



ARKANSAS
Department of Environmental Quality

December 30, 2013

Larry Dunaway, Public Works Director
City of Nashville
426 North Main Street
Nashville, AR 71852

RE: Compliance Inspections (Howard Co)

AFIN: 31-00036

NPDES Permit No.: AR0021776 CEI

AR0021776 CSI

AR0021776 SSO

AR0021776 PCI

AR0021776C

31-00274

Permit No.: 4794-WG-WR-1

Dear Mr. Dunaway:

On December 2, 2013, Inspector Supervisor Kerri McCabe and I performed a compliance sampling inspection of the waste water treatment facility, a routine compliance inspection of the land application permit and a routine compliance inspection of the WWTP Construction permit and on December 4, 2013, I performed a pretreatment inspection in accordance with the provisions of the Federal Clean Water Act, the Arkansas Water and Air Pollution Control Act, and the regulations promulgated thereunder. This inspection revealed the following violations:

Wastewater Treatment Plant

1. For the purposes of calculating the mass loadings, the average flow measurement during the 6-hr composite sample period should be used for the parameters requiring composite samples and the instantaneous flow measurement taken at the time the grab samples are collected should be used for the parameters requiring grab samples. Currently the facility is calculating all mass loadings using a 24 hour flow.
2. A DMR calculation check revealed an error in calculating the loadings for Ammonia Nitrogen for July 2013. No reason for the calculation error could be found.
3. The exact location of sample collection is not noted on the facility records for the parameters sent to the contract lab for analyses.
4. The name of the individual collecting the sample is not noted on the facility records for the parameters sent to the contract lab for analyses.

5. Not all sample collection times and analyses times are accurate. Facility records should indicate the exact time each sample is collected and the exact time each sample is analyzed.
6. The identification of the analyst recorded on the facility bench sheets is not always accurate. Facility records should indicate the exact individual performing the analyses.
7. An excessive amount of sludge was observed in the aeration lagoons. This sludge should be removed in order to maintain the designed volume and achieve maximum treatment. Please consult with the ADEQ Permits Branch staff as specific permitting requirements may be needed for the disposal of this sludge.
8. Excessive sewage-related solids were found in the aeration and facultative lagoons. A primary bar screen should be installed to collect the solids prior to entering the system.
9. Interior levee bank erosion and excessively tall vegetation was noted in various locations.
10. Duplicates of the in-house analyzed parameters are not being performed as required. No documentation that duplicates have been performed after April 2013 could be located.
11. The NH₃-N monthly average concentration and monthly average lbs/day exceeded the permit limits.

* The permit requires daily flow monitoring. Recommend that facility flow records indicated a “no flow” on days that no discharge occurred at the plant. A blank value might give the false impression that a discharge did occur but no flow value was documented.

Sanitary Sewer Overflow

* No violations of the permit were found during this inspection.

Pretreatment

1. The current program requires that the City sample and inspect the Categorical Industrial Users twice per year. However, these sampling and inspection events are only performed once per year.

WWTP Construction Permit

1. This permit states that “if the construction site will disturb in excess of one (1) acre, the permittee must comply with the terms of the Stormwater Construction General Permit Number ARR150000 prior to the start of construction. Best Management Practices (BMPs) must be in place regardless of the size.” No stormwater controls were observed to be in place at the time of the inspection.


Land Application Permit

* No violations of this permit were found during the inspection.

The above item requires your immediate attention. Please submit a written response to this finding to the Water Division Inspection Branch, of this Department. This response should be mailed to the address below, or e-mailed to Water-Inspection-report@adeq.state.ar.us. This response should contain documentation describing the course of action taken to correct each item noted. This corrective action should be completed as soon as possible, and the written response with all necessary documentations (i.e. photos) is due by **January 13, 2014**.

If I can be of any assistance, please contact me at (870) 389-6970.

