



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES

Memphis Environmental Field Office
8383 Wolf Lake Drive
Bartlett, TN 38133
Phone 901-371-3000 Statewide 1-888-891-8332 Fax 901-371-3170

August 9, 2020

Honorable Dwayne Cole, Mayor
City of Munford
1397 Munford Avenue
Munford, TN 38058

RE: Compliance Evaluation Inspection
 Munford Water System
 NPDES Permit Number TN0081671
 Tipton County

Dear Mayor Cole:

On July 14, 2021, in conjunction with performing a Sanitary Survey of the water treatment plant, personnel from the Division of Water Resources (DWR) conducted a Compliance Evaluation Inspection (CEI) at the Munford Water Treatment Plant filter backwash. Upon arrival at the facility, division personnel met with Mr. Justin Barkelew and stated that the purpose of the inspection was to evaluate the plant's compliance with its National Pollutants Discharge Elimination System (NPDES) permit. This was accomplished by reviewing the facility's self-monitoring reports and conducting an inspection of the facility. Attached you will find the NPDES Compliance Inspection Report, including photographs, which summarizes the findings of the CEI. The following observations were noted during the inspection.

- Records were complete and orderly and are being maintained as required by the NPDES permit. Discharge Monitoring Reports are submitted (electronically) each month as required. A copy of the current permit should be available for reference.
- The laboratory was in good condition and a Standard Operating Procedure was available and appeared to address the required procedures.
- Lagoon had been dredged in the fall of 2019 and currently has three plus feet of free-board along its perimeter.
- Discharge sign was in place and clearly visible.

Division personnel would like to thank Mr. Barkelew for his assistance and courtesy during the inspection. If you have any questions or need additional information, please contact me at the Memphis Environmental Field Office. My telephone number is (901) 321-8089, or you can email me at cameron.byrd@tn.gov.

Sincerely,

Cameron Byrd
Environmental Scientist
Memphis Environmental Field Office
Division of Water Resources

cc: TDEC/DWR/MEFO: file
TDEC/DWR/Nashville Central Office: file
George Watson, Public Works Director
Justin Barkelew, Water Plant Operator

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Water Resources

Memphis Environmental Field Office, 8383 Wolf Lake Drive, Bartlett, TN 38133

1-888-891-8332 (TDEC)

**Compliance Inspection for Filter Backwash and Sedimentation Basin Washout from Water Treatment Plants
General NPDES Permit**

Facility Name: City of Munford Water Plant (WTP)	NPDES Tracking Number: TN0081671
Permit Coverage Effective Date: 1/11/2021	Permit Expiration Date: 8/31/2025
Date and Time of Inspection: 7/14/2021	Inspector Name: Cameron Byrd

Official Contact Person Name: Mr. Justin Barkelew	
Address: 60 Water Street, Munford, TN 38058	Phone Number: (901) 837-5974
	Email: jbarkelew@munford.com

Summary of Findings and Comments

On July 14, 2021, Mr. Cameron Byrd, Mrs. Courtney Driver and Mr. Eddy Bouzeid with the Division of Water Resources, Memphis Environmental Field Office (DWR/MEFO), conducted a Compliance Evaluation Inspection (CEI) of the filter backwash system at the City of Munford Water Treatment Plant (WTP) located at 60 Water Street in Munford, Tipton County, Tennessee. DWR staff met with Mr. Justin Barkelew, the WTP Certified Operator and reviewed the records and operation of the filter backwash lagoon. The following is a summary of the findings and observations.

Coverage under the NPDES general permit authorizes the discharge of filter backwash and sedimentation basin wash water from the City of Munford Water Plant (WTP) into Cane Branch. Coverage was issued and became effective on January 11, 2021, and assigned the tracking number TN0081671.

Records/Reports

Records were available as required by the permit and appeared to be complete during the inspection. DMRs are submitted electronically via EPA's Net DMR portal.

Facility Site Review

There have been no exceedances of the facility's permit limits during the period of evaluation.

Effluent/Receiving Waters

There was regular discharge through the outfall during the inspection (photo 1). The discharge water appeared to be clear. The sign was in place at the point of discharge (photo 2) and displayed the correct information as required by the permit.

Flow Measurement

A flow meter is used to measure the amount of water utilized in the backwash process (photo 3). The measurement is in gallons per minute, which is then converted to million gallons per day and reported on the DMR.

Self-Compliance Program

Analysis for total suspended solids, settleable solids and iron are performed at the water plant laboratory by Mr. Barkelew. Total residual chlorine and pH are field parameters that are conducted at the time of sample collection utilizing TRC and pH meters.

Laboratory

A Standard Operating Procedure (SOP) for field parameter measurement and laboratory analysis of samples was available at the plant.

Operation and Maintenance

The Munford WTP appeared to be operating properly at the time of the inspection.

Sludge/Handling Disposal

The lagoon was dredged out during the fall of 2019 and currently has three plus feet of free-board along its perimeter (photo 4). Land adjacent to the town's wastewater lagoon was approved for application of the iron sludge.

Pollution Prevention

The Munford WTP personnel appeared to maintain a clean and orderly facility. All chemical storage and handling are managed to prevent release of materials.

Photographic Log

Project: Munford Water Plant		Site Location: Munford, Tipton County	Permit No.: TN0081671
Photo No. 1	Date 7-14-21		
Description Regular discharge through the outfall.			
Photo No. 2	Date 7-14-21		
Description View of modified sign at the outfall location.			

Photographic Log



Project: Munford Water Plant		Site Location: Munford, Tipton County	Permit No.: TN0081671
Photo No. 3	Date 7-14-21	 A photograph showing three digital flow meters mounted vertically on a wooden wall. To their right is a white control panel with a digital display and two red labels: 'Q5 = 500 gpm' and '125 = 750 gpm'. Further right is a black rectangular panel with a recessed area.	
Description View of flow meter used to measure the amount of water utilized for the backwash process.			

Photo No. 4	Date 7-14-21	 A photograph of a lagoon with a grassy bank in the foreground. The water reflects the sky and surrounding trees. In the background, there are residential houses and a utility pole under a cloudy sky.
Description View of lagoon. It was dredged in the fall of 2019.		

Photographic Log

Project: Munford Water Plant	Site Location: Munford, Tipton County	Permit No.: TN0081671
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Photo No. 5	Date 7-14-21	
Description View of filter backwash basin full of water, during the filter backwash process.		

Photo No. 6	Date 7-14-21	
Description View of filter backwash basin during the filter backwash process.		