#### **≎**EPA

Form Approved OMB No. 2040-0003 Approval Expires 7-31-85

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

## **NPDES Compliance Inspection Report**

Section A: National Data System Coding														
1	Transaction Code         NPDES         yr/mo/day         Inspect. Type         Inspector         Fac Type           1         N         2         5         3         A         R         0         0         4         3         6         1         3         11         12         0         7         0         1         1         6         17         18         S         19         S         20         1													
	1   4   -   0   0   0   5   9     C   0   1   u   m   b   i   a													
	Section B: Facility Data													
incli City	Name and Location of Facility Inspected (For industrial users discharging to POTW, also include POTW name and NPDES permit number)  City of Magnolia, Big Creek WWTP  Entry Time /Date 9:15/01/16.07  October 2005													
	Columbia 300 gnolia, AR									Fime/Da 01/17/0				Permit Expiration Date 30 September 2010
	ne(s) of On-Site Representative(s)/Ti sell Thomas, Manager	tle(s)	/Phone ar	nd Fax Num	ber(s)								Oti	her Facility Data
Rus P.O.	Name, Address of Responsible Official/Title/Phone and Fax Number Russell Thomas, Manager/870-234-2454 P.O. Box 666 Magnolia, AR 71754  Contacted Yes X No													
	Section C: Areas Evaluated During Inspection (S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)													
S	Permit	S	Flow N	<b>Aeasureme</b>	nt		S	Ope	erations	& Ma	intena	nce	S	Sampling
S	Records/Reports	S	Self-N	Monitoring	Program		N	Slu	dge Ha	ndling/	Dispo	sal	N	<b>Pollution Prevention</b>
S	Facility Site Review	N	Comp	liance Sche	dules		N	Pr	etreatn	nent			N	Multimedia
U	Effluent/Receiving Waters	S	Labor	atory		N Storm Water			Other:					
	Section D: Summary of Findings/Comments (Attach additional sheets if necessary)													
>60	Samples of the facility's effluent revealed that the fecal coliform concentration was over the permit limit for 7 day average. The sample concentration for fecal was >6000 CFU/100mL, permit limit of 2000 CFU/100mL. The mass loading limits for TSS was over the monthly average limits. The loading from the sample was 480 lbs/day, permit limit 313 lbs/day.													
fac	The facility had experienced over 8" of rain the day before the inspection. The flow on the date of the inspection was 5.643 MGD which is way over the average. The facility diverted as much of the excess flow into the surge lagoon. After the surge lagoon was filled, the facility had to send the excess flow through the plant. All records appeared in order. No operational problems were noted.													
John	Name(s) and Signature(s) of Inspector(s)  John Wesley Lamb  Agency/Office/Telephone/Fax  ADEQ/El Dorado/870862-5941/870-862-3509  Date  09 February 2007													
_	-													
Sign	Signature of Reviewer Agency/Office/Phone and Fax Numbers Date													

	PERMIT NO. AR0043613
SECTION A - PERMIT VERIFICATION	
PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS DETAILS:	URTHER EXPLANATION ATTACHED <u>NO</u> )
1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE	■Y□N □NA
2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES	□Y□N ■NA
3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT	■Y□N □NA
4. ALL DISCHARGES ARE PERMITTED	■Y□N □NA
SECTION B - RECORDKEEPING AND REPORTING EVALUATION	
RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT.  DETAILS:  S D M D U D NA (FU	IRTHER EXPLANATION ATTACHED <u><b>no</b></u> )
1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRs.	■Y□N □NA
2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE.	■S □M □U □NA
a) DATES, TIME(S) AND LOCATION(S) OF SAMPLING	■ Y□N □NA
b) NAME OF INDIVIDUAL PERFORMING SAMPLING	■Y□N □N
c) ANALYTICAL METHODS AND TECHNIQUES.	■Y□N□NA
d) RESULTS OF ANALYSES AND CALIBRATIONS.	■Y□N □NA
e) DATES AND TIMES OF ANALYSES.	■Y□N □NA
f) NAME OF PERSON(S) PERFORMING ANALYSES.	■Y□N□NA
3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE.	■S□M □U □NA
4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR.	■ S □ M □ U □ NE
5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA.	■Y□N□NA
SECTION C - OPERATIONS AND MAINTENANCE	
TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED.  DETAILS:	THER EXPLANATION ATTACHED
1. TREATMENT UNITS PROPERLY OPERATED.	■S□M□U □NA
2. TREATMENT UNITS PROPERLY MAINTAINED	■S□M□U □NA
3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED.	■S□M□U □NA
4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE.	■S □M □U □NA
5. ALL NEEDED TREATMENT UNITS IN SERVICE.	■S□M□U □NA
6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED.	■S□M□U □NA
7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED.	■S □M □U □NE
8. OPERATION AND MAINTENANCE MANUAL AVAILABLE. STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED.	■Y□N□NA
PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED.	■Y□N□NE

