

625SERBSF10,636

625SERBSF10,636

Site Name (Subject): UNION CARBIDE CORP/EVEREADY BATTERY

Site ID (Document ID): NCD003184249

Document Name (DocType): Correspondence (C)

Report Segment:
Description: General Correspondence, 1982 - 1996

Date of Document: 4/29/1996

Date Received:

Box: *Enter SF and # with no spaces* SF10,636

Access Level: PUBLIC

Division: WASTE MANAGEMENT

Section: SUPERFUND

Program (Document Group): SERB (SERB)

Document Category: FACILITY

**Print Report for
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UNION CARBIDE CORP

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This site has been archived from the CERCLIS inventory.

Site Name: UNION CARBIDE CORP
Street: EVANS ST EXTN & 264 BYP
City / State / ZIP: GREENVILLE, NC 27834

NPL Status: Not on the NPL
Non-NPL Status: NFRAP

EPA ID: NCD003184249
EPA Region: 04
County: PITT

Federal Facility Flag: Not a Federal Facility

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UNION CARBIDE CORP

Contacts

[Site Info](#) | [Aliases](#) | [Operable Units](#) | [Contacts](#)
[Actions](#) | [Contaminants](#) | [Site-Specific Documents](#)

Title	Name	Phone Number
Remedial Project Manager (RPM)	JON BORNHOLM	(404) 562-8820
Remedial Project Manager (RPM)	Luis Flores	(404) 562-8807
Remedial Project Manager (RPM)	KEN LUCAS	(404) 562-8953
Remedial Project Manager (RPM)	KEN MALLARY	(404) 562-8802
Remedial Project Manager (RPM)	MICHAEL TOWNSEND	(404) 562-8813
Remedial Project Manager (RPM)	SAMANTHA URQUHART F	(404) 562-8760
Remedial Project Manager (RPM)	Phil Vorsatz	(404) 562-8789
Site Assessment Manager (SAM)	Jennifer Wendel	(404) 562-8799

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UNION CARBIDE CORP

Actions

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<u>OU</u>	<u>Action Name</u>	<u>Qualifier</u>	<u>Lead</u>	<u>Actual Start</u>	<u>Actual Completion</u>
00	DISCOVERY		F		08/01/1980
00	PRELIMINARY ASSESSMENT	L	F		02/01/1985
00	SITE INSPECTION	N	S		03/20/1991
00	ARCHIVE SITE		EP		10/07/1994

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

RECEIVED

MAY 02 1996

SUPERFUND SECTION

4WD-WPB

April 29, 1996

Ms. Pat DeRosa, Head
CERCLA Branch
North Carolina Department of Environment,
Health and Natural Resources
Division of Solid Waste Management
P.O. Box 27687
Raleigh, North Carolina 27611-7687

Dear Ms. DeRosa:

This letter is in response to your letter of March 13, 1996, requesting the status of several North Carolina sites.

Carolina Tank Cleaning (NCD 980 729 412): The SIP was given a complete date of 9/29/95 for further action.

Carolina Galvanizing (NCD 048 181 218): I have requested information from the OSC.

CP&L - Lee (NCD 000 830 661): SIP disposition - NFRAP.

CP&L - Roxboro (NCD 000 830 653): SIP disposition - NFRAP.

CP&L - Mayo (NCD 000 830 612): SIP disposition - NFRAP.

Diamond Shamrock (NCD 057 454 670): SIP disposition - NFRAP.

Federal Paperboard (NCD 000 605 303): SIP disposition - NFRAP.

GA Pacific (NCD 000 773 515): No SIP was assigned. SI complete 9/28/92. Needs ESI.

GA Pacific (NCD 000 773 507): No SIP was assigned. SI complete 9/28/92. Needs ESI.

Kaiser Acme Farmarket (NCD 980 557 847): SIP disposition - NFRAP.

Liberty Furniture (NCD 003 213 568): SIP disposition - NFRAP.

Sherwood Treating (NCD 003 213 545): Spoke with Harry Zinn on 4/29/96 - A SIP letter will be prepared showing the additional data and change in score. Once this is submitted to EPA the event qualifier will be changed to NFRAP.

Statesville Road Landfill (NCD 000 605 097): Additional sampling - NFRAP. Disposition form enclosed.

Union Camp (NCD 003 216 959): No SIP was assigned. SI complete 9/29/92. Needs ESI.

Triangle Pacific Corp (NCD 087 336 335): Additional sampling - Further Action. Team is sending out a special notice letter to PRP.

Northeast Chemical Company (NCD 053 530 234): SIP - NFRAP and decision form enclosed.

Union Carbide Corp. (NCD 003 184 249): SIP - NFRAP and decision form enclosed.

Wilmington Branch (NCD 001 704 980): SIP - NFRAP and decision form enclosed.

Academy Steel Drum (NCD 024 462 327): SIP - NFRAP based on 12/06/95 letter from Serafino Franch.

Ellis Junkyard (NC0 001 402 213): Add to workplan for Preliminary Assessment.

Lee Paving Company (NCD 980 249 189): This site is the same as Crestline Contaminated Wells. Message is enclosed.

EC Manufacturing (NC0 001 119 569): Sent a message to wastelan representative: This site has a RCRA number of NCD 024 740 433, why was it given the number NC0 001 119 569)?

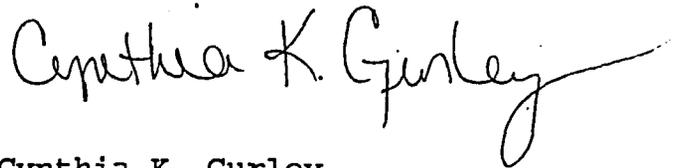
Parnell Residence/RAM Leather Care (NC0 001 402 171): Sent a message to wastelan representative: This site has already been discovered under the name RAM Leather Care Site, NCD 982 096 653. The Parnell Res needs to be deleted.

Other items discussed: Glen Raven Mills will be a combined PA/SI. Lake Wylie will be added to the workplan for a preliminary assessment with a due date of Sept. 30, 1996. Masonite Corporation will be added to workplan for an ESI. Kerr-McGee Chemical Company is another possible ESI. The NC team is currently in the process of sending out Special Notice Letters to Triangle Pacific, Monsanto Company and Reasor Chemical Company. Also, I have requested information on the Graves Property from ERRB.

The March 6, 1996 Draft of Voluntary Cleanup Guidance, the Preremedial site status report and the CERCLIS archive 8T sorted by site name is enclosed.

If you have any questions concerning these site decisions,
please call me at (404) 347-7791, Extension 2031.

Sincerely,

A handwritten signature in cursive script that reads "Cynthia K. Gurley". The signature is written in black ink and has a long, sweeping tail that extends to the right.

Cynthia K. Gurley
North Carolina, PO

Enclosures

SEP 15 95

411 Contaminated soil headed for Canada

■ Records show that some of the soil at the Eveready site is so toxic it will have to be shipped to Canada because no U.S. hazardous waste disposal site can accept it. Meanwhile, nearby Lakewood Pines residents say they're still worried about contaminated groundwater.

