ADEQ

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

June 25, 2007

John Rimmer, General Manager
West Memphis Utilities Commission
P.O. Box 1868
West Memphis, AR 72301

RE: Waste Water Treatment Plant

AFIN: 18-00109 NPDES Permit No.: AR0022039

Dear Mr. Rimmer:

On May 15, 2007, I performed a routine compliance inspection of the waste water 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 violations:

1. Improper reporting of 7-day averages; this violates Part IV Section A: Definition 18. "7-day average" discharge limitation, other than for fecal coliform bacteria, is the highest allowable arithmetic means of the values for all effluent samples collected during the calendar week. The 7-day average for fecal coliform bacteria is the geometric mean of the values of all effluent samples collected during the calendar week in colonies/100 ml. The DMR should report the highest 7-day average obtained during the calendar month. **For reporting purposes, the 7-day average values should be reported as occurring in the month in which the Saturday of the calendar week falls in.**

2. Improper sample collection; this violates Part IV Section A: Definition 22. "6-hour composite sample" consists of six effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) and composited according to flow. The first sample portion was being collected earlier than 10:00 a.m. *If you wish to switch to collecting 24-hour composite samples as discussed during the inspection, please contact the Permits Section of this department for permission.*

3. There was a calculation error in the March 2007, DMR. The 7-day average for BOD was incorrectly reported as 12.5 mg/l. The correct 7-day average for BOD was 5.1 mg/l. Please submit a corrected DMR for this monitoring period.

The above items require your immediate attention. Please submit a written response to these findings to the Water Division Enforcement Section of this Department. This response should contain documentation describing the course of action taken to correct the items noted. This corrective action should be completed as soon as possible, and the written response is due by July 19, 2007.

If I can be any assistance, please contact me at walker@adeq.state.ar.us or 870-935-7221 ext.-12.

Sincerely,

Brent L Walker

Brent L. Walker
District 3 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
Approval Expires 7-31-85

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	AR0022039			070515			C		S		1

Remarks

67	Inspection Work Days	69	70	Facility Evaluation Rating	71	BI	72	QA	73	Reserved	74	75	Reserved	80
				2		N		N						

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
West Memphis WWTP **502 Rushing Rd.** **West Memphis, AR** **Crittenden County**	**1105 5/15/07**	**June 1, 2003**
	Exit Time/Date **1705 5/15/07**	Permit Expiration Date **May 31, 2008**

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)	Other Facility Data
Paul Holloway/Waste Water Superintendent/870-735-9862 **Patricia Dixon/Laboratory**	

Name, Address of Responsible Official/Title/Phone and Fax Number	Contacted
John Rimmer/General Manager/870-735-3355 **West Memphis Utilities Commission** **P.O. Box 1868** **West Memphis, AR 72301**	Yes ☐ No ☑

Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

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

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

As of November 2006 the City of West Memphis has taken over the responsibility of daily operation and maintenance of the facility from OMI. There have been many notable improvements in operation and maintenance of the facility since the last inspection.

A review of DMRs since November 2006 revealed no permit excursions.

See attached sheets for a Summary of Findings/Comments.

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone/Fax	Date
Brent L. Walker Brent L Walker	**AR Dept. of Environmental Quality-Jonesboro** **(870) 935-7221 ext. 12/(870) 935-4715 (Fax)**	**June 15, 2007**
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:	
1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRS: **Calculation errors**	☐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:	
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: **In process of purchasing and installing a generator**	☐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: **One oxidation ditch drained for repair of fine bubble diffusers**	☑S ☐M ☐U ☐NA ☐NE
6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED: **3 1-Class VI & 2-Class III**	☑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:

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: **Composite started before 1000**	☐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: **Sigma 980 with magnetic partial pipe meter**

1.	PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED: __ TYPE OF DEVICE:	☐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: **Meter is due for recalibration.**	☑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: **Thermometers need to be recalibrated**	☑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: **ETC (Environmental Testing and Consulting)**	
b.	LAB ADDRESS: **Memphis, TN**	
c.	PARAMETERS PERFORMED: **FCB & Acute Toxicity**	
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: **Observation made downstream of UV system and in the effluent wet well. There was a small amount of suspended and floating material resembling plastic or polystyrene. It is unlikely this causes a visible impact on the receiving stream.**

OUTFALL #:	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOATING SOLIDS	COLOR	OTHER
001	None	None	Low	None	Slight	Clear	--

SECTION H: SLUDGE DISPOSAL

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

DETAILS: **Sludge goes to the Shelby County Landfill (Tennessee)**

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: **No-Exposure Exclusion Tracking # ARR00C405 – Sludge Handling Area is exposed to precipitation. Facility does not meet the requirements for keeping a No-Exposure Exclusion – A separate letter and inspection will be sent to address this deficiency.**

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

Facility does not have a primary manual flow measuring device. A flow calibration check could not be performed.

Date: _____ Time: _____

Head in Inches: _____ Feet: _____

Type & Size of Primary Flow Measurement Device:

Name & Model of Secondary Flow Measurement Device:

Recorded Flow at Date & Time Listed Above: _____ (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)

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

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

$$\% \text{ Error} = \frac{\quad}{\quad} \times 100$$

% Error = _____ X 100

% Error = _____ %

Comments:

DMR Calculation Check

Reporting Period:	**From**	**07**	**3**	**1**	**To**	**07**	**3**	**31**
		Year	**Month**	**Day**		**Year**	**Month**	**Day**

Parameter Checked: **BOD**

	Loading Mass Mo. Avg. - lbs/day	**Concentration Monthly Mo. Avg. - mg/l**	**Concentration Monthly 7-day Avg. - mg/l**
Reported Value:	**153**	**4.4**	**12.5**
Calculated Value:	**153**	**4.4**	**5.1**
Permit Value:	**1126**	**30**	**45**

If calculated value does not equal reported value, explain:
Calculation error by permittee
Week of Feb. 25 – Mar. 3 = 5.1 mg/l

DMR Calculation Check

Reporting Period: From 07 (Year) 3 (Month) 1 (Day) **To** 07 (Year) 3 (Month) 31 (Day)

Parameter Checked: FCB

	Loading Mass Mo. Avg. - lbs/day	Concentration Monthly Mo. Avg. - mg/l	Concentration Monthly 7-day Avg. - mg/l
Reported Value:		74.5	142.7
Calculated Value:		76	180
Permit Value:		1000	2000

If calculated value does not equal reported value, explain:

Permittee was incorrectly calculating and reporting the 7-day Average.

NPDES Compliance Inspection Report
Further Explanation

1. Improper reporting of 7-day averages; this violates Part IV Section A: Definition 18. "7-day average" discharge limitation, other than for fecal coliform bacteria, is the highest allowable arithmetic means of the values for all effluent samples collected during the calendar week. The 7-day average for fecal coliform bacteria is the geometric mean of the values of all effluent samples collected during the calendar week in colonies/100 ml. The DMR should report the highest 7-day average obtained during the calendar month. **For reporting purposes, the 7-day average values should be reported as occurring in the month in which the Saturday of the calendar week falls in.**

2. Improper sample collection; this violates Part IV Section A: Definition 22. "6-hour composite sample" consists of six effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) and composited according to flow. The first sample portion was being collected earlier than 10:00 a.m.

3. There was a calculation error in the March 2007 DMR. The 7-day average for BOD was incorrectly reported as 12.5 mg/l. The correct 7-day average for BOD was 5.1 mg/l.