



ARKANSAS

ENERGY & ENVIRONMENT

May 4, 2023

Larry Dunaway, Mayor
City of Nashville
426 Main Street
Nashville, AR 71852

RE: Nashville WWTP Inspection
AFIN: 31-00036 **Permit No.: AR0021776**

Dear Mayor Dunaway:

On February 9, 2023, I performed a Compliance Evaluation Inspection (CEI) of the above referenced facility in accordance with the provisions of the Federal Clean Water Act, the Arkansas Water and Air Pollution Control Act, and the regulations promulgated thereunder. A copy of the inspection report is enclosed for your records.


Please refer to the “Summary of Findings” section of the inspection report and provide a written response for each item that was noted. This response should be mailed to the attention of the Office of Water Quality Compliance Branch at the address below my signature or emailed to Water-Inspection-Report@adeq.state.ar.us. This response should contain documentation describing the course of action taken to correct each item noted. The corrective action(s) should be completed as soon as possible and the written response with all necessary documentation (i.e. photos) is due by **May 18, 2023**.

If I can be of any assistance, please contact me at Michael.young@adeq.state.ar.us or 501-837-2073.

Sincerely,

A handwritten signature in black ink, appearing to read 'Michael Young'.

INSPECTOR NAME
Inspector Supervisor, Office of Water Quality
5301 Northshore Drive, North Little Rock, AR, 72118

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|  ENVIRONMENTAL QUALITY | OFFICE OF WATER QUALITY | | |
| | INSPECTION REPORT | | |
| | AFIN: 31-00036 | PERMIT #: AR0021776 | DATE: 2/9/2023 |
| | COUNTY: 31 Howard | PDS #: 125647 | MEDIA: WN |
| GPS LAT: 33.919997 LONG: -93.861332 LOCATION: Entrance | | | |
| FACILITY INFORMATION | | INSPECTION INFORMATION | |
| NAME: Nashville WWTP LOCATION: 743 Highway 27 South CITY: Nashville, AR | | FACILITY TYPE: 1 - Municipal INSPECTOR ID#: 101531 S - State FACILITY EVALUATION RATING: 4 - Satisfactory INSPECTION TYPE: Compliance Evaluation | |
| RESPONSIBLE OFFICIAL | | DATE(S): 2/9/2023 ENTRY TIME: 11:12 EXIT TIME: 13:02 PERMIT EFFECTIVE DATE: 12/1/2020 PERMIT EXPIRATION DATE: 11/30/2025 | |
| NAME: / TITLE Larry Dunaway / Mayor COMPANY: City of Nashville MAILING ADDRESS: 426 Main Street CITY, STATE, ZIP: Nashville AR 71852 PHONE & EXT: / FAX: 870-845-7400 / EMAIL: npw@nashar.org | | FAYETTEVILLE SHALE RELATED: N FAYETTEVILLE SHALE VIOLATIONS: N | |
| CONTACTED DURING INSPECTION: Yes | | INSPECTION PARTICIPANTS | |
| | | NAME/TITLE/PHONE/FAX/EMAIL/ETC.: Larry Dunaway/Mayor and Operator (Lic. #005011)/870-845-4015 Kevin Funderburk/Pretreatment Coordinator and operator Trey Butler/DEQ Water Inspector Robert Diaz/DEQ Water Inspector | |
| AREA EVALUATIONS | | | |
| <small>(S=Satisfactory, M=Marginal, U=Unsatisfactory, N=Not Applicable/Evaluated)</small> | | | |
| M | PERMIT | S | FLOW MEASUREMENT |
| S | RECORDS/REPORTS | S | LABORATORY |
| S | OPERATION & MAINTENANCE | S | EFFLUENT/RECEIVING WATER |
| S | SAMPLING | S | SLUDGE HANDLING/DISPOSAL |
| ** | OTHER: | N | PRETREATMENT |