By Will Anderson
The Daily Reflector

Soil contaminated with highly toxic chemicals that have leached into groundwater at the former Eveready Battery site in Greenville will be removed within the next three months, according to a plan submitted by the company.

Some of the soil will be shipped to Canada because of the high levels of toxicity — levels that are not acceptable at any hazardous waste disposal site in the United States, according to environmental records with the company.

Meanwhile, residents of an adjacent neighborhood say Eveready has not done enough to allay fears about tainted groundwater supplies in the area.

After demolishing the 32-year-old Eveready building, workers at the site intend to dig up more than 140 tons of soil and haul it to designated hazardous waste facilities in Canada and South Carolina.

Another 280 tons will be sent to a lined landfill in Sampson County.

N.C.

The Soils Remediation Plan, designed by the environmental firm ERM-Southeast of Charlotte, calls for the soil to be removed within 17 weeks after approval from the state Division of Environmental Management. The state agency approved the document on Aug. 3.

"We're proceeding in accordance with the corrective action plan, and we're on schedule," said Eveready spokesman Keith Schopp at the company's office in St. Louis.

Schopp declined to discuss specifics of the document and was unable to say why the soils remediation plan was not included with other materials submitted by Eveready for public inspection at Sheppard Memorial Library in Greenville.

The Daily Reflector got a copy of the plan from the city's planning department.

The company agreed to make the information available last spring after residents of Lakewood Pines subdivision, which borders the site, complained Eveready had not responded to concerns about groundwater contamination in the neighborhood.

"They did this in our back yard," said Gary Gilliland, an attorney who lives in Lakewood Pines. "They seem to be continuing their policy of hiding the ball."

In a March letter addressed to Gilliland's wife, East Carolina University forensic pathologist Dr. M.G.F. Gilliland, Eveready Vice

See SCL B3

FROM PAGE ONE

Friday, September 15, 1995

The Daily Reflector B3

Soil

Continued from B1

President of Operations Walter E. Towslee said copies of the environmental studies and reports would be available at the library.

Other documents containing information on groundwater contamination at the site were placed on public display, but the soil plan was left out.

"I don't know why it was not included," Schopp said.

The soil plan was submitted to the Division of Environmental Management in May, a week after the Greenville City Council voted to rezone the Eveready property for a shopping center on the 38-acre site.

Lakewood Pines residents fought the rezoning issue on grounds that Eveready should have been forced to clean up the site before considering the sale of the property.

The council approved the

rezoning request by a vote of 4-2.

Not long after Eveready moved out of the building in September of 1990, ERM-Southeast began monitoring the movement of the contaminated groundwater.

Large concentrations of volatile organic compounds known as tetrachlorethene (PCE) and trichlorethene (TCE) mixed with the underground water and moved slowly toward the north, where the neighborhood is.

Both chemicals are ingredients in industrial solvents that were used to clean machine parts at Eveready. Although their uses are ordinary, they are highly toxic to humans and known carcinogens.

ERM and Eveready officials knew about the groundwater contamination and its northward migration as early as 1992. Lakewood Pines residents were not informed of the problem until December 1994.

The timing of the notices sent to residents fell just a few months

before Eveready officials announced their intention to sell the vacant land to Atlanta-based Alliance Properties for the development of the strip mall shopping center.

While all the homes run treated city water through the taps, uncapped wells still exist in the neighborhood. The water from them was frequently used for sprinkling vegetable gardens, and one resident reportedly filled his swimming pool with it.

Under the remediation plan, the soil with the highest concentration of PCE known Zone 1 soil will be trucked to a landfill in Canada. The plan estimates about 20 tons of the Zone 1 soil will be removed and recommends digging 4 feet deep around the site where the contaminants were originally spilled. The worst affected area is located under a cement loading dock that was installed sometime before 1985.

Monitoring wells in Zone 1 soils at the site have shown a PCE

concentration of up to 12,000 micrograms per liter in the groundwater. Federal standards indicate it is unsafe for drinking water to have a PCE concentration of more than 5 micrograms per liter.

The plan calls for taking the most highly contaminated soils to a Canadian hazardous waste facility because of land ban constraints in the United States that will not allow certain facilities to accept soils with PCE concentrations higher than 6,000 micrograms per kilogram of soil. Zone 1 soils at the site have PCE concentrations of up to 186,000 micrograms per kilogram.

"This is the first time I've ever heard of a case such as this," said Jim Edwards, a hazardous waste technician with the state Division of Solid Waste in Raleigh.

"It sounds to me like the Canadian disposal sites are less stringent than they are in this country," he said.

Zone 2 soils, or those areas with lower concentrations of PCE, will be trucked to a hazardous waste facility in Pinewood, S.C., known as Laidlaw's, the plan says. An estimated 123 tons of soil will go to the South Carolina landfill.

Another 280 tons of soil that has a lower concentration of contaminants, known as Zone 3 soils, will be taken to a lined landfill in Sampson County, N.C., the plan says.

Because none of the nearby residents use well water in their taps, the plan calls for doing nothing about contaminated groundwater except monitor its movement. Eventually, the compounds will be diluted by other surface waters or dispersed in the atmosphere

without any health hazards to humans, the plan says.

It's called natural attenuation, which means letting nature deal with the problem instead of man.

The Greenville Environmental Advisory Commission, which oversees environmental issues for the city, endorsed the plan at a recent meeting. Although concern about contaminated groundwater remains, commissioners said removing soil will do a lot to solve the problem.

"What's been proposed is what all of us have been after all along," said commission member Richard Mauger, a geology professor at East Carolina University.

"The only thing that we have the responsibility to do is monitor (groundwater contamination). And as long as the levels are decreasing, who's going to argue with that?" he asked.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

RECEIVED

SEP 18 1995

SUPERFUND SECTION

September 11, 1995

Ms. Pat DeRosa, Head
CERCLA Branch
North Carolina Department of Environment,
Health and Natural Resources
Division of Solid Waste Management
P.O. Box 27687
Raleigh, North Carolina 27611-7687

Dear Ms. DeRosa:

The following reports have recently been reviewed and accepted by EPA - Region IV Site Assessment Section:

Preliminary Assessment

Tom Sadler Road Wells
Mecklenburg County
NCD 986 231 967

Further Action (FA)

Combined Preliminary Assessment / Site Inspections (PA/SIs)

Jimmy Green Metals
Nash County
NCO 000 195 743

FA

Site Inspections (SIs)

Champion Landfill No. 1
Haywood County
NCD 986 188 001

No Further Remedial
Action Planned (NFRAP)

Champion Landfill No. 2
Haywood County
NCD 986 188 019

NFRAP

Champion Landfill No. 3
Haywood County
NCD 986 188 027

NFRAP

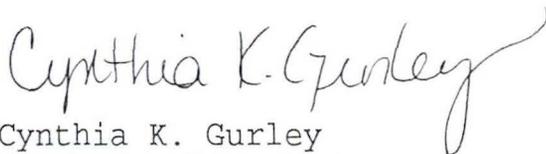
Site Inspection Prioritizations (SIPs)

