

ADEQ

ARKANSAS
Department of Environmental Quality

May 15, 2006

Mr. Greg Withrow, General Manager
El Dorado Chemical Corporation
P.O. Box 231
El Dorado, AR 71731

NPDES Permit No. AR0000752

Dear Mr. Withrow:

On April 25 and 26, 2006, I performed an NPDES compliance sampling inspection of the EDCC Facility in conjunction with a multimedia inspection conducted with the Air, Hazardous Waste and Water Divisions of the ADEQ. The NPDES portion of this inspection 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. The NPDES portion of the multimedia inspection revealed the following:

1. The DMR data for dissolved oxygen for January 2006 was not consistent with the actual instantaneous minimum performed by the facility. The facility reported a monthly average of 8.78 mg/L instead of actual instantaneous minimum of 8.0 mg/L.
2. The Storm Water Pollution Prevention Plan (SWPPP) needs to be updated to show the current plant staff.
3. The SWPPP needs to be certified by the current General Manager.
4. The SWPPP needs to be updated to show the moving and addition of diesel fuel tanks by the railroad into the plant.
5. The Annual Comprehensive Site Compliance Evaluation was not performed during 2005. The last Evaluation was performed in December 2004.



FILES COMPLIANCE FILES
NPDES # 752
DMR'S *JP*
NCR *Codeal*
 CORRESPONDENCE
CRAS

May 15, 2006
Greg Withrow
Page 2

These 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 each item noted. This corrective action should be completed as soon as possible, and the written response is due by June 5, 2006.

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

Sincerely,



for
John W. Lamb
District Field Inspector
Water Division

cc: NPDES Branch



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

Transaction Code	NPDES	yr/mo/day	Inspec. Type	Inspector	Fac Type
1 N 2 5 3 A R 0 0 0 0 7 5 2 11 12 0 6 0 4 2 6 17 18 S 19 S 20 2					
Remarks					
U n i o n					
Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved	
67 69	70 3	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) El Dorado Chemical Company Northwest Ave El Dorado, AR	Entry Time /Date 9:42/04/26/06	Permit Effective Date 01 July 2002
	Exit Time/Date 12:42/04/26/06	Permit Expiration Date 30 June 2007
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) Wes Morgan/ Environmental Manager/(870)-863-1484 David Sartain/ Environmental Tech	Other Facility Data	
Name, Address of Responsible Official/Title/Phone and Fax Number Greg Withrow, General Manager/870-863-1400 EDCC P.O. Box 231, El Dorado, AR 71731	Contacted Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

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

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

This inspection was performed in conjunction with a multimedia inspection with the ADEQ Air, Water and Hazardous Waste Divisions. All samples were within the permitted limits.

Section B, item 1: The DMR data for dissolved oxygen for January 2006 was not consistent with the actual instantaneous minimum performed by the facility. The facility transposed the monthly average dissolved oxygen (8.78 mg/L) for the actual instantaneous minimum (8.0 mg/L)

The following items were noted in the area of Storm Water Pollution Prevention:

The Storm Water Pollution Prevention Plan (SWPPP) needs to be updated showing current plant staff.

The SWPPP needs to be certified by the current plan manager. It was certified by the previous plant manager

The SWPPP need to be updated showing the moving and addition of diesel fuel tanks by the rail road company on the plant site.

The annual Comprehensive Site Compliance Evaluation was not performed for 2005. The previous Evaluation was performed in December 2004. Routine inspections as outline in the plan were up to date.

Name(s) and Signature(s) of Inspector(s) John Wesley Lamb	Agency/Office/Telephone/Fax ADEQ/El Doraod/870862-5941/870-862-3509	Date 15 May 2006
Signature of Reviewer	Agency/Office/Phone and Fax Numbers	Date

SECTION A - PERMIT VERIFICATION

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

- 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: see page 1 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 N
 - 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 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.
 DETAILS: S M U NA (FURTHER EXPLANATION ATTACHED no)

- 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 NE
- 8. OPERATION AND MAINTENANCE MANUAL AVAILABLE.
 STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED. Y N NA
 PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED. Y N NE

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 - SELF-MONITORING

PERMITTEE SELF-MONITORING MEETS PERMIT REQUIREMENTS. S M U NA (FURTHER EXPLANATION ATTACHED no).
 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 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 no)
 DETAILS:

- 1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED. Y N NA
 TYPE OF DEVICE parshall flume
- 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 monthly) 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