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| SUMMARY OF FINDINGS |
| <p>1.) Untreated wastewater was being discharged from the equalization basin to waters of the State (see photos 4-6). This is a violation of the of the Arkansas Water and Air Pollution Control Act - A.C.A. §8-4-217 (b)(1)(E). Please provide a response including a plan of action to prevent future unpermitted discharges.</p> <p>2.) There is less than two (2) feet of freeboard in the equalization basin (see photos 2-3). This is a violation of the "Ten State Standards" adopted by Regulation 6.202.B of the APC&EC; specifically citation 93.415 of "2014 Recommended Standards for Wastewater Facilities."</p> |

GENERAL COMMENTS



On February 9, 2023 I performed a Compliance Evaluation Inspection (CEI) at City of Nashville WWTP with the above participants in attendance. City of Nashville WWTP has a treatment design consisting of a bar screen and grit screen followed by an equalization basin, two primary aeration basins ran in parallel, followed by clarification, and disinfection using UV treatment (see Figure 1). After final treatment flow is measured in a Parshall Flume that is monitored with a totalizer and treated water is discharged from Outfall 001 to Mine Creek and thence to Millwood Lake, the Little River, and ultimately segment 1C of the Red River basin. This inspection consisted of a record review and site assessment.

Record Review:

I was provided sampling information and analysis for December 2022. City of Nashville WWTP contracts with Ana-Lab to analyze Ammonia Nitrogen, Total Phosphorus, Nitrate + Nitrite Nitrogen, and Total Recoverable Cyanide. An internal lab for the City of Nashville WWTP analyzes CBOD5, TSS, Fecal Coliform bacteria, DO and pH. I conducted a DMR check and there were no discrepancies.

Site Assessment:

As we started the inspection at the bar screen (see photo 1), I observed that the water levels were very high in all of the ponds at the facility. Larry Dunaway, Mayor and Operator, stated that there had been recent heavy rainfall in the area. I observed that the equalization basin had less than the required two (2) feet of freeboard and we proceeded to walk around the basin (see photos 2-3). At a low water crossing I observed that there was a discharge of untreated sewage going over the low water crossing (see photos 4-5). Another low water crossing on the opposite side of the facility was also discharging untreated sewage (see photo 6). I informed Mr. Dunaway and Kevin Funderburk that the unpermitted discharge needed to be reported to DEQ Enforcement Branch. As I continued to the aeration basins, I observed both to be in good operation with all aerators working (see photos 7-11) with only some small pockets of heavy blanketed sludge on the edges of the aeration basins. Water discharged from the aeration basins was a good color and smell and a grate kept most solids from entering the clarification portion of treatment (see photo 12). Both clarifiers were in good condition with very little accumulations of plastics or other objects (see photos 13-15). Following clarification is the disinfection process which is achieved using UV treatment and I observed that all the components were in good working condition (see photo 16). Flow is measured through a Parshall Flume (see photo 17-18) that is monitored with a totalizer that was in good working condition (see photo 19). A composite sampler is used that is refrigerated and I observed the temperature to be correct (see photo 20). Following UV treatment and flow monitoring is a stair-step post-aeration and samples are collected after post-aeration (see photo 21). Mr. Dunaway stated that flow checks are performed by the facility and provided the most recent calibration information for the totalizer (see photo 22).

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| INSPECTOR'S SIGNATURE:  Michael Young | DATE: 03/21/2023 |
| SUPERVISOR'S SIGNATURE:  Jason Bolenbaugh | DATE: 5/2/2023 |