Amoco New Hanover County NCD 040 049 173	NFRAP
Ashe Pattern Shop Gaston County NCD 986 175 636	NFRAP
Gen. Elect. Med. Steam Turbine Durham County NCD 072 018 252	NFRAP
National Starch & Chemical Brunswick County NCD 091 572 073	NFRAP
Northeast Chemical Co. New Hanover County NCD 053 530 234	NFRAP
Texasgulf, Inc. Beaufort County NCD 041 519 364	FA
Union Carbide Corp. Pitt County NCD 003 184 249	NFRAP
Weyerhaeuser Co/ Plymouth Martin County NCD 991 278 540	FA
Wilmington Branch Brunswick County NCD 001 704 980	NFRAP

Enclosed please find the Remedial Site Assessment Decision Forms for each report generated by the North Carolina Superfund program and a copy of the actual report generated by the EPA Contractor.

If you have any questions concerning these site decisions, please call me at (404) 347-7791, Extension 2031.

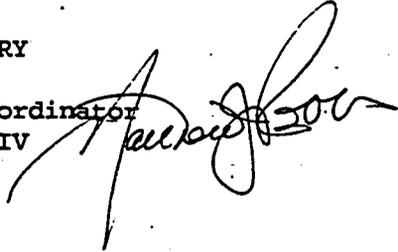
Sincerely,


Cynthia K. Gurley
North Carolina, PO

1995 DATE: August 22, 1995

SUBJECT: REMOVAL FROM EPA'S CERCLIS INVENTORY

FROM: Matthew J. Robbins, Brownfields Coordinator
Waste Management Division, Region IV



TO: UNION CARBIDE CORP
EVANS ST EXTN & 264 BYP
GREENVILLE
NC 27834

EPA has identified the Brownfields Initiative as one of the Agency's top priorities. The term "brownfields" refers to previously used properties that may lie vacant because potential contamination makes them unmarketable to the private sector. EPA has recently announced a comprehensive Brownfields strategy, including Pilot grants to municipalities, to stimulate economic revitalization.

One part of the strategy has been for EPA to review its complete inventory of Superfund sites. These sites have been screened and determined to require no remedial action under the Federal Superfund Program based on information available as well as on conditions and policies that currently exist. This is to notify you that EPA has removed your facility from EPA's computer inventory known as CERCLIS. THIS DOES NOT INDICATE THAT THE STATE HAS MADE A SIMILAR DETERMINATION.

If you have any questions, please call me at 404/347-5059 ext. 6214.

cc: State Agency

REMEDIAL SITE ASSESSMENT DECISION - EPA REGION IV

Site Name: Union Carbide Corporation

EPA ID#: NC D 003184249

Alias Site Names: _____

City: Greenville

County or Parish: Pitt County

State: NC

Refer to Report Dated: 8/22/94

Report type: Draft Site Inspection Prioritization

Report developed by: B & V

DECISION:

1. Further Remedial Site Assessment under CERCLA (Superfund) is not required because:

<input checked="" type="checkbox"/> 1a. Site does not qualify for further remedial site assessment under CERCLA (No Further Remedial Action Planned - NFRAP)		<input type="checkbox"/> 1b. Site may qualify for further action, but is deferred to:		RCRA
				NBC

| | 2. Further Assessment Needed Under CERCLA: 2a. (optional) Priority: | | Higher | | Lower

2b. Activity		PA		ESI
Type:		SI		HRS evaluation
		Other: _____		

DISCUSSION/RATIONALE: Although one of the four groundwater samples, GW03, had levels of VOCs above MCLs, the fact that these same contaminants were not detected in the other groundwater samples or in the soil sample collected in conjunction with GW03 location sheds doubt on the data. The contaminants detected + their associated MCL are as follows: trichloroethylene 44ppb where the MCL is 5ppb + tetrachloroethylene 930 ppb where the MCL is 5ppb. As these contaminants are mobile in the subsurface environment, you would expect to see them in @ least one other groundwater sample in VOCs in the groundwater was a problem here.

The soils look clean.

Report Reviewed and Approved by: Jon Boraholm

Signature: [Signature]

Date: 9/30/94

Site Decision Made by: John McKewen

Signature: [Signature]

Date: 10/7/1994

Site Name: Union Carbide Corp

Site Number: NCD 003 184 249

Site Location: Greenville, N.C.

Pitt County

Latitude: 35 34 37.0

Longitude: 77 23 04.0

Date: July 06, 1992

Calculation Results

Distance from Site Location	Population		Number of Households	
	Per Ring	Cumulative	Per Ring	Cumulative
0 to 1/4 mile	306	306	156	156
>1/4 to 1/2 mile	1,358	1,664	598	754
>1/2 to 1 mile	4,683	6,347	2,036	2,790
>1 to 2 miles	12,477	18,824	5,195	7,985
>2 to 3 miles	24,808	43,632	9,184	17,169
>3 to 4 miles	11,481	55,113	4,841	22,010

Note: The populations and number of households within specified target distance rings were calculated for the NC Superfund Section by the NC State Center for Geographic Information and Analysis using the 1990 US Census data. These values were calculated by summing the population and the number of households data for each census block located within each target ring. For census blocks lying only partially within the ring, the per cent area of the block within the ring was multiplied by the population and household densities of the block.

DIVISION OF ENVIRONMENTAL MANAGEMENT

February 12, 1992

RECEIVED

FEB 13 1992

SUPERFUND SECTION

MEMORANDUM

TO: Harvey Allen, Environmental Engineer
Solid Waste Management
Super Fund Section

FROM: Willie Hardison, Groundwater Supervisor
Washington Regional Office

RE: Summary Report - Phase II Assessment
Eveready Battery Company
Greenville, North Carolina
Pitt County

RRP for WAH

Union Carbide

Enclosed is the above referenced report concerning the Eveready Site located on Greenville Boulevard, Greenville, North Carolina, in Pitt County. As we recently discussed, once you've had an opportunity to review the reports, it may be prudent for us to get together to talk over which agency should take the lead and/or any other matter pertaining to the issue. Please give me a call, I look forward to hearing from you.

