ADEQ

ARKANSAS
Department of Environmental Quality

March 13, 2012

Mr. Russell Thomas, Manager
City of Magnolia
P.O. Box 666
Magnolia, AR 71753

Dear Mr. Thomas:

On January 30, 2012, David Long, USEPA Region 6, and I performed a routine compliance inspection of the 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:

1. **The facility failed to mark the number of excursions on the November 2011 DMR for TSS, NH3-N, Nitrate and Total Phosphorus.**

2. **The facility did not have a Class IV licensed operator (only Class III). This is a violation of Part II.1 of the permit.**

3. **The facility did not have adequate operational staff. The facility only has 6 licensed operators for the WWTP, the pretreatment program, sludge processing plant and collection system operations. The O and M manual developed for the plant recommends 6 operators just for the WWTP, exclusive of the pretreatment program and sludge plant. This is a violation of Part III.B.1.B of the permit.**

4. **The facility had floating solids (appeared to be small grease balls) discharging as well as a sludge blanket in the effluent ditch to Big Creek. This is a violation of Part I of the permit.**

5. **The facility had one aerator out of service. This is a violation of Part III.B.1.A of the permit.**

6. **The facility had several aerators in need of new fins. This is a violation of Part III.B.1.A of the permit.**

7. **The facility had excessive solids on the discharge from the raceway to the clarifier as well as excessive algae growth on the clarifier weirs. This is a violation of Part III.B.1.A of the permit.**

8. **The facility's surge lagoon had trees which need to be removed and also had levees on the West and Northeast side that were narrow and less than 1 foot of freeboard. This is a violation of Part III.B.1.A of the permit.**

9. **The rubber seal on the clarifier rake was in need of replacement. It was not making adequate contact with the clarifier wall. This is a violation of Part III.B.1.A of the permit.**

10. **The Fecal Coliform Chain of Custody for the sample taken 11/02/2012 had the incorrect time of receipt by Ana Lab listed. The chain of custody showed that the sample was relinquished by the facility to Ana-Lab at 12:00 but was received by the Ana-Lab at 10:30. The chain of custody was also not signed by the Bio-Analytical, the final receiving contract lab.**

11. **The thermometer in the composite sampler had not been calibrated within the last 12 months to a NIST traceable thermometer. This is a violation of Part III.C.3 of the permit.**

The above items require your immediate attention. Please submit a written response to these findings to Water Division Enforcement Branch. This response should be mailed to the address below, or e-mailed to Water-Enforcement-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 documentations (i.e. photos) is due by March 23, 2012.

For additional information you may contact the enforcement branch by telephone at 501-682-0639 or by fax at 501-682-0910.

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

Sincerely,

John W. Lamb
District 8 Field Inspector
Water Division

cc: Water Division Enforcement Branch
Water Division Permits Branch

EPA

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

NPDES Compliance Inspection Report

Form Approved
OMB No. 2040-0003

Section A: National Data System Coding

1	Transaction Code	2	NPDES	11	12	Yr/Mo/Day	17	18	Inspec. Type	19	Inspector	20	Fac. Type
	N	5	ARG043613			120130			C		T		1

Remarks

Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved
67–69	70: 1	71: N	72: N	73–74, 75–80

Section B: Facility Data

Name and Location of Facility Inspected *(For industrial users discharging to POTW, also include POTW name and NPDES permit number)*	Entry Time/Date	Permit Effective Date
City of Magnolia, Big Creek Wastewater Treatment Plant **72 Columbia Road 300** **Magnolia, AR**	**09:15/01/30/2012**	**01 January 2011**
	Exit Time/Date **14:00/01/30/2012**	Permit Expiration Date **31 December 2015**

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)	Other Facility Data
Russell Thomas/Manager/870-234-2454	PDS #064415
Name, Address of Responsible Official/Title/Phone and Fax Number **Russell Thomas, Manager/870-234-2454** **City of Magnolia** **P.O.Box 666** **Magnolia, AR 71754**	Contacted Yes ☑ No ☐

