<2.00		
Benzo(a)pyrene			<2.00		
3,4-Benzofluoranthene			<2.00		
Benzo(g,h,i)perylene			<2.00		
Benzo(k)fluoranthene			<2.00		
p-Chloro-m-cresol			<5.00		
2-Chlorophenol			<5.00		
4,6-Dinitro-o-cresol			<10.0		
2,4-Dinitrophenol			<20.00		

Include any parameters sampled in the reporting period including the routine semiannual sampling as well as the effluent sampling specified in Section III of the National Pollution Discharge Elimination System (NPDES) permit, including applicable toxic organics (i.e., toluene, benzene, 1,1,1 – trichloroethane and chloroform).

**You must sample for all parameters in your NPDES Permit at the required frequency (See Part 3 of your NPDES permit for required pretreatment monitoring).**

**Form 1a**

**Results of Sampling at Control Authority**

Sample Date(s): October 17-18, 2022: Collierville Shelton Rd. STP TN0057461

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Parameter	Influent (µg/l)	Protection criteria (µg/l)	Effluent (µg/l)	Pass Through Limit (mg/l)	Removal Rate (%)
2-Nitrophenol			<5.00		
4-Nitrophenol			<10.0		
Pentachlorophenol			<5.00		
2,4-Dimethylphenol			<5.00		
2,4-Dichlorophenol			<5.00		
Antimony			<1.00		
Arsenic			<0.500		
Beryllium			<0.500		
Selenium			<1.00		
Thallium			<0.200		
Oil and Grease			<1.5		
Total Dissolved Solids			198		
Vinyl Chloride			<1.00		
cis-1,3-Dichloropropene			<1.00		
trans-1,3-Dichloropropene			<1.00		

Include any parameters sampled in the reporting period including the routine semiannual sampling as well as the effluent sampling specified in Section III of the National Pollution Discharge Elimination System (NPDES) permit, including applicable toxic organics (i.e., toluene, benzene, 1,1,1 – trichloroethane and chloroform).

**You must sample for all parameters in your NPDES Permit at the required frequency (See Part 3 of your NPDES permit for required pretreatment monitoring).**



**Form 1a**  
**Results of Sampling at Control Authority**

Sample Date(s): October 17-18, 2022: Collierville Shelton Rd. STP TN0057461

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Parameter	Influent (µg/l)	Protection criteria (µg/l)	Effluent (µg/l)	Pass Through Limit (µg/l)	Removal Rate (%)
Acrolein			<20.0		
Acrylonitrile			<20.0		
Benzene		15.00	<1.00	3.00	
Bromoform			<1.00		
Carbon Tetrachloride			<1.00	15.00	
Chlorobenzene			<1.00		
Chlorodibromomethane			<1.00		
Chloroethane			<1.00		
2-Chloroethylvinyl Ether			<5.00		
Chloroform			<1.00	85.00	
Dichlorobromomethane			<1.00		
1,1-Dichloroethane			<1.00		
1,2-Dichloroethane			<1.00		
trans-1,2-Dichloroethylene			<1.00	1.50	
1,1-Dichloroethylene			<1.00		
1,2-Dichloropropane			<1.00		
1,3-Dichloropropylene			<1.00		
Ethylbenzene		28.57	<1.00	4.00	
Methyl Bromide			<1.00		
Methyl Chloride			<1.00		
Methylene Chloride			<10.0	50.00	
1,1,2,2-Tetrachloroethane			<1.00		
Tetrachloroethylene			<1.00	25.00	
Toluene		214.29	<5.00	15.00	
1,1,1-Trichloroethane		200.00	<1.00	30.00	
1,1,2-Trichloroethane			<1.00		
Trichloroethylene		90.91	<1.00	10.00	

Include any parameters sampled in the reporting period including the routine semiannual sampling as well as the effluent sampling specified in Section III of the National Pollution Discharge Elimination System (NPDES) permit, including applicable toxic organics (i.e., toluene, benzene, 1,1,1 – trichloroethane and chloroform).

**You must sample for all parameters in your NPDES Permit at the required frequency (See Part 3 of your NPDES permit for required pretreatment monitoring).**

