

May 15, 2020

Joe Doss Phillips, Executive Director City of Texarkana PO Box 2008 Texarkana, TX 75504

RE: City of Texarkana - North WWTP Inspections (Miller Co)

AFIN: 46-00237 NPDES Permit No.: AR0048691 ARR00C484

Dear Mr. Phillips:

On April 29, 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.

Please refer to the "Summary of Findings" section of each of the attached inspection reports and provide a written response for each violation that was noted. This response should be mailed to the attention of the Office of Water Quality (OWQ) Compliance Branch at the address at the bottom of this letter 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 documentation (i.e., photos) is due by May 29, 2020.

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

Sincerely,

Michael Young

District 8 Inspector

Office of Water Quality

inspection Report: City of	Inspection Report: City of Texarkana - North WWTP, AFIN: 46-00237, Permit #: AR0048691							
VDEO	WATER	WATER DIVISION INSPECTION REPORT						
AULY	AFIN: 46-00237 P	ERMIT #: AR0048	691	DATE: 4/29/2020				
ARKANSAS	COUNTY: 46 Miller		PDS #: 111868	MEDIA: WN				
Department of Environmental Quality	GPS LAT: 33.50313	7 LONG: -94.0170	011 LOCATION	N: Entrance				
FACILITY INFORMAT	TON	INS	SPECTION INF	ORMATION				
City of Texarkana - North WWTP		facility type: 1 - Municipal	INSPECTOR ID#: 101531 S - St	ate				
8301 Sanderson Lane		facility evaluation rating 2 - Marginal	С	ompliance Evaluation				
Texarkana, AR 71854		` '	RY TIME: EXIT TIME: 13:42	PERMIT EFFECTIVE DATE:				
RESPONSIBLE OFFICIAL				PERMIT EXPIRATION DATE:				
NAME: / TITLE				10/31/2014				
Joe Doss Phillips / Executive Direction COMPANY:	tor	FAYETTEVILLE SHALE RELATED: N						
City of Texarkana MAILING ADDRESS:		FAYETTEVILLE SHALE VIOLATIONS: N						
PO Box 2008		INSPECTION PARTICIPANTS						
CITY, STATE, ZIP:		NAME/TITLE/PHONE/FAX/EMAIL/ETC: Ronald Ward/Operator (Lic. #008227)/903-798-3821						
Texarkana TX 75504 PHONE & EXT: / FAX:		Ronaid Ward/Op	perator (Lic. #u	108227)/903-798-3821				
903-798-3821 / 903-793-0610								
EMAIL:								
phillips@txkusa.org								
CONTACTED DURING INSPECTION	: No							
(0-0		LUATIONS						
(5=5	atisfactory, M=Marginal, U=Unsat	isiactory, N=NOt Applicable/E	vaiuateu)					

(0-batisfactory, in-inarginal, 0-brisatisfactory, in-interpretable/Evaluated)					
S	PERMIT	S	FLOW MEASUREMENT	S	STORMWATER
S	RECORDS/REPORTS	M	LABORATORY	S	FACILITY SITE REVIEW
S	OPERATION & MAINTENANCE	S	EFFLUENT/RECEIVING WATER	S	SELF-MONITORING PROGRAM
S	SAMPLING	S	SLUDGE HANDLING/DISPOSAL	S	PRETREATMENT
**	OTHER:				

SUMMARY OF FINDINGS

- 1.) At the time of inspection, the Dissolved Oxygen (DO) meter calibration was being performed as a liquid saturation without the appropriate buffer and not an air saturation method. This is a violation of permit condition Part III. (C.) (3.).
- 2.) The thermometer in the composite sampler has no recorded calibration (see Photo 21). This is a violation of permit condition Part III. (C.) (3.).
- 3.) There are no written Standard Operating Procedures (SOPs) at the North Texarkana WWTP for the laboratory analyses that are conducted in the lab of the North Texarkana WWTP. This is a violation of permit condition Part III. (C.) (3.).
- 4.) In February 2020, there was an exceedance of the 7-day average of flow and the non-compliance report (NCR) included did not have all the information required (see Photo 27). This is a violation of permit condition Part III. (D.) (7.).

GENERAL COMMENTS

On April 29, 2020, I performed an inspection at the City of Texarkana – North Texarkana WWTP with the above participants in attendance. North Texarkana WWTP has a treatment system that consists of a lift station, bar screen, grit removal, aerated activated sludge, secondary clarification, post-aeration, and UV disinfection. Flow is measured through a Parshall flume with a secondary totalizer. Sampling is completed as grabs and composites by the staff of the WWTP, and there is a refrigerated automatic composite sampler at Outfall 001. Laboratory analysis is completed in the Texarkana Water Utilities (TWU) laboratory in Texas, which is under the jurisdiction of Texas Commission on Environmental Quality (TCEQ). This inspection consisted of a facility inspection and records review.

Facility Inspection:

I started the inspection at the influent lift station (see Photos 1-2) and continued to the aeration basins (see Photos 3-4). Only one aeration basin was in operation at the time of inspection. The operator, Donald Ward, stated that the system is operated with a single aeration basin and single clarifier each month; and on the 10th, the system alternates the treatment components. Following the aeration basin, wastewater enters the secondary clarification unit (see Photos 5-6) in which sludge is wasted from the clarifier to a pump station wet well and is pumped to the City of Texarkana WWTP in Texas (see Photos 7-8). I observed the second clarifier to be empty (see Photo 9) and Mr. Ward stated that he would initiate it into service on the 10th. Following clarification, wastewater enters a post-aeration basin (see Photo 10) and is then routed through UV disinfection (see Photos 11-12). Following disinfection, wastewater is routed through a Parshall flume that has a secondary totalizer (see Photos 13-18). Sampling is completed following step-aeration (see Photo 19) and there is a refrigerated composite sampler at the collection point for Outfall 001 (see Photos 20-21). Composite samples are collected as a 24-hour composite with equal aliquots collected every hour. Mr. Ward supplied evidence that the aliquots are then composited as a flow-weighted sample (see Photo 22). Laboratory analysis of Ammonia-Nitrogen (NH3-N), pH, and DO are performed at the North Texarkana WWTP by Mr. Ward. NH3-N is analyzed in a spectrophotometer and the correct reagents were in date (see Photos 24-25). I requested Mr. Ward to perform a calibration of the DO and pH meters and observed that the calibration for the DO meter was being completed in a setting that required a buffer. Mr. Ward was using the method to calibrate in a watersaturated air environment, and I showed him how to correctly select percent (%) saturation instead of mg/L (see Photos 26-27). The pH calibration is being completed correctly with buffers that are not expired (see Photo 28).