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| SECTION A: PERMIT VERIFICATION | |
| PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS | <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE |
| DETAILS: | |
| 1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES: | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE |
| 3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 4. ALL DISCHARGES ARE PERMITTED: <u>Unpermitted discharge from equalization basin.</u> | <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| SECTION B: RECORDKEEPING AND REPORTING EVALUATION | |
| RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT | <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE |
| DETAILS: | |
| 1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRS: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE: | <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE |
| a. DATES AND TIME(S) OF SAMPLING: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| b. EXACT LOCATION(S) OF SAMPLING: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| c. NAME OF INDIVIDUAL PERFORMING SAMPLING: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| d. ANALYTICAL METHODS AND TECHNIQUES: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| e. RESULTS OF CALIBRATIONS: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| f. RESULTS OF ANALYSES: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| g. DATES AND TIMES OF ANALYSES: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| h. NAME OF PERSON(S) PERFORMING ANALYSES: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE: | <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR: | <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| SECTION C: OPERATIONS AND MAINTENANCE | |
| TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED | <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE |
| DETAILS: | |
| 1. TREATMENT UNITS PROPERLY OPERATED: | <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 2. TREATMENT UNITS PROPERLY MAINTAINED: | <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED: | <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE: | <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 5. ALL NEEDED TREATMENT UNITS IN SERVICE: | <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED: | <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED: | <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 8. OPERATION AND MAINTENANCE MANUAL AVAILABLE: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 9. STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 10. PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED: | <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 11. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 12. IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 13. HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS: | <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 14. HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 15. IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |

| SECTION D: SAMPLING | |
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| PERMITTEE SAMPLING MEETS PERMIT REQUIREMENTS | <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE |
| DETAILS: | |
| 1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 6. SAMPLE COLLECTION PROCEDURES ADEQUATE: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| a. SAMPLES REFRIGERATED DURING COMPOSITING: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| b. PROPER PRESERVATION TECHNIQUES USED: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| c. CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 7. IF MONITORING IS PERFORMED MORE OFTEN THAN REQUIRED ARE RESULTS REPORTED ON THE DMR: | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE |
| SECTION E: FLOW MEASUREMENT | |
| PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS | <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE |
| DETAILS: | |
| 1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED: __ TYPE OF DEVICE: <u>18" Parshall flume</u> | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED: <u>Totalizer</u> | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 4. CALIBRATION FREQUENCY ADEQUATE: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 5. RECORDS MAINTAINED OF CALIBRATION PROCEDURES: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 6. CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 7. FLOW ENTERING DEVICE WELL DISTRIBUTED ACROSS THE CHANNEL AND FREE OF TURBULENCE: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 8. FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 9. HEAD MEASURED AT PROPER LOCATION: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| SECTION F: LABORATORY | |
| PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS | <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE |
| DETAILS: | |
| 1. EPA APPROVED ANALYTICAL PROCEDURES USED (40 CFR 136.3 FOR LIQUIDS, 503.8(B) FOR SLUDGES) : | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED: | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE |
| 3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 4. QUALITY CONTROL PROCEDURES ADEQUATE: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 5. DUPLICATE SAMPLES ARE ANALYZED \geq 10% OF THE TIME: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 6. SPIKED SAMPLES ARE ANALYZED \geq 10% OF THE TIME: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 7. COMMERCIAL LABORATORY USED: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| a. LAB NAME: <u>Ana-Lab</u> | |
| b. LAB ADDRESS: <u>4270 Viking Drive, Suite A, Bossier City, LA 71111</u> | |
| c. PARAMETERS PERFORMED: <u>Ammonia, Phosphorus, Nitrate-Nitrite Nitrogen, Total Cyanide,</u> | |
| 8. BIOMONITORING PROCEDURES ADEQUATE: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| a. PROPER ORGANISMS USED: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| b. PROPER DILUTION SERIES FOLLOWED: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| c. PROPER TEST METHODS AND DURATION: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| d. RETESTS AND/OR TRE PERFORMED AS REQUIRED: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |

| SECTION G: EFFLUENT/RECEIVING WATERS OBSERVATIONS | | | | | | | |
|--|-----------|--------|-----------|--------------|-----------------|---|-------|
| BASED ON VISUAL OBSERVATIONS ONLY | | | | | | <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE | |
| DETAILS: | | | | | | | |
| OUTFALL #: | OIL SHEEN | GREASE | TURBIDITY | VISIBLE FOAM | FLOATING SOLIDS | COLOR | OTHER |
| 001 | N | N | N | N | N | Colorless | -- |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| SECTION H: SLUDGE DISPOSAL | | | | | | | |
| SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS | | | | | | <input type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE | |
| DETAILS: | | | | | | | |
| 1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY: | | | | | | <input type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE | |
| 2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503: | | | | | | <input type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE | |
| 3. FOR LAND APPLIED SLUDGE, TYPE OF LAND APPLIED TO: (E.G., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE): | | | | | | | |
| | | | | | | | |
| SECTION I: SAMPLING INSPECTION PROCEDURES | | | | | | | |
| SAMPLE RESULTS WITHIN PERMIT REQUIREMENTS | | | | | | <input type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE | |
| DETAILS: | | | | | | | |
| 1. SAMPLES OBTAINED THIS INSPECTION: | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE | |
| 2. TYPE OF SAMPLE: <input type="checkbox"/> GRAB:__ <input type="checkbox"/> COMPOSITE:__ METHOD:__ FREQUENCY: | | | | | | | |
| 3. SAMPLES PRESERVED: | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE | |
| 4. FLOW PROPORTIONED SAMPLES OBTAINED: | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE | |
| 5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE: | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE | |
| 6. SAMPLE REPRESENTATIVE OF VOLUME AND NATURE OF DISCHARGE: | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE | |
| 7. SAMPLE SPLIT WITH PERMITTEE: | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE | |
| 8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED: | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE | |
| 9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT: | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE | |
| | | | | | | | |
| SECTION J: STORM WATER POLLUTION PREVENTION PLAN | | | | | | | |
| STORM WATER MANAGEMENT MEETS PERMIT REQUIREMENTS | | | | | | <input type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE | |
| DETAILS: | | | | | | | |
| 1. SWPPP UPDATED AS NEEDED:__ DATE OF LAST UPDATE: | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE | |
| 2. SITE MAP INCLUDING ALL DISCHARGES AND SURFACE WATERS: | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE | |
| 3. POLLUTION PREVENTION TEAM IDENTIFIED: | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE | |
| 4. POLLUTION PREVENTION TEAM PROPERLY TRAINED: | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE | |
| 5. LIST OF POTENTIAL POLLUTANT SOURCES: | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE | |
| 6. LIST OF POTENTIAL SOURCES AND PAST SPILLS AND LEAKS: | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE | |
| 7. ALL NON-STORM WATER DISCHARGES ARE AUTHORIZED: | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE | |
| 8. LIST OF STRUCTURAL BMPS: | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE | |
| 9. LIST OF NON-STRUCTURAL BMPS: | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE | |
| 10. BMPS PROPERLY OPERATED AND MAINTAINED: | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE | |
| 11. INSPECTIONS CONDUCTED AS REQUIRED: | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE | |
| | | | | | | | |

FLOW CALCULATION SHEET

Date: **2/9/2023** Time: **12:47**

Head in Inches: **4.44"** Feet: **0.37'**

Type & Size of Primary Flow Measurement Device: **18" Parshall Flume**

Name & Model of Secondary Flow Measurement Device: **Totalizer**

Date of last Calibration of Secondary Flow Device: **Bi-weekly checks**

Recorded Flow at Date & Time Listed Above: **589** (Facility Flow Meter)

Calculated Flow at Date & Time Listed Above: **583.6**

(Flow is calculated using flow charts in: ISCO Open Channel Flow Measurement Handbook-5th Edition)

| | | | | |
|------------------|-------------------------|----------|-------------------------|--------------|
| % Error = | Recorded Value | - | Calculated Value | X 100 |
| | Calculated Value | | | |

| | | | | |
|------------------|------------|----------|------------|--------------|
| % Error = | 589 | - | 583 | X 100 |
| | 583 | | | |

| | | |
|------------------|------------|--------------|
| % Error = | 6 | X 100 |
| | 583 | |

| | | |
|------------------|-------------|--------------|
| % Error = | 0.01 | X 100 |
|------------------|-------------|--------------|

| | | |
|------------------|----------|----------|
| % Error = | 1 | % |
|------------------|----------|----------|