Sincerely,



Shan Lynch
District 7 Field Inspector
Water Division



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Washington, D.C. 20460

NPDES Compliance Inspection Report

Form Approved
OMB No. 2040-0003

Section A: National Data System Coding

Transaction Code	NPDES	Yr/Mo/Day	Inspec. Type	Inspector	Fac. Type
1 N 2 5 3 A R 0 0 2 1 7 7 6 11 12 1 3 1 2 0 2 17 18 C 19 S 20 1	Remarks				
Inspection Work Days		Facility Evaluation Rating		BI QA -----Reserved-----	
67 69		70 2		71 N 72 N 73 74 75 80	

Section B: Facility Data

Name and Location of Facility Inspected (<i>For industrial users discharging to POTW, also include POTW name and NPDES permit number</i>) City of Nashville Wastewater Treatment Plant Hwy 27 ~ 1/2 mile south of town	Entry Time/Date 0841 / 12-2-2013 0825 / 12-3-2013	Permit Effective Date February 1, 2009
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) Chip Colston / Chief Operator / (870) 845-4522 Greg Strawn / Water & Sewer Supt. / (870) 845-7400 Ed Carlyle / Pretreatment Coordinator / (870) 845-4522	Exit Time/Date 1421 / 12-2-2013 0848 / 12-3-2013	Permit Expiration Date January 31, 2014
Name, Address of Responsible Official/Title/Phone and Fax Number Larry Dunaway / Public Works Director / (870) 845-4015 426 North Main Street Nashville, AR 71852	Contacted Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Other Facility Data Major Municipal CEI PDS# 075293

Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

S	Permit	S	Flow Measurement	M	Operations & Maintenance	S	Sampling
U	Records/Reports	M	Self-Monitoring Program	N	Sludge Handling/Disposal	N	Pollution Prevention
S	Facility Site Review	N	Compliance Schedules	N	Pretreatment	N	Multimedia
S	Effluent/Receiving Waters	M	Laboratory	N	Storm Water	U	Other: CSI

Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

* See "Further Explanation" page

Name(s) and Signature(s) of Inspector(s) Shan Lynch <i>Shan Lynch</i>	Agency/Office/Telephone ADEQ / Dist. 7 / 870 389-6970	Date December 26, 2013
Signature of Reviewer Kerri McCabe <i>Kerri McCabe</i>	Agency/Office/Phone and Fax Numbers ADEQ / NLR / 501-682-0642	Date December 27, 2013

SECTION A: PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS S M U NA NE

DETAILS:

- 1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE: Y N NA NE
- 2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES: Y N NA NE
- 3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT: Y N NA NE
- 4. ALL DISCHARGES ARE PERMITTED: Y N NA NE

SECTION B: RECORDKEEPING AND REPORTING EVALUATION

RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT S M U NA NE

DETAILS:

- 1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRS: Y N NA NE
- 2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE: S M U NA NE
 - a. DATES AND TIME(S) OF SAMPLING: Y N NA NE
 - b. EXACT LOCATION(S) OF SAMPLING: Y N NA NE
 - c. NAME OF INDIVIDUAL PERFORMING SAMPLING: Y N NA NE
 - d. ANALYTICAL METHODS AND TECHNIQUES: Y N NA NE
 - e. RESULTS OF CALIBRATIONS: Y N NA NE
 - f. RESULTS OF ANALYSES: Y N NA NE
 - g. DATES AND TIMES OF ANALYSES: Y N NA NE
 - h. NAME OF PERSON(S) PERFORMING ANALYSES: Y N NA NE
- 3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE: S M U NA NE
- 4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR: S M U NA NE
- 5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA: Y N NA NE

SECTION C: OPERATIONS AND MAINTENANCE

TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED S M U NA NE

DETAILS:

