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STATE OF ARKANSAS
 DEPARTMENT OF POLLUTION CONTROL & ECOLOGY
 8001 National Drive, P.O. Box 8913
 Little Rock, Arkansas 72219-8913
 Phone: (501) 682-0744 Fax: (501) 682-0798
 Legal Division: (501) 682-0892 Fax: (501) 682-0891



August 14, 1998

Mr. Charles R. Nestrud
 Chisenhall, Nestrud & Julian, P.A.
 First Commercial Bank Building
 400 West Capitol, Suite 2840
 Little Rock, Arkansas 72201

Re: El Dorado Chemical Company
 NPDES Permit No. AR0000752
 EPA I.D. No. ARD001700657
 CAO LIS 98-119

Dear Chuck:

Enclosed is an executed copy of Consent Administrative Order (CAO) LIS 98-119 between ADPC&E and El Dorado Chemical Company.

This CAO is subject to a thirty (30) day public review and comment period in accordance with A.C.A. Section 8-4-103(d) and APC&EC Reg. 8. The publication date will be on or about September 10, 1998. It is anticipated that the effective date of the CAO will be on or about October 10, 1998.

Thank you for your attention to this matter. Should you have any questions or comments, feel free to contact me by telephone at (501) 682-0743 or by E-mail at jackson@adeq.state.ar.us.

Sincerely,

Nelson E. Jackson
 Attorney

- | | |
|--------------------|---------------------|
| cc: Randall Mathis | ✓ David Brown |
| Becky Keogh | Gerald Delavan |
| Larry Wilson | Marysia Jastrzebski |
| Mike Bates | Art Riddle |
| Chuck Bennett | Joe Williford |

ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY

IN THE MATTER OF:

EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS 71731-0231
EPA ID No. ARD001700657
NPDES PERMIT No. AR0000752

LIS 98 - 119

CONSENT ADMINISTRATIVE ORDER

This Consent Administrative Order (hereinafter "Order") is issued pursuant to the authority of the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended; A.C.A. § 8-4-101 et seq.), the Arkansas Hazardous Waste Management Act (Act 406 of 1979, as amended; A.C.A. §8-7-201 et seq.), the Arkansas Remedial Action Trust Fund Act, A.C.A. § 8-7-501 et seq. as amended, the Arkansas Pollution Control and Ecology Commission (hereinafter "APC&EC") Regulation 7: Civil Penalties, and APC&EC Regulation 23: Hazardous Waste Management (hereinafter "Regulation No. 23").

Pursuant to the authority of A.C.A. §8-4-207(1)(B), the Director of the Arkansas Department of Pollution Control & Ecology (hereinafter "ADPC&E") is authorized to set schedules of compliance for facilities permitted under the Arkansas Water Pollution Control Act necessary to assure compliance with both applicable state and federal effluent limitations.

The issues herein, as they pertain to the El Dorado Chemical Company, El Dorado, Union County, Arkansas (hereinafter "Respondent") having been settled by the agreement of the Respondent and ADPC&E, it is hereby agreed and stipulated by all parties that the Order and Agreement be entered herein. By entering into this Order, Respondent neither admits nor denies the Findings of Fact or the existence of any alleged violation.

FINDINGS OF FACT

1. The Respondent's facility (hereinafter "facility"), located at 4500 North West Avenue in El Dorado, Union County, Arkansas, is a manufacturer of commercial chemical products.

2. In 1983 the Respondent acquired the facility from Monsanto Corporation. The facility was initially constructed in the early 1940's for the production of sulfuric acid, nitric acid, ammonium nitrate fertilizers, and industrial grade ammonium nitrate and has been manufacturing substantially the same products since that time. The Respondent's facility consists of nine (9) discrete manufacturing plants (the Sulfuric Acid Plant, the North and South Nitric Acid Concentrators, three Nitric Acid Plants, two Ammonium Nitrate Plants, and the UHDE Concentrated Nitric Acid Plant), the loading/unloading areas, and the tank storage areas.

3. The NPDES Permit, number AR000752 (hereinafter "NPDES Permit") was transferred to the Respondent in 1986. On May 31, 1990, the NPDES Permit was reissued to the Respondent to become effective July 1, 1990, with an expiration date of January 31, 1995. The NPDES Permit authorized discharge in accordance with the Arkansas Water and Air Pollution Control Act and the regulations promulgated thereunder. The NPDES Permit allowed the Respondent to have four (4) outfalls: Outfall 001 for treated process streams; Outfall 002 for excess process stormwater runoff; Outfall 003 for treated domestic wastewater; and Outfall

004 for excess stormwater runoff.