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. Y N NA

LAB NAME Arkansas Analytical Labs
 LAB ADDRESS Little Rock, AR
 PARAMETERS PERFORMED all permitted parameters but pH and Dissolved Oxygen

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	Slight	None	None	Lt green	
010, 011	Not constructed						
003	None	none	none	none	none	colorless	
002, 004, 005, 006, 007	None	None	Moderate	None	none	Lt brown	

Comments:

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 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 yes); see page 1 and attachments

- 1. SAMPLES OBTAINED THIS INSPECTION. Y N NA
- 2. TYPE OF SAMPLE OBTAINED
 GRAB X COMPOSITE SAMPLE X METHOD Auto sampler FREQUENCY 1/hr for 24 hours
- 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

DMR Calculation Check

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

Parameter Checked: Dissolved Oxygen Outfall 001

	Loading Mass Monthly Avg. (lbs/ day)	Monthly Avg.-Mg/l	Concentration Instantaneous Minimum
Reported Value:			8.78 mg/L
Calculated Value:			8.0 mg/L
Permit Value:			5.0 mg/L

If calculated value does not equal reported value, explain: Not equal. The facility reported an 8.78 for the instantaneous minimum for dissolved oxygen which was the monthly average for dissolved oxygen, not the true minimum. Other months were reviewed with this being the only month that this occurred. The staff transposed the wrong number. No parameter violation occurred.

FLOW CALCULATION SHEET

Field Data: Date 26 April 2006 Time 10:22

Head in Inches 3.75 = 0.31 ft.

Type & Size of Primary Flow Measurement Device 12" parshall flume

Name & Model of Secondary Flow Measurement Device Isco 3010

Recorded Flow at date & time listed above 0.438

Flows are calculated from flow charts taken from the ISCO Open Channel Flow Measurement Handbook

0.31 ft. = .4348 M.G.D./g.p.m.

% error = $\frac{\text{recorded value} - \text{calculated value}}{\text{calculated value}} \times 100$

% error = 1.20 **less than 10% is acceptable**

- CERTIFICATE OF ANALYSIS -

Attn:

Phone:
FAX:

Ext:

Our Lab#: 2006-0982

Your Sample ID: El Dorado Chemical 001

Sample Type:

Report Date: 08-May-06

NH3-N-ISE

Ammonia as nitrogen	3.67	mg/L	5/8/2006
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ICP/MS-T

Aluminum	220	µg/L	5/1/2006
Antimony	< 10.0	µg/L	5/1/2006
Arsenic	< 2.50	µg/L	5/1/2006
Barium	34.7	µg/L	5/1/2006
Beryllium	< 0.50	µg/L	5/1/2006
Boron	77.2	µg/L	5/1/2006
Cadmium	< 1.00	µg/L	5/1/2006
Calcium	15.7	mg/L	5/1/2006
Chromium	1.16	µg/L	5/1/2006
Cobalt	< 2.50	µg/L	5/1/2006
Copper	6.17	µg/L	5/1/2006
Iron	131	µg/L	5/1/2006
Lead	< 1.00	µg/L	5/1/2006
Magnesium	7.81	mg/L	5/1/2006
Manganese	32.5	µg/L	5/1/2006
Nickel	6.54	µg/L	5/1/2006
Potassium	5.95	mg/L	5/1/2006
Selenium	< 5.00	µg/L	5/1/2006
Silicon Dioxide	7.58	mg/L	5/1/2006
Silver	< 5.00	µg/L	5/1/2006
Sodium	126	mg/L	5/1/2006
Thallium	< 2.50	µg/L	5/1/2006

CERTIFICATE OF ANALYSIS –

Attn: Phone: Ext:

FAX:

Our Lab#: 2006-0982

Your Sample ID: El Dorado Chemical 001

Sample Type:

Report Date: 08-May-06

	Vanadium	12.3	µg/L	5/1/2006
	Zinc	41.9	µg/L	5/1/2006
TSS/TDS				
	Total suspended solids	10.0	mg/L	4/26/2006
	Total dissolved solids	502	mg/L	4/26/2006
Anions				
	Bromide	5.18	mg/L	4/26/2006
	Fluoride	0.34	mg/L	4/26/2006
	Chloride	43.2	mg/L	4/26/2006
	Sulfate	81.8	mg/L	4/26/2006
NH3/PO4/NO3				
	Nitrite+Nitrate-N	32.7	mg/L	4/27/2006

