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Winston-Salem
Regional Office

TANK CLOSURE REPORT

OMS #7

2000 Silas Creek Parkway
Winston-Salem, North Carolina

SPATCO Work Order #9-5096

NC National Guard
- OMS #7

PREPARED FOR:

Mr. Todd Preddy
NCARNG
4105 Reedy Creek Road
Raleigh, North Carolina

PREPARED BY:

SPATCO Environmental
556-L Arbor Hill Road
Kermersville, North Carolina

July 11, 1994

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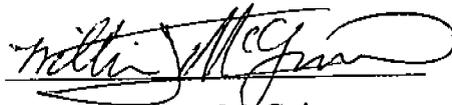
Figure 1	USGS Quadrangle Map
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Appendix I	30-day Notification of Intent of Closure (GW/UST-3 Form)
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CERTIFICATION

This report has been prepared under the guidance of a North Carolina Licensed Geologist to meet the requirements of the North Carolina Department of Environment, Health and Natural Resources. The information and conclusions expressed in this report are based upon normal standards of the profession and limited to information available at this time. Chemical analyses of samples associated with this report were performed by a subcontracted independent certified laboratory. Laboratory results have been accepted on the basis of subcontractor's internal laboratory procedures and should be considered qualitative unless verified with appropriate QA/QC samples analysis.

 13 July 94

William McGuinness
Senior Hydrogeologist
NC Licensed Geologist #1160



1.0 UNDERGROUND STORAGE TANK EXCAVATION AND REMOVAL

On June 7, 1994, SPATCO Environmental excavated and disposed of one (1) 2,000 gallon diesel underground storage tank (UST) from the North Carolina Army National Guard (NCANG) site at 2000 Silas Creek Parkway, in Winston-Salem, North Carolina. Figure 1 is a copy of the USGS 7½' quadrangle for Winston-Salem East, North Carolina showing the location of the site. Table I summarizes relevant information pertaining to the UST.

Prior to tank removal, a Notification of Intent of Closure (30-day Notice) was filed with the NCDEHNR on May 12, 1994. A copy of the notification is attached in Appendix I. Local fire marshall permits were not required prior to tank closure. Immediately before tank excavation, the UST was inerted with dry ice and product lines were purged with nitrogen, following API recommended guidelines.

The UST was transported by SPATCO Environmental to Safeway Tank Disposal, Inc. for proper disposal. A certificate of disposal of the UST is included in Appendix II.

2.0 SOIL SAMPLING/FIELD SCREENING

Soils encountered during excavation were primarily fill dirt and debris. Bedrock was not encountered. Soil samples were obtained from the undisturbed soil within the excavation pit using the excavation bucket. Additionally, a soil sample was obtained in the vicinity of a pump island adjacent to the UST. Figure 2 is a site plan showing the former tank and sampling locations. New, disposable, latex gloves were worn during each transfer of soil from the excavator bucket to the glass containers.

After collection, soil samples were divided into two representative portions. The first portion of each sample was placed in a polyethylene bag for a least five minutes. An OVA was used to screen the head space of the bagged sampled. Data is presented in Table II.

The second portion of the soil samples collected during tank closure was placed in an appropriate glass container and sealed with a Teflon[®] lined cap. The soil sample was maintained at approximately 4°C for laboratory analysis. The samples were shipped to Hydrologic, Inc., and analyzed for the following:

- Total Petroleum Fuel Hydrocarbons (TPH), EPA Method 3550
- Total Petroleum Fuel Hydrocarbons (TPFH), EPA Method 5030

Proper Chain of Custody procedures were followed. The Chain-of-Custody and laboratory analysis is attached in Appendix III and are summarized in Table II.

3.0 LABORATORY RESULTS

Referring to Table II, soil samples collected beneath the UST and pump island contain no detectable concentrations of TPH or TPFH.

4.0 CONCLUSION

Based on the soil concentrations and NCDEHNR guidelines, SPATCO Environmental anticipates the NCDEHNR will require no further action or additional assessments. A completed UST-2 form is attached in Appendix IV.