- 1. TREATMENT UNITS PROPERLY OPERATED: S M U NA NE
- 2. TREATMENT UNITS PROPERLY MAINTAINED: S M U NA NE
- 3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED: S M U NA NE
- 4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE: S M U NA NE
- 5. ALL NEEDED TREATMENT UNITS IN SERVICE: S M U NA NE
- 6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED: S M U NA NE
- 7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED: S M U NA NE
- 8. OPERATION AND MAINTENANCE MANUAL AVAILABLE: Y N NA NE
- 9. STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED: Y N NA NE
- 10. PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED: Y N NA NE
- 11. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR: Y N NA NE
- 12. IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED: Y N NA NE
- 13. HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS: Y N NA NE
- 14. HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT: Y N NA NE
- 15. IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT: Y N NA NE

SECTION D: SAMPLING

PERMITTEE SAMPLING MEETS PERMIT REQUIREMENTS

S M U NA 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

S M U NA NE

DETAILS:

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED: __ TYPE OF DEVICE: <u>90 V-notch weir</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:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
4. CALIBRATION FREQUENCY ADEQUATE: <u>April 13, 2010</u>	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" 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

S M U NA 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 type="checkbox"/> Y <input checked="" 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>American Interplex</u> <u>Ana-Lab Corp.</u>	
b. LAB ADDRESS: <u>8600 Kanis Rd.; Little Rock, AR 72204</u> <u>PO Box 9000; Kilgore, TX 75663</u>	
c. PARAMETERS PERFORMED: <u>biomonitoring</u> <u>NH3-N, Total Phosphorous, Nitrite + Nitrite N, Cyanide, Selenium</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 type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE

SECTION G: EFFLUENT/RECEIVING WATERS OBSERVATIONS

BASED ON VISUAL OBSERVATIONS ONLY S M U NA NE

DETAILS:

OUTFALL #:	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOATING SOLIDS	COLOR	OTHER
001	none	none	none	none	none	clear	NA

SECTION H: SLUDGE DISPOSAL

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS S M U NA NE

DETAILS:

1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY:	<input type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input checked="" 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 checked="" 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 S M U NA NE

DETAILS:

1. SAMPLES OBTAINED THIS INSPECTION:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
2. TYPE OF SAMPLE: <input checked="" type="checkbox"/> GRAB:__ <input checked="" type="checkbox"/> COMPOSITE:__ METHOD:__ FREQUENCY:	
3. SAMPLES PRESERVED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
4. FLOW PROPORTIONED SAMPLES OBTAINED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
6. SAMPLE REPRESENTATIVE OF VOLUME AND NATURE OF DISCHARGE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
7. SAMPLE SPLIT WITH PERMITTEE:	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE

SECTION J: STORM WATER POLLUTION PREVENTION PLAN

STORM WATER MANAGEMENT MEETS PERMIT REQUIREMENTS S M U NA 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:	12-2-2013	Time:	1030	
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Head in Inches:	13"	Feet:	1.08	
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Type & Size of Primary Flow Measurement Device: **90 degree V-notch weir**

Name & Model of Secondary Flow Measurement Device: **Milltronics HydroRanger**

Date of last Calibration of Secondary Flow Device: **April 13, 2010**

Recorded Flow at Date & Time Listed Above:	1458 gpm	(Facility Flow Meter)
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Calculated Flow at Date & Time Listed Above:	1360 gpm	
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(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 =	1458	-	1360	X 100	
	1360				

% Error =	98	X 100	
	1360		

% Error =	0.0720	X 100	
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% Error =	7.2	%	
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Comments:

DMR Calculation Check

Reporting Period: From 13 07 01 To 13 07 31
Year Month Day Year Month Day

Parameter Checked: NH3-N

	Loading Mass Mo. Avg. - lbs/day	Concentration Monthly Mo. Avg. - mg/l	7-day Avg. - mg/l
Reported Value:	<u>3</u>	<u>.254</u>	<u>.359</u>
Calculated Value:	<u>2.52</u>	<u>.257</u>	<u>.359</u>
Permit Value:	<u>38</u>	<u>2</u>	<u>3</u>

If calculated value does not equal reported value, explain:

No explanation could be found as to the reason for the discrepancy.