Records Review:

Sampling for composites and grab samples are collected by the North Texarkana WWTP. Composite samples are collected as a 24-hour composite with equal aliquots collected every hour. Mr. Ward supplied evidence that the aliquots are then composited as a flow-weighted sample (see Photo 22). I informed Mr. Ward that this facility is only required to perform a 3-hour composite according to the permit. Mr. Ward maintains all records in a very orderly fashion at the WWTP laboratory building. I reviewed entries in NetDMR, flow records, analysis information, and chain of custody (COC) forms for 2020. There were no issues identified in the records review.

Miller	
INSPECTOR'S SIGNATURE: Michael Young	DATE: 5/12/2020
Kerri Mª Cale	
SUPERVISOR'S SIGNATURE:Kerri McCabe	DATE: 5/13/2020

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 Øn □na □ne
3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT:	Øy □n □na □ne
4. ALL DISCHARGES ARE PERMITTED:	Øy □n □na □ne
SECTION B: RECORDKEEPING AND REPORTING EVALUATION	
RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT	☑S □M □U □NA □NE
DETAILS:	
ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRS:	ØY □N □NA □NE
2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE:	☑S ☐M ☐U ☐NA ☐NE
a. DATES AND TIME(S) OF SAMPLING:	Øy □n □na □ne
b. EXACT LOCATION(S) OF SAMPLING:	ØY □N □NA □NE
c. NAME OF INDIVIDUAL PERFORMING SAMPLING:	☑Y □N □NA □NE
d. ANALYTICAL METHODS AND TECHNIQUES:	ØY □N □NA □NE
e. RESULTS OF CALIBRATIONS:	Øy □n □na □ne
f. RESULTS OF ANALYSES:	Øy □n □na □ne
g. DATES AND TIMES OF ANALYSES:	ØY □N □NA □NE
h. NAME OF PERSON(S) PERFORMING ANALYSES:	ØY □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:	Øy □n □na □ne
SECTION C: OPERATIONS AND MAINTENANCE	50 5M 5H 5M 5M
TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED	☑S □M □U □NA □NE
DETAILS:	7. 0. 0. 0. 0.
1. TREATMENT UNITS PROPERLY OPERATED:	Øs Om Ou Ona One
2. TREATMENT UNITS PROPERLY MAINTAINED:	Øs Om Ou Ona One
3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED:	Øs Om Ou Ona One
4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE:	Øs Om Ou Ona One
5. ALL NEEDED TREATMENT UNITS IN SERVICE:	Øs Om Ou Ona One
6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED:	Øs Om Ou Ona One
7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED:	Øs Om Ou Ona One
8. OPERATION AND MAINTENANCE MANUAL AVAILABLE:	Øy □n □na □ne
9. STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED:	ØY □N □NA □NE
10. PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED:	ØY □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:	OY ON ONA ONE
14. HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT:	OY ON ONA ONE
15. IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT:	□y □n ☑na □ne

SECTION D: SAMPLING	
PERMITTEE SAMPLING MEETS PERMIT REQUIREMENTS	ØS □M □U □NA □NE
DETAILS:	
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:	☑Y □N □NA □NE
5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT:	☑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: TYPE OF DEVICE: 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:	☑Y □N □NA □NE
4. CALIBRATION FREQUENCY ADEQUATE:	☑Y □N □NA □NE
5. RECORDS MAINTAINED OF CALIBRATION PROCEDURES:	☑Y □N □NA □NE
6. CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE:	☑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:	
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 Øn □na □ne
a. LAB NAME:	
b. LAB ADDRESS:	
c. PARAMETERS PERFORMED:	
8. BIOMONITORING PROCEDURES ADEQUATE:	□y □n Øna □ne
a. PROPER ORGANISMS USED:	□y □n Øna □ne
b. PROPER DILUTION SERIES FOLLOWED:	□y □n ☑na □ne
c. PROPER TEST METHODS AND DURATION:	□Y □N ØNA □NE
d. RETESTS AND/OR TRE PERFORMED AS REQUIRED:	□Y □N ØNA □NE