TABLE I.
Underground Storage Tank Data

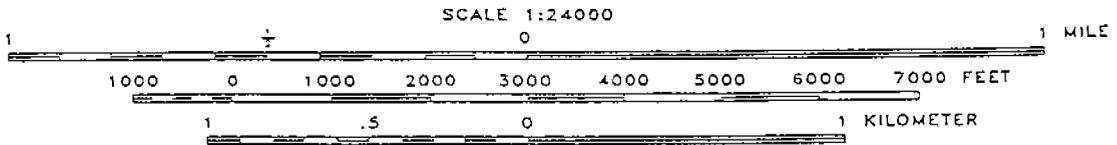
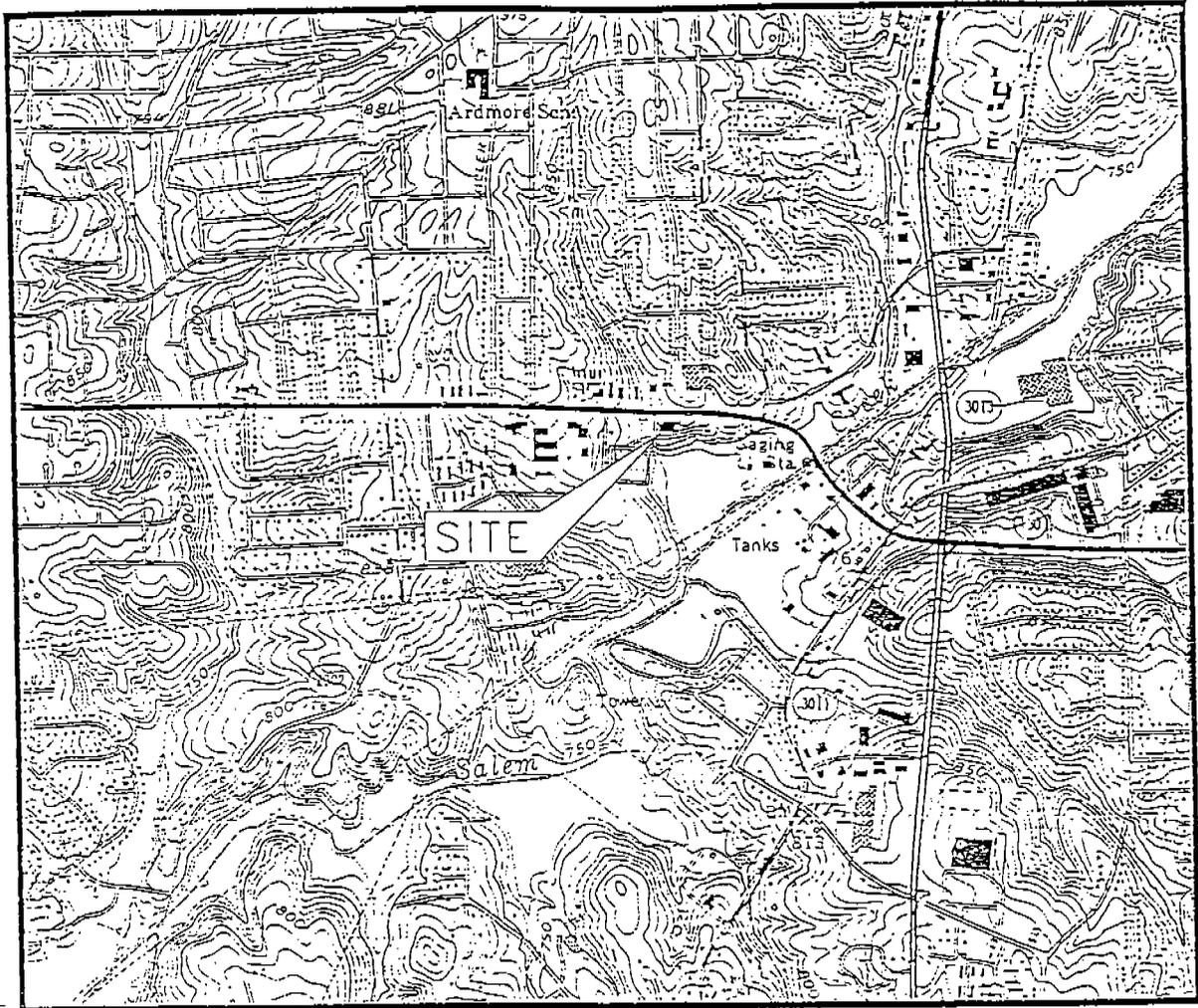
Tank #	Composition	Dimensions (D x L)	Volume (gallons)	Stored Product
1	Steel	64" 12'0"	2,000	Diesel