Enclosure

cc: Jim Mulligan

DIVISION OF ENVIRONMENTAL MANAGEMENT

February 5, 1992

MEMORANDUM

TO: Jim Mulligan, Regional Supervisor
Washington Regional Office

FROM: Willie Hardison, ^{WHD} Groundwater Supervisor
Washington Regional Office

SUBJECT: Summary Report
Phase II Site Assessment
Eveready Battery Company
Greenville, North Carolina
Pitt County

The Groundwater Section in the Washington Regional Office has reviewed the above mentioned summary report dated December 1991, prepared by ERM - Southeast, Inc. The following paragraphs are brief overviews of our findings and conclusions:

Based on soil gas surveys, soil and groundwater analysis, it appears that impacts to the on-site soils and groundwater has occurred. A total of fifty-five (55) one-inch vapor boring points were advanced at the site. These borings were constructed to a depth of approximately three (3) feet below landsurface. In addition, to the vapor points, fifteen (15) groundwater samples (10 hydropunches, 5 monitoring wells) were collected and analyzed. Each sample was analyzed for TAL metals and purgeable hydrocarbon compounds. Review of the 15 groundwater samples collected revealed that 10 of the samples collected showed the presence of VOCs at various detection levels, which exceeded the Groundwater Quality Standards (NCAC.2L).

In conclusion, it is the office's opinion that sufficient information exists that suggests contravention to Groundwater Standards; and thus, believe additional site characterization is needed.

cc: Harvey Allen
Dick Denton



Eveready Battery Company, Inc.
Technology Laboratory

REC 12/11/91
WAC

December 9, 1991

Mr. Willie Hardison
Regional Groundwater Supervisor
North Carolina DEHNR
Northeastern Region
1424 Carolina Ave.
Washington, North Carolina 27889-1424

SUBJECT: Eveready Battery Facility
Greenville, North Carolina

Dear Mr. Hardison:

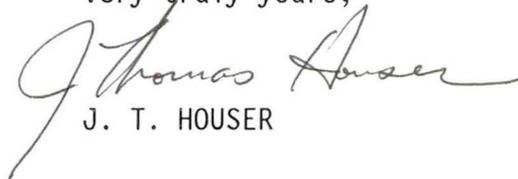
In accordance with your letter dated November 8, 1991 and our telephone conversation of November 18, 1991, I am submitting to the Division the latest results as summarized by ERM-Southeast of investigations, studies, and/or evaluations completed to date by Eveready at the subject site.

I did receive on December 2, 1991, your letter and accompanying map as related to the focus of your inquiry. The map will be forwarded to ERM so that it can be addressed in any further studies and/or reports on this facility.

I hope this information is useful to you. Per my previous letter, as soon as you have an opportunity to review this information, I would like to schedule a meeting with your department and the State DENHR group (Harvey Allen) in Raleigh to review all results of these studies and the status of our facility. With the holidays fast approaching, early January might be a good time to consider for this meeting.

As always, if you have any questions, please feel free to call me at 216/835-7606. Thanks for your cooperation in this matter.

Very truly yours,



J. T. HOUSER

JTH/n11



Eveready Battery Company, Inc.
Technology Laboratory

RECEIVED
WASHINGTON OFFICE

DEC 12 1991

D. E. M.

December 6, 1991

Mr. Willie Hardison
Regional Groundwater Supervisor
North Carolina DEHNR
Northeastern Region
1424 Carolina Ave.
Washington, North Carolina 27889-1424

SUBJECT: Eveready Battery Facility
Greenville, North Carolina

Dear Mr. Hardison:

I received copies of the latest summary report from ERM-Southeast by overnight courier just this morning. After a review of the documents, I found several errors and cross-references that need to be corrected before submitting these documents to your office. Most of the errors were erroneous cross-references between "Figure" and "Table" numbers and the text.

I have talked with personnel at ERM and they will correct the documents within the next 2-3 days. Once they are returned to me, I will forward the documents to you.

I regret this delay in submitting information to you. Thank You for your patience and cooperation.

Very truly yours,


J. T. HOUSER

JTH/n11



Eveready Battery Company, Inc.
Technology Laboratory

RECEIVED
WASHINGTON OFFICE

NOV 21 1991

D. E. M.

GP/NAH
928

November 20, 1991

Mr. Willie Hardison
Regional Groundwater Supervisor
North Carolina DEHNR
Northeastern Region
1424 Carolina Ave.
Washington, North Carolina 27889-1424

SUBJECT: Eveready Battery Facility
Greenville, North Carolina

Dear Mr. Hardison:

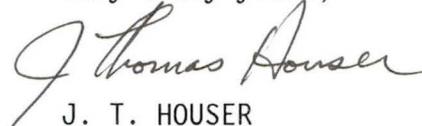
In accordance with your letter dated November 8, 1991 and our telephone conversation of November 18, 1991, I am submitting to the Division the results of investigations, studies, and/or evaluations completed to date by Eveready at the subject site.

As discussed in our November 18, 1991 telecon, Eveready's environmental consulting firm (ERM-Southeast) is currently working on a summary report which addresses the most recent soil and groundwater sampling and analysis work performed at the Greenville facility. I will expedite the completion of this report and submit it to you by December 6, 1991. Also during the November 18, 1991 telecon, I re-iterated my request for a copy of the inquiries received by DEHNR regarding Eveready's Greenville facility, so that our consultant can review them and incorporate appropriate information responses to these inquiries in their report.

I hope this information is useful to you. As soon as you have an opportunity to review this information, I would like to schedule a meeting with your department and the State DEHNR group (Harvey Allen) in Raleigh to review all results of these studies and the status of our facility.

As always, if you have any questions, please feel free to call me at 216/835-7606. Thanks for your cooperation in this matter.

Very truly yours,


J. T. HOUSER

JTH/n11

ERM-Southeast, inc.

Suite 200 • 7300 Carmel Executive Park • Charlotte, North Carolina 28226 • (704) 541-8345

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NOV 21 1991

August 21, 1991

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ENVIRONMENTAL
AFFAIRS

D. E. M.

Mr. Tom Houser
Eveready Battery Company, Inc.
25225 Detroit Road
Westlake, Ohio 44145

RE: Soil Gas Survey Conducted at the Eveready Battery Facility
Located in Greenville, North Carolina.

