



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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

Section A: National Data System Coding

Transaction Code: 1 N 2 3 A R 0 0 2 0 6 0 5 11 12 0 7 0 6 2 8 17 18 C 19 S 20 1
Remarks: A F I N 1 0 - 0 0 0 6 1 C l a r k C o u n t y
Inspection Work Days: 67 1 69
Facility Evaluation Rating: 70 3
BI: 71 N 72 N 73 74 75 80

Section B: Facility Data

Name and Location of Facility Inspected: City of Arkadelphia Wastewater Treatment Plant - located just east of 3rd Street, approximately 2 miles south of Arkadelphia, AR
Entry Time /Date: 0920 on 6/28/07
Permit Effective Date: 1-1-07
Exit Time/Date: 1350 on 6/28/07
Permit Expiration Date: 12-31-11
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s): David Thomason - Superintendent / 403-3102 ©, Christi Daniel - Lab Technician / 870-246-0697
Other Facility Data:
Name, Address of Responsible Official/Title/Phone and Fax Number: Dorinda Suitor - Utilities Manager / 870-246-5863, 700 clay Street, P.O. Box 495, Arkadelphia, AR 71923
Contacted: Yes [x] N [ ]

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

Table with 4 columns: Permit, Flow Measurement, Operations & Maintenance, Sampling. Rows include: Records/Reports, Facility Site Review, Effluent/Receiving Waters, Self-Monitoring Program, Compliance Schedules, Laboratory, Sludge Handling/Disposal, Pretreatment, Storm Water, Pollution Prevention, Multimedia, Other.

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

See Page 8 for further explanations.

Name(s) and Signature(s) of Inspector(s): Jim McSwain / [Signature]
Agency/Office/Telephone/Fax: ADEQ / Hot Springs / (501)-520-0541 / (501)-520-5978
Date: 6/29/07
Signature of Management QA Reviewer:
Agency/Office/Phone and Fax Numbers:
Date:

## SECTION A - PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS  S  M  U  NA (FURTHER EXPLANATION ATTACHED No)  
 DETAILS:

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  M  U  NA (FURTHER EXPLANATION ATTACHED yes)

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  NA

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  NA

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:  S  M  U  NA (FURTHER EXPLANATION ATTACHED yes)

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  NA

8. OPERATION AND MAINTENANCE MANUAL AVAILABLE.  Y  N  NA

STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED.  Y  N  NA

PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED.  Y  N  NA

**SECTION C – OPERATIONS AND MAINTENANCE (CONT'D)**

9. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE PAST YEAR?  Y  N  NA  
 IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED?  Y  N  NA  
 HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS?  Y  N  NA

10. HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT?  Y  N  NA  
 IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT?  Y  N  NA

**SECTION D – SAMPLING**

PERMITTEE SAMPLING MEETS PERMIT REQUIREMENTS.  S  M  U  NA (FURTHER EXPLANATION ATTACHED yes).  
 DETAILS:

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 136.3.  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.  
 DETAILS  S  M  U  NA (FURTHER EXPLANATION ATTACHED yes)

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED.  Y  N  NA  
 TYPE OF DEVICE 4.125 foot rectangular weir without end contractions

2. FLOW MEASURED AT ALL OUTFALLS 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 1-14-06)  Y  N  NA  
 RECORDS MAINTAINED OF CALIBRATION PROCEDURES.  Y  N  NA  
 CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE.  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.  
 DETAILS:  S  M  U  NA (FURTHER EXPLANATION ATTACHED yes)

1. EPA APPROVED ANALYTICAL PROCEDURES USED (40 CFR 136.3 FOR LIQUIDS, 503.8(b) FOR SLUDGES)  Y  N  NA

## SECTION F – LABORATORY (CONT'D)

2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED  Y  N  NA3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT.  S  M  U  NA4. QUALITY CONTROL PROCEDURES ADEQUATE.  S  M  U  NA5. DUPLICATE SAMPLES ARE ANALYZED. 100 or 0 % OF THE TIME.  Y  N  NA6. SPIKED SAMPLES ARE ANALYZED. % OF THE TIME.  Y  N  NA7. COMMERCIAL LABORATORY USED. Bio-monitoring  Y  N  NALAB NAME Sorrells ResearchLAB ADDRESS 8002 Stanton Road, in Little Rock, ARPARAMETERS PERFORMED Bio-monitoringSECTION G – EFFLUENT/RECEIVING WATERS OBSERVATION.  S  M  U  NA (FURTHER EXPLANATION ATTACHED no ).