	<u> </u>	<u> </u>		<u> </u>	46-00237, Permit	#. ARUU4009 I		
	6: EFFLUENT/R			ATIONS				
	N VISUAL OBS	ERVATIONS C	ONLY				U DNA DNE	
DETAILS:								
OUTFALL #:	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOATING SOLIDS	COLOR	OTHER	
001	No	No	No	No	No	Colorless		
SECTION F	I: SLUDGE DIS	POSAL						
SLUDGE [DISPOSAL ME	ETS PERMIT F	REQUIREMEN ^T	TS		⊠S □M □	U DNA DNE	
DETAILS:	Waste Activate	d Sludge (WAS) is pumped an	d piped to the V	WWTP in Texas.			
1. SLUDGE M	IANAGEMENT ADEQU	ATE TO MAINTAIN EF	FLUENT QUALITY:			⊠s □m	□U □NA □NE	
2. SLUDGE R	ECORDS MAINTAINE	O AS REQUIRED BY 40) CFR 503:			⊠s □m	□U □NA □NE	
3. FOR LAND	APPLIED SLUDGE, T	YPE OF LAND APPLIE	D TO: (E.G., FOREST,	AGRICULTURAL, PU	BLIC CONTACT SITE):			
SECTION I:	SAMPLING IN	SPECTION PRO	CEDURES					
SAMPLE F	RESULTS WITH	HIN PERMIT R	EQUIREMENT	S			U ⊠NA □NE	
DETAILS:								
1. SAMPLES	OBTAINED THIS INSP	ECTION:				□Y	□n ☑na □ne	
2. TYPE OF S	SAMPLE: GRAB:_	□COMPOSITE:_ N	METHOD: FREQUE	NCY:				
3. SAMPLES	PRESERVED:					□Y	□n ☑na □ne	
4. FLOW PRO	PORTIONED SAMPLE	S OBTAINED:				□Y	□n ☑na □ne	
5. SAMPLE C	BTAINED FROM FACI	LITY'S SAMPLING DE\	/ICE:			□Y	□n ☑na □ne	
6. SAMPLE R	EPRESENTATIVE OF	VOLUME AND NATUR	E OF DISCHARGE:			□Y	□n ☑na □ne	
7. SAMPLE S	PLIT WITH PERMITTE	E:				□Y	□n Øna □ne	
8. CHAIN-OF-	-CUSTODY PROCEDU	RES EMPLOYED:				□Y	□n ☑na □ne	
9. SAMPLES	COLLECTED IN ACCO	RDANCE WITH PERM	IT:			□Y	□n ☑na □ne	
SECTION J	: STORM WAT	ER POLLUTION	PREVENTION	PLAN				
STORM W	ATER MANAG	EMENT MEET	S PERMIT RE	QUIREMENTS	}		U ⊠NA □NE	
DETAILS:								
1. SWPPP UF	PDATED AS NEEDED:_	_ DATE OF LAST UP	DATE:			□Y	□N ☑NA □NE	
2. SITE MAP	INCLUDING ALL DISC	HARGES AND SURFA	CE WATERS:			□Y	□n ☑na □ne	
3. POLLUTIO	N PREVENTION TEAM	I IDENTIFIED:				□Y	□n ☑na □ne	
4. POLLUTIO	4. POLLUTION PREVENTION TEAM PROPERLY TRAINED:							
5. LIST OF PO	5. LIST OF POTENTIAL POLLUTANT SOURCES:							
6. LIST OF PO	6. LIST OF POTENTIAL SOURCES AND PAST SPILLS AND LEAKS:							
7. ALL NON-S	STORM WATER DISCH	IARGES ARE AUTHOR	IZED:			□Y	□n Øna □ne	
8. LIST OF S	8. LIST OF STRUCTURAL BMPS:							
9. LIST OF N	ON-STRUCTURAL BMF	PS:				□Y	□n ☑na □ne	
10. BMPS PRO	PERLY OPERATED A	ND MAINTAINED:				□Y	□n ☑na □ne	
11. INSPECTION	ONS CONDUCTED AS	REQUIRED:				□Y	□n ☑na □ne	
1	NSPECTIONS CONDUCTED AS REQUIRED:							

FLOW CALCULATION SHEET							
Date: 4/2	9/2020	Time: 11:54					
Head in Inc	ches: 6.48	Feet: 0.54					
Type & Siz	e of Primary Flow	/ Measurement Device: \$	9" Parshall Flume				
Name & Mo	odel of Secondary	y Flow Measurement De	evice: Endress+Hauser FMU90				
Date of last	t Calibration of Se	econdary Flow Device:	4/30/2019				
Recorded F	low at Date & Ti	me Listed Above: 0.77	MGD (Facility Flow Meter)				
		_	7729				
(Flow is calcula	ted using flow charts in:	ISCO Open Channel Flow Measu	surement Handbook-5" Edition)				
% Error =	Recorded Value	e - Calculated Value culated Value	X 100				
% Error =	0.77	0.7729	X 100				
		····					
% Error =	-0.0029 0.7729	X 100					
% Error =	-0.0037	X 100					
% Error =	0.3	%					
Comments	Within 10%.						

Inspection Report: City of Texarkana - North WWTP, AFIN: 46-00237, Permit #: AR0048691 **DMR Calculation Check**

Reporting Period:	From	2020	02	01	_ To	2020	02	29
		Year	Month	Day		Year	Month	Day
Parameter Checked:		Flow	-					
		Loading				Concer		
	Mo	Mass Avg Ibs/d	lav/			Mon	thly	
		day Averag	•	Mo. A	vg r	ng/l	7-day Avg	g mg/l
Reported Value:		0.732/ <mark>1.23</mark>			N/A		N/A	\
Calculated Value:		0.732/ <mark>1.23</mark>			N/A		N/A	<u> </u>
Permit Value:	R	Report/ <mark>0.95</mark>			N/A		N/A	<u> </u>
If calculated value do	es not e	equal repor	ted value, e	xplain:				

<u>Equal</u>

Facility exceeded flow 7-day average requirement.

Non-compliance report (NCR) was incomplete for this exceedance (see Photo 29).

Inspection Report: City of Texarkana - North WWTP, AFIN: 46-00237, Permit #: AR0048691 DMR Calculation Check

Reporting Period:	From	2020	01	01	_ To	2020	01	31
		Year	Month	Day		Year	Month	Day
Parameter Checked:	·	TSS	_					

	Loading Mass	Concentration Monthly			
	Mo. Avg Ibs/day	Mo. Avg mg/l	7-day Avg mg/l		
Reported Value:	47.2	13.9	22.8		
Calculated Value:	47.2	13.9	22.8		
Permit Value:	118.8	15	22.5		

If calculated value does not equal reported value, explain:

Equal.

TSS exceeded limits.

