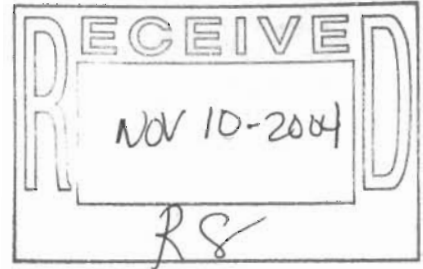


**PERMIT APPLICATION
FORM 1**

ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER DIVISION
POST OFFICE BOX 8913
LITTLE ROCK, AR 72219

PURPOSE OF THIS APPLICATION

- INITIAL PERMIT APPLICATION FOR NEW FACILITY
- INITIAL PERMIT APPLICATION FOR EXISTING FACILITY
- MODIFICATION OF EXISTING PERMIT
- REISSUANCE (RENEWAL) OF EXISTING PERMIT
- MODIFICATION AND CONSTRUCTION OF EXISTING PERMIT
- CONSTRUCTION PERMIT ONLY



SECTION A – GENERAL INFORMATION

1. Facility Name: El Dorado Chemical Company
2. Legal Applicant Name (If the applicant is different from the above): NA
3. Operator Name: El Dorado Chemical Company
4. Is the operator identified in number 2 above, the owner of the facility? Yes No
5. NPDES Permit Number (If applicable): AR0000752
6. NPDES General Permit Number (If applicable): NA
7. NPDES General Storm Water Permit Number (If applicable): N/A
8. Does your facility hold any other permits that are not listed above? Yes No
9. Permit numbers and/or names of any permits issued by ADEQ or EPA for an activity located in Arkansas that is presently held by the applicant or its parent or subsidiary corporation:

<u>Permit Name</u>	<u>Permit Number</u>	<u>Held by</u>
<u>Air Code Permit</u>	<u>573-AR-7</u>	<u>EDCC</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

10. Give a verbal description (Direction) of the facility with respect to known or easily identifiable landmarks:

The facility is located north of the city of El Dorado, approximately 1 mile west of State Highway 7 Spur on North West Avenue.

11. Facility Location: (Attach a map with location marked; street, route no. or other specific identifier)

Street: 4500 North West Avenue

City: El Dorado County: Union State: AR Zip Code: 71730

12. Facility Mailing Address (Street or Post Office Box):

Street: NA P.O. Box: P.O. Box 231

City: El Dorado State: AR Zip: 71731-0231

13. Neighboring states within 20 miles of the permitted facility (Check all that apply):

Oklahoma Missouri Tennessee Louisiana Texas Mississippi

14. Type of ownership: Public Private State Federal Other

15. Indicate applicable Standard Industrial Classification(SIC) Codes or NAICS codes for all processes"

Primary 2873 Secondary 2819 Other

16. Design Flow: 2 MGD Highest Monthly Average of the last two years flow: NA MGD

17. Is Outfall equipped with a diffuser? Yes No

18. Responsible Official (as described on the last page of this application):

Name: George Hogg Title: Plant Manager

Address: PO Box 231 Phone Number: (870) 863-1400

City: El Dorado State: AR Zip: 71731

19. Designated Facility Contact (as described on the last page of this application):

Name: Randall Whitmore Title: Responsible Care Manager

Address: PO Box 231 Phone Number: (870) 863-1498

City: El Dorado State: AR Zip: 71731

20. Name, address and telephone number of consulting engineering firm (If none, so state):

Name: GBM^c & ASSOCIATES

Address: 219 Brown Lane Phone Number: (501) 847-7077

City: Bryant State: AR Zip: 72022

SECTION B – Facility and Outfall Information

1. Facility Location:

Lat: 33° 09' 55" N Long: 92° 24' 40" W Section 6 & 7 Twnshp: 17S

Range: 15W County: Union Nearest Town: El Dorado

USGS Hydrologic Unit Code: 08040202 What map scale is used? 1:24,000

What method is used? A Indicate Technical Accuracy 3

What map datum is used? 1 Where is the collection point? 1

2. Outfall/monitoring location:

Outfall 001:

Lat: 33° 15' 32" Long: 92° 41' 12" Section: 7

USGS Hydrologic Unit Code: 08040202 What map scale is used? 1:24,000

What method is used? A Indicate Technical Accuracy 3

What map datum is used? 1 Where is the collection point? 001

Name of receiving stream (i.e., an unnamed tributary of Mill Creek, then into Mill Creek; thence into Arkansas River): See Attachment 1