4. The Respondent submitted a Notice of Intent (NOI) dated December 7, 1992, for coverage under NPDES General Stormwater Permit ARR00A000 and ADPC&E granted the coverage by letter dated December 8, 1992. The facility was given tracking number ARR00B036 (hereinafter "Stormwater Permit"). The Stormwater Permit allows the Respondent to have three (3) stormwater outfalls: Outfall 005 receives stormwater from the south side of the plant including areas around the boiler house, along the entrance road for the facility, runoff from parking lots, runoff from areas surrounding administration buildings, and roof drains from maintenance shops; Outfall 006 receives stormwater runoff from the north side of the warehouse, boiler house, and a portion of the area where rail hopper cars are maintained; Outfall 007 receives stormwater from the north side of the plant including a salvage yard, scrap metal pile, a portion of hopper car cleaning operations, and nonindustrial runoff from a large wooded area. The Stormwater Permit requires periodic sampling of the stormwater from these outfalls.

5. From December 7, 1992, until present stormwater samples collected for Outfalls 005 and 007 have been taken from a location past the outfalls where the stormwater was commingling with off-site nonindustrial or other facility discharges prior to sampling in violation of the Stormwater Permit. In May of 1997, the Respondent proposed to ADPC&E a project to relocate Outfalls 005 and 007 (which includes Outfall 006), to add stormwater Outfalls 008 and 009, with the possibility of modifying Outfalls 006 through 009 into one outfall, Outfall 006.

6. Beginning at an unknown time but, known to be in existence on or about June 19, 1996, the Respondent has identified contamination of the shallow groundwater aquifer beneath the Respondent's property. A Phase

II Groundwater Investigation was performed for the Respondent by Woodward-Clyde, hereafter referred to as (WC) and submitted to ADPC&E on June 19, 1996. This groundwater investigation report revealed nitrate contaminated groundwater in and around the plant site, above the USEPA Safe Drinking Water Act Maximum Contaminant Level (MCL) of 10 mg/L in ten (10) of twenty-two (22) monitoring wells, with the highest observed nitrate concentration being 1,010 mg/L. There is no primary drinking water standard MCL for sulfate. Sulfate concentrations in excess of the proposed USEPA MCL of 500 mg/L were observed in five (5) of twenty-two monitoring wells, with the highest values observed being 809 mg/L. Concentrations of chromium and dissolved lead were less than the MCL of 0.05 mg/l adopted in Appendix III of Regulation 22 for hexavalent chromium and lead. Detected lead concentrations in groundwater were attributed to naturally occurring lead in the soils at the facility by WC.

7. In May of 1995, the Respondent entered into Consent Administrative Order No. 95-070 with ADPC&E (hereinafter "CAO 95-070") which became effective June 10, 1995. CAO 95-070 provided, among other items, that the Respondent would "undertake a monitoring program designed to assess the groundwater quality for the constituents nitrates, sulfates, lead, and chromium in the areas affected by the process wastewater treatment system, including Lake Lee, Lake Killdeer and the plant drain system; the area in which the nitric acid concentrator is located and all product loading and unloading areas." The Respondent completed this assessment. These areas were suspected to be sources of releases of nitrates, sulfates, lead and chromium to groundwater. Pursuant to CAO 95-070, the Respondent submitted a report entitled "Development of Risk-Based Target Monitoring Levels" to ADPC&E. As part of that effort, the Respondent characterized the wastewaters and stormwaters, and initiated a project to trace the extensive underground plant drain system from the source to its point of discharge. The Respondent has initiated dye testing of the plant drain system to identify the sources of each effluent stream, and to characterize the volume and constituents

of the influent streams. As a result of this, the Respondent found and reported to ADPC&E that the underground plant drain system allows some process waters, under certain flow scenarios, to commingle with stormwater in violation of both the NPDES Permit and the Stormwater Permit. These conditions were not identified in the Final Report entitled "Development of Risk-Based Target Monitoring Levels" dated February 1997, as contributing to surface and groundwater contamination that presents a risk of concern. That February 1997 report determined that the human health risks caused by the ground water contamination in and around the plant site were acceptable to a domestic water well located 4.7 miles down gradient from the Respondent's facility. As a result of a meeting on September 30, 1997 between ADPC&E and the Respondent, the Respondent revised this report to include the human health risk to a commercial water well located 1.3 miles down gradient. Water from commercial water wells is not generally used for drinking water. However, this closest commercial water well was evaluated as though it was used for drinking water. The revised report, dated December 1997, concluded that the estimated human health risks are acceptable for all receptor populations evaluated. However, due to the fact that surface and groundwater contamination was confirmed, the Respondent recommended a comprehensive evaluation of the plant wastewater and stormwater collection and treatment systems. The Respondent has completed and submitted to ADPC&E as part of the Final Report entitled "Addendum to Risk-Based Target Monitoring Levels" dated April 1997, an initial characterization of the wastewater streams.