Comments: **Within 10%**

DMR Calculation Check

Reporting Period: From 2022 12 01 To 2022 12 31
 Year Month Day Year Month Day

Parameter Checked: TSS

| | Loading Mass Mo. Avg. - lbs/day | Concentration Monthly Mo. Avg. - mg/l | 7-day Avg. - mg/l |
|-------------------|---------------------------------------|---|-------------------|
| Reported Value: | <u>206.03</u> | <u>16.9</u> | <u>30.97</u> |
| Calculated Value: | <u>206.03</u> | <u>16.9</u> | <u>30.97</u> |
| Permit Value: | <u>437.9</u> | <u>15</u> | <u>22.5</u> |

If calculated value does not equal reported value, explain:

Equal

Office of Water Quality Photographic Evidence Sheet

| | | | |
|---------------|--------------------------------------|----------|-------------------|
| Location: | Nashville WWTP | | |
| Photographer: | Michael Young | Date: | 02/09/2023 |
| Witness: | Trey Butler, Robert Diaz | Time: | 12:07 |
| | | Photo #: | 1 |
| Description: | Bar and grit screen dumpster. | | |



| | | | |
|---------------|---|----------|-------------------|
| Photographer: | Michael Young | Date: | 02/09/2023 |
| Witness: | Trey Butler, Robert Diaz | Time: | 12:07 |
| | | Photo #: | 2 |
| Description: | Equilization basin with little to no free-board. | | |



Office of Water Quality Photographic Evidence Sheet

| | | | |
|---------------|--|----------|-------------------|
| Location: | Nashville WWTP | | |
| Photographer: | Michael Young | Date: | 02/09/2023 |
| Witness: | Trey Butler, Robert Diaz | Time: | 12:08 |
| | | Photo #: | 3 |
| Description: | Equilization basin with little to no freeboard. | | |



| | | | |
|---------------|---|----------|-------------------|
| Photographer: | Michael Young | Date: | 02/09/2023 |
| Witness: | Trey Butler, Robert Diaz | Time: | 12:18 |
| | | Photo #: | 4 |
| Description: | Unpermitted discharge occurring from the low water crossing on the equalization basin. | | |



Office of Water Quality Photographic Evidence Sheet

| | | | |
|---------------|---|----------|-------------------|
| Location: | Nashville WWTP | | |
| Photographer: | Michael Young | Date: | 02/09/2023 |
| Witness: | Trey Butler, Robert Diaz | Time: | 12:18 |
| | | Photo #: | 5 |
| Description: | Unpermitted discharge from equalization basin. | | |



| | | | |
|---------------|---|----------|-------------------|
| Photographer: | Michael Young | Date: | 02/09/2023 |
| Witness: | Trey Butler, Robert Diaz | Time: | 12:18 |
| | | Photo #: | 6 |
| Description: | Unpermitted discharge from low water crossing across equalization basin. | | |



Office of Water Quality Photographic Evidence Sheet

| | | | |
|---------------|--|----------|-------------------|
| Location: | Nashville WWTP | | |
| Photographer: | Michael Young | Date: | 02/09/2023 |
| Witness: | Trey Butler, Robert Diaz | Time: | 12:31 |
| | | Photo #: | 7 |
| Description: | Aeration basin with activated sludge. | | |



| | | | |
|---------------|--|----------|-------------------|
| Photographer: | Michael Young | Date: | 02/09/2023 |
| Witness: | Trey Butler, Robert Diaz | Time: | 12:31 |
| | | Photo #: | 8 |
| Description: | Second aeration basin with some minor accumulations of sludge blanketing. | | |