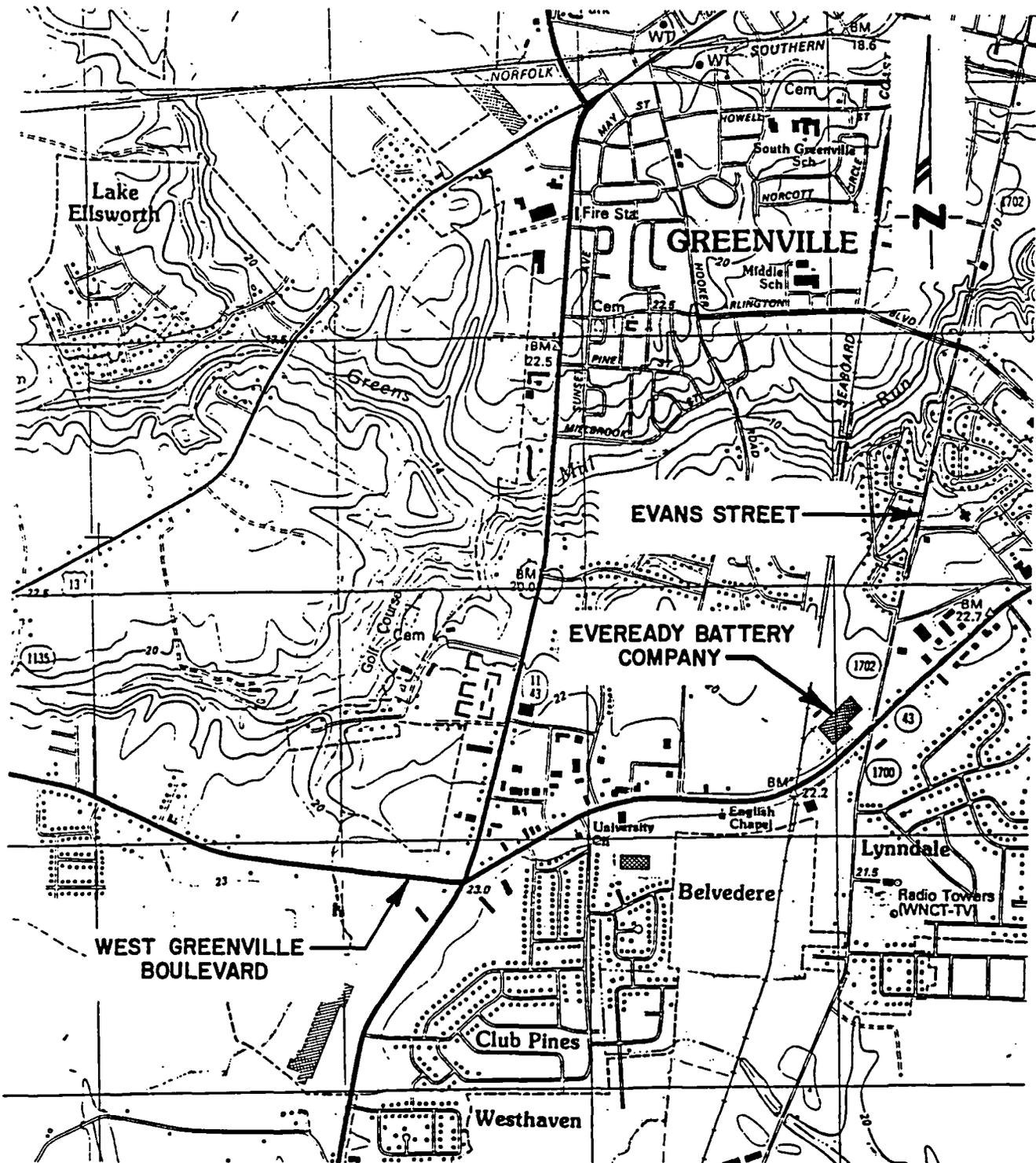
Dear Mr. Houser:

ERM-Southeast, Inc. (ERM) respectfully submits for your review and comment a draft summary report which details the investigative methods and evaluates the results of a soil gas survey conducted at the subject Eveready facility.

1.0 Project Background

The Eveready property occupies 38.42 acres at the northwest intersection of Evans Street and West Greenville Boulevard (U.S. 264) in Greenville, North Carolina (Figure 1). Battery manufacturing operations were begun at this facility in 1963 by the Union Carbide Corporation and terminated by Eveready in 1990. Facility operations have generated D001, D002, D003, D006, D009 and F002 type wastes. The EPA hazardous waste generator number for the facility is NCD003184249.

In February 1985, the North Carolina Department of Environment, Health and Natural Resources (DEHNR) Superfund Branch (CERCLA Section) completed a routine Preliminary Assessment (PA) of the facility. In response to the CERCLA investigation, the EPA requested that soil and ground water samples be collected at the site. In November 1990, Greenhorne and O'Mara, Inc. of Greenbelt, Maryland conducted a Site Investigation (SI) at the Eveready facility under the oversight of the CERCLA Division of the DEHNR. Six soil and four ground water samples were collected as part of the SI and analyzed for TCL volatile, TCL semi-volatile and TAL metal compounds including cyanide in accordance with Contract Laboratory Procedures (CLP).



SCALE = 1:24,000

SOURCE: USGS GREENVILLE SW TOPO MAP.

**FIGURE I. SITE LOCATION MAP
EVEREADY BATTERY FACILITY
GREENVILLE, NORTH CAROLINA**

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Environmental Resources Management

ERM-Southeast, Inc.

Mr. Tom Houser
Eveready Battery Company
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Based on the analytical data generated by SI, a preliminary Hazardous Ranking System (HRS) score was compiled by Greenhorne and O'Mara which suggested that the site may be listed on the National Priorities List (NPL). A potential NPL ranking is directly related to the concentrations of 1,2-dichloroethene (total) (42 ug/l), trichloroethene (44 ug/l) and tetrachloroethene (930 ug/l) indicated by the analysis of ground water sample GW03. Ground water sample GW03 was collected from a temporary boring advanced adjacent to the hazardous waste storage building located behind the main facility. A complete evaluation and presentation of the November 1990 SI data may be referenced in the February 26, 1991 summary report prepared by ERM.

2.0 Purpose

A soil gas survey was conducted at the Greenville, North Carolina Eveready facility as a field screening method for identifying areas of potential subsurface contamination. The soil gas survey results will also be used to provide additional basis for the locations of planned monitor wells and soil sampling points. The soil gas survey is the initial task of a site investigation designed to further assess the potential releases indicated by laboratory analysis of soil and ground water samples collected during the SI. The additional environmental setting and analytical data acquired during this investigation may also be used to eliminate certain assumptions associated with the HRS scoring system and thereby provide a more accurate and possibly significantly reduced HRS score. The environmental and analytical data may then allow Eveready to defend possible EPA assignment to the NPL.

The investigation was performed by Mr. William Goldschmidt, ERM gas chromatograph operator, and Mr. Donald Hankins, ERM hydrogeologist, under the surveillance of Mr. Jones Card, former plant manager of this Eveready facility, on July 22 through July 24, 1991. A photographic survey of the investigation is presented in Appendix A.

The soil gas survey investigative procedures, gas chromatograph results and data evaluation are discussed below.

3.0 Soil Gas Survey Procedures

3.1 Theory of Soil Vapor Analysis

Analysis of soil vapors is an effective method to quickly screen a large area for the potential existence of subsurface areas affected by volatile organic compounds. The ability to detect volatile organic compounds by examining soil gas vapors is related to the partitioning of these compounds from the liquid phase to the vapor

ERM-Southeast, Inc.

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phase under ambient subsurface soil conditions. In response to concentration gradients, the vapor phase typically diffuses upward into the unsaturated soil column or vadose zone. The detection of elevated values of volatile compounds in soil vapor can be an indication, therefore, of the extent and relative magnitude of a subsurface source of contamination.

Compounds with high gas-liquid partitioning coefficients (Henry's Law Constants) and high vapor pressures are most readily mobilized from a source area into the vadose zone. The industrial solvent PCE and the breakdown components of PCE including TCE, 1,1-DCE and VC possess high partitioning coefficients. Aromatic compounds such as benzene, toluene, ethylbenzene and xylene (BTEX) also readily volatilize at ambient subsurface conditions. PCE, the daughter products of TCE degradation, and BTEX were the subject compounds analyzed for during this soil vapor investigation.