	PERMIT NO. AR0043613
SECTION C - OPERATIONS AND MAINTENANCE (CONT'D)	
9. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR? IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED? HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS?	■ Y □ N □ NA ■ Y □ N □ NA ■ Y □ N □ NA
10.HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT? IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT?	□Y■N □NA □Y□N ■NA
SECTION D - SELF-MONITORING	
PERMITTEE SELF-MONITORING MEETS PERMIT REQUIREMENTS. $\blacksquare$ S $\Box$ M $\Box$ U $\Box$ NA (further explanation details:	ON ATTACHED_NO).
1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT.	■Y □N □NA
2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES.	■Y □N □NA
3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT.	■Y □N □NA
4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT.	■Y □N □NA
5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT.	■Y □N □NA
6. SAMPLE COLLECTION PROCEDURES ADEQUATE	■Y □N □NA
a) SAMPLES REFRIGERATED DURING COMPOSITING.	■Y □N □NA
b) PROPER PRESERVATION TECHNIQUES USED.	■Y □N □NA
c) CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136	■Y □N □NA
7. IF MONITORING AND ANALYSES ARE PERFORMED MORE OFTEN THAN REQUIRED BY PERMIT, ARE THE RESULTS REPORTED IN PERMITTEE'S SELF-MONITORING REPORT?	■Y □N □NA
SECTION E - FLOW MEASUREMENT	
PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS.	HER EXPLANATION ATTACHED <b>NO</b> )
PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED.  TYPE OF DEVICE18' Parsahll flume	■Y □N □NA
2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED.	■Y □N □NA
3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED.	■Y □N □NA
4. CALIBRATION FREQUENCY ADEQUATE. (DATE OF LAST CALIBRATION 15 March 2006) RECORDS MAINTAINED OF CALIBRATION PROCEDURES. CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE	■Y □N □NA ■Y □N □NE ■Y □N □NA
5. FLOW ENTERING DEVICE WELL DISTRIBUTED ACROSS THE CHANNEL AND FREE OF TURBULENCE.	■Y □N □NA
6. HEAD MEASURED AT PROPER LOCATION.	■Y □N □NA
7. FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES.	■Y □N □NA
SECTION F – LABORATORY	
PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS.  ■ S □ M □ U □ NA (FURT DETAILS:	THER EXPLANATION ATTACHED <u><b>no</b></u> )
1. EPA APPROVED ANALYTICAL PROCEDURES USED (40 CFR 136.3 FOR LIQUIDS, 503.8(b) FOR SLUDGES)	■Y□N□NA

						PERMIT	NO. AR0043613		
SECTION F - LABOR	ATORY (CONT'D)								
2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED ☐ Y ☐ N ■ NA									
3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT.									
4. QUALITY CONTROL PROCEDURES ADEQUATE.									
5. DUPLICATE SAMP	5. DUPLICATE SAMPLES ARE ANALYZED.10_ % OF THE TIME.								
6. SPIKED SAMPLES	ARE ANALYZED. <u>10</u>	% OF THE TIME.				■Y□	N 🗆 NA		
7. COMMERCIAL LAE	BORATORY USED.					■Y□	N □ NA		
LAB ADDRESS Litt			Biomontoring	_					
SECTION G - EFFLU	ENT/RECEIVING WAT	ERS OBSERVATIONS	i.	■S □M □U □	NA (FURTHER EXPLAI	NATION ATTACHE	D).		
Based on visual	observations or	nly.							
OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOAT SOL.	COLOR	OTHER		
001	none	none	none	none	none	colorless			
Comments:				•					
SECTION H - SLUDG	GE DISPOSAL								
SLUDGE DISPOSAL DETAILS:	MEETS PERMIT REQ	UIREMENTS.		■S□M□	U □ NA (FURTHER E	XPLANATION ATT	ACHED <u>no</u> ).		
1. SLUDGE MANAGE	EMENT ADEQUATE TO	O MAINTAIN EFFLUEN	IT QUALITY.			■S□M□	U 🗆 NA		
2. SLUDGE RECORD	OS MAINTAINED AS R	EQUIRED BY 40 CFR	503.			■S □M □U	J NA		
3. FOR LAND APPLIE	ED SLUDGE, TYPE OF	F LAND APPLIED TO:	Public Contact, Class	A sludge_(e.g., FORES	T, AGRICULTURAL, PU	BLIC CONTACT	SITE)		
SECTION I - SAMPLI	ING INSPECTION PRO	OCEDURES		(FURTHER EXPL	_ANATION ATTACHED <u>see</u>	e page 1_).			
1. SAMPLES OBTAIN	NED THIS INSPECTIO	N.				■Y□	N □ NA		
2. TYPE OF SAMPLE	OBTAINED								
GRAB X	COMPOSITE SAMI	PLE X MI	ETHOD auto sampl	er FREQUENC	Y 6 hour composite				
3. SAMPLES PRESERVED. ■ Y □ N □ NA									
4. FLOW PROPORTI	ONED SAMPLES OBT	AINED.				■ Y □	N 🗆 NA		
5. SAMPLE OBTAINE	ED FROM FACILITY'S	SAMPLING DEVICE.				■Y□	N □ NA		
6. SAMPLE REPRES	ENTATIVE OF VOLUM	ME AND NATURE OF D	DISCHARGE.			■ Y □	N 🗆 NA		
7. SAMPLE SPLIT W	7. SAMPLE SPLIT WITH PERMITTEE. ■ Y □ N □ NA								
8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED.									
9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT.									