Office of Water Quality Photographic Evidence Sheet

| | | | |
|---------------|---|----------|-------------------|
| Location: | Nashville WWTP | | |
| Photographer: | Michael Young | Date: | 02/09/2023 |
| Witness: | Trey Butler, Robert Diaz | Time: | 12:32 |
| | | Photo #: | 9 |
| Description: | Second aeration basin with some minor accumulations of sludge. | | |



| | | | |
|---------------|--|----------|-------------------|
| Photographer: | Michael Young | Date: | 02/09/2023 |
| Witness: | Trey Butler, Robert Diaz | Time: | 12:32 |
| | | Photo #: | 10 |
| Description: | View of second aeration basin with light accumulations of sludge. | | |



Office of Water Quality Photographic Evidence Sheet

| | | | |
|---------------|---|----------|-------------------|
| Location: | Nashville WWTP | | |
| Photographer: | Michael Young | Date: | 02/09/2023 |
| Witness: | Trey Butler, Robert Diaz | Time: | 12:34 |
| | | Photo #: | 11 |
| Description: | Second aeration basin with some accumulating sludge. | | |



| | | | |
|---------------|--|----------|-------------------|
| Photographer: | Michael Young | Date: | 02/09/2023 |
| Witness: | Trey Butler, Robert Diaz | Time: | 12:34 |
| | | Photo #: | 12 |
| Description: | Discharge from the aeration basin to the clarifier. | | |



Office of Water Quality Photographic Evidence Sheet

| | | | |
|---------------|---|----------|-------------------|
| Location: | Nashville WWTP | | |
| Photographer: | Michael Young | Date: | 02/09/2023 |
| Witness: | Trey Butler, Robert Diaz | Time: | 12:41 |
| | | Photo #: | 13 |
| Description: | Clarifier with only minor algae at the top of the clarifier. | | |



| | | | |
|---------------|--|----------|-------------------|
| Photographer: | Michael Young | Date: | 02/09/2023 |
| Witness: | Trey Butler, Robert Diaz | Time: | 12:41 |
| | | Photo #: | 14 |
| Description: | Sweeping arm in operation in clarifier. | | |

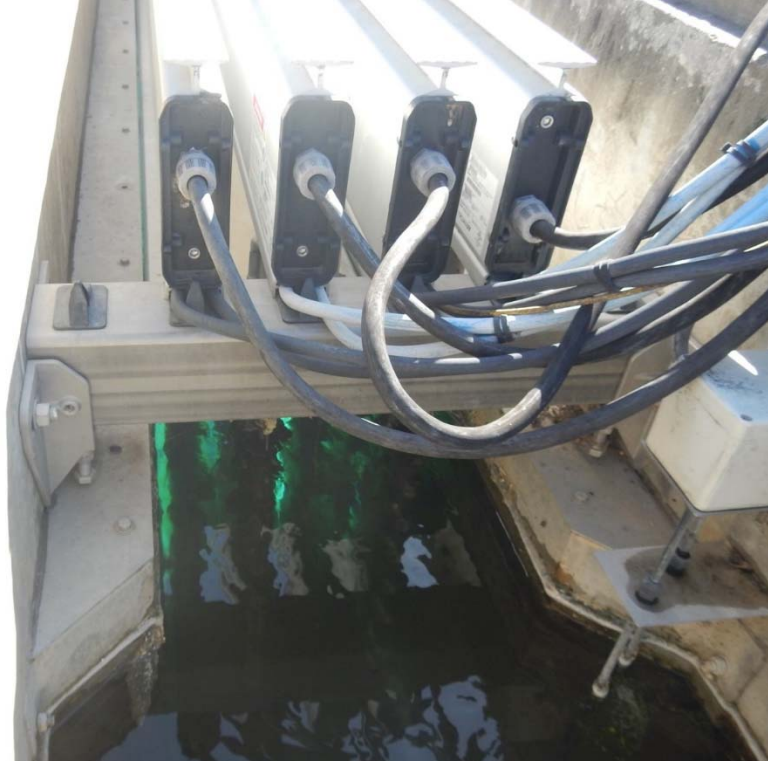


Office of Water Quality Photographic Evidence Sheet

| | | | | | |
|---------------|--|-------|-------------------|----------|--------------|
| Location: | Nashville WWTP | | | | |
| Photographer: | Michael Young | Date: | 02/09/2023 | Time: | 12:42 |
| Witness: | Trey Butler, Robert Diaz | | | Photo #: | 15 |
| Description: | Clarifier with no accumulation of objects at the surface. | | | | |



| | | | | | |
|---------------|---|-------|-------------------|----------|--------------|
| Photographer: | Michael Young | Date: | 02/09/2023 | Time: | 12:44 |
| Witness: | Trey Butler, Robert Diaz | | | Photo #: | 16 |
| Description: | UV light system treating effluent prior to sampling. | | | | |