Section C: Areas Evaluated During Inspection
(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

S	Permit	S	Flow Measurement	U	Operations & Maintenance	U	Sampling
U	Records/Reports	U	Self-Monitoring Program	U	Sludge Handling/Disposal	N	Pollution Prevention
U	Facility Site Review	N	Compliance Schedules	N	Pretreatment	N	Multimedia
U	Effluent/Receiving Waters	U	Laboratory	N	Storm Water	N	Other:

Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

SEE PAGE 8 FOR FINDINGS AND COMMENTS

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone/Fax	Date
John W. Lamb John W. Lamb	**AR Dept. of Environmental Quality, 3400 West Hillsboro** **El Dorado, AR (870)862-0680 (870)862-3509**	
David Long	**U.S. EPA, Region 6, 1445 Ross Avenue** **Dallas, TX 75202 (214)665-7323**	
Signature of Reviewer	Agency/Office/Phone and Fax Numbers	Date

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 ☐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: **See page 8**	
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: **See page 8**	
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:	☑Y ☐N ☐NA ☐NE
9. STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED:	☑Y ☐N ☐NA ☐NE
10. PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED:	☑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: **See page 8**	
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: **18" parhsall 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: **see page 8**	
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: **Ana-Lab Bio-Analytical Laboratories**	
b. LAB ADDRESS: **P.O. Box 9000, Kilgore TX 3240 Spurgin Road, Doyline, La**	
c. PARAMETERS PERFORMED:	
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: **see page 8**

OUTFALL #:	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOATING SOLIDS	COLOR	OTHER
001	None	None	Slight	None	Yes	colorless	

SECTION H: SLUDGE DISPOSAL

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

DETAILS: **see page 8**

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):

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:

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

FLOW CALCULATION SHEET

Date: **01/30/2012** Time: **11:37**

Head in Inches: Feet: **0.65**

Type & Size of Primary Flow Measurement Device: 18" parshall flume

Name & Model of Secondary Flow Measurement Device: Siemens Hydro Ranger 200

Date of last Calibration of Secondary Flow Device: 03/23/2011

Recorded Flow at Date & Time Listed Above: **1265.1** (Facility Flow Meter)

Calculated Flow at Date & Time Listed Above:

(Flow is calculated using flow charts in: ISCO Open Channel Flow Measurement Handbook-5th Edition)

$$\% \text{ Error} = \frac{\text{Recorded Value} - \text{Calculated Value}}{\text{Calculated Value}} \times 100$$

$$\% \text{ Error} = \frac{1265.1 - 1388}{1388} \times 100$$

% Error = **8.85** %

Comments: **Less than 10 % error is acceptable**

DMR Calculation Check

Reporting Period: From **2011** (Year) **Dec** (Month) **01** (Day) To **2011** (Year) **Dec** (Month) **31** (Day)

Parameter Checked: **TSS**

	Loading Mass Mo. Avg. - lbs/day	Concentration Monthly Mo. Avg. - mg/l	Concentration Monthly 7-day Avg. - mg/l
Reported Value:	106.60	3.92	7.00
Calculated Value:	106.6	3.92	7.00
Permit Value:	313	15	22.5

If calculated value does not equal reported value, explain: **EQUAL**

Date	Conc	Flow	# day
12/6	4.67	2.584	100.64
12/13	2.0	1.232	20.55
12/20	2.0	2.353	39.25
12/27	7.0	4.556	265.98
	15.67		426.42
15.67/ 4 = 3.92		426.42/4=106.6	

NPDES Compliance Inspection Report
Further Explanation

Section B: The November 2011 DMR was not filled in correctly. The facility failed to mark the number of excursions for TSS, NH3-N, Nitrate and Total Phosphorus.

