ARKANSAS
ENERGY & ENVIRONMENT

December 3, 2020

WH Calvin Murdock, Utility Manager
City of Forrest City
PO Box 816
Forrest City, AR -723661074

RE: Forrest City Wastewater Treatment Plant Inspections (St. Francis Co)
AFIN: 62-00070 NPDES Permit No.: AR0020087
62-00408 ARR000222

Dear Mr. Murdock:

On September 22, 2020, I performed a Compliance Evaluation Inspection, an SSO/Collection System Inspection, and an Industrial Stormwater Inspection 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 each of the inspection reports is enclosed for your records.

No violations were noted at the time of the inspections. Please refer to each of the attached inspection reports for any comments. If I can be of any assistance, please contact me at mccabe@adeq.state.ar.us or (501) 682-0642.

Sincerely,

Kerri McCabe
Inspector Supervisor, Office of Water Quality
5301 Northshore Drive, North Little Rock, AR, 72118

CC: Joel R Thetford, City of Forrest City, WW Supervisor, thet24@msn.com

ENVIRONMENTAL QUALITY

OFFICE OF WATER QUALITY INSPECTION REPORT

AFIN: **62-00070**	PERMIT #: **AR0020087**	DATE: **9/22/2020**
COUNTY: **62 St. Francis**	PDS #: **114212**	MEDIA: **WN**
GPS LAT: **34.998147** LONG: **-90.835217** LOCATION: **Entrance**		

FACILITY INFORMATION

NAME:
Forrest City Wastewater Treatment Plant
LOCATION:
320 SFC 209
CITY:
Forrest City, AR

RESPONSIBLE OFFICIAL

NAME: / TITLE
WH Calvin Murdock / Utility Manager
COMPANY:
City of Forrest City
MAILING ADDRESS:
303 N Rosser Street PO Box 816
CITY, STATE, ZIP:
Forrest City AR -723661074
PHONE & EXT: / FAX:
870-633-2921 / 870-633-5921
EMAIL:
whcm2@aol.com
CONTACTED DURING INSPECTION: **Yes**

INSPECTION INFORMATION

FACILITY TYPE: **1 - Municipal**	INSPECTOR ID#: **84022 S - State**
FACILITY EVALUATION RATING: **3 - Satisfactory**	INSPECTION TYPE: **Compliance Evaluation**

DATE(S): **9/22/2020** ENTRY TIME: **09:45** EXIT TIME: **12:15**
PERMIT EFFECTIVE DATE: **11/1/2017**
PERMIT EXPIRATION DATE: **10/31/2022**

FAYETTEVILLE SHALE RELATED: **N**
FAYETTEVILLE SHALE VIOLATIONS: **N**

INSPECTION PARTICIPANTS

NAME/TITLE/PHONE/FAX/EMAIL/ETC.:
Edward Gregory, Water Supervisor (Class III/Advanced Industrial; Lic. #007843)
Garrett Davis, Operator (Class I; Lic. #013090)
Joel R Thetford, Wastewater Supervisor (Class III/Advanced Industrial; Lic. #005326) - via email only

AREA EVALUATIONS

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

S	PERMIT	**S**	FLOW MEASUREMENT	**S**	STORMWATER
S	RECORDS/REPORTS	**S**	LABORATORY	**S**	FACILITY SITE REVIEW
M	OPERATION & MAINTENANCE	**S**	EFFLUENT/RECEIVING WATER	**S**	SELF-MONITORING PROGRAM
S	SAMPLING	**S**	SLUDGE HANDLING/DISPOSAL	**S**	PRETREATMENT
******	OTHER:				

SUMMARY OF FINDINGS

No violations noted at the time of the inspection.

Please see attached email dated Sept 23, 2020 sent to city personnel providing immediate feedback regarding the inspection.

GENERAL COMMENTS

On Tue, Sept 22, 2020, an inspection was conducted with the above mentioned inspection participants. The inspection consisted of a site assessment and a records review.

