ADEQ

ARKANSAS
Department of Environmental Quality

March 5, 2009

Thea Hughes
Jacksonville Wastewater Utility
248 Cloverdale Road
Jacksonville, AR 72076

AFIN: 60-00543 NPDES Permit No.: AR0041335

Dear Ms. Hughes:

On February 24, 2009, Dennis Benson and I performed a compliance sampling inspection and an SSO 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 that you were in compliance with the terms of your permit.

If I can be any assistance, please contact me at glenn@adeq.state.ar.us or 501-682-0658.

Sincerely,

Jill Glenn
District 9 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	AR0041335			090224			S		S		1

Remarks

Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved
67–69	70: 4	71: N	72: N	73–80

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
Jacksonville Wastewater Utility – J. Albert Johnson Plant - **248 Cloverdale Road** **Jacksonville, AR**	**0945 on 2/24/09** **0915 on 2/25/09**	**11/01/07**
	Exit Time/Date **1440 on 2/24/09** **1000 on 2/25/09**	Permit Expiration Date **10/31/12**

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)	Other Facility Data
Sam Zehtaban – Operations Manager / 501-982-0581	

Name, Address of Responsible Official/Title/Phone and Fax Number	Contacted
Thea Hughes – General Manager / 501-982-0581 **Jacksonville Wastewater Utility** **248 Cloverdale Road** **Jacksonville, AR 72076**	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	S	Sampling
S	Records/Reports	S	Self-Monitoring Program	S	Sludge Handling/Disposal	N	Pollution Prevention
S	Facility Site Review	N	Compliance Schedules	N	Pretreatment	N	Multimedia
S	Effluent/Receiving Waters	S	Laboratory	S	Storm Water	N	Other:

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

Facility was in compliance with the terms of permit at the time of the inspection.

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone/Fax	Date
Jill Glenn, Jill Glenn	**ADEQ/ North Little Rock/ 501-682-0658/ 501 682-0910 (Fax)**	**2/24/09**
Dennis Benson	**ADEQ/ North Little Rock/ 501-683-0827/ 501 682-0910 (Fax)**	**2/24/09**
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:	☑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:	☑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:	
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: **3' Parshall 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: **Last calibration 5/19/08**	☑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:	☑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: **American Interplex**	
b. LAB ADDRESS: **8600 Kanis Road, Little Rock, AR 72204**	
c. PARAMETERS PERFORMED: **Priority pollutants, quarterly metals, and pretreatment program samples**	
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:

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

SECTION H: SLUDGE DISPOSAL

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

DETAILS: **Two Pines Landfill**

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: **Results within permit requirements**

1. SAMPLES OBTAINED THIS INSPECTION: ☑Y ☐N ☐NA ☐NE
2. TYPE OF SAMPLE: ☑GRAB:__ ☑COMPOSITE:__ METHOD:__ FREQUENCY: **850 mL of sample every 40,000 gallons**
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 certificate**

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: **2/24/09** Time: **1035**

Head in Inches: _____ Feet: **0.86**

Type & Size of Primary Flow Measurement Device:
3' Parshall Flume

Name & Model of Secondary Flow Measurement Device:
Milltronic Hydroranger Plus

Recorded Flow at Date & Time Listed Above: **5.73** (Facility Flow Meter)

Calculated Flow at Date & Time Listed Above: **6.124**
(Flow is calculated using flow charts in: ISCO Open Channel Flow Measurement Handbook-5th Edition)

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

$$\% \text{ Error} = \frac{5.73 - 6.124}{6.124} \times 100$$

$$\% \text{ Error} = \frac{-0.394}{6.124} \times 100$$

$$\% \text{ Error} = -0.0643 \times 100$$

% Error = **-6.43** %

Comments: **Within 10%**

DMR Calculation Check

Reporting Period: **From** 08 (Year) 11 (Month) 01 (Day) **To** 08 (Year) 11 (Month) 30 (Day)

Parameter Checked: NH3-N

	Loading Mass Mo. Avg. - lbs/day	Concentration Monthly Mo. Avg. - mg/l	Concentration Monthly 7-day Avg. - mg/l
Reported Value:	7.8	0.2	0.2
Calculated Value:	7.8	0.2	0.2
Permit Value:	411	4	6

If calculated value does not equal reported value, explain: Same

DMR Calculation Check

Reporting Period: From 08 (Year) 11 (Month) 01 (Day) **To** 08 (Year) 11 (Month) 30 (Day)

Parameter Checked: CBOD

	Loading Mass Mo. Avg. - lbs/day	Concentration Monthly Mo. Avg. - mg/l	Concentration Monthly 7-day Avg. - mg/l
Reported Value:	89.0	2.3	2.9
Calculated Value:	89.0	2.3	2.9
Permit Value:	1027	10	15

If calculated value does not equal reported value, explain: Same

NPDES Compliance Inspection Report
Further Explanation

Date: 2/25/09
Time: 0928
Flow: 5.582 MGD

Grab sample		**Permit Limits**
Temp.: 13.8 °C	Dup: 13.8 °C	
pH: 6.76 SU	Dup: 6.78 SU	**6.0 - 9.0 SU**
DO: 9.57 mg/L	Dup: 9.58 mg/L	**Min. 6.0 Mo. Avg.**
TRC: 0.02 mg/L	Dup: 0.03 mg/L	**< 0.10 mg/L**

Composite sample
Started at 0800 2/24/09 850 mL sample collected every 40,000 gallons
Ended at 0800 2/25/09

Arkansas Department of Environmental Quality

5301 Northshore Drive
North Little Rock, AR 72118

- CERTIFICATE OF ANALYSIS -

Our Lab#: 2009-0523
Sample ID: City of Jacksonville - AR0041335 **Sample Collect Date:** 2/25/2009
Sample C **Report Date:** 3/5/2009

Test Group	Test		Result	Units	Analysis Date	MDL	RDL
CBOD5							
	5-day Carbonaceous BOD		0.58	mg/L	2/25/2009	0.2	0.20
FC-MF							
	Fecal coliform		~25	cfu/100 ml	2/25/2009	1	1
FIELD							
	Dissolved oxygen		9.57	mg/L	2/25/2009		
	Field pH		6.76	SU	2/25/2009		
NH3-N-ISE							
	Ammonia as nitrogen	<	0.15	mg/L	2/25/2009	0.15	0.15
TSS/TDS							
	Total suspended solids	<	1.0	mg/L	2/25/2009	1	1.0

Loading calculations
CBOD: 27.001 lbs/day
TSS: 46.554 lbs/day
NH3-N: 6.983 lbs/day

Permit limits
CBOD: **1027 lbs/day Mo. Avg.,10 mg/L Mo. Avg., 15 mg/L 7 Da. Avg.**
TSS: **1540 lbs/day Mo. Avg., 15 mg/L Mo. Avg., 22.5 mg/L 7 Da. Avg.**
NH3-N: **411 lbs/day Mo. Avg., 4 mg/L Mo. Avg., 6 mg/L 7 Da. Avg.**
Fecal: **2000 #/100mL**