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOAT SOL.	COLOR	OTHE R
001	none	none	trace	none	none	trace green	-
	-	-	-	-	-	-	-

RECEIVING WATER OBSERVATIONS The Ouachita River appeared normal at this time.

## SECTION H – SLUDGE DISPOSAL

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS.  S  M  U  NA (FURTHER EXPLANATION ATTACHED no ).  
DETAILS:1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY.  S  M  U  NA2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503.  S  M  U  NA

3. FOR LAND APPLIED SLUDGE, TYPE OF LAND APPLIED TO: \_\_\_\_\_ (e.g., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE)

SECTION I – SAMPLING INSPECTION PROCEDURES (FURTHER EXPLANATION ATTACHED no ).1. SAMPLES OBTAINED THIS INSPECTION.  Y  N  NA

2. TYPE OF SAMPLE OBTAINED

GRAB \_\_\_\_\_ COMPOSITE SAMPLE \_\_\_\_\_ METHOD \_\_\_\_\_ FREQUENCY \_\_\_\_\_

3. SAMPLES PRESERVED.  Y  N  NA4. FLOW PROPORTIONED SAMPLES OBTAINED.  Y  N  NA5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE.  Y  N  NA6. SAMPLE REPRESENTATIVE OF VOLUME AND MATURE OF DISCHARGE.  Y  N  NA7. SAMPLE SPLIT WITH PERMITTEE.  Y  N  NA8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED.  Y  N  NA9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT.  Y  N  NA

**DMR Calculation Check**

Reporting Period: from 07 03 01 to 07 03 31  
year month day year month day

Parameter Checked: TSS, mg/L

	<u>Quantity</u>	
	<u>Monthly Avg.</u>	<u>7 Day avg.</u>
Reported Value:	16.3	35.3
Calculated Value:	16.3	35.3
Permit Value:	90	135

If calculated value does not equal reported value, explain:

Same

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**Flow Calculation Sheet**

Field Data: Date 6-28-07 Time 1322 hrs.

Head 0.2 feet

Type & Size of Flow Monitoring Device 4.125 Rectangular Weir

Name & Model of Flow Monitoring Device Milltronics Ultrasonic Flow Meter

Recorded Flow at date & time listed above 0.75 MGD

Reference for Flow Calculations Isco Open Channel Flow Measurement Handbook

Calculations:

$$\text{For MGD } Q = 2.152LH^{1.5}$$

L=length of weir in feet

H=head on the weir

$$Q = 2.152(4.125)0.2^{1.5}$$

$$Q = 2.152(4.125)0.0894$$

$$Q = 0.794 \text{ MGD}$$

$$\% \text{ error} = \frac{\text{Recorded value} - \text{calculated value}}{\text{calculated value}} (100)$$

$$\% \text{ error} = \frac{.75 - .794}{.794} \times 100$$

$$\% \text{ error} = -5.54 \% \text{ error}$$

### **Further Explanations**

**Section B(2)** - The following required information is not being recorded for the grab samples: Analytical method and reference for each individual parameter. Specifically, the methods were not reference for DO, pH, and Chlorine.

**Section C(2)** - The Limna System had high concentrations of Marsh Pennywort. According to the operator, they are having a difficult time trying to control it. He had recently sprayed 2-4-D on the Pennywort in an effort to kill it back.

**Section C(2)** - The pump used to draw water to the chlorination system has a leaking seal. This leak bypasses chlorination and is discharged onto the ground.

**Section D(6c)** - The fecal coliform sample is not being collected properly. Currently, the sample is being collected utilizing an unsterilized plastic funnel.

**Section E (3&4)** – The flow measuring device has not been calibrated on an annual basis. The last calibration was performed on 1/14/06. Furthermore, monthly flow calibration checks are not being performed as required to ensure 10% accuracy to true value.

**Section F(5)** - Duplication of the pH analysis and the dissolved oxygen analysis is not being performed at a minimum frequency of 10% of each set of samples analyzed.