Section B, item 2, Section D, item 6: The Fecal Coliform Chain of Custody for the sample taken 11/02/2012 had the incorrect time of receipt by Ana-Lab lab listed. The chain of custody showed that the sample was relinquished by the facility to Ana-Lab at 12:00 but was received by Ana-Lab at 10:30. The chain of custody was also not signed by Bio-Analytical, the final receiving contract lab. See Page 17

Section B, item 3, Section F item 3: The facility thermometer used in the composite sampler has not been calibrated in accordance to Part III.C.3 of the permit. The facility should insure that all thermometers are calibrated at least annually with an NIST certified traceable thermometer.

Section C, item 1: The following operational items were noted at the plant at the time of inspection:

The facility had 1 aerator out of service (photos 2 & 3).

The facility had several aerators in need of new fins (The facility had new fins onsite ready to be installed) (photos 1 & 4).

Excessive solids were noted in the raceway discharge to the clarifier (photo 5).

Excessive solids were noted on the clarifier weir (photo 6).

The rubber on the clarifier rake was in need of replacement (it was not making full contact with the clarifier edge at all places) (photo7).

The facility had a few trees (Chinaberry and persimmon) on the lagoon levees which need to be removed (photos 11 & 13).

The lagoon levee was low and narrow on the West side and low on the Northeast corner, with freeboard less than 1 foot (photos 10 & 12).

The sludge judge was also broken at the time of inspection. These items are all required actions under Part III.B.1.A

Section C, item 6: The facility did not have a Class IV licensed operator as required by Part II.1 of the permit. (Facility only had Class III operators.) The facility also appeared understaff with a total of 5 operators plus 1 manager for the entire wastewater system (WW plant, sludge processing plant, pretreatment and collection system operations). Only 3 of the operators are deal mostly in the WW Plant and sludge processing plant. According the facility's O & M manual, the facility should have 6 plant operators. The facility is required to provide an adequate operating staff in accordance with Part III.B.1.B of the permit.

Section G, Section H: The facility was discharging floating solids which appeared to be small grease balls. A sludge blanket was also noted in effluent channel from the plant to Big Creek. This is prohibited in Part 2 of Part IA of the permit (photos 8 & 9).

Water Division NPDES Photographic Evidence Sheet								
Location:	Magnolia WWTP, Magnolia AR							
Photographer:	John Lamb			**Witness:**	David Long, EPA			
Photo #	1	**Of**	13	**Date:**	01/30/2012	**Time:**	11:44	
Description:	Aerator with fins missing							

Photographer:	John Lamb			**Witness:**	David Long, EPA			
Photo #	2	**Of**	13	**Date:**	01/30/2012	**Time:**	11:26	
Description:	Solids behind out of service aerator							

Water Division NPDES Photographic Evidence Sheet								
Location:	Magnolia WWTP, Magnolia AR							
Photographer:	John Lamb			**Witness:**	David Long, EPA			
Photo #	3	**Of**	13	**Date:**	01/30/2012	**Time:**	11:26	
Description:	Aerator shaft not coupled to shaft next to it, resulting in aerator out of service							

Photographer:	John Lamb			**Witness:**	David Long, EPA			
Photo #	4	**Of**	13	**Date:**	01/30/2012	**Time:**	11:27	
Description:	More fins off another aerator							

Water Division NPDES Photographic Evidence Sheet								
Location:	Magnolia WWTP, Magnolia AR							
Photographer:	John Lamb			**Witness:**	David Long, EPA			
Photo #	5	**Of**	13	**Date:**	01/30/2012	**Time:**	11:27	
Description:	Solids built up in discharge of aeration raceway							

Photographer:	John Lamb			**Witness:**	David Long, EPA			
Photo #	6	**Of**	13	**Date:**	01/30/2012	**Time:**	11:32	
Description:	Secondary clarifier with excessive algae on weir							

Water Division NPDES Photographic Evidence Sheet								
Location:	Magnolia WWTP, Magnolia AR							
Photographer:	John Lamb			**Witness:**	David Long, EPA			
Photo #	7	**Of**	13	**Date:**	01/30/2012	**Time:**	11:34	
Description:	Rubber on clarifier rack not touching side of clarifier							