8. Concurrently, the Respondent has been in discussions with the Water Division of ADPC&E regarding the reissuance of the NPDES Permit, which the Respondent and ADPC&E contemplate will include additional treatment component(s) for ammonia removal in addition to reviewing all effluent limits.

9. CAO 95-070 addressed certain NPDES compliance issues discovered during a March 21, 1994, inspection.

In a letter dated May 20, 1994, to ADPC&E, the Respondent indicated that those issues were corrected. The Respondent has taken steps to eliminate any potential discrepancies in its sampling and reporting practices, and since January 1, 1997, the Respondent has relied upon outside laboratories to generate its NPDES data (with the exception of pH, temperature, dissolved oxygen and flow which must be measured at the facility).

10. On May 5, 1997, the Respondent experienced a sodium hydroxide spill which was released from NPDES stormwater outfall 005 to surface waters of the State in violation of A.C.A. §8-4-217. The boiler house operator observed a leak of sodium hydroxide originating from a two (2) inch PVC pipe valve, located at or near the bottom of the feed vessel. The operator then allowed the sodium hydroxide to be released through a floor drain located inside the boiler house. As defined in APC&EC Regulation No. 23, §260.10, "generation" means the act or process which results in the production of waste materials. The operator mistakenly believed that the floor drain located inside the boiler house was connected by design to the on-site wastewater collection system and drained to the on-site day pond. The facility operators were prepared to respond to the sodium hydroxide release once it entered the on-site day pond. When the expected flow failed to materialize at the day pond, the facility operators began investigating other potential release points. This failure to accurately predict the on-site and eventual off-site release pathway is a violation of APC&EC Regulation 23 §265.31, which requires facilities to be maintained and operated to minimize the possibility of any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to soil or surface water which could threaten human health or the environment. As a consequence, the spilled sodium hydroxide was allowed to exit the site unimpeded at NPDES outfall 005, which discharges to surface water. The actual release to the surface water is defined as a violation of APC&EC Regulation 23 §2(d) engaging in hazardous waste management in such a manner or place as to create or as is likely to be created a public health hazard or to cause water or air pollution within the meaning of the Arkansas Water and Air

Pollution Control Act.

11. The total amount of sodium hydroxide spilled was reported to be approximately two thousand three hundred (2300) gallons of 50% concentration. The Respondent engaged the services of HAZTECH, Inc., a hazardous materials emergency response team to assist in neutralizing the released material. Both ADPC&E and the Respondent monitored the pH of the receiving tributary during the response effort and reported pH ranging up to 12.5 s.u. indicating the pH of the material spilled was higher. Therefore, the spilled sodium hydroxide, which by the act of the operator, resulted in the production of a solid waste as defined in APC&EC Regulation No. 23, §261.2, and as a further consequence of that act a point of generation for a characteristic hazardous waste (D002) for corrosivity as defined in APC&EC Regulation No. 23, §261.3(a)(2)(I). A release, into the environment, of a hazardous substance with a pH equal to or greater than 12.5 s.u. constitutes a release of a characteristic hazardous waste, (D002) for corrosivity.

12. A fish kill occurred in an unnamed tributary to Flat Creek as a result of the sodium hydroxide spill. This is an unlawful action as defined by A.C.A. §8-4-217. However, ADPC&E inspectors observed fewer than 100 dead fish of eight (8) species.

13. On September 9, 1997, ADPC&E conducted a Hazardous Waste Compliance Evaluation Inspection (CEI) of the Respondent's facility. During that CEI the inspector identified other violations of APC&EC Regulation No. 23. The Respondent generates D002 characteristic hazardous waste at this facility during the production of sulfuric acid and nitric acid. A portion of the acid wastes generated are released into the environment. The remaining acid wastes are collected in a Resource Conservation and Recovery Act (RCRA) exempt treatment unit for elementary neutralization. These hazardous wastes are transported to the elementary neutralization