Outfall 002:

Lat: 33° 15' 48" Long: 92° 41' 24" Section: 7

USGS Hydrologic Unit Code: 08040202 What map scale is used? 1:24,000

What method is used? A Indicate Technical Accuracy 3

What map datum is used? 1 Where is the collection point? 002

Name of receiving stream (i.e., an unnamed tributary of Mill Creek, then into Mill Creek; thence into Arkansas River): See Attachment 1

Outfall 003:

Lat: 33° 15' 38" Long: 92° 41' 07" Section: 7

USGS Hydrologic Unit Code: 08040202 What map scale is used? 1:24,000

What method is used? A Indicate Technical Accuracy 3

What map datum is used? 1 Where is the collection point? 003

Name of receiving stream (i.e., an unnamed tributary of Mill Creek, then into Mill Creek; thence into Arkansas River): See Attachment 1

Outfall 004:

Lat: 33° 15' 42" Long: 92° 41' 27" Section: 7

USGS Hydrologic Unit Code: 08040202 What map scale is used? 1:24,000

What method is used? A Indicate Technical Accuracy 3

What map datum is used? 1 Where is the collection point? 004

Name of receiving stream (i.e., an unnamed tributary of Mill Creek, then into Mill Creek; thence into Arkansas River): See Attachment 1

Outfall 005:

Lat: 33° 15' 42" Long: 92° 41' 17" Section: 7

USGS Hydrologic Unit Code: 08040202 What map scale is used? 1:24,000

What method is used? A Indicate Technical Accuracy 3

What map datum is used? 1 Where is the collection point? 005

Name of receiving stream (i.e., an unnamed tributary of Mill Creek, then into Mill Creek; thence into Arkansas River): See Attachment 1

Outfall 006:

Lat: 33° 16' 03" Long: 92° 41' 02" Section: 6

USGS Hydrologic Unit Code: 08040202 What map scale is used? 1:24,000

What method is used? A Indicate Technical Accuracy 3

What map datum is used? 1 Where is the collection point? 006

Name of receiving stream (i.e., an unnamed tributary of Mill Creek, then into Mill Creek; thence into Arkansas River): See Attachment 1

Outfall 007:

Lat: 33° 16' 11" Long: 92° 41' 16" Section: 6

USGS Hydrologic Unit Code: 08040202 What map scale is used? 1:24,000

What method is used? A Indicate Technical Accuracy 3

What map datum is used? 1 Where is the collection point? 007

Name of receiving stream (i.e., an unnamed tributary of Mill Creek, then into Mill Creek; thence into Arkansas River): See Attachment 1

Outfall 010:

Lat: 33° 17' 22" Long: 92° 28' 05" Section: 2

USGS Hydrologic Unit Code: 08040201 What map scale is used? 1:24,000

What method is used? A Indicate Technical Accuracy 3

What map datum is used? 1 Where is the collection point? 010

Name of receiving stream (i.e., an unnamed tributary of Mill Creek, then into Mill Creek; thence into Arkansas River): See Attachment 1

3. Are the proposed or existing facility located above the 100-year flood level? Yes No

If "No", what measures are (will be) used to protect the facilities? NA

4. Type of treatment system (include all components of treatment system and attach the process flow diagram): NA

Section C – Waste Storage and Disposal Information N/A

1. Sludge Disposal Method (Check as many as applicable):

Landfill

Landfill Site Name N/A ADEQ Solid Waste Permit No.

Land Application

ADEQ State Permit No.

Method of sludge treatment?

What is the estimated amount of sludge generated at the treatment facility?

Dry Ton/Acre per year Gallons/Acres per year

List all the land application sites with the following information:

Field Number	New/ Old	Range	Twtnshp.	Section	Total Acres	Available Acres	Crop Cover	Loading Rate

Septic tank

Arkansas Department of Health Permit No.

Distribution and Marketing

Facility receiving sludge:

Name Address

City State Zip Phone

Rail Pipe Other

ATTACHMENT 1

Verbal Description of Discharge Points

Outfall 001

On the east side of the 50-acre impoundment on the southern half of El Dorado Chemical Company's (EDCC) property (4500 North West Avenue, El Dorado, AR 71730).

