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	2	NPDES	11	12	yr/mo/day	17	18	Inspec. Type	19	Inspector	20	Fac Type
	N	5	ARG0046566			060831			C		S		1

Remarks: AFIN 38-00040

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)*
City of Walnut Ridge Wastewater Treatment Facility
8897 Oak Street
Walnut Ridge, AR Lawrence County

Entry Time /Date: **1015 /August 31,2006**
Exit Time/Date: **1615 / August 31,2006**
Permit Effective Date: **October 1, 2005**
Permit Expiration Date: **September 30,2010**

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)
Gene Wheeless/ Operator/870-866-3348
Jonathan Kopp/operator in training/870-866-3348

Other Facility Data
36.06764N
-90.97219W

Name, Address of Responsible Official/Title/Phone and Fax Number
Lester Herring/Water and Wastewater Superintendent/870-886-2312
City of walnut Ridge
216 Southwest 4th Street
Walnut Ridge, AR 72467

Contacted: Yes [X] No [ ]

Section C: Areas Evaluated During Inspection

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

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

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

During the course of the inspection, Discharge Monitoring Reports for May, June and July, 2006, were reviewed and according to the Discharge Monitoring Reports, the effluent exceeded permit limits in the months of June and July, for Total Suspended Solids and Ammonia Nitrogen. In the month of June, the effluent also exceeded permit limits for CBOD. The second Quarter Bio-monitoring failed in two areas.

Noted major improvements in the area of effluent monitoring and laboratory records.

See attachment # 3 for additional comments.

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone/Fax	Date
Mike Kennedy	Arkansas Dept. Environmental Quality/Batesville, AR	October 6, 2006
Dale Washam Dale D. Washam	Arkansas Dept. Environmental Quality/Mammoth Spring, 870-625-7477	October 6, 2006
Signature of Reviewer	**Agency/Office/Phone and Fax Numbers**	**Date**

	PERMIT NO.: **AR0046566**

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. □ S □ M ■ U □ NA (FURTHER EXPLANATION ATTACHED **Yes**)
DETAILS:

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. **Contract Laboratory**	■ 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. □ S ■M □U □NA (FURTHER EXPLANATION ATTACHED **Yes**)
DETAILS:

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. # 1 blower was down for repairs	□S ■M □U □NA
6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED. 2-Class III, 2- Class I, 1 operator in training	■ S □M □U □NA
7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED. (No written inventory being maintained)	□S □M ■U □NE
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 ■NE

PERMIT NO.: **AR0046566**

SECTION C - OPERATIONS AND MAINTENANCE (CONT'D)

9. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST 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: **Starting the 6 hour composite sample before 10:00 a.m.**

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. □ S □ M ■ U □ NA (FURTHER EXPLANATION ATTACHED **Yes**)
DETAILS: Secondary instrument out of calibration

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED. ■ Y □ N □ NA
TYPE OF DEVICE 90 degree v-notch weir

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 (**July 11, 2006**) □ 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. ■ S □ M □ U □ NA (FURTHER EXPLANATION ATTACHED **No**)
DETAILS:

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

PERMIT NO.: **AR0046566**

SECTION F - LABORATORY (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. ■ S ☐ M ☐ U ☐ NA

4. QUALITY CONTROL PROCEDURES ADEQUATE. ■ S ☐ M ☐ U ☐ NA

5. DUPLICATE SAMPLES ARE ANALYZED. 10 % OF THE TIME ■ Y ☐ N ☐ NA

6. SPIKED SAMPLES ARE ANALYZED. 10 % OF THE TIME. ■ Y ☐ N ☐ NA

7. COMMERCIAL LABORATORY USED. (State certified) ■ Y ☐ N ☐ NA

LAB NAME **Arkansas Testing Laboratories** **Bio-Analytical Laboratories**
LAB ADDRESS **P.O. Box 481, Searcy, Ar 72145** **3240 Sprugin Rd,Dayline,LA 71023**
PARAMETERS PERFORMED **CBOD,TSS,Fecal Coliform,pH,TRC,DO, NH3-N** Biomonitoring

SECTION G – (EFFLUENT)/RECEIVING WATERS OBSERVATIONS. ■ S ☐ M ☐ U ☐ NA (FURTHER EXPLANATION ATTACHED **No**).

Based on visual observations only.

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOAT SOL.	COLOR	OTHER
001	**None**	**None**	**Moderate**	**None**	**None**	**Light green**	

Comments:

SECTION H - SLUDGE DISPOSAL

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS. ■ S ☐ M ☐ U ☐ NA (FURTHER EXPLANATION ATTACHED **No**).
DETAILS: no sludge or bio-solids were disposed of in the past year.