3.2 Limitations of Soil Vapor Study

Remote sensing technologies, such as the utilization of a soil gas survey to indicate the subsurface presence of volatile organic compounds, have limitations. The ability to detect the vapor phase transport of volatile compounds in the vadose zone may be affected by site specific conditions. The effectiveness of a soil gas survey can be limited by soil moisture content, depth to ground water, the permeability of the vadose zone medium, soil organic content and atmospheric pressure. Saturated soil conditions preclude the presence of vapor phase. Inhomogeneities in the depth to ground water, soil permeability and soil organic content will impact the emission rate or soil vapor flux of volatile compounds into the vadose zone.

Soil gas survey identification of a source area or "hot spot" is based on the relative concentration differences over an investigated area. The severity of contamination can be best interpreted when isotropic and homogeneous conditions exist at a site. This is an unrealistic assumption. Indicated soil vapor concentrations, therefore, should be interpreted relative to surrounding values in the soil vapor boring network and as such, a soil gas survey data should be interpreted as initial site screening information. Soil vapor values cannot be converted to reflect the concentration of volatile compounds in the local ground water. When properly supplemented with conventional soil and ground water sampling and analysis programs, a soil gas survey can provide a basis for future site evaluation.

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3.3 Soil Vapor Boring Network

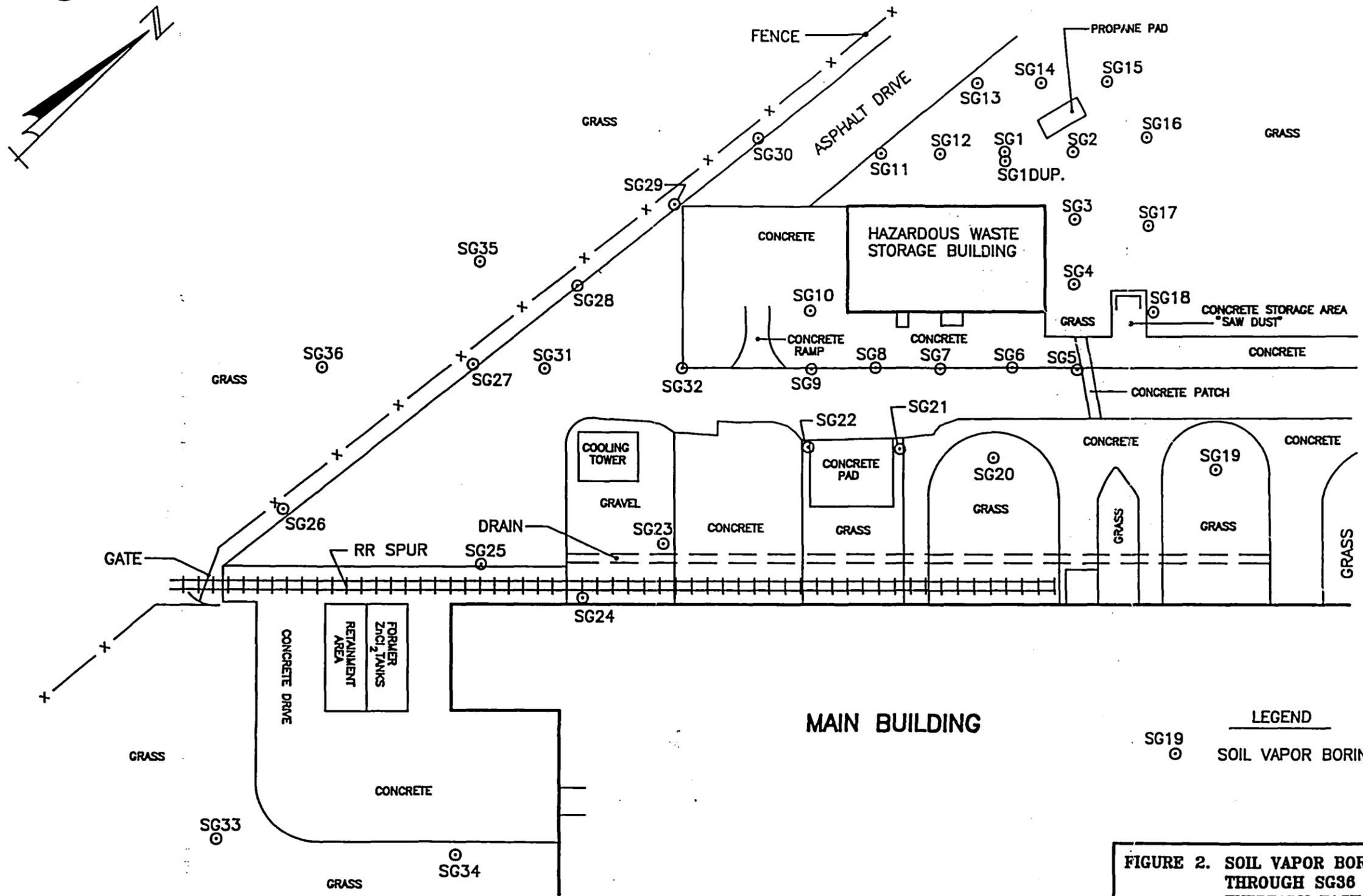
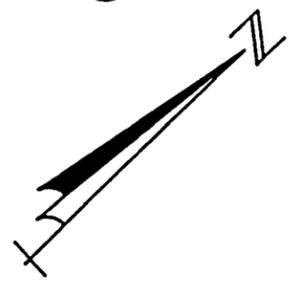
A total of fifty-five one-inch soil vapor boring points were advanced at the site. The boring points were concentrated in the vicinity of the hazardous waste storage building in order to delineate a potential plume or affected soil area indicated by the November SI data (Figure 2). Additional borings were advanced on approximately 200-foot intervals along the southern and eastern boundaries of the Eveready property adjacent to Greenville Boulevard and Evans Street, respectively (Figure 3). The borings advanced along the property boundary were sited to assess the possible migration of volatile compounds to the property from potential off-site source areas.

3.4 Collection of Vapor Samples

Each boring was advanced to a depth of approximately three feet below the ground surface using a power auger equipped with one-inch diameter auger flights. A one-inch diameter PVC soil gas probe was then inserted into the boring. The annulus between the probe and the ground surface was sealed with the auger cuttings to ensure that soil gas vapors were derived solely from the holes located in the bottom six inches of a probe. A Foxboro Model 128 Organic Vapor Analyzer (OVA) with a flame ionization detector (FID) was then connected to the soil gas probe and utilized to draw soil gas vapors from medium surrounding each boring. When the maximum total volatile organic compound (VOC) reading was indicated with the OVA instrument, a Hamilton gas-tight syringe was inserted into the tygon tubing which extends from the top of the probe. At the time of the maximum OVA reading, an appropriate gas volume (based on the maximum total VOC reading) was then withdrawn from the tygon tubing and injected into the column of a Photovac 10S50 Photionization Detector (PID) portable gas chromatograph (GC).