Outfall 002

A 20-inch pipe on the south side of the 1-acre aeration pond below the influent pipe that discharges to the 50-acre equalization pond, located on the south side of EDCC's manufacturing process area.

Outfall 003

East of Outfall 005, southeast of EDCC's manufacturing process area, on the east edge of a power line clearing/easement.

Outfall 004:

South of the ammonia spheres and "A" Street, west of the 1-acre aeration pond.

Outfall 005:

The southeast side of the plant, south of the production parking lot.

Outfall 006:

Northeast of the plant, north of fire hydrant #11, and north of the intersection of the main railroad into the plant and the railroad spur.

Outfall 007:

Off of "D" Street at the northeast corner of the process area, immediately downstream of the convergence of multiple pipes at a concrete structure used to divert flow in the ditch from the west direction to the north direction.

Outfall 010:

Approximately 14 miles east of EDCC, along the Ouachita River, in the NE ¼ of the NW ¼ of Section 31, T16S, R13W.

Trace of the Effluent Flow

Outfall 001:

From the 50-acre equalization pond, to a valved 24-inch pipe into an unnamed tributary of Flat Creek, thence to Flat Creek, thence to Haynes Creek, thence into Smackover Creek in Segment 2D of the Ouachita River Basin.

Outfall 002:

From the 1-acre aeration treatment pond through two 12-inch pipes into a 20-inch pipe into an unnamed tributary of Flat Creek, thence to Flat Creek, thence to Haynes Creek, thence into Smackover Creek in Segment 2D of the Ouachita River Basin.

Outfall 003:

The Imhoff treatment system discharges into an unnamed tributary of Flat Creek, thence to Flat Creek, thence to Haynes Creek, thence into Smackover Creek in Segment 2D of the Ouachita River Basin.

Outfall 004:

From a 30-inch pipe leading to an unnamed tributary of Flat Creek, thence to Flat Creek, thence to Haynes Creek, thence into Smackover Creek, thence Ouachita River.

Outfall 005:

From an unnamed tributary of Flat Creek, thence to Flat Creek, thence to Haynes Creek, thence to Smackover Creek in Segment 2D of the Ouachita River Basin.

Outfall 006:

From an unnamed tributary of Flat Creek, thence to Flat Creek, thence to Haynes Creek, thence to Smackover Creek in Segment 2D of the Ouachita River Basin.

Outfall 007:

From an unnamed tributary of Flat Creek, thence to Flat Creek, thence to Haynes Creek, thence to Smackover Creek in Segment 2D of the Ouachita River Basin.

Outfall 010:

Via pipeline directly to the Ouachita River in Segment 2D of the Ouachita River Basin.

Subsurface Disposal (Lagooning)

Location of lagoon _____ How old is the lagoon? _____

Surface area of lagoon _____ Acre Depth _____ Ft Does lagoon have liner? Yes No

Incineration

Location of incinerator _____

Other (Provide complete description) _____

SECTION D – Water Supply See Attachment 2

Water Sources (check as many as are applicable):

- Private Well**
Distance from discharge point: Within 5 miles Within 50 miles

- Municipal Water Utility** (Specify City) _____
Distance from discharge point: Within 5 miles Within 50 miles

- Surface Water** Name of Surface Water Source: _____
Distance from discharge point: Within 5 miles Within 50 miles

- Other** (Specify): _____
Distance from discharge point: Within 5 miles Within 50 miles

SECTION E – Financial Assurance

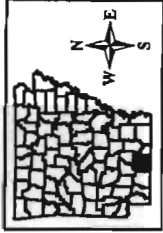
Act 336 of 1995 provides for financial assurance requirements for permitting common sewage systems. Arkansas Code 8-5-703 (1)(1)-The Department of Pollution Control and Ecology shall not permit or register any common sewage system serving two (2) or more occupied lots, residences, businesses, or other discernible occupied unity without the applicant first demonstrating to the department its financial ability to cover the costs of operating and maintaining the system for a period of five (5) years.

Please provide **financial assurance** in order to show that the facility is able to cover the costs of operating and maintaining the treatment system for the next five years.