Water Division Photographic Evidence Sheet Location: City of Texarkana - North WWTP Photographer: Michael Young Date: 04/29/2020 Time: 11:43 Witness: Photo #: 1 Description: Influent wet well for WWTP.



Photographer:	Michael Young	Date: 04/29/2020	Time:	
Witness:			Photo #:	2

Description: Influent wet well for WWTP.



Water Division Photographic Evidence Sheet Location: City of Texarkana - North WWTP Photographer: Michael Young Date: 04/29/2020 Time: 11:46 Witness: Photo #: 3

Description: Aerated activated sludge basin in operation.

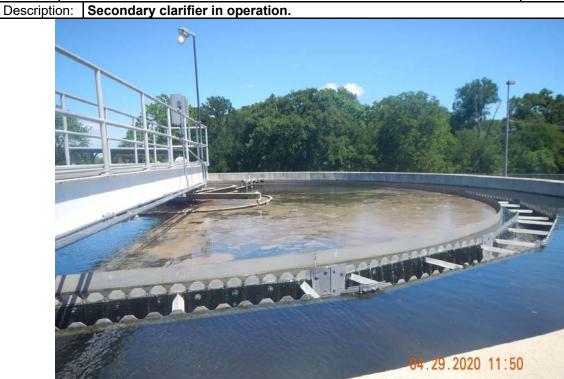


Photographer: Michael Young Date: 04/29/2020 Time: 11:46
Witness: Photo #: 4

Description: Aerated activated sludge basin in operation. Basin on right of photo not in operation.



Water Division Photographic Evidence Sheet Location: City of Texarkana - North WWTP Photographer: Michael Young Date: 04/29/2020 Time: 11:50 Witness: Photo #: 5



Photographer:Michael YoungDate:04/29/2020Time:11:50Witness:Photo #:6





Water Division Photographic Evidence Sheet Location: City of Texarkana - North WWTP Photographer: Michael Young Date: 04/29/2020 Time: 11:49 Witness: Photo #: 9

Description: Secondary clarifier not in operation during inspection.

Output

Photographer:	Michael Young	Date:	04/29/2020	Time:	11:51
Witness:				Photo #	: 10





Inspection Report: City of Texarkana - North WWTP, AFIN: 46-00237, Permit #: AR0048691 **Water Division Photographic Evidence Sheet** Location: City of Texarkana - North WWTP Photographer: Michael Young Date: 04/29/2020 Time: 11:51 Witness: Photo #: 11 Description: **UV lights in operation.** Photographer: Michael Young Date: 04/29/2020 Time: 11:51 Witness: Photo #: **12** Description: Power units and ballasts for UV lights.





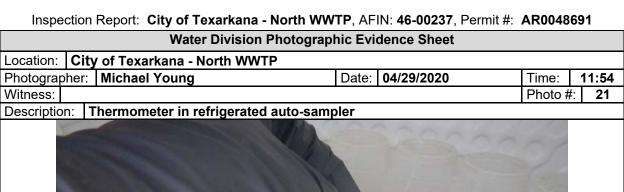
Water Division Photographic Evidence Sheet Location: City of Texarkana - North WWTP Photographer: Michael Young Date: 04/29/2020 Time: 11:53 Witness: Photo #: 17 Description: Secondary flow measuring device with calibration sticker



Photographer:Michael YoungDate:04/29/2020Time:11:54Witness:Photo #:18



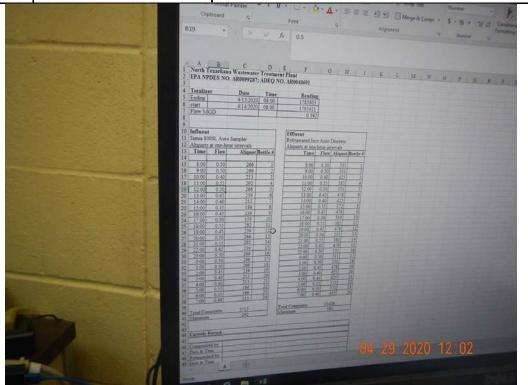






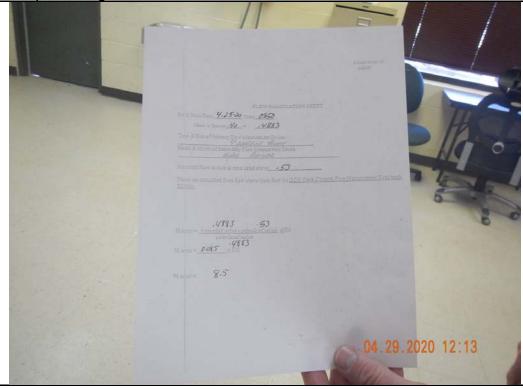
Photographer: Michael Young Date: 04/29/2020 Time: 12:02
Witness: Photo #: 22

Description: Influent/effluent flow data spreadsheet



Water Division Photographic Evidence Sheet Location: City of Texarkana - North WWTP Photographer: Michael Young Date: 04/29/2020 Time: 12:13 Witness: Photo #: 23

Description: Flow-weighted calculation sheet



Photographer: Michael Young	Date:	04/29/2020	Time:	11:21
Witness:			Photo #:	24

Description: NH3-N reagents

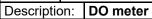


Inspection Report: City of Texarkana - North WWTP, AFIN: 46-00237, Permit #: AR0048691

Water Division Photographic Evidence Sheet							
Location: City of Texarkana - North WWTP							
Photographer: Michael Young	Date:	04/29/2020	Time:	11:21			
Witness: Photo #: 25							