Office of Water Quality Photographic Evidence Sheet

| | | | | | |
|---------------|--|-------|-------------------|----------|--------------|
| Location: | Nashville WWTP | | | | |
| Photographer: | Michael Young | Date: | 02/09/2023 | Time: | 12:46 |
| Witness: | Trey Butler, Robert Diaz | | | Photo #: | 17 |
| Description: | 18" Parshall flume measuring the flow of Outfall 001. | | | | |

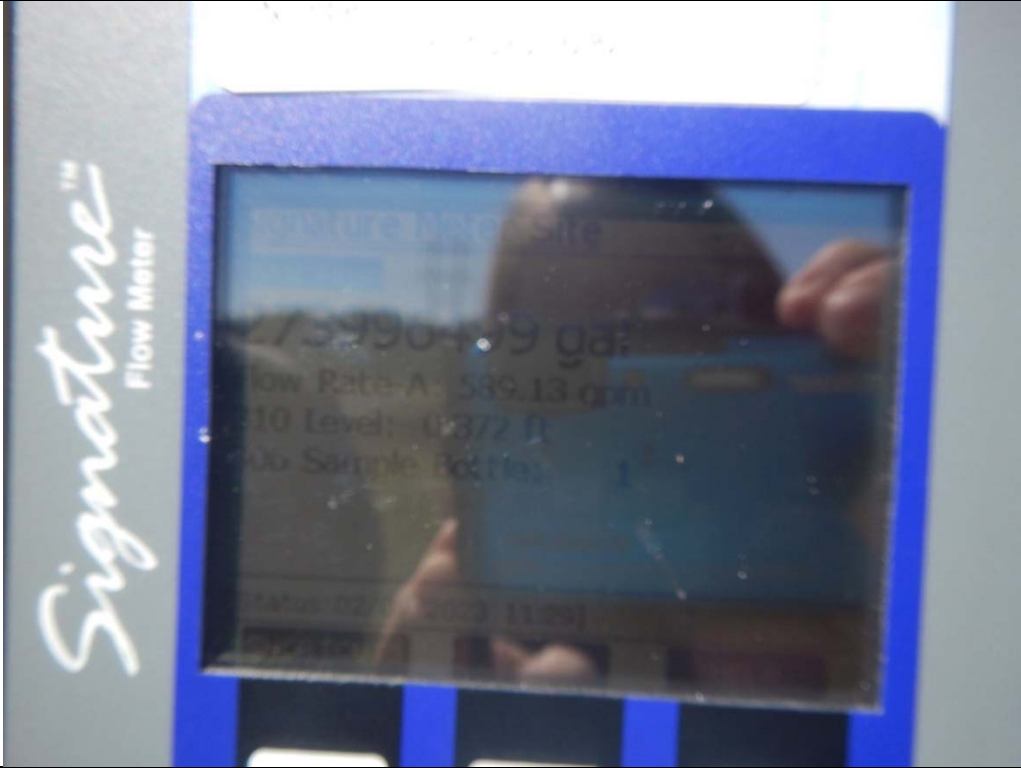


| | | | | | |
|---------------|---|-------|-------------------|----------|--------------|
| Photographer: | Michael Young | Date: | 02/09/2023 | Time: | 12:46 |
| Witness: | Trey Butler, Robert Diaz | | | Photo #: | 18 |
| Description: | Staff gage for Parshall flume used to perform flow checks. | | | | |