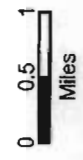
The minimal financial assurance may be demonstrated to the department (Arkansas Code 8-5-703(a)(2)):

- A. By obtaining insurance;
- B. By passing a financial test;
- C. By obtaining a letter of credit;
- D. By obtaining a surety bond;
- E. By obtaining a trust fund or escrow account;
- F. Through the use of a combination of insurance, financial test, letter of credit, surety bond, trust fund, or escrow account.

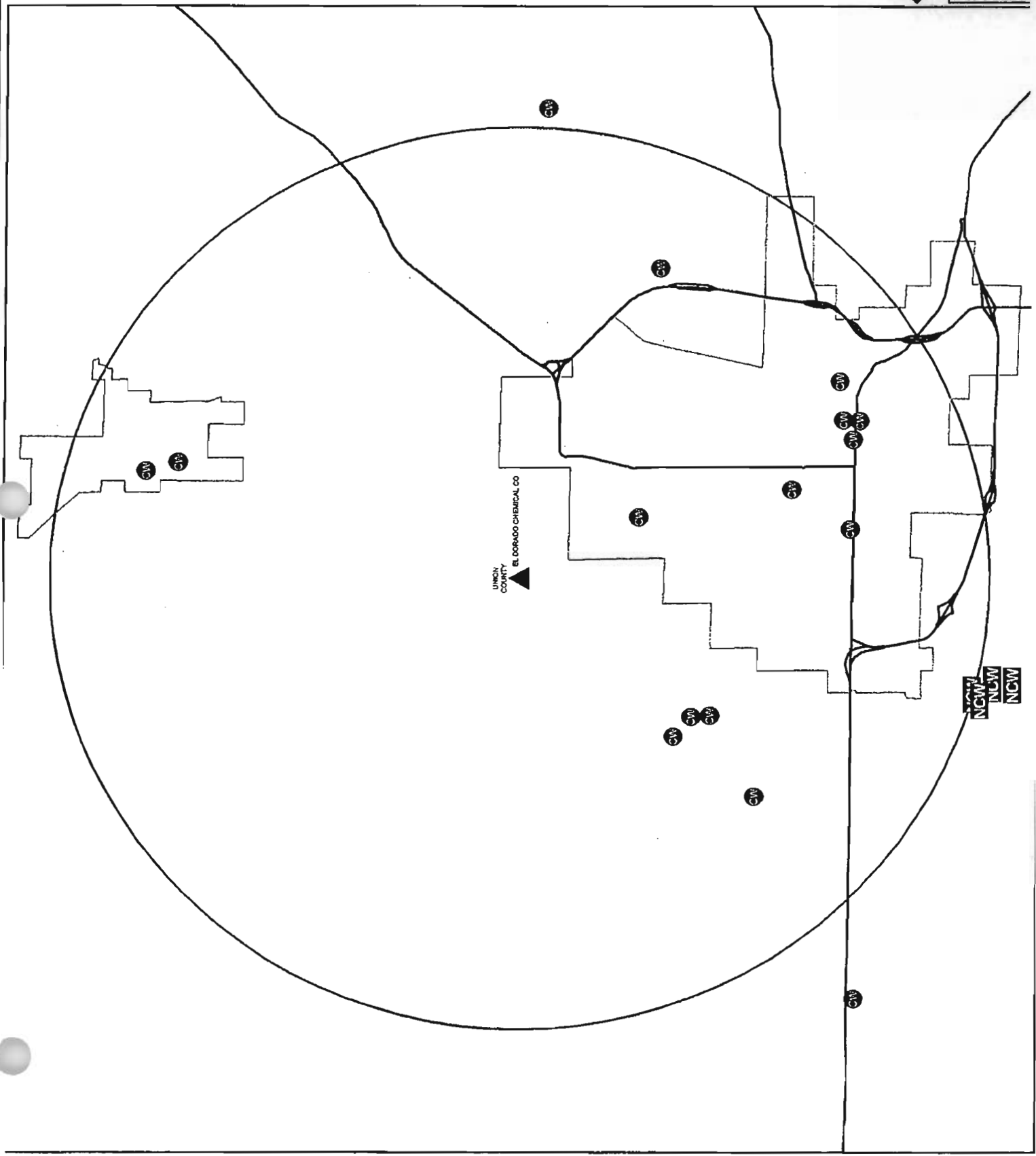
**EL DORADO
CHEMICAL CO
(5-MILE BUFFER)**