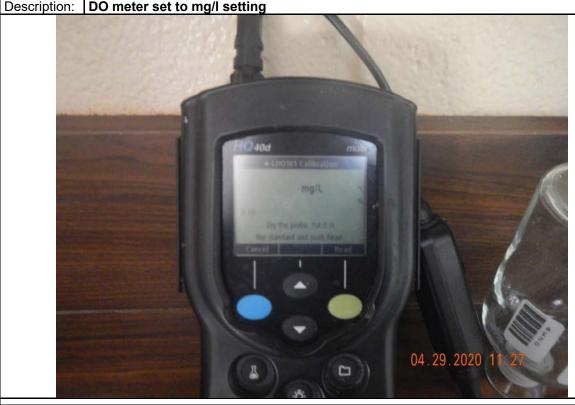


Photographer:Michael YoungDate:04/29/2020Time:11:22Witness:Photo #:26

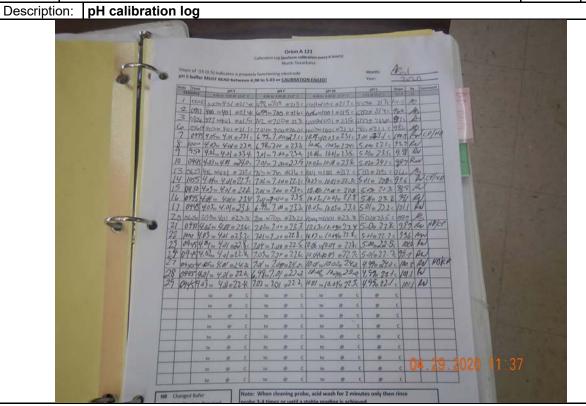




Water Division Photographic Evidence Sheet							
04/29/2020	Time:	11:27					
	Photo #:	27					
	04/29/2020						



Photographer:	Michael Young	Date:	04/29/2020	Time:	11:37
Witness:				Photo #:	28



	Water Divisi	on Photo	graphic	Evid	lence SI	heet				
Location: City of Te	xarkana - North W	WTP								
Photographer: Micha	ael Young		D	ate:	05/12/20	020	-	Time:	1	1:30
Witness:							I	Photo #	ł: [27
Description: NCR fo	r flow exceedance	has "N/A	" for c	orrect	tive mea	asures.	•			
Description: NCR 10	Arkania: Department Office of Where Qual Sett Northkelver Pirit Northkelver Pirit North Liefle Rock, All RE: Permit Not. AF Facility: North Liefle Rock, All RE: Permit Not. AF Facility: North Teast Address: SOIN Sono City: Texanura Contact: J. D. Philips. Date of Non-Compliance Feo 3 - 15, 2000 We feel this problem	NON-COMPI of Environmental Quality Tenforcement Branch v. 7-2118 consists consist	Directory State: All Phone: Quantity or Loading 1230		71 001-A	asures.				
	Time estimated that in a Sincerely, JO Philips, Executive Dir. Submitted By: Submitted a Certification Statement I or experision in according information showing the proposable for professing the proposable of professing the proposable of professing the proposable of professing the profession of the professio	the problem in this mans the problem in this mans the problem in this mans the problem is will take to correct problem in the problem in this problem in the problem in this problem in the	03/10/2020 Date in document and all at source that qualified p to or person who man	enomel properly maps the system, o of my knowledge s	gather and evaluate the or those persons directly and belief, true, accurate,					

Figure 1. Overview of the grounds at the North Texarkana WWTP.



 From:
 TWU-White, Pamela

 To:
 Water-Inspection-Report

 Cc:
 TWU-McAllister, Sally

Subject: City of Texarkana - North WWTP Inspections (Miller Co) Corrective Action

Date: Thursday, May 21, 2020 4:10:30 PM

Attachments: ADEQ Corrective Action.pdf

Attachments Response Letter May 2020.pdf

Letter and attachments providing corrective action for the four violations found during your April 29, 2020 inspection of our facility.

If additional information is needed, please contact J.D. Phillips at phillips@txkusa.org or (903) 798 3821.

Pamela J. White
Administrative Coordinator
Texarkana Water Utilities

Ph: (903) 798 3821 Fax: (903) 793 0610 pwhite@txkusa.org www.txkusa.org/twu

DO Meter Calibration Log

Year: 2020

			Winkler	Initial	Set			
Date	Plant	Analyst	Result	Reading	Point	Slope	Offset	Comments
125	NT	en	8,6	8.26	8,6	95,8	0.00	lm
2.3	WC	98	8.6	8.18	8.Ce	101.2	0.00	
2-28	NT	200	8,2	8,19	8,2	93.7	000	
3-1	WC	98	8.6	8.61	8,6	98.1	0.00	
3-11	SR	98	8.5	8.67	8.5	96.6	0.00	
4-13	5R	98	8,4	8.93	8.4	91.7	0.00	
4-13	WC	%	8.4	7.89	8,4	98.7	0.00	
415	NT	8	8.5	8.01	8.5	96.4	0.00	
5-1	NT	ien	8.5	7.98	8.7	96.5	000	
5-18	SR	28	8.7	8.63	8.7	92.4	0.00	
8-19	WC	98	8.7	8.15	8.7	98.4	00,00	
								790-
				*				

Daily Air Calibration HQ40D North Texarkana

- 1. Press power button
- 2. Press tool button (shows LDO101 settings)
- 3. Press select
- 4. Scroll to modify current settings
- 5. Press select
- 6. Press Calibration Options
- 7. Press Calibration User
- 8. Press select
- 9. Scroll to user 100% and press ok
- 10. Press exit 4 times (main screen will display)
- 11. Press Calibrate and read
- 12. Screen will display. Dry probe and now place in DO btl. With ¼ Water. Press read.
- 13. Screen will display 100% and Calibration passed.
- 14. Press done record you slope for the day
- Press store. Meter has been calibrated and return to main
 Screen display. You are ready for today samples
- 16. The main Lab will calibrate once a month on the Labs HQ40 counter top meter Using the Winkler results as a set point to make sure the meter maintain a controlled calibration along with the air calibration. The result will be recorded and kept in the main Lab as QC results.

pH Calibration

Orion Star A121 portable (North Texarkana)