Site Assessment:

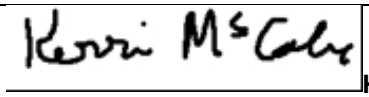
Treatment consists of preliminary (bar screen and grit removal), aeration basins (3; ran parallel) for activated sludge, clarification (3; ran parallel; 15' deep and maintain a 3' blanket), UV disinfection (cleaning frequency based on FCB results), primary/secondary flow measurement, post-aeration, and discharge to Outfall 001. The former lagoon system (two, 72-acre ponds) is used for flow EQ and sludge wasting. If the generator goes down, gates at a splitter box open to direct influent to EQ/sludge lagoons. The water in the EQ/sludge lagoons is either routed back through the treatment system or discharged though the UV unit for discharge to Outfall 001 (bypass).

Only minor issues noted with treatment system: blower system is not maintained properly and has to be bled off and the diffuse air distribution system for the middle aeration basin is not working properly. The middle clarifier is not used due to poor engineered design, but this component is not needed at this time.

City personnel report conducting some process control: aeration basin BOD5/CBOD5, aeration basin TSS, influent flow measurement, and once/week settling test.

Records Review:

Records for April 2019 were requested for review. Records were supplied via email and are deemed complete. The city runs an in-house lab for process control only, and all effluent monitoring, with the exception of instantaneous parameters (flow, DO, and pH), is conducted by a contract lab. No major issues with city documents or contract lab Chains of Custody (COC) and analysis sheets.

INSPECTOR'S SIGNATURE: 	**Kerri McCabe**	DATE: **11/30/2020**
SUPERVISOR'S SIGNATURE: 	**Jason Bolenbaugh**	DATE: **12/3/2020**

SECTION A: PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS	☑S ☐M ☐U ☐NA ☐NE
DETAILS:	
1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE: **Elected mayor has changed to Cedrick Williams.**	☑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: **Operator collects/analyzes flow, DO, and pH; contract labs for other parameters.**	
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: **Preliminary (bar screen and grit removal), aeration basins for activated sludge (ran in parallel), clarifiers (ran in parallel), UV disinfection, post-aeration, and discharge to Outfall 001. Former lagoon system (two, 72-acre ponds) used for flow EQ and sludge wasting.**	
1. TREATMENT UNITS PROPERLY OPERATED:	☑S ☐M ☐U ☐NA ☐NE
2. TREATMENT UNITS PROPERLY MAINTAINED: **Blower and diffuse air system reported to be scheduled for maintenance.**	☐S ☑M ☐U ☐NA ☐NE
3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED: **Two generators onsite.**	☑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: **One aeration basin down due to diffuse air system and one clarifier down due to design.**	☐S ☑M ☐U ☐NA ☐NE
6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED: **One Class III and one Class I; additional personnel from water department.**	☑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: **Former lagoon system can be used.**	☑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: **Operator collects/analyzes flow, DO, and pH; contract labs for other parameters.**	
1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT:	☑Y ☐N ☐NA ☐NE
2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES:	☑Y ☐N ☐NA ☐NE
3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT:	☑Y ☐N ☐NA ☐NE
4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT: **Conduct additional sampling for WET testing water quality.**	☑Y ☐N ☐NA ☐NE
5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT: **Ar, Total Recoverable required for one year only.**	☑Y ☐N ☐NA ☐NE
6. SAMPLE COLLECTION PROCEDURES ADEQUATE:	☑Y ☐N ☐NA ☐NE
a. SAMPLES REFRIGERATED DURING COMPOSITING:	☑Y ☐N ☐NA ☐NE
b. PROPER PRESERVATION TECHNIQUES USED:	☑Y ☐N ☐NA ☐NE
c. CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136:	☑Y ☐N ☐NA ☐NE
7. IF MONITORING IS PERFORMED MORE OFTEN THAN REQUIRED ARE RESULTS REPORTED ON THE DMR:	☐Y ☐N ☑NA ☐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: **Yes** TYPE OF DEVICE: **12" Parshall flume**	☑Y ☐N ☐NA ☐NE
2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED:	☑Y ☐N ☐NA ☐NE
3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED: **Greyline SLT32 (totalizer)**	☑Y ☐N ☐NA ☐NE
4. CALIBRATION FREQUENCY ADEQUATE: **Last calibrated Aug 30, 2020.**	☑Y ☐N ☐NA ☐NE
5. RECORDS MAINTAINED OF CALIBRATION PROCEDURES:	☑Y ☐N ☐NA ☐NE
6. CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE: **Secondary meter is located in office and not readily available for accuracy check at primary device.**	☐Y ☐N ☐NA ☑NE
7. FLOW ENTERING DEVICE WELL DISTRIBUTED ACROSS THE CHANNEL AND FREE OF TURBULENCE:	☑Y ☐N ☐NA ☐NE
8. FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES:	☑Y ☐N ☐NA ☐NE
9. HEAD MEASURED AT PROPER LOCATION:	☑Y ☐N ☐NA ☐NE

