United States Environmental Protection Agency

Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	December 6, 2017		
Media:	Water		
Regulatory Program(s)	NPDES		
Company Name:	**City of Nashville**		
Facility Name:	**City of Nashville Wastewater Treatment Plant**		
Facility Physical Location:	33.919, -93.861		
Mailing address:	426 North Main		
(city, state, zip code)	Nashville, AR 71852		
County/Parish:	Howard County		
Facility Contact:	Larry Dunway	Public Works Director	
	larry19211@gmail.com		
FRS Number:	110000752855		
Identification/Permit Number:	AR0021776		
Media Number:	none		
NAICS:	221320		
SIC:	4952		
Personnel participating in inspection:			
Magda Dallemagne	US EPA, 6EN-WS	Inspector	(214) 665-7396
Sarah Khoury	Facility Representative	Lab Technician	(870) 845-4522
Larry Dunway	Facility Representative	Public Works Director	(870) 845-1440
Greg Strawn	Facility Representative	Water & Wastewater Production Superintendent	(870) 845-7797
EPA Lead Inspector Signature/Date			
	Magda Dallemagne		Date
Supervisor Signature/Date	Esteban Herrera		2/2/2018
For	Robert Houston		Date

6ENFORM-019-R7 (2/15/2017)

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector Magda Dallemagne arrived at the City of Nashville Wastewater Treatment Plant (WWTP) (the Facility) at 9:10 am on December 6, 2017, for an unannounced inspection. I met with Sarah Khoury, Laboratory Technician, Larry Dunaway, Public Works Director, and Greg Strawn, Water and Wastewater Production Superintendent. I presented my credentials to Ms. Khoury and Mr. Dunaway informing them that this was an EPA inspection to determine compliance with the facility's National Pollution Discharge Elimination System (NPDES) permit, AR0021776. The scope of the inspection is to evaluate the compliance of the facility's laboratory and sampling with it's NPDES operating permit.

FACILITY DESCRIPTION

The Facility laboratory is not accredited under State, National, or Private programs. There is one supervising technician who is responsible for the training of one other technician, expected to replace him in the near future. The laboratory performs pH, dissolved oxygen (DO), 5 Day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$), Total Suspended Solids (TSS), and Fecal Coliform (Fecal) testing under their NPDES operating permit. The remaining required testing is sampled on site and sent to a contract laboratory, Ana Laboratory, to satisfy the permit requirements.

Section II - OBSERVATIONS

The inspector discussed the operations and management of the laboratory and observed as the technician walked them through the processes for testing and sampling as per the NPDES permit.

The following observations were made.

1. Internal training is not formally tracked, and performance reviews are not documented.
2. Thermometers are not traceable to National Institute of Standards and Technology (NIST) certification. They also were not correctly labeled with calibration, expiration, and correction factors. There were no temperature logs maintained for the temperature-controlled instruments.
3. Several thermometers were not held suspended in containers such that the thermometers were touching the inside surface of its container. Temperature readings can be affected if the thermometer is touching surfaces such as glass or metal, and so must be suspended.
4. pH and DO meters are not calibrated before each use, and are instead calibrated weekly.
5. The balance undergoes a yearly "Basic Test Confirmation," which is not a NIST certified calibration. Additionally, the contracting company performing this test stated in its last report "This balance is obsolete and is no longer supported … I would advise that the

customer consider replacing the balance." NIST certified weights are not available to perform regular calibration checks of the balance in house.

6. The refrigerator used for chemical and sample storage is also used for food storage. Spaces used for storage in this manner can cause contamination of one or more of the samples, chemicals, and food.
7. Solutions and reagents are not properly labeled with open and expiration dates. Most reagents are stored within the same cabinet and presented several concerns, as listed below.
    a. Expired and out of use chemicals are stored with the working reagents
    b. Acids and bases are stored right next to each other
    c. The labels of some chemicals had worn off, or were otherwise illegible
8. The method used for measuring TSS is incorrect. The technician is drying the samples in an oven only once before recording the weight of solid. It is required that TSS samples be dried two or more times, or until the difference in mass after each drying period is less than 0.005g.
9. During Fecal testing, the technician is not utilizing an acceptable method to sterilize the forceps used to transfer the filter papers.
10. The oven used in the laboratory was placed on an unstable rolling table, and was stored within just a few feet of a bookcase filled with books.
11. Bench sheets have some instances of auto-populated date and time. All entries must be made at time-of, none can be auto-populated. The bench sheets also do not reference any EPA method or SOP. White out was used to correct mistakes instead of the cross out, initialing, and dating method.
12. There are no written Standard Operating Procedures (SOP) as required. All testing procedures are performed as read from the 2015 edition of Standard Methods or are an understood method.

Section III – AREAS OF CONCERN

At the conclusion of the inspection, the EPA inspector met with the representatives from the Facility for an exit interview at 3:33 pm December 6, 2017. At that time, the inspector provided details of the inspection and reviewed areas of concern noted in the inspection that will require additional follow-up or correction. These areas of concern included:

1. Tracking of personnel training and performance reviews
2. Use of non-certified NIST balance and thermometers in testing procedures
3. Inadequate maintenance and/or operation of equipment and instruments
4. Inadequate storage and handling of chemicals, reagents and samples
5. Improper EPA methods used
6. Maintenance of SOPs and bench sheets

Section IV – FOLLOW UP

As per the document request placed during the inspection, documents were received by EPA on December 15, 2017, after exiting the Facility on December 6, 2017. Additional information was received January 29, 2018. A copy of this report will be sent to the facility.