- 1. Turn on Power.
- 2. Rinse probe and blot dry.
- 3. Place probe in first standard and press **Calibrate**. (Display will show the reading at the top and **Cal. 1** at the bottom.)
- 4. When the small **pH** in the top right corner stops flashing, the reading is stable and the display changes to read **04.01** and the small arrow beside pH/ISE (on the left) flashes. Press the button to the left of the arrow keys to change the cursor position, and the up and down arrows to change the numbers.
- 5. If the display is correct, press Calibrate again to move to the next standard.
- 6. Place the second standard under the probe. When the small **pH** in the top right corner stops flashing, the reading is stable and the display changes to read **10.00** and the small arrow beside pH/ISE (on the left) flashes. Press the button to the left of the arrow keys to change the cursor position, and the up and down arrows to change the numbers.
- 7. When the display is correct, press **Measure/save/print**. The meter will briefly display the slope.
- 8. Place the QC standard (7.00) under the probe. When **AR** in the top right corner stops flashing, the display will freeze and the reading is ready.

Reading a Sample

- 1. Rinse the probe and blot dry.
- 2. Place sample under probe, and press Measure/save/print.
- 3. When **AR** in the top right corner stops flashing, the display will freeze and the reading is ready.

Nitrogen, Ammonia

Salicylate Method¹

Method 8155

0.01 to 0.80 mg/L NH₃-N

Powder Pillows

Scope and application: For water, wastewater and seawater.

¹ Adapted from Clin. Chim. Acta., 14, 403 (1966).



Test preparation

Before starting

The reagents that are used in this test contain sodium nitroferricyanide. Keep cyanide solutions at pH > 11 to prevent exposure to hydrogen cyanide gas. Collect the reacted samples for safe disposal.

Keep the samples sealed at all times to prevent ammonia contamination from the air.

Always do tests in sample cells. Do not put the instrument in the sample or pour the sample into the cell holder.

Make sure that the sample cells are clean and there are no scratches where the light passes through them.

Rinse the sample cell and cap with the sample three times before the sample cell is filled.

Make sure that there are no fingerprints or liquid on the external surface of the sample cells. Wipe with a lint-free cloth before measurement.

Cold waters can cause condensation on the sample cell or bubbles in the sample cell during color development. Examine the sample cell for condensation or bubbles. Remove condensation with a lint-free cloth. Invert the sample cell to remove bubbles.

Install the instrument cap over the cell holder before ZERO or READ is pushed.

After the test, immediately empty and rinse the sample cell. Rinse the sample cell and cap three times with deionized water.

If the test result is over-range, dilute the sample with high quality, ammonia-free deionized water and repeat the test. Multiply the result by the dilution factor. Refer to Sample dilution on page 2.

Review the Safety Data Sheets (MSDS/SDS) for the chemicals that are used. Use the recommended personal protective equipment.

Dispose of reacted solutions according to local, state and federal regulations. Refer to the Safety Data Sheets for disposal information for unused reagents. Refer to the environmental, health and safety staff for your facility and/or local regulatory agencies for further disposal information.

Items to collect

Description	Quantity
Ammonia Cyanurate Reagent Powder Pillow, 10-mL	2
Ammonia Salicylate Reagent Powder Pillow, 10-mL	2
Sample cells, 25-mm (10 mL)	2

Refer to Consumables and replacement items on page 6 for order information.

Sample collection and storage

- · Collect samples in clean glass or plastic bottles.
- If the sample contains chlorine, add 1 drop of 0.1 N sodium thiosulfate to 1 liter of sample to remove each 0.3 mg/L of chlorine.
- To preserve samples for later analysis, adjust the sample pH to less than 2 with concentrated sulfuric acid (approximately 2 mL per liter). No acid addition is necessary if the sample is tested immediately.
- Keep the preserved samples at or below 6 °C (43 °F) for a maximum of 28 days.
- Let the sample temperature increase to room temperature before analysis.
- Before analysis, adjust the pH to 7 with 5 N sodium hydroxide solution.
- Correct the test result for the dilution caused by the volume additions.

Sample dilution

Select the applicable sample volume from Table 1. The sample volume depends on the starting concentration of the sample. Put the sample in a graduated mixing cylinder, then dilute the sample to 25 mL with deionized water and mix fully.

Table 1 Sample volumes for dilution

Starting concentration (mg/L NH ₃ -N)	Sample volume (mL)	Dilution factor
≤ 0.8	Dilution is not necessary.	_
≤ 2	10.0 mL	2.5
≤ 4	5.0 mL	5.0
≤ 8	2.5 mL	10.0
≤ 20	1.0 mL	25.0

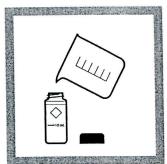
Powder pillow procedure



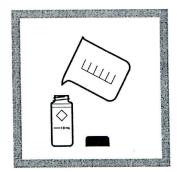
 Set the instrument to NH₃-N.
 For DR300, push the up arrow button. For PCII, push the menu button, checkmark

button, then the menu

button again.



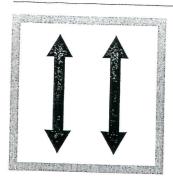
2. Prepare the blank: Fill a sample cell to the 10-mL mark with deionized water.



3. Prepare the sample: Fill a sample cell to the 10-mL mark with sample or diluted sample. Refer to Sample dilution on page 2.



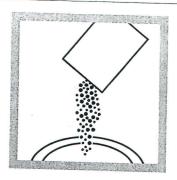
4. Add the contents of one Ammonia Salicylate Powder Pillow to each sample cell.



5. Put the stopper on the sample cell. Shake to dissolve the reagent.



6. Set and start a timer for 3 minutes. A 3-minute reaction time starts.



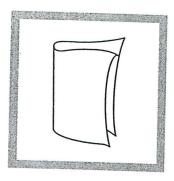
7. After the timer expires, add the contents of one Ammonia Cyanurate Powder Pillow to each sample cell.