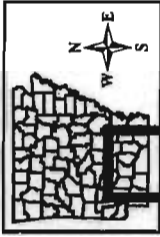
- EL DORADO CHEM CO
- COMMUNITY WELL
- NON COMMUNITY WELL
- COMMUNITY SURFACE
- NON COMMUNITY SURFACE
- INTERSTATE
- US HIGHWAY
- CITY LIMITS
- 5 MILE BUFFER
- COUNTY BOUNDARY



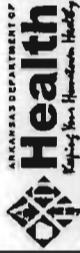
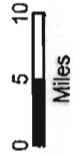
The information herein is derived from sources managed by other agencies and organizations to their own standards. The ADH makes no warranty nor assumes any liability for the accuracy, completeness, timeliness, or fitness for use of the information. Calculations and other information are the responsibility of the user.



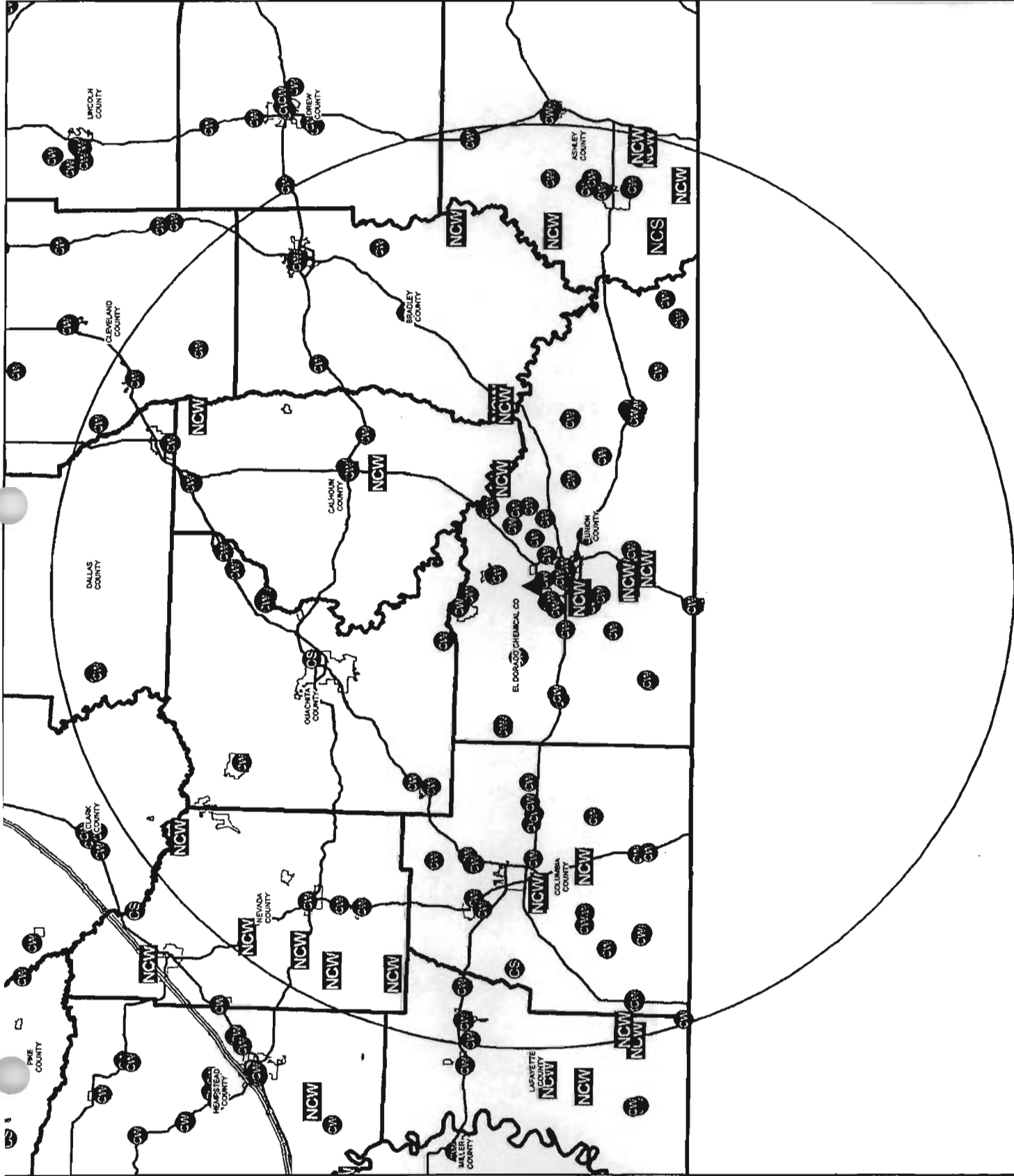
EL DORADO CHEMICAL CO (50-MILE BUFFER)