SECTION F: LABORATORY	
PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS	☑S ☐M ☐U ☐NA ☐NE
DETAILS: **Operator collects/analyzes flow, DO, and pH; contract labs for other parameters.**	
1. EPA APPROVED ANALYTICAL PROCEDURES USED (40 CFR 136.3 FOR LIQUIDS, 503.8(B) FOR SLUDGES) :	☑Y ☐N ☐NA ☐NE
2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED:	☐Y ☐N ☑NA ☐NE
3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT:	☑Y ☐N ☐NA ☐NE
4. QUALITY CONTROL PROCEDURES ADEQUATE:	☑Y ☐N ☐NA ☐NE
5. DUPLICATE SAMPLES ARE ANALYZED ≥10% OF THE TIME:	☑Y ☐N ☐NA ☐NE
6. SPIKED SAMPLES ARE ANALYZED ≥10% OF THE TIME:	☑Y ☐N ☐NA ☐NE
7. COMMERCIAL LABORATORY USED:	☑Y ☐N ☐NA ☐NE
a. LAB NAME: **Environmental Services Co, Inc.** **Huther and Associates, Inc.**	
b. LAB ADDRESS: **13715 West Markham, Little Rock, AR 72211** **1156 North Bonnie Brae, Denton, TX 76201**	
c. PARAMETERS PERFORMED: **CBOD5, TSS, NH3-N, FCB, TP, NO3+NO2-N, Cu (Total Recoverable), and Ar (Total Recoverable)** **WET**	
8. BIOMONITORING PROCEDURES ADEQUATE:	☑Y ☐N ☐NA ☐NE
a. PROPER ORGANISMS USED:	☑Y ☐N ☐NA ☐NE
b. PROPER DILUTION SERIES FOLLOWED:	☑Y ☐N ☐NA ☐NE
c. PROPER TEST METHODS AND DURATION:	☑Y ☐N ☐NA ☐NE
d. RETESTS AND/OR TRE PERFORMED AS REQUIRED:	☐Y ☐N ☑NA ☐NE

SECTION G: EFFLUENT/RECEIVING WATERS OBSERVATIONS

BASED ON VISUAL OBSERVATIONS ONLY — ☑S ☐M ☐U ☐NA ☐NE

DETAILS: **Viewed at Outfall 001.**

OUTFALL #:	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOATING SOLIDS	COLOR	OTHER
001	NO	NO	NO	NOT PERSISTENT	NO	CLEAR	--

SECTION H: SLUDGE DISPOSAL

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS — ☑S ☐M ☐U ☐NA ☐NE

DETAILS: **Sludge is wasted to former lagoon system onsite.**

1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY: ☑S ☐M ☐U ☐NA ☐NE
2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503: ☐S ☐M ☐U ☑NA ☐NE
3. FOR LAND APPLIED SLUDGE, TYPE OF LAND APPLIED TO: (E.G., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE): **N/A**

SECTION I: SAMPLING INSPECTION PROCEDURES

SAMPLE RESULTS WITHIN PERMIT REQUIREMENTS — ☐S ☐M ☐U ☑NA ☐NE

DETAILS:

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

SECTION J: STORM WATER POLLUTION PREVENTION PLAN

STORM WATER MANAGEMENT MEETS PERMIT REQUIREMENTS — ☑S ☐M ☐U ☐NA ☐NE

DETAILS: **Part II, Condition 6 requires BMP for stormwater protection; inspected under IGP ARR000222.**