Mass loading calculations

Parameter	Concentration (mg/L)	X	Flow (mgd)	X 8.34 =	lbs/day	Permitted limit
NH3-N	3.34	x	0.3525	X 8.34 =	9.82	811.84 lbs/day
Nitrate-N	32.7	x	0.3525	X 8.34 =	96.1	1153.73 lbs/day
TSS	10	x	0.3525	X 8.34 =	29.4	692 lbs/day
TDS	502	x	0.3525	X 8.34 =	1475.8	report lbs/day
Sulfate	81.8	x	0.3525	X 8.34 =	240.5	report lbs/day
Chlorides	43.2	x	0.3525	X 8.34 =	127.0	report lbs/day
Copper	0.00617	x	0.3525	X 8.34 =	0.0181	report lbs/day
Selenium	0.005	x	0.3525	X 8.34 =	0.0147	report lbs/day
Zinc	0.0419	x	0.3525	X 8.34 =	0.123	report lbs/day

- CERTIFICATE OF ANALYSIS -

Attn: Phone: Ext:
 Our Lab#: 2006-0983 FAX:
 Your Sample ID: El Dorado Chemical 003
 Sample Type: Report Date: 08-May-06

TSS	Total suspended solids	<	1.00	mg/L	4/26/2006
CBOD5	Carbonaceous biochemical oxygen demand		Void	mg/L	4/26/2006
FC-MF	Fecal coliform by membrane filter		~14	cfu/100 ml	4/26/2006
NH3-N-ISE	Ammonia as nitrogen		0.62	mg/L	5/8/2006

Mass loading calculations

Parameter	Concentration (mg/L)	X	Flow (mgd)	X	8.34	=	lbs/day	Permitted limit
TSS	1.0	x	0.043	X	8.34	=	0.35	3.3 lbs/day
NH3-N	0.62	x	0.043	X	8.34	=	0.22	2.1 lbs.day

Field Data

Outfall 001

Dissolved oxygen 6.52 mg/L permitted minimum 5.0 mg/L
 pH 7.84 S.U. permitted range 6.0 -9.0 S.U.
 Temperature 73.4 F permitted maximum 86 F

Outfall 003

pH 6.47 S.U. permitted range 6.0-9.0 S.U.

COPY
JUN 06 2006

P.O. BOX 1373 • OKLAHOMA CITY, OKLAHOMA 73101 • 405-235-4546

VIA CERTIFIED MAIL: 7004 0750 0000 9377 2108
RETURN RECEIPT REQUESTED



CHEMICAL COMPANY

June 1, 2006

Mr. Dennis Benson
Technical Assistance Manager
NPDES Permits Section - Water Division
Arkansas Department of Environmental Quality
8001 National Drive
Little Rock, Arkansas 72219-8913

ROUTING

<input type="checkbox"/>	<input type="checkbox"/>	<i>No - For your file</i>
<input type="checkbox"/>	<input type="checkbox"/>	<i>copy to Sarah Clark</i>
<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	

BMM 6-8-06

RE: Annual Compliance Progress Report – El Dorado Chemical Company
NPDES No. AR0000752

Dear Mr. Benson:

Pursuant to the requirements of Part IB Section B2 of the referenced NPDES permit, this letter serves as the second year Annual Compliance Progress Report. Pursuant to Part II Section D 5, this report is being submitted within 14 days of the schedule date of June 1, 2006.

During the second year under the referenced NPDES Permit, El Dorado Chemical Company (EDCC) has continued to conduct projects and studies in an effort to not only meet the final limitations of the NPDES permit, but to ensure compliance with current permit limitations. During the past year, there continued to be significant progress as a result of these activities. The following paragraphs present the details.

1. Hydrologic Study

EDCC submitted a hydrologic study plan for the storm water outfalls. This plan was approved by ADEQ and then subsequently revised to modify the location of the background monitor for Outfalls 006 and 007. During 2006 the level loggers continued to collect data pursuant to the approved work plan and the subsequent revision due to low flow conditions in 2005. Additional flow measurements required by the study plan were made during this quarter and we anticipate completion of the flow measurements during the 3rd quarter of 2006. The hydrologic study report will be developed and submitted to the ADEQ after that data is collected.