- ▲ EL DORADO CHEM CO
- COMMUNITY WELL
- NCW NON COMMUNITY WELL
- CS COMMUNITY SURFACE
- NCS NON COMMUNITY SURFACE
- INTERSTATE
- US HIGHWAY
- CITY LIMITS
- 50 MILE BUFFER
- COUNTY BOUNDARY



The information herein is derived from sources received by other agencies and organizations to their own standards. The ACH makes no warranty nor assumes any liability for the accuracy, completeness, timeliness, or fitness for a particular purpose with respect to this information. Calculations drawn from such information are the responsibility of the user.



SECTION F – Industrial Activity

1. Does an effluent guidelines limitation promulgated by EPA (<http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-N.thm>) under Section 304 of the Clean Water Act (CWA) apply to your facility?

YES (Answer questions 2 and 3) NO

2. What Part of 40 CFR? 418
3. What Subpart(s)? B, D, E
4. Give a brief description of all operations at this facility including primary products or services (attach additional sheets if necessary): produces ammonium nitrate, nitric acid, and sulfuric acid
-
-
-
5. Production: (projected for new facilities)

Product(s) Manufactured (Brand Name)	Production
	lbs/day Average Daily Production
Ammonium Nitrate, Agricultural Grade	2,221,340
Ammonium Nitrate, Industrial Grade	1,253,280
Nitric Acid, 57%	1,419,400
Nitric Acid, 63%	691,720
Nitric Acid, 98%	529,320
Sulfuric Acid, 93%	525,520
Sulfuric Acid, 98%	46,200

SECTION G – Wastewater Discharge Information

Facilities that checked "Yes" in question 1 of Section B are considered Categorical Industrial Users and should skip to question 2.

1. **For Non-Categorical Users Only:** List average wastewater discharge, maximum discharge, and type of discharge (batch, continuous, or both), for each plant process. Include the reference number from the process flow schematic (reference Figure 1) that corresponds to each process. [New facilities should provide estimates for each discharge.]

Number	Process Description	Average Flow (GPD)	Maximum Flow (GPD)	Type of Discharge (batch, continuous, none)

If batch discharge occurs or will occur, indicate: [New facilities may estimate.]

Number of batch discharges: _____ per day Average discharge per batch: _____ (GPD)

Time of batch discharges _____ at _____
(days of week) (hours of day)

Flow rate: _____ gallons/minute Percent of total discharge: _____

Answer questions 2, 3, and 4 only if you are subject to Categorical Pretreatment Standards.

2. For Categorical Users: Provide the wastewater discharge flows for each of your processes or proposed processes. Include the reference number from the process flow schematic (reference Figure 1) that corresponds to each process. [New facilities should provide estimates for each discharge.]

Number	Regulated Process	Average Flow (MGD)	Maximum Flow (GPD)	Type of Discharge (batch, continuous, none)
See Form 2C, Section II, as previously submitted				

Number	Unregulated Process	Average Flow (MGD)	Maximum Flow (GPD)	Type of Discharge (batch, continuous, none)

Number	Dilution (e.g., cooling water)	Average Flow (MGD)	Maximum Flow (GPD)	Type of Discharge (batch, continuous, none)

If batch discharge occurs or will occur, indicate: [New facilities may estimate.]

Number of batch discharges: _____ per day Average discharge per batch: _____ (GPD)

Time of batch discharges _____ at _____
(days of week) (hours of day)

Flow rate: _____ gallons/minute Percent of total discharge: _____

3. Do you have, or plan to have, automatic sampling equipment or continuous wastewater flow metering equipment at this facility?

Current: Flow Metering	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
Sampling Equipment	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
Planned: Flow Metering	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
Sampling Equipment	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>

If so, please indicate the present or future location of this equipment on the sewer schematic and

describe the equipment below: Outfall 010

4. Are any process changes or expansions planned during the next three years that could alter wastewater volumes or characteristics?

