

DIVISION OF ENVIRONMENTAL QUALITY

February 28, 2024

Abraham Travis Dotson, Mayor City of Huntsville P.O. Box 430 Huntsville, AR 72740 Email: <u>mayordotson@huntsvillearkansas.org</u>

RE: Huntsville WWTF Inspection (Madison Co.) AFIN: 44-00018 Permit No.: AR0022004

Dear Honorable Mayor Dotson:

On February 5, 2024, I performed a Compliance Evaluation 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 the inspection report is enclosed for your records.

No violations were noted at the time of the inspection. Please refer to the inspection report for any comments.

If I can be of any assistance, please contact me at William.Cody@adeq.state.ar.us or (501) 944-2569.

Sincerely,

Will Ceg

William Cody Inspector, Office of Water Quality

Cc: <u>Sean.Davis@huntsville-water.com</u> <u>Bill.Eoff@huntsville-water.com</u>

( sub	10 00 MARTINE	OFFICE OF WATER QUALITY INSPECTION REPORT								
(II) · 44		AF	AFIN: 44-00018 PERMIT #: AR002200			2004		DATE: 2/5/2024		
ANG.	THO ENVION	CC	)UNTY: <b>44 Ma</b>	diso	on	PDS a	#: <b>129144</b>		MEDIA: WN	
		GF	S LAT: 36.111	1835	LONG: -93.732	806 L	OCATION:	Entrance	9	
	FACILITY INFORMAT	ION			IN	SPEC <sup>®</sup>		RMATIO	N	
	ntsville WWTF			1	FACILITY TYPE: <b>1 - Municipal</b>	INSPECT 1422	or ID#: 257 S - State	e		
<b>30'</b>	191 AR-23			:	FACILITY EVALUATION RATING	<b>3</b> :		TION TYPE: npliance	Evaluation	
Hu	ntsville				DATE(S): EN	ITRY TIME:	EXIT TIME: 10.00		FECTIVE DATE:	
RESPONSIBLE OFFICIAL						0.00	10.00	8/1/20 PERMIT EX	JZ3 (PIRATION DATE:	
NAME: / TITLE								7/31/2	2028	
COMF					FAYETTEVILLE SHALE RELATED: N					
Cit	y of Huntsville				FAYETTEVILLE SHALE VIOLATIONS: N					
P.C	<b>D. Box 430</b>				INSPECTION PARTICIPANTS					
CITY,	STATE, ZIP:				NAME/TITLE/PHONE/FAX/EMAI	L/ETC.:	. Dine et e u	(470) 700	-	
Hu	ntsville AR 72740				sean.davis@huntsville-water.com					
47	9-738-6929 /				Bill Eoff, Wastewater Manager, bill.eoff@huntsville-					
EMAIL	L:			,	water.com					
ma	yordotson@huntsvillearkansas.c	org			Austin Hawes, Area 1 Inspector, (501) 837-6910,					
CC	INTACTED DURING INSPECTION	: NO			austin.hawes@adeq.state.ar.us					
					William Cody, Area 1 Inspector, (501) 944-2569,					
						ideq.s	lale.ar.us			
	(S=S	atisfac	tory, M=Marginal, U=U	Insatisf	factory, N=Not Applicable/	Evaluated	)			
S	PERMIT	S	FLOW MEAS	SURE	EMENT	Ν	STORMW	ATER		
S	RECORDS/REPORTS	S	LABORATOF	RY		S	FACILITY	SITE RE	VIEW	
S	OPERATION & MAINTENANCE	S	EFFLUENT/F	RECI	EIVING WATER	N	SELF-MO	NITORIN	IG PROGRAM	
S	SAMPLING	S	SLUDGE HA	NDL	ING/DISPOSAL	Ν	PRETREA	TMENT		
**	OTHER:									

# SUMMARY OF FINDINGS

No items were noted during the inspection.

#### **GENERAL COMMENTS**

On February 5, 2024, I conducted a Compliance Evaluation Inspection at the above-referenced facility in accordance with the NPDES permit AR0022004. Austin Hawes, Area 1 Inspector, Sean Davis, Executive Director, and Bill Eoff, Wastewater Manager, accompanied me during the inspection. The inspection consisted of a site assessment and records were reviewed at a later date.