**Form 1a**  
**Results of Sampling at Control Authority**

Sample Date(s): January 9-10, 2022 : Collierville Shelton Rd. STP TN0057461

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Parameter	Influent (mg/l)	Protection criteria (mg/l)	Effluent (mg/l)	Pass Through Limit (mg/l)	Removal Rate (%)
Copper (Cu)	0.0485	0.27394	0.00854	0.05068	82.39%
Chromium III	<0.01		<0.01		
Chromium VI	<0.01	0.05613	<0.01	0.05709	
Chromium Total	0.00118		<0.001		
Nickel (Ni)	0.00281	0.31034	0.000957	0.18	65.94%
Cadmium (Cd)	<0.0001	0.00318	<0.0001	0.00117	
Lead (Pb)	0.00157	0.01008	<0.0005	0.01585	68.15%
Mercury (Hg)	0.0000097	0.00078	0.00000145	0.00023	85.05%
Silver (Ag)	0.000261	0.00384	<0.0001	0.00094	61.69%
Zinc (Zn)	0.115	0.43809	0.0557	0.2	51.57%
Cyanide (Cn)	0.005	0.05429	<0.005	0.01657	
Phenols, Total	0.0468	0.10476	<0.0050	0.05	89.32%
Total Nitrogen	115		4.59		96.01%
Nitrate + Nitrite – N	<0.500		2.45		
Total Kjeldahl Nitrogen	115		2.14		98.14%
Total Phosphorus	3.76		1.24		67.02%
Nitrate	<0.500		2.45		
Nitrite	<0.500		<0.100		

Include any parameters sampled in the reporting period including the routine semiannual sampling as well as the effluent sampling specified in Section III of the National Pollution Discharge Elimination System (NPDES) permit, including applicable toxic organics (i.e., toluene, benzene, 1,1,1 – trichloroethane and chloroform).

**You must sample for all parameters in your NPDES Permit at the required frequency (See Part 3 of your NPDES permit for required pretreatment monitoring).**





**Form 1b**

**Biosolids**

What does the Control Authority do with the sludge/biosolids? Shelton Rd. & Northwest WWTP's process biosolids through screw presses and belt filter presses respectively. The biosolids are disposed of at the Quad County Landfill located in Byhalia, MS.

If biosolids are land-applied, please fill out the following Table.

<b>Parameter</b>	<b>Biosolids Concentration (mg/kg)</b>	<b>503 Table 1 limits Ceiling Concentration (mg/kg)</b>	<b>503 Table 3 limits Monthly Ave. (mg/kg)</b>
Arsenic		75	41
Cadmium		85	39
Copper		4300	1500
Lead		840	300
Mercury		57	17
Molybdenum		75	N/A
Nickel		420	420
Selenium		100	100
Zinc		7500	2800

Were there any samples of biosolids that exceeded the ceiling concentrations from 40 CFR Part 503 (Table 1)?

What date(s)?

**Form 2**

**Report of Upsets, Protection Criteria Violations, Biosolids Violations and Pass-Through Limit Violations**

Type of Incident	Date	Explanation of Incidents	Corrective Action Taken
None			

\* Give a detailed explanation of the causes of the incident and the corrective action taken to date. The corrective action should also include any plans the Control Authority has to identify or correct the problem. If there is not enough room on this form, include the information in the Narrative Summary.

### Form 3 Industrial User Summary

Industrial User Name and Mailing Address	Contact (indicate Mr./Ms.) Phone #/Fax# and email address (optional)	Type of Industry **	Actual Flow (GPD)
Carrier Corp., UTC 97 S. Byhalia R.d Collierville, TN 38017	Ms. Amy McCaffery	Metal Finisher	19,194
Carrier Corp., UTC 97 S. Byhalia R.d Collierville, TN 38017	Ms. Amy McCaffery	SN-ground water remediation	537,121
Carrier Corp., UTC 97 S. Byhalia R.d Collierville, TN 38017	Ms. Amy McCaffery	Other - Cooling Towers	11,558
Carrier Corp., UTC 97 S. Byhalia R.d Collierville, TN 38017	Ms. Amy McCaffery	Other - Soil Vapor Extraction	0
Floratine Products 355 East South St. Collierville, TN 38017	Ms. Joyce Theodore	Other - Custom Fertilizer Blender	500

**\*\*If a Significant Industrial User (SIU) is Categorical, list the applicable category (i.e., metal finisher, electroplater, leather tanner, etc.). Non-categorical SIUs should be listed as SN (Significant Non-Categorical), with a description of the process (i.e., SN-landfill or SN-hospital). All Non-significant Categorical Industrial Users (NSCIU) should be listed on the form and identified as an NSCIU. Information on NSCIUs is required on Form 3, but not required on any other form in this report. Industries that are not significant and not categorical are not required to be listed in this report. However, if you wish to list them on this form, please identify them as "Other."**