8. Put the stopper on the sample cell. Shake to dissolve the reagent.



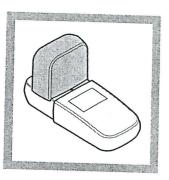
9. Set and start a timer for 15 minutes. A 15-minute reaction time starts.



10. When the timer expires, clean the blank sample cell.



11. Insert the blank into the cell holder. Point the diamond mark on the sample cell toward the keypad.



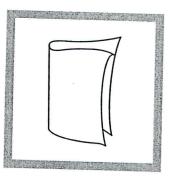
12. Install the instrument cap over the cell holder.



13. Push ZERO. The display shows "0.00".



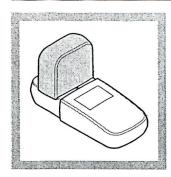
14. Remove the sample cell from the cell holder.



15. Clean the prepared sample cell.



16. Insert the prepared sample into the cell holder. Point the diamond mark on the sample cell toward the keypad.



17. Install the instrument cap over the cell holder.



18. Push **READ**. Results show in mg/L ammonia as nitrogen (NH₃–N).



19. If the sample was diluted, multiply the result by the applicable dilution factor from Table 1 on page 2.

Note: To change the results to mg/L ammonia (NH₃), multiply the result by 1.22. To change the results to mg/L ammonium (NH₄⁺), multiply the result by 1.29.

Interferences

Interfering substance	Interference level
Calcium	1000 mg/L as CaCO ₃
Iron	 All levels. Correct for iron interference as follows: Use one of the Iron, Total procedures to measure the iron concentration of the sample. Use an iron standard solution to add iron to the deionized water blank so that the blank has the same iron concentration as the sample. The iron interference will be zeroed out from the test result.
Magnesium	6000 mg/L as CaCO ₃
Monochloramine	Monochloramine that is in chloraminated drinking water interferes directly at all levels and gives high results. Use a Free Ammonia and Monochloramine method to determine free ammonia in these sample matrices.
Nitrate	100 mg/L as NO ₃ ⁻ –N
Nitrite	12 mg/L as NO ₂ ⁻ –N
pН	Adjust acidic or basic samples to approximately pH 7. Use 1 N sodium hydroxide standard solution for acidic samples and 1 N hydrochloric acid standard solution for basic samples.
Phosphate	100 mg/L as PO ₄ ³ -–P
Sulfate	300 mg/L as SO ₄ ²⁻
Sulfide	 Sulfide will intensify the color. Remove sulfide interference as follows: Measure approximately 350 mL of sample in a 500-mL Erlenmeyer flask. Add the contents of one Sulfide Inhibitor Reagent Powder Pillow. Swirl to mix. Filter the sample through a folded filter paper and filter funnel. Use the filtered sample in the test procedure.
Other substances	Less common interferences such as hydrazine and glycine cause intensified colors in the prepared sample. Turbidity and color will give incorrect high values. Samples with severe interferences require distillation. Use the distillation procedure that is supplied with the distillation set.

Method 10101

CHLORINE, TOTAL (0 to 5.00 mg/L)

For water, wastewater and seawater

DPD Test 'N Tube Method*

Note: This product has not been evaluated to test for chlorine and chloramines in medical applications in the United States.



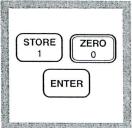
1. Enter the stored program number for Test 'N Tube total chlorine (Cl₂).

Press: PRGM

The display will show:

PRGM ?

Note: For most accurate results, perform a Reagent Blank Correction using deionized water (see Section 1).



2. Press: 10 ENTER
The display will show mg/L, Cl2 and the
ZERO icon.



3. Insert the COD/TNT Vial Adapter into the cell holder by rotating the adapter until it drops into place. Then push down to fully insert it.

Note: For increased performance, a diffuser band covers the light path holes on the adapter. Do not remove the diffuser band.



4. Fill an empty Test 'N Tube vial with sample (the blank).

Note: Fill to the top of the Hach logo "oval" mark.

Note: Samples must be analyzed immediately and cannot be preserved for later analysis.

^{*} Adapted from Standard Methods for the Examination of Water and Wastewater.

CHLORINE, TOTAL, continued



5. Wipe the outside of the blank vial with a towel.

Note: Wiping with a damp cloth followed by a dry one removes fingerprints and other marks.



6. Place the blank in the adapter.

Push straight down on the top of the vial until it seats solidly into the adapter.

Note: Do not move the vial from side to side as this can cause errors.



7. Cover the vial tightly with the instrument cap.

Press: ZERO

The cursor will move to the right, then the display will show:

0.00 mg/L Cl2

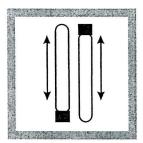
Note: If Reagent Blank Correction is on, the display may flash "limit". See Section 1.



8. Remove the cap from a Total Chlorine DPD-TNT tube. Add 10 mL of sample.

Note: Fill to the top of the Hach logo "oval" mark.

Note: A pink color will develop if chlorine is present.



9. Cap and invert at least 10 times to dissolve the powder. This is the prepared sample.

Note: Use slow, deliberate inversion for complete recovery. Ten inversions should take at least 30 seconds. One inversion equals turning the vial upside down, then returning it to an upright position.



10. Press:

TIMER ENTER

A three-minute reaction period will begin.

Note: A pink color will develop if chlorine is present.



11. When the timer beeps, wipe the prepared sample vial with a towel, then place it in the vial adapter.

Push straight down on the top of the vial until it seats solidly into the adapter.

Note: Do not move the vial from side to side as this can cause errors.



12. Cover the vial tightly with the instrument cap.

Press: READ

The cursor will move to the right, then the result in mg/L total chlorine will be displayed.