The GC was equipped with a CPSil 5 CP capillary column encapsulated in an isothermal oven to provide temperature controlled release of the targeted compounds. Chromatograms of each soil vapor sample are generated by the GC as a function of the relative retention time of a given volatile compound. Soil gas vapor sample chromatograms were compared to the appropriate calibration standard chromatograms to qualitatively determine the presence of the volatile compounds of interest.

The location of sample points, sample injection volumes, analyses run number, and the Photovac GC responses to calibration standards and other compounds were documented in the field. Each chromatogram was labeled with the project name, date, time and sample location number.

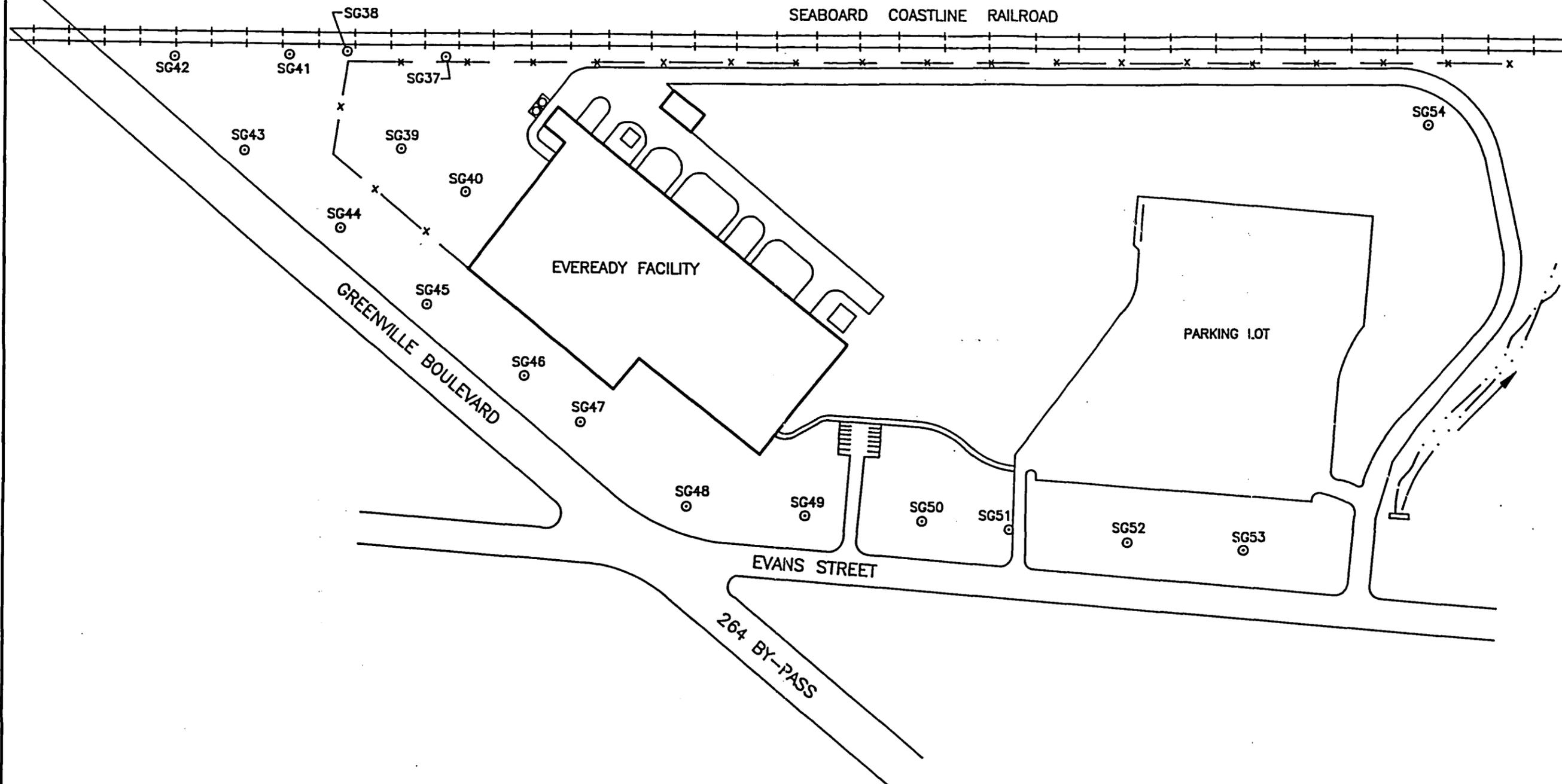


LEGEND
SG19 ○ SOIL VAPOR BORING LOCATION



FIGURE 2. SOIL VAPOR BORINGS SG1 THROUGH SG36
EVEREADY FACILITY
GREENVILLE, NORTH CAROLINA

ERM ERM-SOUTHEAST, INC



LEGEND
○ SOIL VAPOR BORING LOCATION

0 160
SCALE IN FEET

FIGURE 3. SOIL VAPOR BORING LOCATIONS - SG37 THROUGH SG54. EVEREADY FACILITY GREENVILLE, NORTH CAROLINA.

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3.5 Quality Control Measures

Each day prior to utilizing the GC, the instrument was calibrated with 0.5 parts per million (ppm) level standards of tetrachloroethene (PCE), trichloroethene (TCE), trans 1,2-dichloroethene (t-1,2-DCE), cis 1,2-dichloroethene (c-1,2-DCE), 1,1-dichloroethene (1,1-DCE), vinyl chloride (VC), benzene (B), toluene (TOL), ethylbenzene (ETH) and xylene (X). The standards were also run at the discretion of the GC operator to track the effects of ambient temperatures on the analyses. Blanks were analyzed as necessary to allow a determination of potential carry-over contamination from the syringe, probes and/or Photovac instrument.

The soil gas probes and power auger flights were decontaminated prior to and between each subsequent boring in order to prevent cross-contamination. The decontamination procedure consisted of an initial phosphate-free detergent wash followed by a tap water rinse and an organic-free water rinse. The equipment was then screened with OVA to determine the presence of residue volatile compounds. The OVA did not indicate the presence of volatile constituents at concentrations exceeding 1 ppm greater than background following the decontamination procedure.

4.0 Soil Gas Survey Results

Reduction of the gas chromatogram data was performed by Mr. William Goldschmidt (ERM) in order to quantify the volatile compounds indicated by the GC analysis. The values of the identified compounds are summarized in Appendix B. These data are also summarized in Table 1 (PCE, TCE, DCE and VC compounds) and Table 2 (B, TOL, ETH, and X compounds). Figures 4 and 5 present the targeted volatile compounds indicated in borings SG1 through SG36 and SG37 through SG54, respectively.