Yes No (If no, skip question 5.)

5. Briefly describe these changes and their effects on the wastewater volume and characteristics.

SECTION H – Technical Information

Technical information to support this application shall be furnished in appropriate detail to understand the project. Information in this Part is required for obtaining a **construction permit** or for **modification** of the treatment/disposal system.

1. Describe the process for wastewater treatment. Include the types of control equipment to be installed along with their methods of operation and control efficiency.

There are no proposed changes to the existing treatment system at this time.

2. One set of construction plans and specifications, approved by a **Professional Engineer (PE)** registered in **Arkansas**, must be submitted as follows:
 - a. The plans must show flow rates in addition to pertinent dimensions so that detention times, overflow rates, and loadings per acre, etc. can be calculated.
 - b. Specifications and a complete design calculations.
 - c. All treated wastewater discharges should have a flow-measuring device such as a weir or Parshall flume installed. Where there is a significant difference between the flow rates of the raw and treated wastewater, a flow-measuring device should be provided both before and after treatment.
3. If this application includes a construction permit disturbing five or more acres, a storm water construction permit must be obtained by submitting a notice of intent (NOI) to ADEQ.

SECTION I – Signatory Requirements

The information contained in this form must be certified by a responsible official as defined in the "signatory requirements for permit applications" (40 CFR 122.22).

Responsible official is defined as follows:

Corporation: a principal officer of at least the level of vice president

Partnership: a general partner

Sole proprietorship: the proprietor

Municipal, state, federal, or other public facility: principal executive officer or ranking elected official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. I further certify under penalty of law that all analyses reported as less than detectable in this application or attachments thereto were performed using the EPA approved test method having the lowest detection limit for the substance tested.

Signature of responsible official: George Hogg Date: 11-5-04

Printed name of responsible official: George Hogg

Official title of responsible official: Plant Manager Telephone Number (870) 863-1400

By signature in Section H above, the applicant certifies that the named individual is qualified as print below to act as a duly authorized representative under the provisions of 40CFR 122.22(b). (NOTE: If no duly authorized representative is designated in this section, the Department considers the applicant to be the responsible official for the facility and only reports, etc., signed by the applicant will be accepted by the Department.)

Cognizant Official (Duly Authorized Representative)

40 CFR 122.22(b) states that all reports required by the permit, or other information requested by the Director, shall be signed by the applicant (or person authorized by the applicant) or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- (1) the authorization is made in writing by the applicant (or person authorized by the applicant):
- (2) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity responsibility, or an individual or position having overall responsibility for environmental matters for the company.

The applicant hereby designates the following person as a cognizant official, or duly authorized representative, for signing reports, etc., including Discharge Monitoring Reports (DMRs) required by the permit, and other information requested by the Director.

George Hogg
NAME (first, last)

Plant Manger (870) 863-1400
TITLE TELEPHONE

EL DORADO CHEMICAL COMPANY

Revised, edited, and published by the Geological Survey
Control by USGS and USCGS

Topography by photogrammetric methods from aerial
photographs taken 1942. Field checked 1965.

Photographic projection - 1927 North American Datum
63,000-foot, and based on Arkansas coordinate system, with zone
1300 meter. Universal Transverse Mercator grid 1806,
zone 15, shown in blue.

Four red dashed lines indicate selected fence and field lines
shown on aerial photography. This information is transferred
to place on the projected North American Datum 1983,
using the projection lines 20 meters south and
15 meters east as shown by dotted corner marks.

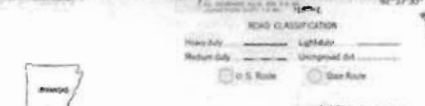
Boundaries shown in double contour lines from aerial photographs taken 1956 and
other sources. This information not field checked. Map scale 1965.