#### **Records Review:**

All records reviewed after conducting the inspection are adequate and no significant items are noted. The November 2023 DMR reports a 7-Day Average value of 0.3 mg/L for Ammonia-Nitrogen. After reviewing provided documents and data, I identified a 7-Day Average value of 0.4 mg/L for November 2023, with this value occurring on November 27, 2023. No other items were noted in the records review.

### Site Assessment:

The facility is in good condition overall. Mr. Eoff explained that the facility is planning and proposing the implementation of Aerobic Granular Sludge (AGS) treatment, which would replace the entirety of the existing treatment plant process. The goal is to have this system implemented and running by July 2026.

Raw influent proceeds through bar racks, bar screens, and then grit removal. Wastewater then proceeds to the anaerobic selector basin with four cells. This basin aids in phosphorous removal. Two of the cells are currently inactive. In this process, there are submerged blowers in each cell to supply oxygen while maintaining an anaerobic environment.

From the anaerobic selector basin, wastewater proceeds to a manhole where a 24" and 16" pipe are located. The 16" pipe introduces aluminum sulfate and lime into the wastewater going to the next treatment process. A RAS and WAS station takes RAS and WAS from the clarifiers and re-introduces it in the treatment process. A recycle station mixes wastewater from the anaerobic selector basin and oxidation ditch and feeds to the anoxic zone. The anoxic zone has one submersible blower, and small bubbles on the surface of the anoxic zone indicate adequate processing of the nitrogen cycle and denitrification. Wastewater then proceeds to the oxidation ditch, which also uses blowers and submersible mixers. Paddle wheels on the oxidation ditch have not been used for regular operation since 2017 but are still available if necessary and are regularly checked and ran to ensure proper functionality.

A splitter box from the oxidation ditch feeds into two clarifiers, both of which appear to be in adequate condition. The facility utilizes UV disinfection after the clarifiers. The facility manually cleans and inspects the UV bulbs weekly although wipers are installed on the bulbs.

The treated effluent discharges through a 2' H-flume into Town Branch. The effluent appears of good quality and no items were noted. Sludge handling is done so through a belt press and sludge dryer. The dried solids are sold to the Kingsley Brothers Farm based out of Miller, Missouri. It was mentioned the solids are sold to this group approximately 1-2 times per month and is not on a scheduled frequency.

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INSPECTOR'S SIGNATURE: William Cody	DATE: 2/15/2024
Army Huneyeitt	
SUPERVISOR'S SIGNATURE: U Amy Huneycutt	DATE: 2/20/2024

SECTION A: PERMIT VERIFICATION	
PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS	ØS OM OU ONA ONE
DETAILS:	
1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE:	
2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES:	
3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT:	
4. ALL DISCHARGES ARE PERMITTED:	
SECTION B: RECORDKEEPING AND REPORTING EVALUATION	
RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT	
DETAILS:	
1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRS:	
2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE:	Øs 🗆 🗇 🖓 NA 🗆 NE
a. DATES AND TIME(S) OF SAMPLING:	
b. EXACT LOCATION(S) OF SAMPLING:	
c. NAME OF INDIVIDUAL PERFORMING SAMPLING:	
d. ANALYTICAL METHODS AND TECHNIQUES:	
e. RESULTS OF CALIBRATIONS:	
f. RESULTS OF ANALYSES:	
g. DATES AND TIMES OF ANALYSES:	
h. NAME OF PERSON(S) PERFORMING ANALYSES:	
3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE:	Øs 🗆 🖾 🗆 🗆 🗠
4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR:	OS OM OU ONA ØNE
5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA:	
SECTION C: OPERATIONS AND MAINTENANCE	
TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED	ØS OM OU ONA ONE
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:	
9. STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED:	
10. PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED:	
11. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR:	
12. IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED:	
13. HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS:	
14. HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT:	
15. IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT:	