CSI Sampling Results

Effluent Characteristics	Monthly Ave. – mass	Monthly Ave. – mass limit	Monthly Ave. - concentration	Monthly Ave. – concentration limit	7 day Ave. - concentration	7 day Ave. – concentration limit
CBOD	24.45 lbs/day	192	1.43 mg/l	10	1.43 mg/l	15
TSS	76.94 lbs/day	288	4.5 mg/l	15	4.5 mg/l	22.5
NH3-N	112.67 lbs/day	96	6.59 mg/l	5	6.59 mg/l	7.5
T. Phosphorus	5.52 lbs/day	report	0.323 mg/l	report	0.323 mg/l	report
NO2+NO3-N	49.75 lbs/day	report	2.91 mg/l	report	2.91 mg/l	report
Tot. Rec. Selenium	0.034 lbs/day	0.148	<2 µg/l	7.73µg/l	<2 µg/l	15.5µg/l
Fecal coliform	NA	NA	<1 col/100 ml	1000	<1 col/100 ml	2000

TRC 0.02 / 0.03
pH 6.90 / 6.95
DO 12.71 / 12.76
24 hr. avg. flow 2.05 mgd
Grab flow 2.05 mgd

*** The NH3-N monthly average concentration and monthly average lbs/day exceeded the permit limits.**

NPDES Compliance Inspection Report Further Explanation

Sec. B – For the purposes of calculating the mass loadings, the average flow during the 6-hr. composite sample period should be used for the parameters requiring composite samples and the instantaneous flow taken at the time the grab samples are collected should be used for the parameters requiring grab samples. Currently the facility is calculating all mass loadings using a 24 hour flow.

Sec. B, 1 – A DMR calculation check revealed an error in calculating the loadings for Ammonia Nitrogen for July, 2013. No reason for the calculation error could be found.

Sec. B, 2, b – The exact location of sample collection is not noted on the facility records for the parameters sent to the contract lab for analyses.

Sec. B, 2, c – The name of the individual collecting the sample is not noted on the facility records for the parameters sent to the contract lab for analyses.

Sec. B, 2, a & g – Not all sample collection times and analyses times are accurate. Facility records should indicate the exact time each sample is collected and the exact time each sample is analyzed.

Sec. B, 2, h – The identification of the analyst recorded on the facility bench sheets is not always accurate. Facility records should indicate the exact individual performing the analyses.

Sec. C, 2 – An excessive amount of sludge was observed in the aeration lagoons. This sludge should be removed in order to maintain the designed volume and achieve maximum treatment. Please consult with ADEQ Permits staff as specific permitting requirements may be needed for the disposal of this sludge.

Sec. C, 2 – Excessive sewage related solids were found in the aeration and facultative lagoons. A primary bar screen should be installed to collect the solids prior to entering the system.

Sec. C, 2 – Interior levee bank erosion and excessively tall vegetation was noted in various locations.

Sec. F, 5 – Duplicates of the in-house analyzed parameters are not being performed as required. No documentation that duplicates have been performed after April 2013 could be located.

Sec. I - The NH₃-N monthly average concentration and monthly average lbs/day exceeded the permit limits.

* The permit requires daily flow monitoring. Recommend that facility flow records indicated a “no flow” on days that no discharge occurred at the plant. A blank value might give the false impression that a discharge did occur but no flow value was documented.

City of Nashville
426 North Main Street
Nashville, AR 71852
1-870-845-4015

January 3, 2014

Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118-5317

Mr. Shan Lynch
District 7 Field Inspector
Water Division

Re: Reply to Inspection Letter dated December 30, 2013

Dear Mr. Lynch:

We appreciate all your comments and requirements noted during your last inspection. Inspections are eye-openers to tell us at the waste treatment plant and laboratory necessary changes needed to help us in our daily operations. This letter answers and corrects those necessary changes. It is our intention to tell you that we take your comments seriously and have taken actions to correct any problems found. We look forward to your next visit in the near future.