CHLORINE, TOTAL, continued

Sampling and Storage

Analyze samples for chlorine **immediately** after collection. Free and combined chlorine are strong oxidizing agents and are unstable in natural waters. They react rapidly with various inorganic compounds and more slowly oxidizes organic compounds. Many factors, including reactant concentrations, sunlight, pH, temperature and salinity influence decomposition of chlorine in water.

Avoid plastic containers since these may have a large chlorine demand. Pretreat glass sample containers to remove any chlorine demand by soaking in a dilute bleach solution (1 mL commercial bleach to 1 liter of deionized water) for at least 1 hour. Rinse thoroughly with deionized or distilled water. If sample containers are rinsed thoroughly with deionized or distilled water after use, only occasional pre-treatment is necessary.

A common error in testing for chlorine is obtaining an unrepresentative sample. If sampling from a tap, let the water flow for at least 5 minutes to ensure a representative sample. Let the container overflow with the sample several times, then cap the sample containers so there is no headspace (air) above the sample. Perform the analysis immediately.

Accuracy Check Standard Additions Method

- a) Snap the top off a High Range Chlorine PourRite[™] Ampule Standard Solution.
- b) Use a TenSette[®] Pipet to add 0.1 mL of the standard to 10 mL of sample (this is the spiked sample). Swirl to mix.
- c) Analyze the spiked sample, beginning at Step 8 of the procedure.
- **d)** Calculate the concentration of mg/L chlorine added to the sample:

mg/L chlorine added = $\frac{0.1 \text{ (vol. standard added)} \times \text{Label value (mg/L Cl}_2)}{10.1 \text{(sample + standard volume)}}$

- e) The spiked sample result (step c) should reflect the analyzed sample result + the calculated mg/L Cl₂ added (step d).
- f) If this increase does not occur, see *Standard Additions*, *Section 1* for more information.

NON-COMPLIANCE REPORT

Arkansas Department of Environmental Quality Office of Water Quality – Enforcement Branch 5301 Northshore Drive North Little Rock, AR 72118

RE: Permit No: A	R0048691	Dis	charge Number:	001-A
Facility: North Texa	rkana WWTP			
Address: 8301 N. San	derson Lane (PO Box 2008	3)		
City: Texarkana		State: AR	Zip: 71854	1
Contact: J. D. Phillips	s, Executive Director	Phone:	(903) 798-3821	
			_	—
Date of Non-Compliance	Parameter Exceeded	Quantity or Loading	Quality or Concentration	Permit Limits
Feb 9 - 15, 2020	7 Day Avg flow MGD	1.230		0.95
We feel this problem	ı was due to:			
	nfall during this time per	riod		
	man danning time time per	nou.		
We plan on correcti	ng the problem in this man	iner:		
Texarkana Water	· Utilities has an Inflow &	Infiltration Prog	ram in place. Th	ey actively
search out any L	§ I situations and report	them for immedi	ate repairs	
Time estimated that	it will take to correct prob	olem:		
On going every d	a y.			
Sincerely,				
·				
JD Phillips, Executive D	irector	03/10/2020.	corrected 05/19/2020	
Submitted By:		Date		
		2410		

☑ Submitted electronically via NetDMR

Certification Statement: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (Revised March 2016)



Texarkana Water Utilities

801 Wood Street, P.O. Box 2008, Texarkana, Texas 75504

(903) 798-3800 Phone 711 TTY (903) 791-0724 Fax

May 21, 2020

Arkansas Department of Environmental Quality Office of Water Quality (OWQ) Compliance Branch 5301 Northshore Drive North Little Rock, AR 72118-5317

RE: City of Texarkana - North Texarkana WWTP Inspections (Miller Co.)

AFIN: 46-00237

NPDES Permit No.: AR0048691

ARR00C484

Dear Mr. Young:

During your April 29, 2020 inspection of our facility, you noted four violations in your summary. Corrective action has been taken and addressed below.

1) Dissolved Oxygen meter calibration was being performed as a liquid saturation without the appropriate buffer and not an air saturation method.

The main lab at South Regional WWTP has always performed a Winkler water calibration once a month on the DO meter. The calibration log is attached for your review. The plant operator performs a daily air calibration on the DO meter and the SOP is included with this response.

2) The thermometer in the composite sampler has no recorded calibration.

Temperature will be read daily and recorded. The thermometer will be brought to the main lab once a month and exchanged with another. The Lab will compare at a temperature that has been Factory Certified on the NIST Thermometer. The results will be recorded and kept in both laboratory locations.

Note: The thermometers will be replaced if they do not calibrate in the range for Sampler (4°±2). The NIST thermometer has been certified at 0, 4, 20, 37, 44.5, and 103 degree.

There are no written Standard Operating Procedures (SOPs) for the laboratory analyses that are conducted in the lab of the North Texarkana WWTP.

Standard Operating Procedures (SOPs) for laboratory analyses conducted at North Texarkana WWTP are included for pH, Ammonia Nitrogen, and Total Chlorine.

4) In February 2020, there was an exceedance of the 7-day average of flow and the non-compliance report (NCR) included did not have all the information required.

New information has now been added to the Non-Compliance Report (NCR) and is included with this response.

If additional information is needed, please contact me at phillips@txkusa.org or (903) 798-3821.

Sincerely,

J.D. Phillips, P.E. Executive Director



February 28, 2022

Joe Doss Phillips, Executive Director City of Texarkana PO Box 2008 Texarkana, TX 75504

RE: City of Texarkana - Response to Inspection (Miller Co)

AFIN: 46-00237 NPDES Permit No.: AR0048691

ARR00C484

Dear Mr. Phillips:

I have reviewed the response pertaining to my April 29, 2020 inspections of the North Texarkana WWTP. The information provided sufficiently addresses the violations referenced in my inspection reports. At this time, the Department has no further comment concerning these particular inspections. 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 (501) 837-2073 or you may e-mail me at youngm@adeq.state.ar.us.

Sincerely,

Michael Young

District 8 Field Inspector Office of Water Quality