2. Retention Basin Temperature Study

Pursuant to the requirements of the final NPDES permit, EDCC submitted a temperature study plan for the purpose of determining the influence of ambient conditions on the temperature regime of the retention basin at EDCC. The study report was completed and submitted to the ADEQ during the 4th quarter of 2005. During the 1st quarter of 2006 ADEQ sent out review comments which were addressed by GBMc in correspondence. At this time there has been no permitting action based on the final study report. EDCC requests ADEQ to move forward on permitting action for EDCC to be able to discharge in July and August 2006.

2 No - your suggestion - can we do this?

RECEIVED
JUN 08 2006
5296

Mr. Dennis Benson
Technical Assistance Manager
NPDES Permits Section - Water Division
Arkansas Department of Environmental Quality
May 31, 2006
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3. Storm Water Outfall Compliance

During the reporting period the following activities were accomplished to effectuate compliance with storm water discharges from Outfalls 004, 005, 006 and 007.

- EDCC evaluated alternatives including gravity diversion and source reduction to attain compliance with permit limits at Outfalls 006 and 007.
- Outfall 004 is in final stages of being diverted to Lake Lee. *-Is this the sanitary outfall?*
- Storm water runoff from the industrial areas of Outfall 005 and part of Outfall 006 were routed into Lake Lee.
- Outfall 005 will be physically eliminated and a request to delete it from our NPDES permit was sent to the ADEQ on March 29, 2006. This project is on hold pending ADEQ's approval for routing Outfall 003 to Lake Lee.

Sanitary?

4. Source Reduction Analysis

During the reporting period source reduction activities continued, including:

- Process improvements in the Nitrate Plant and Acid Plant areas were implemented to reduce waste loading to the wastewater system. These efforts have paid-off with major reductions in the nitrate and ammonia concentrations in the wastewater measured in Lake Lee. 2006 year to date Lake Lee effluent averaged 33 mg/L Ammonia-N and 67 mg/L Nitrate-N down from 2005's average of 120 mg/L Ammonia-N and 178 mg/L Nitrate-N. 2006 year to date Outfall 001 averaged 12 mg/L Ammonia-N and 63 mg/L Nitrate-N down from 2005's average of 70 mg/L Ammonia-N and 142 mg/L Nitrate-N. *great!*
- Efforts continue to identify and repair piping and collection sumps in the Nitrate Plant area and Acid Plant Area to reduce waste loading to the wastewater system.
- The plant continues to recover waste streams for recycling in the processes. The plant has reduced the overall wastewater flowing to Lake Lee on a dry weather basis from 1.0 MGD to 0.6 MGD. *good!*

5. Wastewater System

During the reporting period, EDCC continued activities regarding the upgrade of the wastewater treatment system. These activities focused on both Lake Lee and Lake Kildeer as listed in the following sections.

Mr. Dennis Benson
Technical Assistance Manager
NPDES Permits Section - Water Division
Arkansas Department of Environmental Quality
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Wastewater/Storm Water Treatment

- Engineering work being done to route Outfall 006 and 007 to Lake Lee will be completed in the 2nd quarter of 2006.
- Constructed a new pipeline from Lake Lee to Lake Kildeer to convey peak storm/process flows and minimize discharges from Outfall 001.
- In March of 2006, EDCC requested that ADEQ authorize a pilot test allowing the diversion of raw domestic sewage to Lake Lee to be used as a carbonaceous material supplement for the biological nitrification/denitrification process. As of this writing, ADEQ has not approved the request and EDCC is pursuing a meeting at which to discuss the need for this pilot project. With the lack of a carbon source in EDCC's wastewater, it is essential that raw domestic sewage be routed to Lake Lee. This could prevent EDCC from having to add Methanol as a carbon source.
- EDCC installed AquaMats in Lake Lee and Lake Kildeer. AquaMats are membranes for biofilm to attach. The AquaMats will sustain colonies of nitrifying and denitrifying bacteria to effectuate nitrogen removal treatment. *Did we know this?*

6. Wastewater Treatment Bioaugmentation

During the reporting period, EDCC continued implementation of the alternative wastewater treatment technology. We continue the collection of performance data to determine the efficacy of the organisms in our wastewater treatment system.

The data that EDCC has collected so far indicates that the source reduction and wastewater treatment improvements (including the addition of various microbes) has had a positive impact on the wastewater treatment system. The biomonitoring results from Outfall 001 continue to demonstrate steady improvement with all of the 2006 tests to date passing at 100% effluent water for lethality. The concentrations of contaminants such as ammonia-nitrogen and nitrate also continue to decline as well. The attached charts present the biomonitoring test results, the results of the source reduction efforts and effluent quality from Outfall 001.