TABLE II
OVA Readings and Soil Sample Laboratory Results

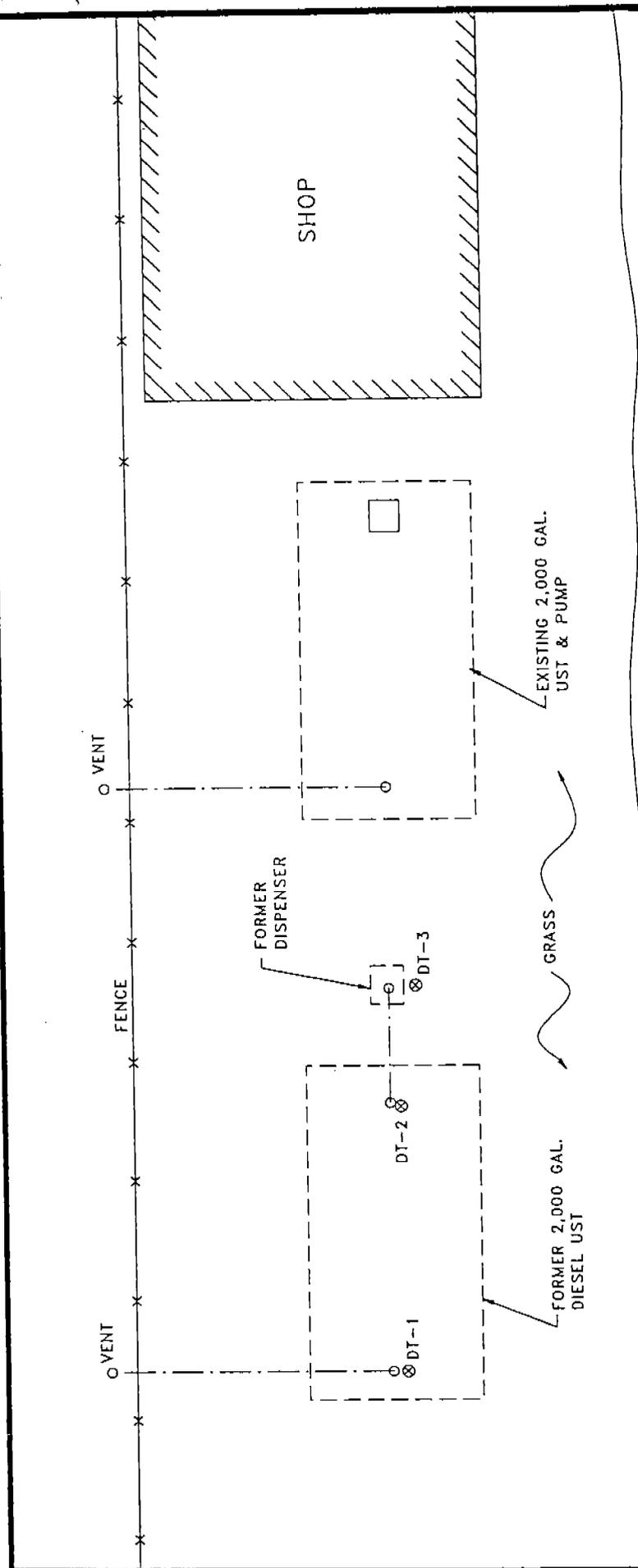
Sample #	Sample Depth (feet)	OVA Reading (ppm)	TPH 3550 (mg/kg)	TPFH 5030 (mg/kg)
DT-1	8	0	BDL	BDL
DT-2	8	0	BDL	BDL
DT-3	3	0	BDL	BDL