1. SWPPP UPDATED AS NEEDED:__ DATE OF LAST UPDATE: ☐Y ☐N ☑NA ☐NE
2. SITE MAP INCLUDING ALL DISCHARGES AND SURFACE WATERS: ☐Y ☐N ☑NA ☐NE
3. POLLUTION PREVENTION TEAM IDENTIFIED: ☐Y ☐N ☑NA ☐NE
4. POLLUTION PREVENTION TEAM PROPERLY TRAINED: ☐Y ☐N ☑NA ☐NE
5. LIST OF POTENTIAL POLLUTANT SOURCES: ☐Y ☐N ☑NA ☐NE
6. LIST OF POTENTIAL SOURCES AND PAST SPILLS AND LEAKS: ☐Y ☐N ☑NA ☐NE
7. ALL NON-STORM WATER DISCHARGES ARE AUTHORIZED: ☐Y ☐N ☑NA ☐NE
8. LIST OF STRUCTURAL BMPS: ☐Y ☐N ☑NA ☐NE
9. LIST OF NON-STRUCTURAL BMPS: ☐Y ☐N ☑NA ☐NE
10. BMPS PROPERLY OPERATED AND MAINTAINED: ☐Y ☐N ☑NA ☐NE
11. INSPECTIONS CONDUCTED AS REQUIRED: ☐Y ☐N ☑NA ☐NE

DMR Calculation Check

Reporting Period: From **2019** (Year) **04** (Month) **01** (Day) To **2019** (Year) **04** (Month) **30** (Day)

Parameter Checked: **TSS**

	Loading Mass (lbs/day) Mon. Avg.	Concentration (mg/l) Mon. Avg.	Concentration (mg/l) 7-Day Avg.
Reported Value:	83.2	4.3	7.9
Calculated Value:	83.2	4.3	7.9
Permit Value:	353.6	20.0	30.0

If calculated value does not equal reported value, explain:
Values are the same. See Table 1 for calculations.

DMR Calculation Check

Reporting Period: From 2019 (Year) 04 (Month) 01 (Day) To 2019 (Year) 04 (Month) 30 (Day)

Parameter Checked: FCB

	~~Loading Mass (lbs/day) Mon. Avg.~~	Concentration (colonies/100ml) Mon. Avg.	7-Day Avg.
Reported Value:	N/A	17	184
Calculated Value:	N/A	17	93
Permit Value:	N/A	1000	2000

If calculated value does not equal reported value, explain:

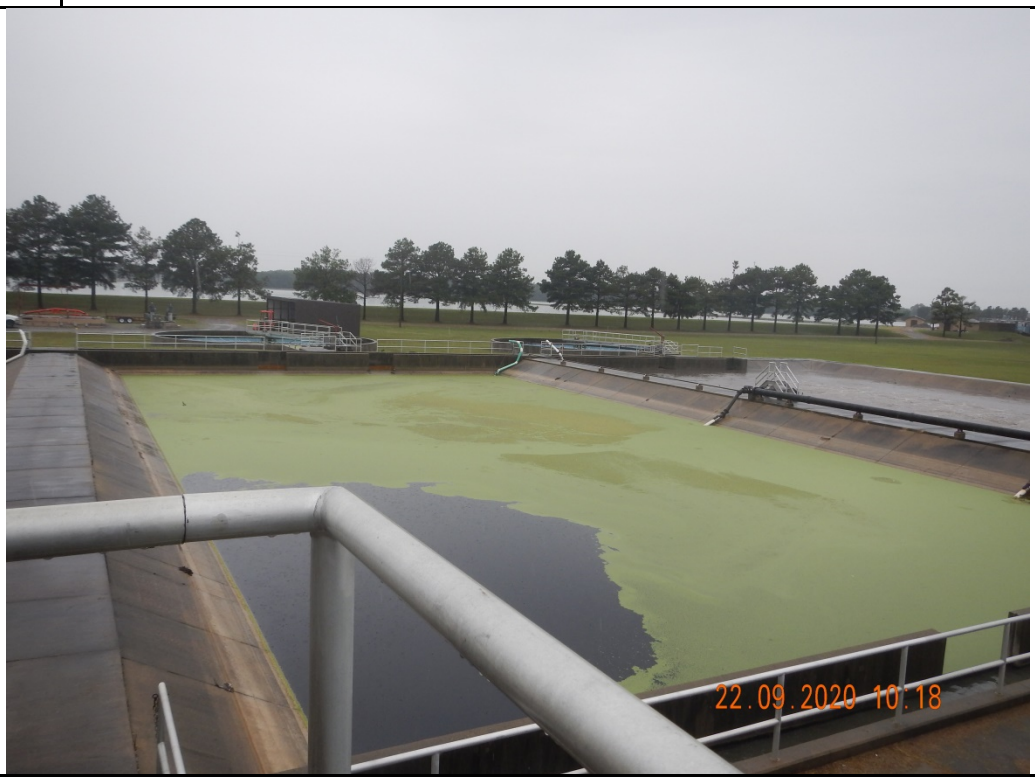
Values are not the same; cannot duplicate results. See Table 2 for calculations.