7. Joint Pipeline Activities

During the reporting period, the ADEQ public noticed draft NPDES permits, the construction permit and the Water Quality Management Plan (WQMP) which supports the NPDES permit effluent limitations. In addition, the ADEQ conducted a public hearing on all the draft permits and the WQMP. We anticipate finalization of the permits during 2006.

Mr. Dennis Benson
Technical Assistance Manager
NPDES Permits Section - Water Division
Arkansas Department of Environmental Quality
May 31, 2006
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8. Ouachita River Nutrient Study

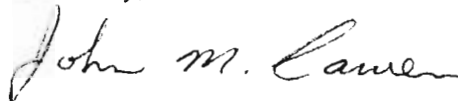
Additionally, during the reporting period, EDCC participated in the completion of the Ouachita River nutrient study requested by the ADEQ and other natural resource agencies. The final report for the study is to be completed and submitted to ADEQ by June 1, 2006.

9. Dissolved Minerals Study

During the reporting period, EDCC initiated a review of the receiving streams for Outfall 001 for the purpose of determining the feasibility of conducting a water quality study to amend the Arkansas Water Quality Standards for dissolved minerals and to remove the designated, but not existing, domestic water supply use. Based on the initial biological survey, the decision was made to proceed with the third-party rulemaking process and the fieldwork was completed during the reporting period. We anticipate submittal of the third party rulemaking request during 2006.

Hopefully, this letter has adequately explained the status of our NPDES compliance efforts during the reporting period. Should you have any questions, please feel free to call me at (405) 235-4546.