Attachment follows. If further changes or comments are needed, we will address them in a quick fashion. You may contact me at 870-845-4015.

Sincerely,



Larry Dunaway
Public Works Director

Cc: Greg Strawn, Water/Wastewater Superintendent
Ed Carlyle, Jr., Pretreatment/Laboratory

Wastewater Treatment Plant

1. For the purpose of calculating the mass loadings, the average flow measurement during the 6-hr composite sample period should be used for the parameters requiring composite samples and the instantaneous flow measurement taken at the time the grab samples are collected should be used for the parameters requiring grab samples. Currently the facility is calculating all mass loadings using a 24 hour flow.

REPLY (1): We have changed our lab sheets to incorporate records for flow of 6-hr and 24 hour flow rates. The six hour composite flow rate is as follows: the beginning time (10:00 am), the ending time (16:00 pm), record the total, and who is responsible for recording the results. We also record from the wastewater laboratory sheets the 24-hour flow rate for DMR records.

2. A DMR calculation check revealed an error in calculating the loadings for Ammonia Nitrogen for July 2013. No reason for the calculation error could be found.

REPLY (2): Human Error, more time will be implemented and a triple check method to make sure all calculations are correct and the person recording such results knows correct procedures.

3. The exact location of sample collection is not noted on the facility records for the parameters sent to the contract lab for analyses.

REPLY (3): Ed Carlyle, Laboratory Technician, has contacted and talked with Ben Head, AnaLab Supervisor, the location of samples taken will be applied on the laboratory sheets or else written in under comments by sampling personnel.

4. The name of the individual collecting the sample is not noted on the facility records for the parameters sent to the contract lab for analyses.

REPLY (4): The person collecting the sample now is responsible for filling out the needed data and signature in his or her own writing as per new laboratory record keeping lab sheet. All personnel have been trained and now know their responsibility concerning record keeping. Two lab technicians have returned to city hall to their own jobs as their training is over with, this has eliminated any confusion with records and signatures.

5. Not all sample collection times and analyses times are accurate. Facility records should indicate the exact time each sample is collected and the exact time each sample is analyzed.

REPLY (5): See reply number 4.

6. The identification of the analyst recorded on the facility bench sheets is not always accurate. Facility records should indicate the exact individual performing the analyses.

REPLY (6): Personnel have been trained and know their responsibilities of record keeping and some personnel have been removed from the laboratory which will eliminate some of the confusion with all the record keeping.

7. An excessive amount of sludge was observed in the aeration lagoons. This sludge should be removed in order to maintain the designed volume and achieve maximum treatment. Please consult with the ADEQ Permits Branch staff as specific permitting requirements may be needed for the disposal of this sludge.

REPLY (7): New permit requirements for the new wastewater treatment plant and construction with the new sludge removal system will solve this problem. Nashville has never had the system to remove sludge. We now have incorporated sludge removal with this new system.

8. Excessive sewage-related solids were found in the aeration and facultative lagoons. A primary bar screen should be installed to collect the solids prior to entering the system.

REPLY (8): The new treatment system currently under construction has plans to install a bar screen within the influent collection system.

9. Interior levee bank erosion and excessively tall vegetation was noted in various locations.

REPLY (9): Steps have already been taken to improve levee bank erosion by the placement of rip-rap around the banks of the holding pond. Excessive tall vegetation will be scheduled for removal by the distribution personnel in the near future.

10. Duplicates of the in-house analyzed parameters are not being performed as required. No documentation that duplicates have been performed after April 2013 could be located.

REPLY (10): A new laboratory bench sheet has been developed to incorporate room for duplicates for all analyses performed by the lab. Dates are monthly recorded on a lab calendar for the year.

11. The NH₃-N monthly average concentration and monthly average lbs/day exceeded the permit limits.

REPLY (11): The construction to be completed by the end of 2014 of a new waste

treatment plant is planned around this problem and should eliminate any problems concerning ammonia.