1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY. ■ S ☐ M ☐ U ☐ NA

2. 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 - **N/A**

GRAB _____ COMPOSITE SAMPLE _____ METHOD _____ FREQUENCY

3. SAMPLES PRESERVED. ☐ Y ☐ N ■ NA

4. FLOW PROPORTIONED SAMPLES OBTAINED. ☐ Y ☐ N ■ NA

5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE. ☐ Y ☐ N ■ NA

6. SAMPLE REPRESENTATIVE OF VOLUME AND NATURE OF DISCHARGE. ☐ Y ☐ N ■ NA

7. SAMPLE SPLIT WITH PERMITTEE. ☐ Y ☐ N ■ NA

8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED. ☐ Y ☐ N ■ NA

9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT. ☐ Y ☐ N ■ NA

Attachment #1
AR0046566

FLOW CALCULATION SHEET

Field Data: Date **8/31/06** Time **1150 & 1205**

Head in feet**: 0.5 & .45**

Type & Size of Primary Flow Measurement Device
90 degree V-notch weir
Name & Model of Secondary Flow Measurement Device
Isco 4210 Flow Totalizer Meter

Recorded Flow at date & time listed above **0.214 & 0.201 MGD**

Flows are calculated from flow charts taken from th**e ISCO Open Channel Flow Measurement Handbook-5th Edition**

% error **= *(recorded value - calculated value)* x 100**
calculated value

% error = $\frac{0.214-0.2857}{0.2857}$ X 100 = -25%

$\frac{0.201-0.2319}{0.2319}$ X 100 =-13 %

% error = -25%

-13%

Error is greater than a +/- 10 % error -- Out of compliance

Attachment 2
AR0046566

DMR Calculation Check

Reporting Period:	From	2006	June	01	To	2006	June	30
		Year	Month	Day		Year	Month	Day

Parameter Checked: TSS

	Loading Mass	Concentration Monthly	
	Mo. Avg. - lbs/day	Mo. Avg. - mg/l	7-day Avg. - mg/l
Reported Value:	64.4	23	37
Calculated Value:	71.1	25	42
Permit Value:	149.0	15	23

If calculated value does not equal reported value, explain:
Mr. Herring was not sure why the values did not equal. The consulting laboratory does all the calculations and reporting the values.

Attachment #2b
AR0046566

DMR Calculation Check

Reporting Period:	From	2006	July	01	To	2006	July	31
		Year	Month	Day		Year	Month	Day

Parameter Checked: CBOD

	Loading Mass	Concentration Monthly	
	Mo. Avg. - lbs/day	Mo. Avg. - mg/l	7-day Avg. - mg/l
Reported Value:	37.0	10	14
Calculated Value:	37.0	10.3	15
Permit Value:	99.0	10	15

If calculated value does not equal reported value, explain:

Mr. Herring was not sure why the values did not equal. The consulting laboratory does all the calculations and reporting the values.

Attachment # 3
NPDES Permit No.AR0046566

NPDES Compliance Inspection Report
Further Explanation

Page 2 of 4

Section B

Detail 1

Analytical results were not consistent with the data reported on DMR's. A review of the June and July 2006, DMR's revealed that the laboratory results did not equal the reported value on the DMR's.

June 2006

For Total Suspend Solids the reported Loading Monthly Average was 64.4 lbs/day while the calculated value was 71.1 lbs/ day. The monthly average concentration reported value was 23 mg/l while the calculated value was 25 mg/l. The 7 day average was reported to be 37 mg/l and it should have been reported as 42 mg/l.

For CBOD the reported Loading Monthly Average was 46.8 lbs/day while the calculated value was 51 lbs/day. The concentration monthly average reported value was 15mg/l while the calculated value was 16.8 mg/l.

July 2006

For Total Suspend Solids the 7 day average was reported on the DMR to be 27 mg/l and it should have been reported as 30 mg/l.

For CBOD the 7 day average was reported on the DMR to be 14 mg/l and it should have been reported as 15 mg/l.

Page 2 of 4

Section C

Detail 2

3 air diffusers were not working properly.

Page 2 of4

Section C

Detail 7

No written inventory of spare parts is being maintained therefore it could not be determine if adequate spare parts is being maintained.

Page 3 of 4

Section D

According to the laboratory data sheet the 6 hour composite sample for TSS, CBOD and NH3-N is being collected beginning at 3:00 AM and ending at 8:00 AM. According to Part IV item 22 of the permit, the 6 hour composite sample, first portion is not to be collected no earlier than 10:00AM.