unit via the 3rd Street sewer. A caustic solution is added to the acids at a point downstream from the 3rd Street sewer. The Respondent's 1996 Annual Report did not include the total amount of D002 characteristic hazardous waste generated and treated on-site. The Respondent subsequently revised its Annual Report which was submitted to ADPC&E on September 26, 1997. However, this revised 1996 Annual Report did not include the total amount of D002 characteristic hazardous waste that was treated on-site in violation of Regulation 23, §262.41(e). The elementary neutralization is excluded from regulation in APC&EC Regulation No. 23 §265.1(c)(10) and 270.1(c)(2)(v). APC&EC Regulation No. 23 §261.4(a)(2) excludes from regulation, industrial wastewater discharges that are point source discharges subject to regulation under the Clean Water Act. The exclusion applies only to the discharge, it does not apply to the wastewaters while they are being collected, stored, or treated before the discharge. Therefore, these hazardous waste streams should be reported on the Annual Report. This reporting failure was also cited during the March 1994 CEI. The Respondent failed to report leaks and spills of D002 characteristic hazardous waste in its 1994 and 1995 Annual Reports.

14. Additionally, as noted in the CEI performed on September 9, 1997, a portion of the acid wastes generated on-site by the Respondent are released into the environment. The Respondent recorded the release of approximately 18,203 gallons of nitric acid and sulfuric acid in its 1996 spill control log. Between January 7, 1997 and August 28, 1997, approximately 2,107 gallons of nitric acid and sulfuric acid were spilled. The repeated occurrence of release at the Respondent's facility is indicative of the Respondent's failure to maintain the facility in a manner which minimizes the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment in violation of Regulation No. 23, §265.31.

15. In addition to the violations mentioned above, recent violations of the Respondent's NPDES permit as reported on the Discharge Monitoring Reports are as follows:

OUTFALL 002

<u>Date</u>	<u>Parameter</u>	<u>Limit</u>	<u>Reported</u>
2/97	pH	6 - 9 s.u.	2.6 s.u.

OUTFALL 003

<u>Date</u>	<u>Parameter</u>	<u>Limit</u>	<u>Reported</u>
4/97	NH3N Mo. Avg. Mass	2.1 lbs/day	4.67 lbs/day
	NH3N Daily max. Mass	3.3 lbs/day	9.26 lbs/day
	NH3N Mo. Avg.	15 mg/l	19.4 mg/l
	NH3N Daily max.	23 mg/l	38.7 mg/l

16. The Respondent notified ADPC&E by letter dated May 21, 1997, to Ms. Orene Robertson, that the microorganisms in the treatment pond had been replaced. That letter further stated that the results of samples taken on April 3, 1997, indicated that the NH3-N concentration was back down below permitted levels

17. The Respondent also reported the following NPDES violations on the Discharge Monitoring Reports:

OUTFALL 001

<u>Date</u>	<u>Parameter</u>	<u>Limit</u>	<u>Reported</u>
10/97	Nitrogen, Nitrate	2043 lbs/day (30-day)	2079 lbs/day (30-day)
11/97	Nitrogen, Ammonia	1852 lbs/day (30-day)	2126 lbs/day (30-day)
11/97	Nitrogen, Nitrate	2043 lbs/day (30-day)	3019 lbs/day (30-day)
11/97	Nitrogen, Nitrate	4160 lbs/day (daily max.)	5302 lbs/day (daily max.)

18. The Respondent notified ADPC&E by letter dated December 16, 1997 to the NPDES Enforcement Section that the flow rate had been reduced by over 50% and more denitrification microorganisms were added. The Respondent stated that it believed the violations were a result of a seasonal pond turn over and that more analytical work indicated that there was lost efficiency in the denitrification microorganisms during the pond turn over and due to the drop in pond temperature.

19. In CAO 95-070 the Respondent agreed to pay a civil penalty of \$150,000. That civil penalty was to consist of a \$25,000 cash payment and an obligation to perform environmentally beneficial Supplemental Environmental Projects (SEPs) with a value of \$125,000. The Respondent paid the \$25,000 cash payment and initiated steps as outlined in CAO 95-070 for the SEPs. The SEPs were to include performance standards of a 25% reduction of sulfates in the facility's wastewater effluent and a 50% reduction in the usage of sulfuric acid in the Boiler Feed System (BFS) which was to be supported by written documentation. CAO 95-070 also stated that in the event ADPC&E determines that the Respondent failed to meet the performance standards the Respondent would receive no credit, or as determined solely by ADPC&E, a partial reduced credit toward offsetting the \$125,000 SEPs obligation of the civil penalty. CAO 95-070 further provided that in the event ADPC&E determined that the Respondent failed to meet one or both of the performance standards, the Respondent would upon written notification by ADPC&E provide written certification to ADPC&E that the Respondent has a Waste Minimization "program in place" for the facility's operations.