Sanitary Sewer Overflow

No violations of the permit were found during the inspection.

Pretreatment

1. The current program requires that the City sample and inspect the Categorical Industrial Users twice per year. However, these sampling and inspection events are only performed once per year.

REPLY (1): On December 5, 2013 a letter was sent to Jan-Eze Plating which changed the sampling and inspection requirements from two per year to only once per year. This was an amendment to the current discharge permit. In accordance with 40 CFR 403.8 all significant or categorical industrial users must be inspected and sampled at least once per year. Recent inspections have noticed no discrepancies and repeated information year after year, thus the reduction of sampling and inspections.

WWTP Construction Permit

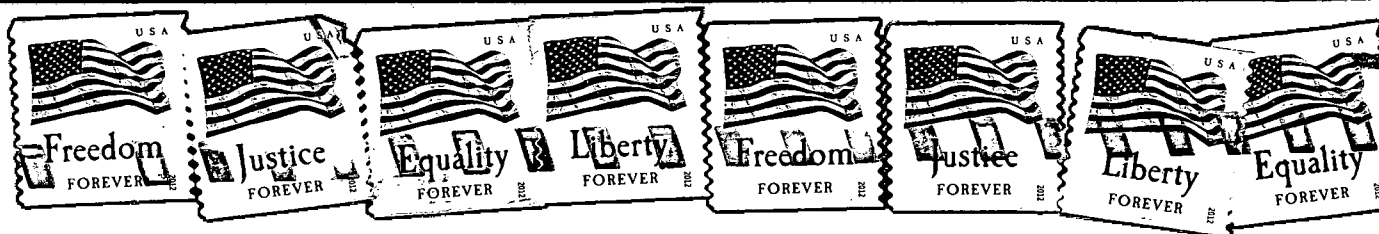
1. This permit states that "if the construction site will disturb in excess of one (1) acre, the permitted must comply with the terms of the Storm water Construction General Permit Number ARR15000 prior to the start of construction. Best Management Practices (BMP's) must be in place regardless of the size." No storm water controls were observed to be in place at the time of the inspection.

REPLY (1): A storm water permit has recently been obtain and is in full effect. Nashville Public Director, Larry Dunaway, has fulfilled this requirement. All questions of concern can be answered by contacting Larry at 870-845-4013.

Land Application Permit

No violations of this permit were found during the inspection.

CITY OF NASHVILLE
LARRY DUNAWAY
PUBLIC WORKS
DIRECTOR
426 NORTH MAIN STREET
NASHVILLE, AR 71852



FUN 4

State of Arkansas
ADEQ
Attention: Shan Lynch
District 7 Field Inspector
5301 Northshore Dr
North Little Rock, AR 72118-5317



ADEQ

ARKANSAS
Department of Environmental Quality

January 17, 2014

Larry Dunaway, Public Works Director
City of Nashville
426 North Main Street
Nashville, AR 71852

RE: Response to Inspections (Howard Co)

AFIN: 31-00036

NPDES Permit No.: AR0021776

AR0021776C

31-00274

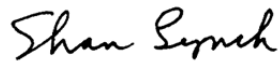
Permit No.: 4794-WG-WR

Dear Mr. Dunaway:

I have reviewed the response pertaining to my December 2, 2013 inspections of the City of Nashville's wastewater treatment facility and the related permits. The information provided sufficiently addresses the violations referenced in my inspection report. At this time, the Department has no further comment concerning this particular inspection. Acceptance of this response by the Department does not preclude any future enforcement action deemed necessary at this site or any other site.

If we need further information concerning this matter, we will contact you. Thank you for your attention to this matter. Should you have any questions, feel free to contact me at 870 389-6970 or you may e-mail me at lynch@adeq.state.ar.us.

Sincerely,



Shan Lynch
District 7 Field Inspector
Water Division