Photographer:	John Lamb			**Witness:**	David Long, EPA			
Photo #	8	**Of**	13	**Date:**	01/30/2012	**Time:**	11:40	
Description:	Floating solids in chlorine contact chamber							

Water Division NPDES Photographic Evidence Sheet								
Location:	Magnolia WWTP, Magnolia AR							
Photographer:	John Lamb			**Witness:**	David Long, EPA			
Photo #	9	**Of**	13	**Date:**	01/30/2012	**Time:**	12:05	
Description:	Sludge blanket on effluent ditch to Big Creek							

Photographer:	John Lamb			**Witness:**	David Long, EPA			
Photo #	10	**Of**	13	**Date:**	01/30/2012	**Time:**	12:24	
Description:	West side of surge lagoon, showing narrow and low levee							

Water Division NPDES Photographic Evidence Sheet								
Location:	Magnolia WWTP, Magnolia AR							
Photographer:	John Lamb			**Witness:**	David Long, EPA			
Photo #	11	**Of**	13	**Date:**	01/30/2012	**Time:**	12:28	
Description:	Chinaberry tree on Southwest side of surge lagoon							

Photographer:	John Lamb			**Witness:**	David Long, EPA			
Photo #	12	**Of**	13	**Date:**	01/30/2012	**Time:**	12:40	
Description:	Low spot on Northeast side of lagoon levee.							

Water Division NPDES Photographic Evidence Sheet								
Location:	Magnolia WWTP, Magnolia AR							
Photographer:	John Lamb				**Witness:**	David Long, EPA		
Photo #	13	**Of**	13		**Date:**	01/30/2012	**Time:**	12:42
Description:	Persimmon tree on Northeast side of surge lagoon							

Photographer:								
Photo #							**Time:**	
Description:								

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556490 CoC Print Group 001 of 001

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663
Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Chain of Custody

11/30/2009 Page 1 of 1

Report To

Russell Thomas
Magnolia Wastewater
P. O. Box 666
Magnolia, AR 71754-0666

MWW1

102
Fecal Coliform/Weekly

Lab Number 107577

Phone 870/234-2955
Fax 870/234-2203

Accredited	Test Name	Method

AFIN# 14-00059
ADEQ Permit # AR 0043613
Matrix: Liquid Aqueous

Sample Collection Start
Date: 1/10/12 Time: 1105

Sampler Printed Name: David Richards
Sampler Affiliation: MWWS
Sampler Signature: David Richard

Fecal Coliform Analysis
Subcontracted to Bio-Analytical Labs

X	**Na2S2O3 (0.008%) Polystyrene-100 mL Sterilized		
	FCSC	Fecal Coliform Subcontract	Sub/ SM9222D

Ambient Conditions/Comments

Date	Time	Relinquished	Received
1/10/12	1200	Printed Name: David Richards Affiliation: MWWS Signature: David Richard	Printed Name: B Head Affiliation: A2 Signature: B Head
1/10/12	1630	Printed Name: BEN HEAD Affiliation: ANA-LAB Signature: B Head	Printed Name: HICKMAN HOTSHOT Affiliation: Signature:
		Printed Name: HICKMAN HOTSHOT Affiliation: Signature:	Printed Name: Affiliation: Signature:
		Printed Name: Affiliation: Signature:	Printed Name: Affiliation: Signature:

Sample Recieved on Ice? [X] Yes [ ] No **Method of Shipment:** [ ] UPS [ ] Bus [ ] FedEx [ ] Lone Star [X] Hand Delivered [X] Other
Cooler/Sample Secure? [X] Yes [ ] No **Tracking/Shipping #**

The accredited column designates accreditation by A - A2LA, N - NELAC, or z - not covered under A2LA or NELAC scope of accreditation. Ana-Lab personnel collect samples as specified by Ana-Lab SOP #000323.