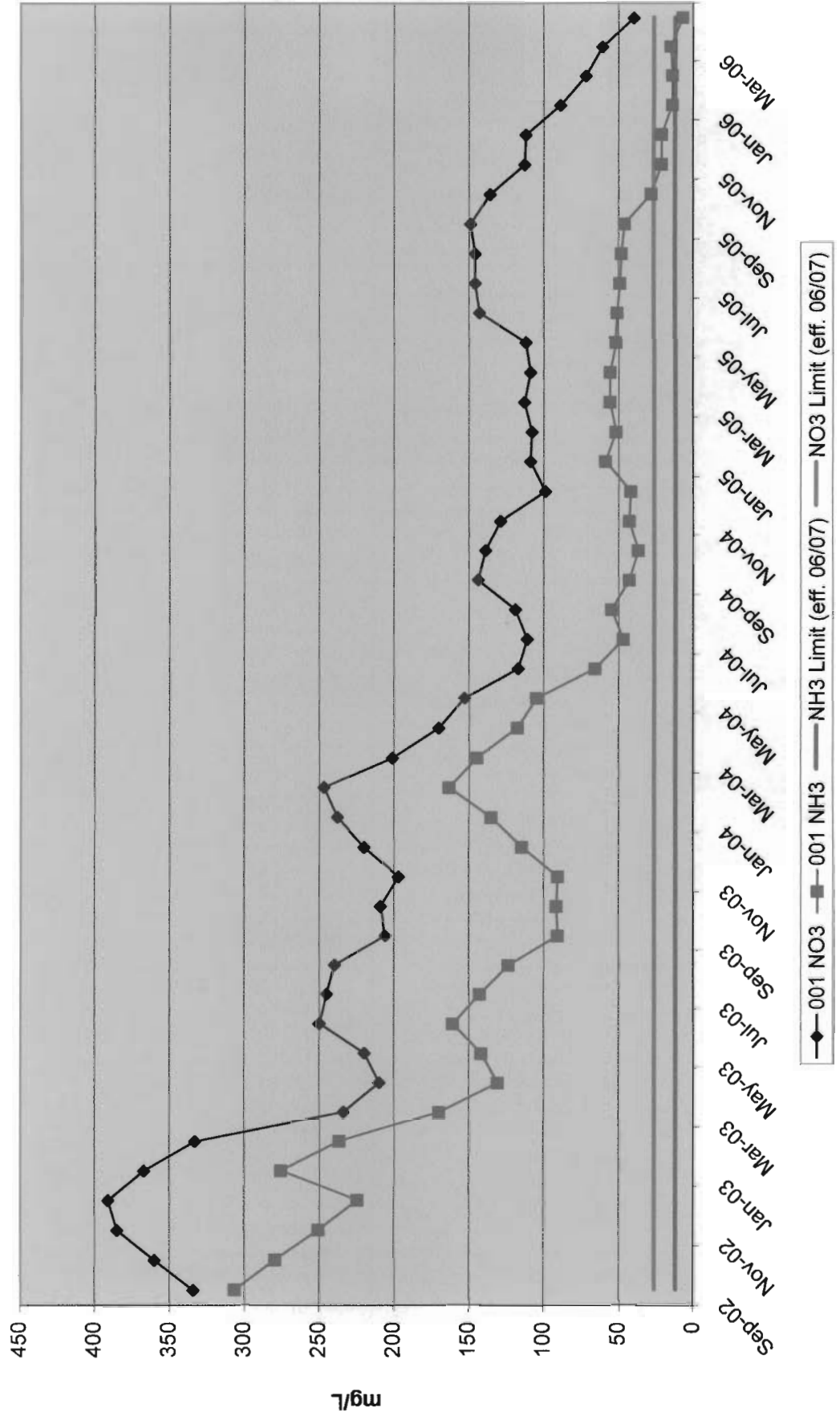
Sincerely,



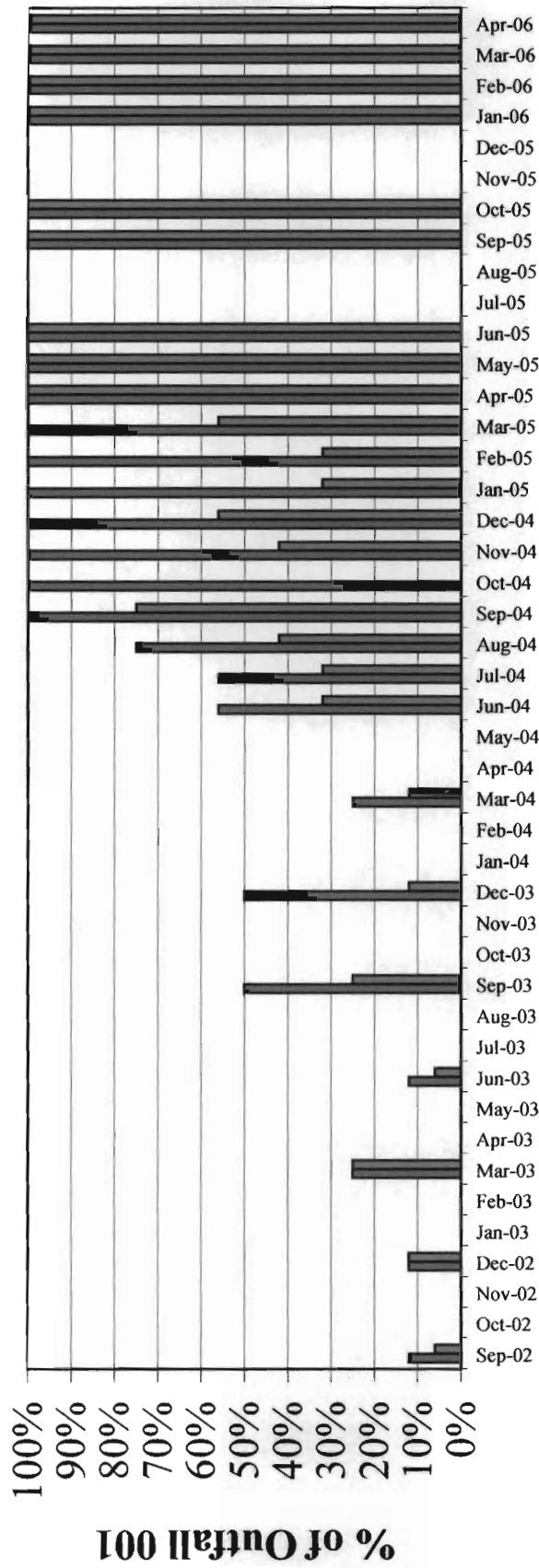
John M. Carver
Vice President Safety and
Environmental Compliance

cc: Mary Leath, Chief Deputy Director, ADEQ
Martin Maner, Chief, Water Division, ADEQ

El Dorado Chemical Co.
 Outfall 001 Monthly
 Averages



El Dorado Chemical Co.
 Outfall 001 Biomonitoring Test Results



No Observed Effects Concentration - Survival

■ Water Flea ■ Fathead Minnow

El Dorado Chemical
Company

Outfall 010
Discharge Point
33° 17' 22"
92° 28' 05"