BDL = Below Detection Limits

FIGURES



SPATCO  environmental	
FIGURE 1: SITE LOCATION MAP OMS #7 2000 SILAS CREEK PARKWAY WINSTON-SALEM, NORTH CAROLINA	
WO #9-5096	DATE: 7-8-94 DRAWN BY: RMC

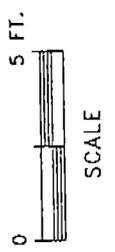


SPATCO environmental

FIGURE 2: SITE MAP
 NCARNG - OMS #7
 200 SILAS CREEK PARKWAY
 WINSTON-SALEM, NC

WO #9-5096 DATE: 7/5/94
 DWG #075096F2 DRAWN BY: JCJ

LEGEND:
 ⊗ SOIL SAMPLE LOCATION



APPENDIX I

(GWAUST-3) Notice of Intent: UST Permanent Closure or Change-in-Service

FOR TANKS IN NC

Return Completed Form To:
The appropriate DEM Regional Office according to the county of the facility's location. (SEE REVERSE SIDE OF OWNER'S COPY (PINK) FOR REGIONAL OFFICE ADDRESS).

State Use Only
I. D. Number _____
Date Received _____

INSTRUCTIONS

Complete and return thirty (30) days prior to closure or change-in-service.

I. OWNERSHIP OF TANK(S)

Tank Owner Name: NCARNG
(Corporation, Individual, Public Agency, or Other Entity)
Street Address: 4105 Reedy Creek Rd.
County: Wake
City: Raleigh State: NC Zip Code: 27607
Tele. No. (Area Code): 919-664-6186

II. LOCATION OF TANK(S)

Facility Name or Company GMS #7
Facility ID # (if available) 0-024323
Street Address or State Road: 2000 Silas Creek Pkwy.
County: Forsythe City: Winston-Salem Zip Code: 27103
Tele. No. (Area Code): _____

III. CONTACT PERSON

Name: Todd Preddy Job Title: Environmental Projects Coordinator Telephone Number: (919) 664-6392

IV. TANK REMOVAL, CLOSURE IN PLACE, CHANGE-IN-SERVICE

- Contact Local Fire Marshall.
- Plan the entire closure event.
- Conduct Site Soil Assessments.
- If Removing Tanks or Closing in Place refer to API Publications, 2015 "Cleaning Petroleum Storage Tanks" & 1804 "Removal & Disposal of Used Underground Petroleum Storage Tanks".
- Provide a sketch locating piping, tanks and soil sampling locations.
- Fill out form GWAUST-2 "Site Investigation Report for Permanent Closure" and return within 30 days following the site investigation.
- Keep records for 3 years.

V. WORK TO BE PERFORMED BY:

(Contractor) Name: SPATCO
Address: 130 Fanfare Dr. Unit 112 State: NC Zip Code: 27603
Contact: Mike Harman Phone: 832-2535

VI. TANK(S) SCHEDULED FOR CLOSURE OR CHANGE-IN-SERVICE

TANK ID#	TANK CAPACITY	LAST CONTENTS	PROPOSED ACTIVITY		
			Removal	Abandonment in Place	Change-in-Service
	<u>2000</u>	<u>Gasoline</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VII. OWNER OR OWNER'S AUTHORIZED REPRESENTATIVE

Print name and official title: Vickie Dudick, Environmental Program Manager
Signature: Vickie A. Dudick
Scheduled Removal Date: 16 May 1994
Date Submitted: 12 May 1994

*If scheduled work date changes, notify your appropriate DEM Regional Office 48 hours prior to originally scheduled date.

APPENDIX II

Safeway Tank Disposal, Inc.