20. The wastewater effluent from the BFS commingles with wastewater and stormwater runoff and exits the Respondent's facility at Outfall 001. The Respondent did report total sulfates on the Discharge Monitoring Reports (DMRs) for Outfall 001 each month during the period in question. The DMRs indicate that there was

no apparent reduction of sulfates in the facility's wastewater effluent. On or about March 26, 1998, the Respondent further reported an 8.3% reduction in the usage of sulfuric acid in the BFS. The Respondent and ADPC&E agree that the Respondent failed to meet the required performance standards specified in CAO 95-070 and should receive no credit toward the obligation to perform a SEP for the BFS upgrade.

21. The Respondent submitted a Waste Minimization Plan to ADPC&E on June 26, 1997. However, upon review of the Waste Minimization Plan initially submitted, it appeared that the plan did not contain any additional time and resources to be spent by the Respondent and did not address all the hazardous waste generated. In particular the Waste Minimization Plan did not address the hazardous waste generated by the leaks and spills of sulfuric and nitric acids.

22. On September 30, 1997, ADPC&E and the Respondent met to discuss, among other things, the issues surrounding the July 1997 Waste Minimization Plan submittal. As a result of this conversation the Respondent revised the Waste Minimization Plan to include the leaks and spills of sulfuric and nitric acids. That revised Waste Minimization Plan was submitted to ADPC&E on December 11, 1997. Additional comments were provided by ADPC&E on June 5, 1998, and responses to these comments were submitted on July 8, 1998, along with a newly Revised Waste Minimization Plan.

ORDER AND AGREEMENT

Therefore, the parties do hereby stipulate and agree:

1. This Order shall supersede CAO 95-070 in its entirety, and CAO 95-070 shall no longer be effective upon

the effective date of this Order. However, there is no intent by the parties to duplicate the work required by CAO 95-070. Any work required by this Order which has already been accomplished by the Respondent may be deemed satisfaction of that requirement of this Order provided the requirement has been approved in writing by ADPC&E.

2. The Respondent shall complete a comprehensive evaluation of all plant processes which contribute to the wastewater and stormwater effluent and undertake a facility-wide wastewater evaluation and pollutant source control program and wastewater minimization program consisting of the following milestone components:

(a) The Respondent shall complete dye testing of the plant drain system to identify the sources of each effluent stream, and to characterize the volume and constituents of the influent streams.

(b) Upon completion of the source control activities, the Respondent shall characterize the flow and constituents of the various wastewater and stormwater streams and compare the results to applicable water quality criteria. At a minimum this characterization shall be in accordance with Attachment "A."

(c) The Respondent is authorized to modify Stormwater Outfalls 006 through 009 for the purpose of reducing the number of sampling locations. Stormwater runoff from areas which drain to new Stormwater Outfalls 007, 008, and 009 may be redirected to existing Stormwater Outfall 006. The runoff will be rerouted along the railroad tracks, prior to commingling with non-industrial runoff. With this modification, stormwater discharges from the northern portions of the facility will drain to Stormwater Outfall 006. All other industrial runoff will be monitored at Stormwater Outfall 005.

After these modifications, sampling of Stormwater Outfall 006 will be re-initiated, and the facility SWPPP will be modified to reflect the changes to the facility.

(d) In addition to the monitoring requirements imposed by the Stormwater and NPDES permits, the Respondent shall also monitor and report the effluent characteristics as set forth in Attachment "A" during the Wastewater Characterization Study.

(e) On or before August 1, 1999, the Respondent shall submit a Final Report of the Wastewater Characterization and Water Quality Evaluation to ADPC&E. This Final Report shall include an engineering drawing of the plant drain system and the influent sources, the results of the wastewater and stormwater characterization, and water quality evaluation.

(f) The Respondent shall initiate an engineering evaluation of the treatment alternatives, and conduct such pilot plant testing as may be appropriate. ADPC&E and the Respondent agree to work cooperatively throughout this project and to exchange information to enable the Respondent's planning efforts to proceed so that an NPDES permit application may be completed.

(g) On or before August 1, 1999, the Respondent shall submit a technically complete revised NPDES permit application to ADPC&E.