Comments

OPERATION & MAINTENANCE MANUAL FOR CITY OF MAGNOLIA, ARKANSAS WASTEWATER TREATMENT FACILITIES

(CS-050767-04)

FEBRUARY 1990

VOLUME 1

AMENDED

JUNE 1998

Prepared By:

NRS CONSULTING ENGINEERS
4415 Jefferson Avenue
Texarkana, Arkansas 71854
(870) 773-9967

B. MANPOWER REQUIREMENTS - STAFF:

The recommended manpower requirements for the City of Magnolia Wastewater Treatment Facility are:

1. 1 Superintendent/Operator
2. 1 Laborer
3. 4 Operators
4. 1 Maintenance

It is believed that these recommended staffing requirements are the minimum acceptable to the EPA and the ADPC&E.

The following typical occupation descriptions are presented for information. Actual abilities of various grades of operators will vary from one geographical area to another.

Salaries for these positions will be dependent upon geographical demand also.

C. TYPICAL OCCUPATIONAL DESCRIPTIONS:

1. Superintendent/Operator

Supervises operation of plant, under general direction of superiors. Performs duties of operations or maintenance supervisor in their absence. Supervises, instructs and assigns specific duties to shift workers. Reviews and evaluates work performance. Participates in training programs. Inspects plant equipment and processes regularly. Analyzes instrument readings and laboratory test results. Determines site and causes of many malfunctions. Orders, supervises or participates in required adjustments or repairs. Maintains and evaluates operating records. Replaces operator or maintenance worker during emergency situations.

Performance of any combination of following the tasks pertinent to controlling operation of plant or performs various tasks as directed: Operates treatment facilities to control flow and processing of wastewater, sludge, and effluent. Monitors gages, meters, and control panels. Observes variations in operating conditions and interprets meter and gage readings and test results to determine processing requirements. Operates valves and gates either manually or by remote control; starts and stops pumps, engines, and generators to control and adjust flow and treatment processes. Maintains shift log and records meter and gage readings. Extracts samples and performs routine laboratory tests and analyses. Performs

ADEQ

A R K A N S A S
Department of Environmental Quality

CERTIFIED MAIL: 91 7199 9991 7030 4904 7721

April 17, 2012

Russell Thomas
City of Magnolia
P.O. Box 666
Magnolia, AR 71753

Re: NPDES Permit No. AR0043613, AFIN 14-00059, Failure to Respond to Inspection

Dear Mr. Thomas:

A letter dated March 13, 2012 was sent by ADEQ to the City of Magnolia Wastewater Treatment Facility. The letter outlined the findings of the January 30, 2012 routine inspection of the above referenced wastewater treatment facility by District Field Inspector John Lamb. The letter requested that a written response be submitted to the Department by March 23, 2012. To date, no response has been received at the Department and it is assumed that this is merely an oversight.

Please submit a response by April 27, 2012. A copy of the inspection report has been included for your convenience.

Thank you for your attention to this matter. Should you have any questions, feel free to contact me at 501-682-0635 or you may e-mail me at anderson@adeq.state.ar.us.

Sincerely,

Alan Anderson
Enforcement Analyst
Water Division Enforcement Branch

April 18, 2012

Alan Anderson
Enforcement Analyst
Water Division Enforcement Branch
Arkansas Department of Environmental Quality

Re: NPDES Permit No.AR0043613, AFIN 1400059, Failure to respond to Inspection.

Dear Mr. Anderson:

Please excuse my tardiness in responding to the Inspection results letter dated March 13, 2012, it was simply and oversight on my part.

I will attempt to respond to the following deficiencies that where found during the January 30, 2012 routine compliance inspection performed by John Lamb, ADEQ and David Long, EPA Region 6.

1. **The facility failed to mark the number of excursions on the November 2011 DMR for TSS, NH3-N, Nitrate, and Total Phosphorus.**

   We feel this problem was due to:
   Getting in too big of a hurry and being distract while filling out the NPDES report form.
   We plan on correcting this problem in this manner:
   Will slow down while filling out the NPDES forms and minimizing my distractions.
   A corrected copy of November 2011 DMR is enclosed with this response.

