

118 East Broad Street
Texarkana, AR 71854 **PHONE** 870.216.1906 • **FAX** 870.216.1907

March 17, 2016

Ms. Gina Porter Enforcement Analyst Arkansas Department of Environmental Quality 5301 Northshore Drive North Little Rock, AR 72118-5317

Re: City of

City of Magnolia Compliance Date Submittal

AFIN: 14-00059 NPDES Permit No. AR0043613

Dear Ms. Porter:

With reference to the captioned NPDES Permit No. and subsequent to our meeting on March 2, 2016, we offer the following:

On March 4, 2016, the City of Magnolia Waste Water Department began diverting Water Treatment Plant back wash water and sludge blowdown from the oxidation ditch to the stabilization pond in an effort to completely isolate it from the biological process of the WWTP. This isolation effort will be maintained for a period of 60 days until May 4, 2016. As of March 11, 2016, the mixed liquor and return activated sludge (RAS) appear to be growing well. See attached Scope Log. If, at the end of the 60 day trial period it is concluded that the source of the WWTP disruption and subsequent discharge violations was the WTP back wash and sludge blowdown, the isolation will be made permanent with a dedicated force main directly from the sludge holding basin at the WTP to the WWTP stabilization pond. As you know, tens of thousands of dollars were spent during 2015 in efforts to chemically treat the WTP sludge for compatibility with the WWTP process, with no positive benefit.

The City as purchased a sewer smoke machine and related equipment in the amount of \$6,481 and a pipe camera system in the amount of \$33,318. The City began collection system smoke testing on March 7, 2016. Findings are being documented with digital photographs, locations and completion of the attached line leak report and manhole survey report. To date, the smoke testing has revealed 6" and 4" open service connections, manhole bottom damage and cracked and broken manhole rings and lids. All of these findings have been repaired as they were identified. The final product of the smoke testing and camera investigation results will be compiled into an SSES. We are anticipating 12 months for the data collection. The SSES will be the basis for a 20 year sanitary sewer collection system master plan for work that cannot be repaired by City

Utility Crews. The improvements will be divided into four (4) Phases to allow as much public funding as possible.

As discussed in our meeting, the City would like to participate in a Supplemental Environmental Project (SEP) in an effort to reduce the current \$10,000 civil penalty. Frequently, the neighboring Columbia County cities with Waste Water collection systems request assistance from Magnolia with line cleaning and stoppages. Magnolia would like to offer smoke testing and/or line camera assistance to these entities at an hourly rate of \$125, or \$1000/day. Magnolia would be available one (1) day per year for each of the four (4) systems for a maximum annual contribution of \$8,000. These amounts would not be charged to the entities for a period not to exceed three (3) years but, would be considered as a SEP to reduce the civil penalty.

We appreciate your consideration of this summary and proposal. If you require additional information, please contact me, Mayor Parnell Vann or Russell Thomas of the Magnolia Waster Water System.

Sincerely,

A. L. FRANKS ENGINEERING, INC.

Anthony L. (Andy) Franks, P.E.

Principal

CC: Mayor Parnell Vann

Russell Thomas, Magnolia Waste Water

Scope Log

03/11/2016

\*Note: The WP is shipping today beginning around 10:30am.

## Mixed Liquor

The mixed liquor was booming again today with new growth. There is an infinite amount of the microscopic swimmers. They are just everywhere. The stalked ciliates are huge and still growing. They are very active as well moving both their cilia and the entire stalk.

The long stalks with no heads I saw earlier in the week are still present. After looking through the SM book, I feel certain it is some type of algae. There is still quite a bit of it along with the filamentous green algae I saw yesterday. I did see one nematode, and he was rather large. But I also saw some of the rotifers today. Yesterday, they were only in the RAS. They are big and healthy.

## RAS

The RAS looked great again today as well. Lots of the tiny swimmers. I did notice there weren't as many of the free swimming ciliates as I saw yesterday. However, some of the tiny organisms that are too small to identify will probably turn out to be ciliates. It's hard to tell so far. There is a strong presence of the rod shaped bacteria that has been growing all week. It's growing around stalks of both ciliate and algae. There are still a lot of the rotifers, all sizes, very hungry. No nematodes today. Despite all the high flows and rain water, both the RAS and mixed liquor are incredibly active and healthy.

ANTEX:

## MAIN LINE LEAK REPORT

LOCATION:					
	Project:				
	Job #:				
	Area:				
	Area:				
<del>                                     </del>	Line No.:				
	Leak No.: Avg.Depth: Date: Time:				
	Date: Avg. Deptil				
<del></del>	Date: Time: Chew Chief/				
<del></del>					
<del></del>	Inspector:				
	LEAK SOURCE				
	Ditch/Storm Sewer Crossing				
	Ditch/Storm Sewer Parallels				
	Ponding Area				
	Potholes/ Faults				
RECOMMEND	Break Along Line				
Quantification Testing:	Private Line Tie-In				
Internal Televising:	Other				
	L				
DEODEE OF LEAK	DECORIDATION OF LEAK				
DEGREE OF LEAK	DESCRIPTION OF LEAK				
Heavy					
Moderate					
Light					
MEASURED INFLOW DRAINAGE AREA	MANHOLES ACCESSIBLE				
Streetsq.f	t. Up Stream				
(GPD) Ground sq.f	t. Down Stream				
IFAK	LOCATION				
LL/11	(LOO/MICH				
	A Company of the Comp				
	R OVER LINE LEAK CHARACERISTICS				
Under Street Conc. Pavement	Yard/ Field Ponding Area				
Righ-of-Way Asph. Pavement	Woods Size of Hole				
Easement Gravel	Other Potential Head				
Other Sidewalk					
REHABILITATION METHOD ADDITIONAL COMMENTS					
·					

MANHOLE SURVEY								
CITY OF:	N		· · · · · · · · · · · · · · · · · · ·					
Manhole No: Area: Crew: Date: Time:			(					
MANHOLE CONSTRUCTION  Brick  Block  Concrete Poured  Conrete Precast  Fiberglass  Cover Size			anhole #:					
		141	annoic #:					
MH CONDITION	LINE CONDITIONS Material	A B	С	D	E	F		
Good Fair Poor Leaking	Size Depth of Invert Depth of Surchage							
AREA COVER Concrete Pavement	<b> </b>	Concrete PVC - Polyvinyl Chloride - Asbestos Cement						
Asphalt Pavement								
Gravel Sidewalk	Potential For Inflow Drainage Area =							
Soil	In Ditch	Cover Openin	g 1	2	3	4		
Grass	In Pond Area	Possible Head		<del>                                     </del>				
Trees	In Flood Area Size							
MH DEFECTS	Infiltration:	Estimated Rat	e (GPM) =	: 				
Line Cracks Circle Cracks	High		I EAK DE	SCRIPT	ON			
Broken Walls	High LEAK DESCRIPTION Medium							
Broken Pipe Entrance	Low							
Broken Bottom								
Broken Frame	SUGGESTED REHAB:							
Broken Cover								
Clogged with Debris			······································					
Roots Present								
Visible Infiltration								
Visible Inflow								
SOIL CONDITIONS								
Dry						*		
Moist								
Wet								
Saturated	Estimated Cost = \$							