RECEIVING REPORT

From: Spates Kulle

Received by: [Signature]
SAFEWAY TANK DISPOSAL, INC.

Transported by: Spates

Tank Disposal Number	Size	Weight	Product	Date Received	Origin
8587	2000	1820	Diesel	6-7-94	National Guard Army Winston Salem, N.C.

Safeway Tank Disposal, Inc. accepts the liability for the tank(s) and contents on this report. The tank(s) and contents must be a petroleum product. If at any time the tanks are found to contain any product other than a petroleum product SAFEWAY TANK DISPOSAL, INC. has the right to refuse disposal or negotiate a price for disposal. Customer will be liable for any clean-up or other cost resulting from contamination by a substance other than a petroleum product.

Safeway Tank Disposal, Inc. agrees to dispose of petroleum tanks and contents in accordance with local, state, and federal regulation. Certificate of Disposal to follow.

[Signature]
SAFEWAY TANK DISPOSAL, INC.

APPENDIX III

H Y D R O L O G I C , I N C .

RECEIVED JUN 21 1994

June 15, 1994

REPORTING:

SPATCO - Kernersville
556 L Arbor Hill Road
Kernersville, NC 27284

Attention: Bob Callinon

INVOICING:

SPATCO - Kernersville
556 L Arbor Hill Road
Kernersville, NC 27284

PROJECT NUMBER: FL94-7340

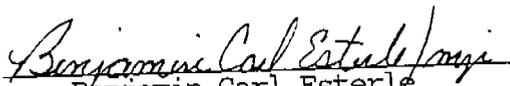
DATE COMPLETED: June 15, 1994
DATE RECEIVED: June 8, 1994

PROJECT DESCRIPTION:

#5096-National Guard W/S--3 soil samples to be analyzed for 3550/5030, sampled on 06/07/94.

Enclosed is the laboratory report for the project described above. If you have any questions or if we can be of further assistance, please feel free to contact Billie Wakefield. We appreciate your business and look forward to serving you again soon.

Respectfully,


Benjamin Carl Esterle
Laboratory Director

H Y D R O L O G I C , I N C .

COMPANY NAME: SPATCO - Kernersville
COMPANY PROJECT NUMBER: #5096-NATIONAL GUARD W/S
HYDROLOGIC PROJECT NUMBER: FL94-7340
HYDROLOGIC SAMPLE NUMBER: 7340
HYDROLOGIC LAB I.D.#: 399
SAMPLE IDENTIFICATION: DT 1
DATE SAMPLED: 6/7/94
DATE EXTRACTED: 6/10/94
DATE/TIME ANALYZED: 6/11/94 6/10/94

METHOD TPH 3550/5030

<u>ANALYSIS</u>	<u>CAS NO.</u>	<u>SDL</u> (mg/kg)	<u>RESULT</u> (mg/kg)
Diesel		1.0	BDL
Gasoline		2.0	BDL

BDL = Below Sample Detection Limit
SDL = Sample Detection Limit

COMMENTS: _____

H Y D R O L O G I C , I N C .

COMPANY NAME: SPATCO - Kernersville
COMPANY PROJECT NUMBER: #5096-NATIONAL GUARD W/S
HYDROLOGIC PROJECT NUMBER: FL94-7340
HYDROLOGIC SAMPLE NUMBER: 7341
HYDROLOGIC LAB I.D.#: 399
SAMPLE IDENTIFICATION: DT 2
DATE SAMPLED: 6/7/94
DATE EXTRACTED: 6/10/94
DATE/TIME ANALYZED: 6/11/94 6/10/94

METHOD TPH 3550/5030

<u>ANALYSIS</u>	<u>CAS NO.</u>	<u>SDL</u> (mg/kg)	<u>RESULT</u> (mg/kg)
Diesel		1.0	BDL
Gasoline		2.0	BDL

BDL = Below Sample Detection Limit
SDL = Sample Detection Limit

COMMENTS: _____

H Y D R O L O G I C , I N C .