(h) ADPC&E shall evaluate the revised NPDES permit application and shall make every effort to issue a draft NPDES permit as soon as possible with appropriate effluent limits. It is contemplated that it will take at least 60 days from the date a complete NPDES permit application is received by

ADPC&E to issue a draft NPDES permit. Due to the fact that there are several factors beyond ADPC&E's control regarding the issuance of a final permit, (i.e., public comments, facility comments, requests for hearing, etc.), ADPC&E cannot commit to issue a final NPDES permit. ADPC&E shall follow the procedures outlined in APC&EC Regulation 8 and shall make every effort to expedite the process where possible. However, it is contemplated that it will take approximately 60 days from the date of issuance of a draft NPDES permit to issue a final NPDES permit for this facility.

(i) The Respondent shall submit final design plans for the additional wastewater treatment component(s) to ADPC&E for approval on or before August 1, 2000. The final design shall include plans to either line Lake Lee to meet a hydraulic conductivity standard of 1.0×10^{-7} cm/sec or to close Lake Lee within 180 days after the substitute treatment/neutralization system is in place.

(j) The Respondent shall construct and have operational the additional treatment system component(s) on or before August 1, 2001.

(k) The Respondent shall be in compliance with final effluent limits of the applicable NPDES permit on or before February 1, 2002.

(l) The Respondent shall submit quarterly reports of its progress in completing this project to the NPDES Enforcement Section of the Water Division. The first report shall be due on or before July 15, 1998, and subsequent reports shall be due on or before the 15th day of the month following the end of each subsequent calendar quarter until the Respondent has achieved compliance with the final effluent limits for six (6) consecutive months. The quarterly reports shall identify the work completed

during the prior quarter and the results achieved, the work planned for the coming quarter, and a projected schedule for completion of the project.

3. Until final agency decision regarding the issuance of the revised NPDES permit, the Respondent shall comply with the terms and conditions of the NPDES permit which became effective July 1, 1990.

4. The Respondent shall implement Interim Measures designed to reduce the concentration of nitrates in the shallow groundwater. Such Interim Measures shall consist of the following:

(a) Implementation of the pollutant source control, wastewater minimization and enhanced wastewater treatment measures required by Paragraph 2 of the Order and Agreement; and

(b) In situ bioremediation in the existing groundwater monitoring wells which have exhibited nitrate concentrations in excess of 10 mg/L.

The Respondent shall submit a work plan within sixty (60) days of the effective date of this Order for in situ bioremediation for all the existing groundwater monitoring wells which have exhibited nitrate concentrations in excess of 10 mg/L. This work plan shall include a description of activities, including a schedule of significant dates for initiation of bioremediation, sampling the groundwater and submission of the sample analysis to ADPC&E, and preparation of annual reports evaluating the effectiveness of the Interim Measure. Respondent shall implement the work plan upon receiving written approval from ADPC&E, and shall continue bioremediation activities until the nitrate concentration is less than 10 mg/L, or for twelve (12) months after completion of the wastewater improvements required by Paragraph 2 of the Order and

Agreement, whichever occurs first, at which time the Respondent shall prepare an "Interim Measures Report." In the event the nitrate concentration in any monitoring well exceeds 10 mg/L, the Interim Measures Report shall include documentation supporting, and a recommendation for approval of a Final Remedy which includes an evaluation of the potential risks to human health and the environment associated with the residual concentration of nitrates in the groundwater, addressing the factors identified in APC&EC Reg. 22 at Section 22.1207(c)(1) through 22.1207(d)(8). The Director's approval of a Final Remedy shall be based upon an evaluation of the potential risks to human health and the environment associated with the residual concentration of nitrates, utilizing the factors identified in APC&EC Reg. 22 at Section 22.1207(c)(1) through 22.1207(d)(8), and may include a determination that further remediation of the groundwater is not necessary following the criteria outlined in APC&EC Reg. 22, Section 22.1207 (e). The Director's decision on the Final Remedy may include a requirement that the Respondent undertake additional action, including monitoring of the groundwater off site and/or groundwater recovery and treatment, if future information indicates contaminated groundwater is presenting a threat to human health or the environment.

5. On July 9, 1998, the Respondent submitted a revised Emergency Response Plan to ADPC&E to address the comments raised in Penny Wilson's review of the plan dated June 8, 1998, as attached hereto as Attachment "C." ADPC&E has not completed its review of this plan to insure that it addresses all the issues properly and this plan shall be subject to the requirements of paragraph 9.