2. **The facility did not have a Class IV operator:**
   In 2011 we could not locate a Class IV operator that was willing to work for us at the rate of pay that we were willing to pay.
   In December 2011 we invested almost $ 700.00 in the study materials that ADEQ recommended that we needed to prepare for the Class IV Exam.
   January 31 – February 2, 2012, we sent an operator (Jared Fuller) to the Class IV review in Little Rock.
   February 21, 2012, sent Jared Fuller back to Little Rock for Class IV math review *(not enough time allotted during first class.)*
   March 7, 2012, sent Jared Fuller to Little Rock for Class IV exam, he failed, will send Jared back again on August 7-9 2012 for Class IV review then on September 6, 2012 to retest.

3. **The Facility did not have adequate Staff.**

At the beginning of the new budget year the Council City approved the budget for only three new employees. The problem that I am facing is the lack of people willing to work, or able to pass a drug test.(everyone wants a job, but they want work).

I have contacted the Adult Education Center which runs the WAGE program here in Magnolia in hope of finding qualified personnel. I am awaiting an answer from them.

Note* The City Council was presented April 9, 2012 with a copy of the Inspection results that your office sent me, I explained to the them during City Council meeting that must of deficiencies found during the inspection was due to not have the adequate staffing.
I am awaiting a response from the City Council on the staffing situation.

4. **The Facility had Floating Solids discharging as well as a sludge blanket in the effluent ditch.**

The floating solids has been contributed to a baffle board at the discharge of the oxidation being out, it has been placed back in the proper position. The floating solids can also can be contributed to the fact that the rubber on the surface skimming arm was wore out on the clarifier that was on line, that has been replaced also. We are still experiencing some floatable solids are currently investigating why.

Sludge Blanket in the Effluent Ditch:

Unsure of when this occurred, I had no Knowledge of this occurring. We have placed another Clarifier on line and have re-instructed the operators to measure the sludge depth in each Clarifier every day. With the permission of ADEQ we will clean the blanket up.

Baffle board back in place;

5. **The Facility had one aerator out of service.**

We need to replace the out board shaft on the aerator, but due to the wetness of the ground at the location of said aerator we have not been able to get a crane in position to remove the aerator from the ditch, as soon as the ground can support a crane we will replace the shaft.(which we have on site)

6. **The Facility had several aerators in need of new fins.**
   Have we have began replacing the fins that are in question, and are continuing to replace fins as manpower and time permits.



7. **The Facility had excessive discharge from the raceway to the clarifier as well as an excessive algae growth on the clarifier's weirs.**

   Poor housekeeping due to the fact we did not have a chance to wash down that morning, we had been addressing an SSO that was at 1821 Lacari Street that morning.

   Operator has been reinstructed in washing procedures of the plant.

Oxidation ditch discharge:

Clarifiers

8. **The Facility's surge lagoon had trees which need to be removed and also had levees on the West and Northeast side that were narrow and less than 1 foot of freeboard.**
   The trees on the pond levee have been removed.

As soon as the weather permits, we will begin hauling dirt to widen the levee on the West and Northeast side of the pond.

During the month of March 2012 we have been taking water from the surge pond into the plant attempting to gain better than a 1 foot freeboard on the board, this has hindered by 10.7 inches of rain that we received, we continue to take in pond water at this time.

Magnolia Wastewater Monthly Flow and Rainfall

	Flow	Rainfall
January	53,442,000	3.7
February	55,198,000	4.0
March	91,119,000	10.7