SECTION D: SAMPLING	
PERMITTEE SAMPLING MEETS PERMIT REQUIREMENTS	ØS OM OU ONA ONE
DETAILS:	
1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT:	
2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES:	
3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT:	
4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT:	
5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT:	
6. SAMPLE COLLECTION PROCEDURES ADEQUATE:	
a. SAMPLES REFRIGERATED DURING COMPOSITING:	
b. PROPER PRESERVATION TECHNIQUES USED:	
c. CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136:	Øy 🛛 n 🖓 na 🖓 ne
7. IF MONITORING IS PERFORMED MORE OFTEN THAN REQUIRED ARE RESULTS REPORTED ON THE DMR:	DY DN DNA ØNE
SECTION E: FLOW MEASUREMENT	
PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS	ØS OM OU ONA ONE
DETAILS:	
1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED: 2' TYPE OF DEVICE: H-Flume	🗹 y 🗆 n 🗆 na 🗆 ne
2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED:	
3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED:	
4. CALIBRATION FREQUENCY ADEQUATE:	
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: minor turbulence	
8. FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES:	
9. HEAD MEASURED AT PROPER LOCATION:	
SECTION F: LABORATORY	
PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS	ØS OM OU ONA ONE
DETAILS:	
1. EPA APPROVED ANALYTICAL PROCEDURES USED (40 CFR 136.3 FOR LIQUIDS, 503.8(B) FOR SLUDGES) :	
2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED:	
3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT:	Dy Dn Dna Øne
4. QUALITY CONTROL PROCEDURES ADEQUATE:	
5. DUPLICATE SAMPLES ARE ANALYZED ≥10% OF THE TIME:	
6. SPIKED SAMPLES ARE ANALYZED <u>&gt;10%</u> OF THE TIME:	
7. COMMERCIAL LABORATORY USED:	Øy 🛛 n 🖓 na 🖓 ne
a. LAB NAME: <u>GTS, Inc.</u>	
b. LAB ADDRESS: 1915 N. Shiloh Dr., Fayetteville, AR 72704	
c. PARAMETERS PERFORMED: Fecal coliform; TP; NO3+NO2-N; NH3-N; CBOD5; Chloride; Sulfate; TDS; TSS; TKN; Iron	
8. BIOMONITORING PROCEDURES ADEQUATE:	
a. PROPER ORGANISMS USED:	
b. PROPER DILUTION SERIES FOLLOWED:	
c. PROPER TEST METHODS AND DURATION:	
d. RETESTS AND/OR TRE PERFORMED AS REQUIRED:	

SECTION G: EFFLUENT/RECEIVING WATERS OBSERVATIONS											
BASED ON	BASED ON VISUAL OBSERVATIONS ONLY										
DETAILS:											
OUTFALL #:	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOATING SOLIDS	COLOR	OTHER				
001	None	None	None	None	None	Clear					
SECTION H	: SLUDGE DIS	POSAL									
SLUDGE D	DISPOSAL MEE	ETS PERMIT F	REQUIREMEN	rs		ØS OM O	U 🗆 NA 🗆 NE				
DETAILS:											
1. SLUDGE M	ANAGEMENT ADEQU	ATE TO MAINTAIN EF	FLUENT QUALITY:			⊠s ⊡m					
2. SLUDGE R	ECORDS MAINTAINED	D AS REQUIRED BY 40	) CFR 503:			⊡s ⊡m	DU 🗹 NA DNE				
3. FOR LAND	APPLIED SLUDGE, TY	PE OF LAND APPLIE	D TO: (E.G., FOREST,	AGRICULTURAL, PUE	BLIC CONTACT SITE):						
SECTION I:	SAMPLING IN	SPECTION PRO	CEDURES								
SAMPLE R	RESULTS WITH	HIN PERMIT R	EQUIREMENT	S			U ⊠NA ⊡NE				
DETAILS:											
1. SAMPLES	OBTAINED THIS INSPE	ECTION:				ΠY	On Øna One				
2. TYPE OF S	AMPLE: GRAB:		IETHOD: FREQUE	NCY:							
3. SAMPLES	PRESERVED:					ΠY	On Øna One				
4. FLOW PRC	PORTIONED SAMPLE	S OBTAINED:				ΠY	On Øna One				
5. SAMPLE O	BTAINED FROM FACIL	LITY'S SAMPLING DEV	ICE:			ΠY	On Øna One				
6. SAMPLE R	EPRESENTATIVE OF	VOLUME AND NATUR	E OF DISCHARGE:			ΠY	□n Øna □ne				
7. SAMPLE SI	PLIT WITH PERMITTER	E:				ΠY	□n Øna □ne				
8. CHAIN-OF-	CUSTODY PROCEDU	RES EMPLOYED:				ΠY	⊡n Øna ⊡ne				
9. SAMPLES	COLLECTED IN ACCO	RDANCE WITH PERM	IT:			ΠY	On Øna One				
SECTION J	: STORM WATE	ER POLLUTION	PREVENTION	PLAN							
STORM W	ATER MANAG	EMENT MEET	S PERMIT RE	QUIREMENTS			U ⊡NA ØNE				
DETAILS:											
1. SWPPP UP	DATED AS NEEDED:	DATE OF LAST UP	DATE:								
2. SITE MAP I	NCLUDING ALL DISCH	HARGES AND SURFAC	CE WATERS:								
3. POLLUTION	N PREVENTION TEAM	IDENTIFIED:									
4. POLLUTION	N PREVENTION TEAM	PROPERLY TRAINED	:								
5. LIST OF PC	DTENTIAL POLLUTANT	F SOURCES:									
6. LIST OF PC	DTENTIAL SOURCES A	AND PAST SPILLS AND	D LEAKS:								
7. ALL NON-S	TORM WATER DISCH	ARGES ARE AUTHOR	IZED:								
8. LIST OF ST	RUCTURAL BMPS:										
9. LIST OF NO	DN-STRUCTURAL BMF	PS:									
10. BMPS PRO	PERLY OPERATED A										
TT. INSPECTIC	INS CONDUCTED AS I										