SCALE 1:14000

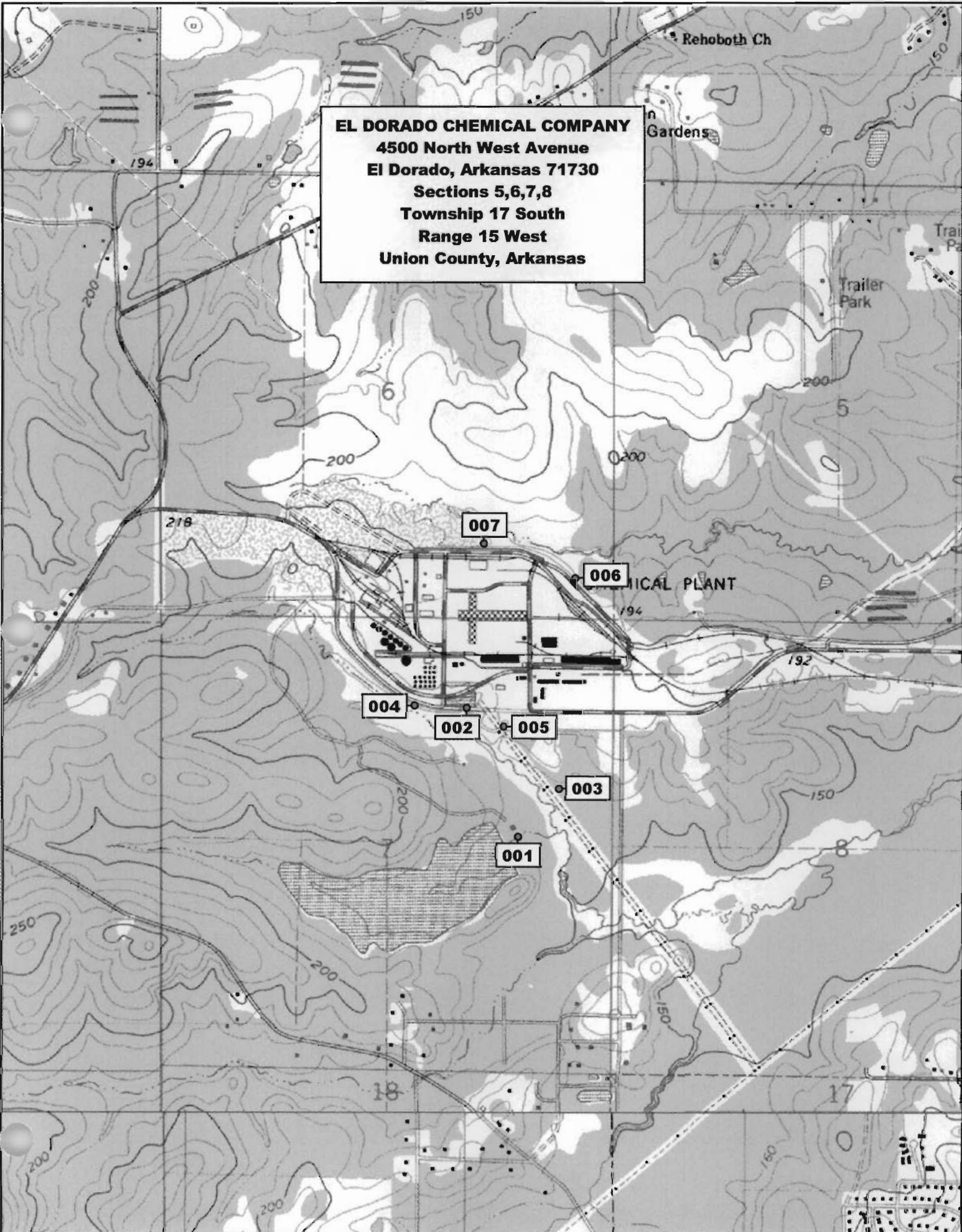
CONTOUR INTERVAL 50 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPILED WITH NATIONAL MAP SECURITY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80202, OR RESTON, VIRGINIA 22092
AND ARKANSAS GEOLOGICAL COMMISSION, LITTLE ROCK, ARKANSAS 72204.
A PAPER-BINDING TOPOGRAPHIC MAP AND SYMBOLS IS AVAILABLE ON REQUEST.



SMACKOVER, ARK.
7.5 MINUTE SERIES (TOPOGRAPHIC)
3300/04-FY-024

1962
PHOTOREVISED 1965
THIS MAP IS IN THE PUBLIC DOMAIN



EL DORADO CHEMICAL COMPANY
4500 North West Avenue
El Dorado, Arkansas 71730
Sections 5,6,7,8
Township 17 South
Range 15 West
Union County, Arkansas