Office of Water Quality Photographic Evidence Sheet

| | | | |
|---------------|---|----------|-------------------|
| Location: | Nashville WWTP | | |
| Photographer: | Michael Young | Date: | 02/09/2023 |
| Witness: | Trey Butler, Robert Diaz | Time: | 12:47 |
| | | Photo #: | 19 |
| Description: | Totalizer readout for Outfall 001. | | |



| | | | |
|---------------|--|----------|-------------------|
| Photographer: | Michael Young | Date: | 02/09/2023 |
| Witness: | Trey Butler, Robert Diaz | Time: | 12:48 |
| | | Photo #: | 20 |
| Description: | Thermometer in the composite sampler. | | |



Office of Water Quality Photographic Evidence Sheet

| | | | |
|---------------|--|-------|-------------------|
| Location: | Nashville WWTP | | |
| Photographer: | Michael Young | Date: | 02/09/2023 |
| Witness: | Trey Butler, Robert Diaz | Time: | 12:50 |
| Description: | Step-aeration following flow measurements and location of sampling. | | |



| | | | |
|---------------|---|-------|-------------------|
| Photographer: | Michael Young | Date: | 02/09/2023 |
| Witness: | Trey Butler, Robert Diaz | Time: | 12:51 |
| Description: | Calibration information for totalizer. | | |

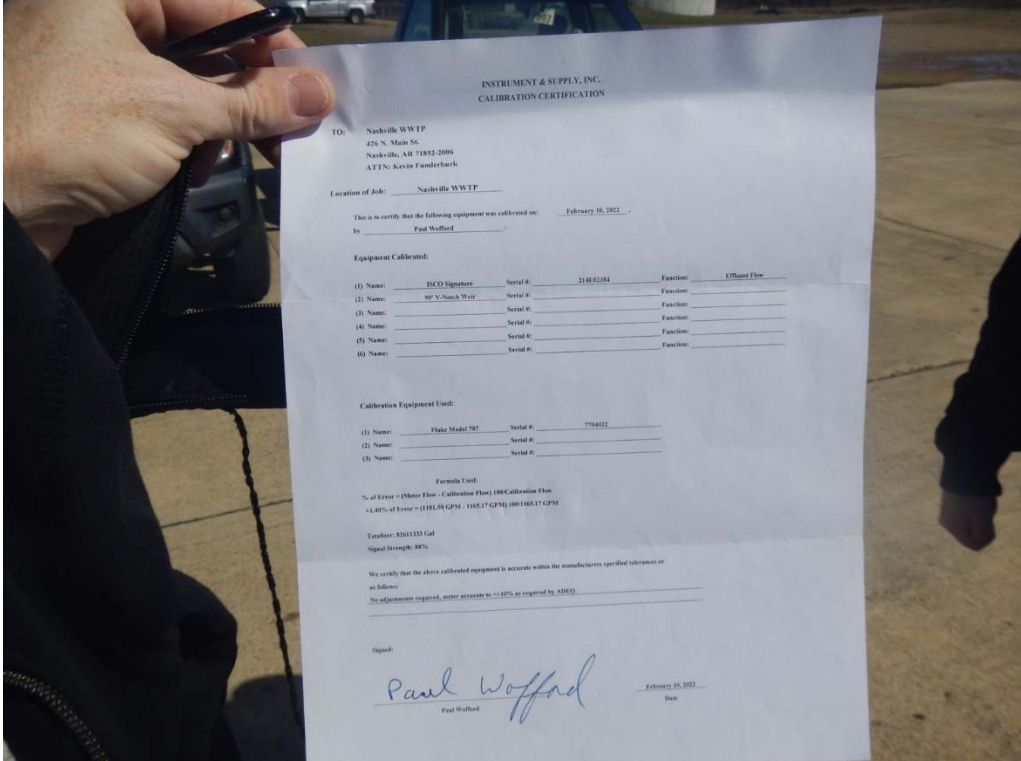


Figure 1. Overview of the City of Nashville WWTP with treatment components identified.