# ADEQ

ARKANSAS  
Department of Environmental Quality

July 2, 2007

Dorinda Suitor, Utilities Manager  
City of Arkadelphia  
P.O. Box 151  
Arkadelphia, AR 71923

Re: AFIN: No. 10-00047      NPDES Permit No. AR0020605

Dear Ms. Suitor:

On June 28, 2007, I performed a routine permit compliance evaluation inspection of your wastewater 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:

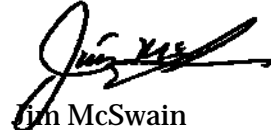
1. The following required information is not being recorded for the grab samples: Analytical method and reference used for the analysis.
2. The fecal coliform sample is not being collected properly. Currently, the sample is being collected utilizing an unsterilized plastic funnel.
3. The flow measuring device has not been calibrated on an annual basis. The last calibration was performed on 1/14/06. Furthermore, monthly flow calibration checks are not being performed as required to ensure 10% accuracy to true value.
4. Duplication of the pH analysis and the dissolved oxygen analysis is not being performed at a minimum frequency of 10% of each set of samples analyzed.
5. The pump used to draw water to the chlorination system has a leaking seal. This leak bypasses chlorination and is discharged onto the ground.

The aforementioned violations require your immediate attention. Please submit a written response to these findings to the NPDES Section of this Department when the violations have been corrected. 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 is due by July 25, 2007.

AR0020605  
7/2/2007  
Page 2

If you have any questions concerning this inspection, please feel free to contact me at (501) 520-0541.

Sincerely,

A handwritten signature in black ink, appearing to read "Jim McSwain", written over a horizontal line.

Jim McSwain  
District Field Inspector  
Water Division

cc: NPDES Branch





700 Clay Street  
P. O. Box 495  
Arkadelphia, AR 71923  
Phone (870) 246-5863  
Fax (870) 246-9546

November 1, 2007

Mr. Greg Hurley  
NPDES Enforcement Section  
Arkansas Department of Environmental Quality  
5301 Northshore Drive  
North Little Rock, AR 72118-5317

RE: NPDES Permit NO: AR0020605 AFIN: 10-00061

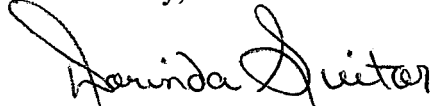
Dear Mr. Hurley:

In regards to comments of our routine permit compliance evaluation inspection of Arkadelphia's wastewater facility I have the following response to Mr. McSwain's comments:

1. Laboratory personnel have proposed that the funnel used in collecting the fecal coliform grab samples will be kept in a separate container and sprayed with alcohol and allowed to air dry immediately before use. If this is not satisfactory please advise.
2. Staff has scheduled with Instrument and Supply to have the flow meter calibrated early next week.
3. Staff believes that samples are duplicated more than 10% of the time. Duplicates were not being performed on DO and staff has added DO to the duplicates being performed.
4. The water coming from the pump used to draw water to the chlorination system is actually chlorinated water. To prevent the water from running onto the ground staff is constructing a small retaining wall that will cause the seepage from the pump to run back into the chlorine contact basin. The pump has a packing seal and not a mechanical seal, therefore it seeps.

I trust that staff's corrective actions will satisfy. If you need anything further please let me know.

Sincerely,

A handwritten signature in cursive script that reads "Dorinda Suitor". The signature is written in black ink and is positioned above the printed name.

Dorinda Suitor  
Manager



700 Clay Street • P. O. Box 495  
Arkadelphia, Arkansas 71923



Mr. Greg Hurley  
NPDES Enforcement Section  
Arkansas Department of Environmental Quality  
5301 Northshore Drive  
North Little Rock, AR 72118-5317

72118+5317





POST  
NOV 19 2007  
MARKED

04#034135  
700 Clay Street  
P. O. Box 495  
Arkadelphia, AR 71923  
Phone (870) 246-5863  
Fax (870) 246-9546

November 25, 2007

Mr. Dennis Benson  
Technical Assistance Manager  
NPDES Enforcement Section  
Arkansas Department of Environmental Quality  
5301 North Shore Drive  
North Little Rock, AR 72118-5317

RE: NPDES Permit # AR0020605 and AFIN: 10-00061

Dear Mr. Benson:

I apologize for the oversight of not properly addressing each item in the first response. I trust that this letter will add closure to the issues.

1. Staff has been instructed to include the analytical method used when recording grab samples for pH and DO, this procedure was intuited after the inspector's visit..
2. Staff is currently disinfecting the funnel with alcohol and storing it in a separate container. Other methods of sampling and collection are being reviewed.
3. Staff will establish monthly calibration checks for accuracy of the flow meter.

If you have further questions or need to contact me I can be reached at 870-246-5863 or by e-mail [dsuitor@cityofarkadelphia.com](mailto:dsuitor@cityofarkadelphia.com).

Sincerely,

Dorinda Suitor  
Manager