COMPANY NAME: SPATCO - Kernersville
COMPANY PROJECT NUMBER: #5096-NATIONAL GUARD W/S
HYDROLOGIC PROJECT NUMBER: FL94-7340
HYDROLOGIC SAMPLE NUMBER: 7342
HYDROLOGIC LAB I.D.#: 399
SAMPLE IDENTIFICATION: DT 3
DATE SAMPLED: 6/7/94
DATE EXTRACTED: 6/10/94
DATE/TIME ANALYZED: 6/14/94 6/10/94

METHOD TPH 3550/5030

<u>ANALYSIS</u>	<u>CAS NO.</u>	<u>SDL</u> (mg/kg)	<u>RESULT</u> (mg/kg)
Diesel		10	BDL
Gasoline		2.0	BDL

BDL = Below Sample Detection Limit
SDL = Sample Detection Limit

COMMENTS: DIESEL-DILUTION FACTOR X 10; OIL PRESENT

APPENDIX IV

(GW/UST-2) Site Investigation Report For Permanent Closure or Change-in-Service of U.S.T.

FOR TANKS IN NC	Return Completed Form To: The appropriate DEM Regional Office according to the county of the facility's location. [SEE MAP ON REVERSE SIDE OF OWNER'S COPY (PINK) FOR REGIONAL OFFICE ADDRESS].	State Use Only I.D. Number _____ Date Received _____
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INSTRUCTIONS

Complete and return within (30) days following completion of site investigation.

I. Ownership of Tank(s)	II. Location of Tank(s)
NCARNG Owner Name (Corporation, Individual, Public Agency, or Other Entity) 4105 Reddy Creek Road Street Address Wake County Raleigh NC 27607 City (919) 664-6186 State Zip Code Area Code Telephone Number	OMS #7 Facility Name or Company 0-024323 Facility ID # (if available) 2000 Silas Creek Parkway Street Address or State Road Forsyth Winston-Salem, 27103 County City Zip Code Area Code Telephone Number

III. Contact Person

Mr. Todd Preddy	Environmental Project Coordinator	(919) 664-6392
Closure Contractor	SPATCO Environmental, 556-L Arbor Hill Rd., Kernersville, NC 27284	Telephone No. (Area Code) 996-0573
Lab	Hydrologic, Inc., 1491 Twilight Trail, Frankfort, KY 40601	Telephone No. (Area Code) 223-0251

IV. U.S.T. Information				V. Excavation Condition				VI. Additional Information Required	
Tank No.	Size in Gallons	Tank Dimensions	Last Contents	Water in Excavation		Free Product		Notable Odor or Visible Soil Contamination	
				Yes	No	Yes	No	Yes	No
1	2,000	64" x 12'	Gasoline		X		X		X

See reverse side of pink copy (owner's copy) for additional information required by N.C. - DEM in the written report and sketch.

VII. Check List

Check the activities completed.

- Contact local fire marshal
 - Notify DEM Regional Office before abandonment
 - Drain & flush piping into tank
 - Remove all product and residuals from tank
 - Excavate down to tank
 - Clean and inspect tank
 - Remove drop tube, fill pipe, gauge pipe, vapor recovery tank connections, submersible pumps and other tank fixtures.
 - Cap or plug all lines except the vent and fill lines.
 - Purge tank of all product & flammable vapors.
 - Cut one or more large holes in the tanks.
 - Backfill the area.
- Date Tank(s) Permanently closed: May 8, 1994
Date of Change-in-Service: _____

- ABANDONMENT IN PLACE**
- Fill tank until material overflows tank opening:
 - Plug or cap all openings:
 - Disconnect and cap or remove vent line
 - Solid inert material used - specify: _____
- REMOVAL**
- Create vent hole
 - Label tank
 - Dispose of tank in approved manner
- Final tank destination: Safeway Tank Disposal, Inc., Colfax, NC

VIII. Certification (Read and Sign)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Print name and official title of owner or owner's authorized representative Bob Callinan, SPATCO Environmental, Staff Geologist	Signature <i>Bob Callinan</i>	Date Signed <u>7-8-94</u>
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