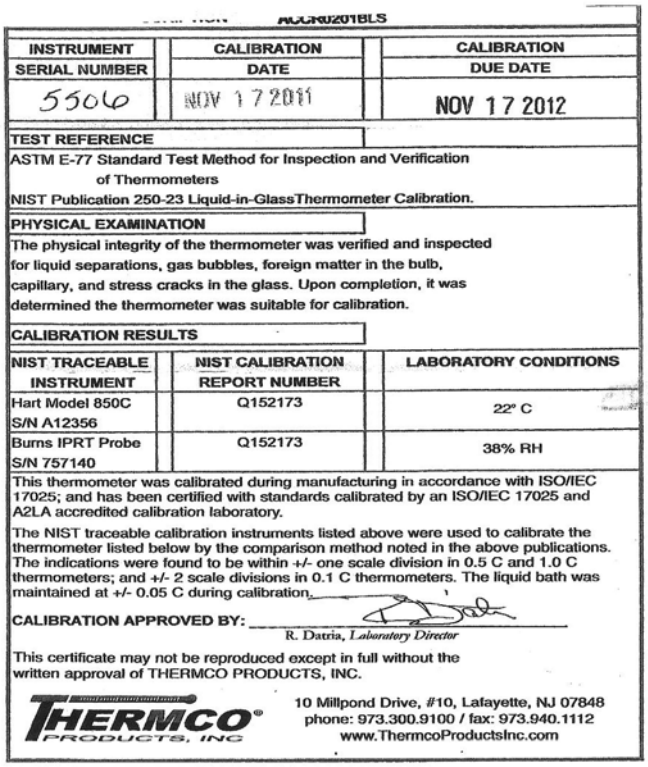
9. **The Rubber Seal on the Clarifier rake was in need of replacement.**
   The rubber seal on the clarifier rake has been replaced.

10. **The Fecal Coli form Chain of custody for the sample taken 01/10/12 had the incorrect time of receipt by ANA-Lab listed. The chain of custody showed that the sample was relinquished by ana-lab at 12:00 but was received by Ana-lab at 10:30. The chain of custody was not signed by Bio-Analytical, the final receiving lab.**

    I have spoken with Ben Head with Ana-lab about the deficiencies found on the chain of custody.

11. The thermometer in the composite sampler had not been calibrated within the last 12 months :

We were unable to produce the calibration certificate at the time of the inspection, but since then have found the certificate:



ACCR0201BLS

INSTRUMENT SERIAL NUMBER	CALIBRATION DATE	CALIBRATION DUE DATE
5506	NOV 17 2011	NOV 17 2012

TEST REFERENCE

ASTM E-77 Standard Test Method for Inspection and Verification of Thermometers
NIST Publication 250-23 Liquid-in-GlassThermometer Calibration.

PHYSICAL EXAMINATION

The physical integrity of the thermometer was verified and inspected for liquid separations, gas bubbles, foreign matter in the bulb, capillary, and stress cracks in the glass. Upon completion, it was determined the thermometer was suitable for calibration.

CALIBRATION RESULTS

NIST TRACEABLE INSTRUMENT	NIST CALIBRATION REPORT NUMBER	LABORATORY CONDITIONS
Hart Model 850C S/N A12356	Q152173	22° C
Burns IPRT Probe S/N 757140	Q152173	38% RH

This thermometer was calibrated during manufacturing in accordance with ISO/IEC 17025; and has been certified with standards calibrated by an ISO/IEC 17025 and A2LA accredited calibration laboratory.

The NIST traceable calibration instruments listed above were used to calibrate the thermometer listed below by the comparison method noted in the above publications. The indications were found to be within +/- one scale division in 0.5 C and 1.0 C thermometers; and +/- 2 scale divisions in 0.1 C thermometers. The liquid bath was maintained at +/- 0.05 C during calibration.

CALIBRATION APPROVED BY: _____
R. Datria, *Laboratory Director*

This certificate may not be reproduced except in full without the written approval of THERMCO PRODUCTS, INC.

THERMCO PRODUCTS, INC

10 Millpond Drive, #10, Lafayette, NJ 07848
phone: 973.300.9100 / fax: 973.940.1112
www.ThermcoProductsInc.com

Again please forgive me for overlooking my response deadline on the compliance inspection letter, most all of our deficiencies lead back to the fact that we are under staffed, and we are trying to correct that situation also.