6. By this Order, ADPC&E hereby makes the determination that the Respondent failed to meet the performance standards as set forth in CAO 95-070 for the BFS upgrade and ADPC&E hereby provides written notification to the Respondent to submit a second revised Waste Minimization Plan to the Hazardous Waste Division of ADPC&E. The revised Waste Minimization Plan shall include an implementation and milestone

schedule for the performance of all waste minimization recommendations provided for in the plan and shall at a minimum address the issues raised in Penny Wilson's review of the plan dated June 5, 1998, as attached hereto as Attachment "D." The Respondent submitted a Revised Waste Minimization Plan on July 9, 1998. However, ADPC&E has not completed its review of this plan to insure that it addresses all the issues properly. The revised plan recommendations and schedule of implementation shall be subject to the requirements of paragraph 9 below. The Respondent shall receive up to \$25,000 per year credit, up to the \$125,000 total for implementing any work conducted after January 1, 1998, in furtherance of an approved revised Waste Minimization Plan or approved portion of the Plan. The Respondent must submit documentation of its expenditures for the Waste Minimization Plan on or before January 30th of each year for the previous year's activities. In the event the Respondent is not able to document \$25,000 in expenditures, the Respondent shall pay the remainder of the \$25,000 for that year as a civil penalty.

7. In compromise and full settlement of the violations specified in the Findings of Fact, Respondent agrees to pay a civil penalty of One Hundred Eighty-three-Thousand Seven-Hundred Dollars (\$183,700). In addition to the terms as set forth in paragraph 6 above, the Respondent shall satisfy a portion of this civil penalty in the form of Supplemental Environmental Projects (SEPs) approved in writing by ADPC&E.

(a) ADPC&E hereby approves a SEP in the amount of Forty-two Thousand Dollars (\$42,000) for an emergency notification system for the El Dorado 911 Center. This SEP has already been satisfied. The Respondent shall receive credit in the amount of Forty-two Thousand Dollars (\$42,000) toward payment of the civil penalty agreed upon in this Order; and

(b) ADPC&E hereby approves a SEP in the amount of Fifteen Thousand Dollars (\$15,000) for the Mercury Task Force made payable to the Arkansas Game and Fish Foundation.

Both the remaining civil penalty amount and the SEP payments are due within ninety (90) days of the effective date of this Order and shall be mailed by certified mail or hand delivered to:

Arkansas Department of Pollution Control & Ecology
Attn: Al Eckert, Legal Division Chief
8001 National Drive
P.O. Box 8913
Little Rock, Arkansas 72219-8913.

In the event that Respondent fails to pay the remaining civil penalty amount or the SEP payments within the prescribed time, ADPC&E shall be entitled to attorneys fees and costs of collection in addition to the stipulated penalties listed in paragraph 10.

8. All submittals required by paragraph 2 of the Order and Agreement shall be submitted by Certified Mail or hand delivered to Art Riddle, NPDES Enforcement Supervisor, Water Division, ADPC&E, 8001 National Drive, P.O. Box 8913, Little Rock, Arkansas 72219-8913 with copies for David Brown, Enforcement Coordinator, Hazardous Waste Division and Gerald Delavan, Senior Geologist Water Division. The submittals required by paragraph 4 of the Order and Agreement shall be submitted by Certified Mail or hand delivered to Gerald Delavan with copies to Art Riddle and David Brown. The submittals required by paragraphs 5 and 6 of the Order and Agreement shall be submitted by Certified Mail or hand delivered to David Brown with copies to Art Riddle and Gerald Delavan.

9. All requirements by the Order and Agreement are subject to approval by ADPC&E. In the event of any deficiencies, Respondent shall, within thirty (30) days of the receipt of written notification by ADPC&E, submit any additional information or changes requested, or take additional actions as specified by ADPC&E. Failure to adequately respond to the notice of deficiency within thirty (30) days constitutes a failure to meet a deadline and subjects Respondent to the civil penalties established in paragraph 10 below, provided that such notice clearly declares that failure to respond within thirty (30) days of receipt is a failure to meet requirements established by this Order.

10. If Respondent fails to submit to ADPC&E any reports or plans, or meet any other requirement of this Order within the applicable deadline established in the Order, the Respondent agrees to pay penalties for delay in the following amounts:

- a. First day through the tenth day: \$500.00/day;
- b. Eleventh day through the twentieth day: \$750.00/day;
- c. Twenty-first day through the thirtieth day: \$1,000.00/day; and
- d. Each day beyond the thirtieth day: \$2,500.00/day.

These stipulated penalties may be imposed for delay in scheduled performance and shall be in addition to any other remedies or sanctions which may be available to ADPC&E by reason of Respondent's failure to comply with the requirements of this Order. ADPC&E reserves its right to collect other penalties and fines pursuant to its enforcement authority in lieu of the stipulated penalties set forth above.