# Inspection Report: Huntsville WWTF, AFIN: 44-00018, Permit #: AR0022004

FLOW CALCULATION SHEET												
Deter	-/0004		<b>T</b> :	<u> </u>	07							
	5/2024		Time:	09:	31							
Head in Ind	ches:	12.75	Fee	et:	1.06							
Tupo & Siz												
		ninary Fi	Jw measu	ren	nent D	evice						
Name & M	odel of	f Second	ary Flow N	lea	surem	ent D	)ev	ice:				
Data of los	t Calib	ration of	Sacandan			vice						
Date of las			Secondary	уг		vice.						
Recorded	Flow a	t Date &	Time Liste	ed A	Above:	1.7	'12	MGD		(Fa	acility Flow Me	ter)
	Flow	at Data 8	Time List	<u></u>	Abovo	. 1	66	5 MCD				
(Flow is calculated	ated using	at Date or flow charts	in: ISCO Ope	eu en Cl	hannel Fl	. Nea	.00 asur	ement Hand	book-5 <sup>th</sup> [	Editio	on)	
	`								-		/	
% Error =	Rec	<u>lue   -   C</u>	- Calculated Value			e	- X 100					
		C	alculated \	liated value								
0/ [		1.712	-		1.65	5		X 100				
% Error =			1.655					X 100				
		0.057										
% Error =		1 655	— X 10	0								
		1.000										
% Error =		0.0344	X 10	0								
% Error =		2 1 1	0/_									
		J.44	70									
Comments:												

## **DMR Calculation Check**

Reporting Period:	From	2023	02	01	То	2023	02	28			
		Year	Month	Day		Year	Month	Day			
Parameter Checked:		ТР	_								
		Loading		Concentration							
	Mo. Avg Ibs/day				vg r	ng/l	7-day Avg mg/l				
Reported Value:		13.4			0.9		1.8				
Calculated Value:		13.4		0.9			1.8				
Permit Value:		33.3			2.0		3.0	)			

If calculated value does not equal reported value, explain:

### **DMR Calculation Check**

Reporting Period:	From	2023	11	01	То	2023	11	30			
		Year	Month	Day		Year	Month	Day			
Parameter Checked:		NH3-N	_								
		Loading Mass		Concentration Monthly							
	Mo.	Mo. A	vg r	ng/l	7-day Avg mg/l						
Reported Value:		3.0			0.3		0.3				
Calculated Value:	3.0			0.3			0.4				
Permit Value:		50.0			3.0		4.5	;			

If calculated value does not equal reported value, explain:

I identified an Effluent Comp. result on 11/27/2023 with an Ammonia-N result value of 0.4 mg/L. This appears to be the highest value throughout November 2023, which should be reported for the 7-day average.

















**Attachment 1.** Google Earth satellite imagery depicting the City of Huntsville Wastewater Treatment Facility and identifying parts of treatment.