### Form 4 Industrial User Monitoring Report

Column 1	Column 2	Column 3	Column 4	Column 5
Industrial User Name and Mailing Address	Control Authority Inspection Date(s)	Control Authority Sampling Frequency	Control Authority Sampling Date(s)	SIU Self-Monitoring Dates(s)
Carrier Corp., UTC 97 S. Byhalia R.d Collierville, TN 38017	March 7, 2023	Semi-annual	March 8, 2023	DO,pH,Metals, CN: 1/Month BOD,TSS,TTO: Semi-annual
Carrier Corp., UTC 97 S. Byhalia R.d Collierville, TN 38017	March 7, 2023	Semi-annual	March 7, 2023	TCE,Cr-T: 1/Quarter
Carrier Corp., UTC 97 S. Byhalia R.d Collierville, TN 38017	March 8, 2023	Semi-annual	March 8, 2023	Cu,CrIII,CrVI,Hg Ni,Phenol,Zn,pH, Toluene: 1/Month
Carrier Corp., UTC 97 S. Byhalia R.d Collierville, TN 38017	January 18, 2023	Semi-annual	January 18, 2023	TCE: 1/Month
Floratine Products 355 East South St. Collierville, TN 38017	March 8, 2023	Semi-annual	March 8, 2023	Cd,Cu,CrIII,CrVI Ni,Pb,CN,Zn,pH, Phenols,BOD, TSS: 1/Month



**Violation resulted: Yes for violations resulting in TRC or Chronic – both are Significant Non-Compliance (SNC) or No for violations not resulting in TRC/Chronic Violations. Please note that monthly average and daily maximum for a specific parameter are considered to be separate limitations. Therefore, SNC would be calculated separately for each limitation. "Conc" stands for concentration.**

**Form 5b  
Industrial User Compliance Report**

Semi-annual reporters only must complete this form  
(For semi-annual reporting period October 1, 2022– March 31, 2023)

Column 1	Column 2		Column 3		Column 4		Column 5		Column 6	
	July – September		October – December		Jan – March		July – December		October – March	
Industrial User	Parameters Violated (conc/limit)	Total Number of Samples	Parameters Violated (conc/limit)	Total Number of Samples	Parameters Violated (conc/limit)	Total Number of Samples	Chronic Viol. (Yes or No)	TRC Viol. (Yes or No)	Chronic Viol. (Yes or No)	TRC Viol. (Yes or No)
Floratine Products 355 East South St. Collierville, TN 38017	Zn (one) (44.1/38.89) mg/L.	3		3	Zn (one) 66.8/38.89 mg/L.	3	No	No	No	No

**Use one line for each parameter for each SIU with violations, showing whether a Technical Review Criteria (TRC) or Chronic Violation resulted: Yes for violations resulting in TRC or Chronic – both are Significant Non-Compliance (SNC) or No for violations not resulting in TRC/Chronic Violations. Please note that monthly average and daily maximum for a specific parameter are considered to be separate limitations. Therefore, SNC would be calculated separately for each limitation. "Conc" stands for concentration.**



## Form 7

### Pretreatment Performance Summary

<b>I. General Information</b>		
Control Authority Name: Town of Collierville, TN		
Address: 500 Keough Rd.		City: Collierville, TN 38017
Contact Person: William McCrae		Contact Phone Number: 901.457.2833 (or) 901.457.2800
Reporting Period: October 1, 2022 to March 31, 2023		NPDES Number: TN0057461
Number of Categorical SIUs:	Number of Non-Categorical SIUs:	Total Number of SIUs:
1	1	2

<b>II. Significant Industrial Compliance</b>	<b>SIUs</b>	
	Categorical	Non- Categorical
1) No. of SIUs in Significant Non-compliance (SNC)	0	0
2) Reasons for Significant Non-compliance (SNC)		
a) In SNC for Violations of pretreatment standards		
b) In SNC for Reporting Violations		
c) In SNC for Compliance Schedule Violations		
d) In SNC for Other (explain in Narrative Summary)		

<b>III. Monitoring</b>	<b>SIUs</b>	
1) Facilities Monitored by CA (samples analyzed for all SIU permit parameters):	Categorical	Non- Categorical
a) No. of SIUs Sampled by the Control Authority (CA)	1	1
b) No. of SIUs Inspected by the CA	1	1
2) Total Monitoring Events:		
a) No. of Samples by the CA	1	1
b) No. of Inspections by the CA	1	1
3) How many SIUs do not have a current control mechanism (permit)		

<b>IV. Enforcement</b>	<b>SIUs</b>	
	Categorical	Non- Categorical
1) SIUs Subject to Any Enforcement Actions (include verbal warnings)	0	0
2) SIUs Listed in the Newspaper for SNC in this period	0	0
3) Notices of Violations Issued *	0	0
4) Administrative Orders Issued *	0	0
5) No. of SIUs on Compliance Schedules (anytime in period)	0	0
6) Suits Filed:		
a) Civil Suits *	0	0
b) Criminal Suits *	0	0
7) Other Actions Taken (sewer bans, etc. but not verbals) *	0	0
8) Penalties Collected: (not surcharges)		

Report Date: April 14, 2023

Town of Collierville, TN

TN0057461

a) No. of SIUs from whom penalties were collected	0	0
b) Total Dollars (\$) collected in the period	0	0
* Enter the number of ACTIONS, not the number of SIUs		