11. If any event causes or may cause delay in the achievement of compliance by Respondent with the requirements of this Order, Respondent shall notify ADPC&E, in writing, as soon as reasonably possible after it is apparent that a delay will result, but in no case after the deadline has passed. The written notice shall describe in detail the anticipated length of delay, the precise cause of delay, the measures taken and to be taken to minimize the delay, and the timetable by which those measures are implemented.

12. The ADPC&E may grant a written extension of any provision of this Order, provided that Respondent requested such an extension in writing and provided that the delay or anticipated delay has been caused by circumstances beyond the control of and without the fault of Respondent. The time for performance may be extended for a reasonable period but, in no event longer than the period of delay resulting from such circumstances. The burden of proving that any delay is caused by circumstances beyond the control of and without fault of Respondent and the length of delay attributable to such circumstances shall rest with Respondent. Failure to notify ADPC&E promptly, as provided in paragraph 11 above, shall be sufficient grounds for denying an extension.

13. Nothing contained in this Order shall be construed as a waiver of ADPC&E's enforcement authority over alleged violations not specifically addressed herein; nor does this Order exonerate past, present, or future conduct which is not expressly addressed herein. Nothing contained herein shall relieve Respondent of any other obligations imposed by any local, state, or federal laws, nor shall this Order be deemed in any way to relieve Respondent of its responsibilities for obtaining or complying with any necessary permits or licenses.

14. This Order is subject to public review and comment in accordance with A.C.A. § 8-4-103(d) and is therefore not effective until thirty (30) days after public notice of the Order is given. ADPC&E retains the

right and discretion to rescind this Order based on comments received within the thirty-day public comment period or based on any other considerations which may subsequently come to light.

SO ORDERED THIS 14th DAY OF August, 1998.

Randall Mathis

RANDALL MATHIS
DIRECTOR

APPROVED AS TO FORM AND CONTENT;
EL DORADO CHEMICAL COMPANY

BY: RL Milliken

(Signature)

Sr. UP Manufacturing. RL Milliken
(Typed or Printed Name)

TITLE: _____

DATE: 8/10/98

ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY

IN THE MATTER OF:

EL DORADO CHEMICAL COMPANY

EL DORADO, ARKANSAS 71731-0231

EPA ID No. ARD001700657

NPDES PERMIT No. AR0000752

LIS No.

AMENDMENT TO CONSENT ADMINISTRATIVE ORDER

The Arkansas Department of Pollution Control and Ecology (hereinafter "ADPC&E") and El Dorado Chemical Company entered into Consent Administrative Order (hereinafter "Order") LIS 98-119 effective October 10, 1998.

ADPC&E and El Dorado Chemical Company (hereinafter "Respondent") desire to amend Order LIS 98-119 to replace ADPC&E personnel receiving the Respondent's submittals required in paragraph 8 of the Order and Agreement. Belinda Colby will receive submittals instead of David Brown, and Keith Brown will receive submittals instead of Gerald Delavan.

Order LIS 98-119, Order and Agreement, paragraph 8 has been amended to read:

8. All submittals required by paragraph 2 of the Order and Agreement shall be submitted by Certified Mail or hand delivered to Art Riddle, NPDES Enforcement Supervisor, Water Division, ADPC&E, 8001 National Drive P.O. Box 8913, Little Rock, Arkansas 72219-8913 with copies for Belinda Colby, Enforcement Coordinator, Hazardous Waste Division and Keith Brown, Manager, State Permits, Water Division. The submittals required by paragraph 4 of the Order and agreement shall be submitted by Certified Mail or hand delivered to Keith Brown with copies to Art Riddle and Belinda Colby. The submittals required by paragraphs 5 and 6 of the Order and Agreement shall be submitted by Certified Mail or hand delivered to Belinda Colby with copies to Art Riddle and Keith Brown.

All provisions of Consent Administrative Order 98-119 not specifically amended by this Amendment shall remain in full force and effect.

This amendment is subject to public review and comment in accordance with Arkansas Pollution Control and Ecology Commission (APC&EC) Regulation No. 8. However, as provided for by APC&EC Regulation No. 8, this amendment shall be effective upon execution. Unless otherwise specified in this amendment, all times for performance of ordered activities shall be calculated from this effective date. ADPC&E retains the right and discretion to rescind this amendment based upon comments received within the thirty (30) day public comment period and shall promptly notify the Respondent if ADPC&E elects such rescision.

SO ORDERED THIS _____ DAY OF _____, 1999.

RANDALL MATHIS
DIRECTOR

APPROVED AS TO FORM AND CONTENT:

EL DORADO CHEMICAL COMPANY

BY: Signature _____

Print or Type Name _____

Title _____

Date _____.