Page 3 of4

Section E

Detail 3& 4

A flow calculation check was performed on the effluent flow meter and it was revealed that the effluent meter was not being properly operated and maintained. Two checks were performed and both checks revealed that the effluent flow meter had an error greater than +/- 10 %. Adequate calibration checks were not being performed on the effluent flow meter to assure the meter was in continued compliance.

Other item noted

In reviewing the facilities records it was revealed that the permittee had not prepared a Storm Water Pollution Prevention Plan. According to condition 10 in Part III of the permit this plan was to be prepared within 60 days of the effective starting date of the permit.

ADEQ

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

October 12, 2006

Lester Herring, Water & Waste water Superintendent
City of Walnut Ridge
216 Southwest 4th Street
Walnut Ridge, AR 72467

RE: AFIN: 3800040 NPDES Permit No.: AR0046566

Dear Mr. Herring:

On August 31, 2006, Mike Kennedy, District Field Inspector, and I performed an investigation of a complaint which alleged that the Walnut Ridge Waste Water Treatment Plant was causing some strong odors in the area. At the time of the investigation, no odors were detected in the area. While at the facility a routine compliance inspection of the waste water treatment facility was performed 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 name and address of the contract laboratory was not included on the Discharge Monitoring Report. This is a violation Part II, Section C: item 5, of the permit.

2. Improper operation and maintenance of the treatment facility; this is a violation of Part II, Section B: 1.a. of the permit. The following items were noted:

    a) At least three air diffusers were not working properly. (Repeat Violation)

    b) There were excess solids and algae on the surface of the clarifier weirs.

    c) No written inventory of spare parts at the facility is being maintained.

3. According to the laboratory data sheet the 6 hour composite sample for TSS CBOD and NH3-N is being collected beginning at 3:00AM and ending at 8:00 AM. According to Part IV item 22 of the permit, the first portion for a 6 hour composite is not to be collected no earlier than 10:00 AM.

4. A flow calculation check was performed on the effluent flow meter and it was revealed that the effluent meter was not being properly operated and maintained. Two checks were performed and the results of both checks indicated that the effluent flow meter had an error greater than +/- 10 % error. This is a violation of Part II, Section C: 1, of the permit.

5. Adequate calibration checks were not being performed on the effluent flow meter to assure the meter was in compliance with permit requirements. This is a violation of Part II, Section C:1, of the permit. (Repeat Violation)

6. In reviewing the facilities records it was revealed that the permittee had not prepared a Storm Water Pollution Prevention Plan. According to item 10 in Part III of the permit, this plan was to be prepared within 60 days of the effective starting date of the permit. The effective date of the permit was October 1, 2005.

7. The effluent exceeded permit limits in the months of June and July, 2006, for Total Suspended Solids and Ammonia Nitrogen. In the month of June, the effluent also exceeded permit limits for CBOD. If you have already submitted a Noncompliance Report (NCR) on each of these exceedances then no further action regarding this item is required at this time.

8. Analytical results were not consistent with the data reported on the Discharge Monitoring Reports (DMR'S). This is a violation of the permit in Part IV by definition. A review of the June and July 2006, Discharge Monitoring Report revealed that the laboratory results did not equal the reported value on the Discharge Monitoring Report.

9.

a) In reviewing the June 2006 Discharge Monitoring Report, the following errors were noted; for Total Suspend Solids the reported Loading Monthly Average was 64.4 lbs/day while the calculated value was 71.1 lbs/ day. The monthly average concentration reported value was 23 mg/l while the calculated value was 25 mg/l. The 7 day average was reported to be 37 mg/l and it should have been reported as 42 mg/l. For CBOD the reported Loading Monthly Average was 46.8 lbs/day while the calculated value was 51 lbs/day. The concentration monthly average reported value was 15mg/l while the calculated value was 16.8 mg/l.

b) In reviewing the July 2006 Discharge Monitoring Report the following errors were noted: For Total Suspend Solids the 7 day average was reported on the DMR to be 27 mg/l and it should have been reported as 30 mg/l. For CBOD the 7 day average was reported on the DMR to be 14 mg/l and it should have been reported as 15 mg/l.

All of the Discharge Monitoring Reports, since the time your consulting laboratory started doing the calculation of the data, should be checked and corrected DMRs submitted where errors are noted in the calculations.

The above items require your immediate attention. Please submit a written response to these findings to the NPDES 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 November 3, 2006.

If I can be any assistance, please contact me at 870-625-7477.

Sincerely,

Dale D. Washam

Dale Washam, Inspector Supervisor
Water Division

cc: NPDES Enforcement Branch
NPDES Permit Branch