If you have any further questions or comments, you may contact me at 870-234-2955

Thank you,

Russell W. Thomas, Manager
Magnolia Wastewater System

ADEQ

A R K A N S A S
Department of Environmental Quality

April 27, 2012

Russell Thomas
City of Magnolia
P.O. Box 666
Magnolia, AR 71753

Re: NPDES Permit No.: AR0043613, AFIN 14-00059, Inspection Response

Dear Mr. Thomas:

The Department has reviewed the response to the inspection of the above referenced facility conducted on January 30, 2012 by District Field Inspector John Lamb. The information provided sufficiently addresses the violations referenced in the inspection report. While the Department appreciates the city's efforts toward obtaining a Class IV licensed operator, this is a requirement of Part II, Paragraph I of the Permit. The Department will continue to cooperate with the city in regard to the Class IV requirement so long as the city continues to meet the effluent limits established in Part I, Section A. of the Permit. However, the city must obtain a Class IV licensed operator no later than October 31, 2012.

The sludge blanked that has formed in the effluent ditch to Big Creek must be removed. Please provide the Department with written certification that the sludge has been removed no later than May 11, 2012 Please contact Mark Hathcote at 501-682-0028 in order to determine if a Short Term Activity Authorization will be required prior to commencing this project.

The Department will keep the inspection and response on file. If future violations occur that require enforcement action, the Department will consider the inspection and response as required by the Pollution Control and Ecology Commission Regulation No. 7, Civil Penalties. This regulation requires the Department to consider the past history of your facility and how expeditiously the violations were addressed in determining any civil penalty that may be necessary for any future violations.

Thank you for your attention to this matter. Should you have any questions, feel free to contact me at 501-682-0635 or you may e-mail me at anderson@adeq.state.ar.us.

Sincerely,

Alan Anderson

Alan Anderson
Enforcement Analyst
Water Division Enforcement Branch

MAGNOLIA WASTEWATER SYSTEM
P.O. BOX 666
MAGNOLIA, ARKANSAS 71754-066
(870) 234-2955
mwws@sbcglobal.net

May 10, 2012

Alan Anderson
Enforcement Analyst
Water Division Enforcement Branch
ADEQ
5301 NorthShore Drive
North Little Rock, Arkansas 72118-5317

Re: NPDES Permit No. AR0043613, AFIN 14-00059, response to April 7, 2012 inspection response letter.

Dear Sir,

Actions & Response:

Class IV operator.

Still in search of Class IV operator.

The Sludge blanket that has formed in the effluent ditch to Big Creek must be removed.

On Thursday May third a phone conversation was held with Mark Hathcote in order to determine if a Short Term Activity Authorization would be required to clean the effluent ditch to Big Creek out, it was determined that it was not need. *(reference e-mail thu, May 3, 2012 12:22:13 PM from Mark Hathcote, ADEQ).*

Work Began on cleaning out the effluent ditch going to Big Creek on Monday , May 7, 2012 and ended on May 8, 2012, pictures of end product included.

All material that was removed from the effluent ditch was spread on our property.

MAGNOLIA WASTEWATER SYSTEM

P.O. BOX 666
MAGNOLIA, ARKANSAS 71754-066
(870) 234-2955
mwws@sbcglobal.net

If you have any question pertaining to this matter, feel free in contacting my office at 870-234-2955.

Thank you,

Russell W. Thomas, Manager
Magnolia Wastewater

From: Hathcote, Mark (HATHCOTE@adeq.state.ar.us)
To: mwws@sbcglobal.net;
Date: Thu, May 3, 2012 12:22:13 PM
Cc: ANDERSON@adeq.state.ar.us;
Subject: No STAA Needed

Mr. Russell,

I after speaking with you this morning, and reviewing the situation, we have determined that you will not need an STAA to remove the sludge. Thank you for contacting us with your situation.

Mark Hathcote
Ecologist, Water Planning Division
Arkansas Department of Environmental Quality
5301 Northshore Dr.
North Little Rock, AR 72118-5317
Email: hathcote@adeq.state.ar.us
Phone: 501-682-0028

MAGNOLIA WASTEWATER SYSTEM

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5301 N. Shore Dr.
North Little Rock, Arkansas 72118-5317

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