Office of Water Quality Photographic Evidence Sheet					
Location:	**Forrest City Wastewater Treatment Plant**				
Photographer:	**Kerri McCabe**	Date:	**Sept 22, 2020**	Time:	**1016**
Witness:				Photo #:	**1**
Description:	**Automatic bar screen at headworks.**				

Photographer:	**Kerri McCabe**	Date:	**Sept 22, 2020**	Time:	**1016**
Witness:				Photo #:	**2**
Description:	**Grit removal at headworks.**				

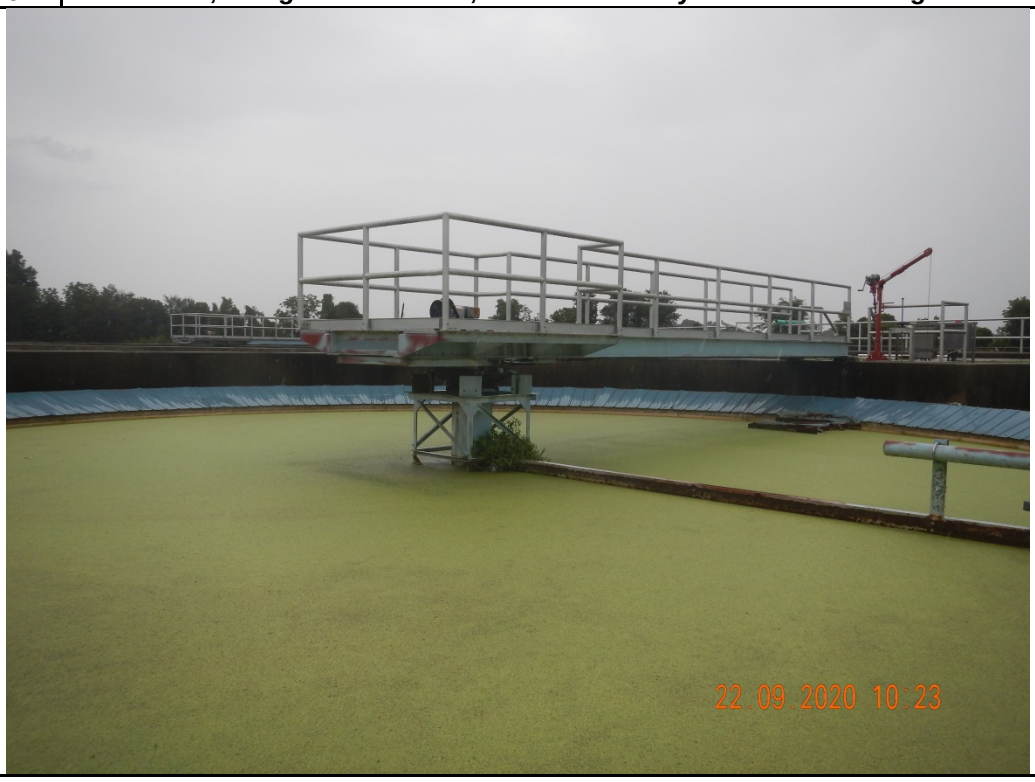
Office of Water Quality Photographic Evidence Sheet					
Location:	**Forrest City Wastewater Treatment Plant**				
Photographer:	**Kerri McCabe**	Date:	**Sept 22, 2020**	Time:	**1018**
Witness:				Photo #:	**3**
Description:	**Aeration Basin #1 for activated sludge.**				