### **DMR Calculation Check**

<b>Reporting Period: From</b>	2006	<u>December</u>	01	<b>To</b> 2006	<u>December</u>	31
	Year	Month	Day	Year	Month	Day

Parameter Checked: NH3-N

	Loading	Concentration		
	Mass Monthly Avg. (lbs/ day)	Monthly AvgMg/l	7-Day Avg. or Daily Max- Mg/l	
Reported Value:	3.12	0.27	0.63	
Calculated Value:	3.12	0.27	0.63	
Permit Value:	142	6.8	13.5	

If calculated value does not equal reported value, explain:

## FLOW CALCULATION SHEET

Field Data: Date 16 January 2007 Time 11:22
Head in Inches =1.35ft.
Type & Size of Primary Flow Measurement Device 18" parshall flume
Name & Model of Secondary Flow Measurement Device <u>Hydro Ranger</u>
Recorded Flow at date & time listed above 4102.9 gpm
Flows are calculated from flow charts taken from the <u>ISCO Open Channel Flow Measurement Handbook</u>
ft. =4273 M.G.D./g.p.m.
% error = $\frac{recorded\ value\ -\ calculated\ value}{calculated\ value}$ x 100 $\frac{recorded\ value}{recorded\ value}$

% error = 4% less than 10 % is OK

#### - CERTIFICATE OF ANALYSIS -

Attn: Phone: Ext: FAX:

Our Lab#: 2007-0391

Your Sample ID: City of Magnolia Outfall

Sample Type: Report Date: 24-Jan-07

CBOD5				
	5-day carbonaceous BOD	1.95	mg/L	1/17/2007
TSS				
	Totalsuspendedsolids	10.2	mg/L	1/17/2007
NH3-N-ISE	•		· ·	
11.10 11 102	Ammonia as nitrogen	0.13	mg/L	1/23/2007
FC-MF				.,_,,_,
1 0 1411	Fecal coliform by membrane filter	> 6000	cfu/100 ml	1/17/2007

#### Calculations:

Concentration X 8.34 X flow = Mass loading, lbs/day

CBOD 1.95 mg/L  $\times$  8.34  $\times$  5.643 MGD = 91.8 lbs/day

TSS 10.2 mg/L X 8.34 X 5.643 MGD = 480 lbs/day {exceeds permit for Monthly Average (313)}

NH3\_N 0.13 mg/L X 8.34 X 5.643 MGD = 6.11 lbs/day



February 13, 2007

Mr. Russell Thomas, Manager Magnolia Wastewater Utilities P.O. Box 666 Magnolia, AR 71754

NPDES Permit No. AR0043613 AFIN:14-00059

Dear Mr. Thomas:

On January 16 and 17, 2007, I performed a routine compliance sampling inspection of the Magnolia Wastewater Treatment 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. This inspection revealed the following:

The fecal coliform sample taken on 17 January 2007 was over the permit limit for 7-day average. The fecal coliform was >6000 CFU/100mL. The maximum 7-day average in the permit is 2000 CFU/100mL.

The above item requires your immediate attention. Please submit a written response to the NPDES Enforcement Section of this Department when the item has been corrected. This response should contain documentation describing the course of action taken to correct the item noted. This corrective action should be completed as soon as possible, and the written response is due by March 05, 2007.

If I can be of any assistance, please contact me at 870-862-0680.

Sincerely,

John W. Lamb

District Field Inspector

Water Division

cc: NPDES Enforcement

NPDES Permits