Photographer:	**Kerri McCabe**	Date:	**Sept 22, 2020**	Time:	**1018**
Witness:				Photo #:	**4**
Description:	**Aeration Basins #2-3 for activated sludge; diffuse air system does not work for AB #2.**				



Office of Water Quality Photographic Evidence Sheet					
Location:	**Forrest City Wastewater Treatment Plant**				
Photographer:	**Kerri McCabe**	Date:	**Sept 22, 2020**	Time:	**1022**
Witness:				Photo #:	**5**
Description:	**Clarifier #1**				

Photographer:	**Kerri McCabe**	Date:	**Sept 22, 2020**	Time:	**1023**
Witness:				Photo #:	**6**
Description:	**Clarifier #2; design malfunction, but treatment system is over-designed.**				



Office of Water Quality Photographic Evidence Sheet					
Location:	**Forrest City Wastewater Treatment Plant**				
Photographer:	**Kerri McCabe**	Date:	**Sept 22, 2020**	Time:	**1024**
Witness:				Photo #:	**7**
Description:	**Clarifier #3**				

Photographer:	**Kerri McCabe**	Date:	**Sept 22, 2020**	Time:	**1028**
Witness:				Photo #:	**8**
Description:	**Rapid sand filters; not in use**				

Office of Water Quality Photographic Evidence Sheet					
Location:	**Forrest City Wastewater Treatment Plant**				
Photographer:	**Kerri McCabe**	Date:	**Sept 22, 2020**	Time:	**1030**
Witness:				Photo #:	**9**
Description:	**UV disinfection**				

Photographer:	**Kerri McCabe**	Date:	**Sept 22, 2020**	Time:	**1028**
Witness:				Photo #:	**10**
Description:	**Post-aeration; oxygen charger (center) and step cascade (left)**				

Office of Water Quality Photographic Evidence Sheet					
Location:	**Forrest City Wastewater Treatment Plant**				
Photographer:	**Kerri McCabe**	Date:	**Sept 22, 2020**	Time:	**1032**
Witness:				Photo #:	**11**
Description:	**Primary/secondary flow measurement**				

Photographer:	**Kerri McCabe**	Date:	**Sept 22, 2020**	Time:	**1034**
Witness:				Photo #:	**12**
Description:	**Outfall 001 at receiving stream**				

Office of Water Quality Photographic Evidence Sheet					
Location:	**Forrest City Wastewater Treatment Plant**				
Photographer:	**Kerri McCabe**	Date:	**Sept 22, 2020**	Time:	**1036**
Witness:				Photo #:	**13**
Description:	**Former lagoon system used for flow EQ and sludge wasting.**				

Figure 1. Google Earth image dated June 7, 2106 depicting City of Forrest City POTW with major components identified.

Table 1. TSS for City of Forrest City for April 2019.

Apr-19				
TSS (three/week)				
Day	Concentration (mg/l)	7-Day Average (mg/l)	Flow (MGD)	Loading (lbs/day)
1	2.50		1.616	33.69
3	2.50		1.651	34.42
4	5.80	3.60	1.758	85.04
8	2.50		3.517	73.33
10	2.50		2.379	49.60
11	2.50	2.50	2.139	44.60
15	2.80		3.140	73.33
17	2.60		2.236	48.49
18	6.20	3.87	2.770	143.23
22	18.80		2.382	373.48
24	2.50		1.928	40.20
25	2.50	7.93	2.001	41.72
29	2.50		1.940	40.45
Monthly Average	4.32			83.20

Table 2. FCB for City of Forrest City for April 2019.

Apr-19				
FCB (three/week)				
Day	Count	Log	Average	Geo Mean
1	10	1.00		
3	21	1.32		
4	7	0.87	1.06	11.5828919429942
8	235	2.37		
10	4	0.60		
11	6	0.80	1.26	18.0921203352057
15	12	1.08		
17	344	2.54		
18	195	2.29	1.97	93.0232338759638
22	1	0.00		
24	12	1.08		
25	10	0.98	0.69	4.87924022929371
29	10	0.98	0.98	9.6000000000000
Average		1.22		
Geo Mean		16.76433278681830		