An evaluation of the chromatograms generated during this investigation indicates elevated PCE, TCE, 1,1-DCE and VC values in soil gas collected at this Eveready facility. The distribution of PCE, 1,1-DCE and VC soil vapor concentrations do not follow a readily identifiable pattern. Consequently, the ability to infer the extent and location of potential source area(s) is limited. The most pronounced area of elevated PCE values, however, is to the south of the hazardous waste storage building in the vicinity of boring SG27. As illustrated in Figure 6, an area in which the soil vapor concentrations of PCE were indicated to exceed 100 ppb is aligned in a north - south direction extending from the south of the former ZnCl₂ tanks (SG33 and SG34) to the immediate west of the hazardous waste storage building (SG29 and SG30).

TABLE 1
GAS CHROMATOGRAPH RESULTS
PCE, TCE, T-1,2,2-DCE, 1,1-DCE, VC, C-1,2-DCE
SOIL GAS SURVEY
EVEREADY FACILITY, GREENVILLE, NC
JULY 1991

GAS CHROMATOGRAPH RESULTS (ppb)							
SAMPLE	PCE	TCE	t-1,2-DCE	1,1-DCE	VC	C-1,2 DCE	TOTAL PID
SG-1	3	—	30	—	100	223	223
SG-DUP	3	—	180	—	260	130	573
SG-2	—	—	10	—	180	120	310
SG-3	—	—	—	—	55	40	95
SG-4	20	—	—	—	30	—	50
SG-5	120	—	—	—	30	—	150
SG-6	3	—	—	—	110	—	113
SG-7	70	—	—	10	1000	5	1085
SG-8	200	—	<1	—	1440	—	1640
SG-9	180	—	—	—	20	—	210
SG-10	60	—	—	10	50	—	120
SG-11	5	—	<1	—	1480	<1	1485
SG-12	6	2	<1	—	220	<1	228
SG-13	—	—	—	—	620	—	620
SG-14	5	<1	—	4	20	—	29
SG-15	—	—	—	5	20	—	25
SG-16	—	—	—	10	50	—	60
SG-17	1	<1	—	20	50	—	71
SG-18	—	30	—	2	20	—	52
SG-19	4	—	—	10	20	—	34
SG-20	3	<1	<1	20	180	<1	203
SG-21	—	—	—	4	70	—	74
SG-22	40	5	—	5	40	10	100
SG-23	40	760	—	<1	30	—	830
SG-24	200	410	<1	<1	30	1070	1710
SG-25	210	2	3	10	60	150	435
SG-26	2	4340	—	20	40	—	4402
SG-27	11000	10	—	50	80	—	11140
SG-28	830	<1	—	40	70	—	940
SG-29	120	10	5	10	100	—	245
SG-30	850	20	—	10	60	—	940

Notes:

PCE = tetrachloroethene

TCE = trichloroethene

PCE = dichloroethene

VC = vinyl chloride

"—" indicates below detection limit of 1 ppb

Total PID = sum of subject compounds

Gas chromatograph data presented in parts per billion (ppb) as indicated by a portable Photovac 10S50 photoionization detector (PID).

TABLE 1 (cont.)
 GAS CHROMATOGRAPH RESULTS
 PCE, TCE, T-1,2,2-DCE, 1,1-DCE, VC, C-1,2-DCE
 SOIL GAS SURVEY
 EVEREADY FACILITY, GREENVILLE, NC
 JULY 1991

GAS CHROMATOGRAPH RESULTS (ppb)							
SAMPLE	PCE	TCE	t-1,2-DCE	1,1-DCE	VC	C-1,2 DCE	TOTAL PID
SG-31	380	10	--	10	70	--	470
SG-32	1370	--	--	10	140	--	1520
SG-33	1030	--	<1	5	20	--	1055
SG-34	140	--	<1	20	70	--	230
SG-35	330	--	<1	20	180	--	530
SG-36	50	--	--	20	60	--	130
SG-37	20	10	<1	10	50	--	90
SG-38	1100	3	<1	5	40	--	1148
SG-39	220	--	--	<1	20	--	240
SG-40	3	<1	--	--	30	<1	33
SG-41	180	<1	<1	2	40	--	222
SG-42	130	2	--	<1	60	10	202
SG-43	860	--	10	70	310	--	1250
SG-44	40	--	--	<1	40	--	80
SG-45	40	1	--	4	40	1	84
SG-46	240	--	1	20	50	<1	311
SG-47	7	1	<1	3	50	<1	61
SG-48	600	--	<1	20	40	<1	660
SG-49	600	--	<1	10	50	--	660
SG-50	3	--	--	4	10	--	17
SG-51	20	--	--	2	10	--	32
SG-52	2	--	--	8	90	--	100
SG-53	40	--	<1	4	30	<1	74
SG-54	30	--	1	10	30	1	72

Notes:

PCE = tetrachloroethene

TCE = trichloroethene

PCE = dichloroethene

VC = vinyl chloride

"--" indicates below detection limit of 1 ppb

Total PID = sum of subject compounds

Gas chromatograph data presented in parts per billion (ppb) as indicated by a portable Photovac 10S50 photoionization detector (PID).

TABLE 2
 GAS CHROMATOGRAPH RESULTS
 BTEX
 SOIL GAS SURVEY
 EVEREADY FACILITY, GREENVILLE, NC
 JULY 1991

SAMPLE	GAS CHROMATOGRAPH RESULTS (ppb)				
	B	TOL	ETH	X	TOTAL PID
SG-1	—	—	—	—	0
SG-DUP	—	—	—	—	0
SG-2	—	—	—	—	0
SG-3	—	—	—	—	0
SG-4	—	—	—	—	0
SG-5	—	—	—	—	0
SG-6	—	—	—	—	0
SG-7	—	—	—	—	0
SG-8	—	—	—	—	0
SG-9	—	—	—	—	0
SG-10	5	—	—	—	5
SG-11	—	—	—	100	100
SG-12	—	—	—	100	100
SG-13	—	—	—	—	0
SG-14	<1	—	—	20	20
SG-15	—	—	—	—	0
SG-16	—	<1	—	—	0
SG-17	3	—	—	—	3
SG-18	—	—	—	—	0
SG-19	—	—	—	100	100
SG-20	3	<1	—	100	100
SG-21	—	—	—	—	0
SG-22	6	—	—	—	6
SG-23	—	—	—	—	0
SG-24	1	<1	—	<1	1
SG-25	2	10	—	10	22
SG-26	—	—	—	—	0
SG-27	40	—	—	—	40
SG-28	10	—	—	10	20
SG-29	—	—	—	20	20
SG-30	—	—	—	—	0

Notes:

B = benzene

TOL = toluene

ETH = ethylbenzene

X = xylene

"—" indicates below detection limit of 1 ppb

Total PID = sum of subject compounds

Gas chromatograph data presented in parts per billion (ppb) as indicated by a Photovac 10S50 photoionization detector (PID).

TABLE 2 (cont.)
 GAS CHROMATOGRAPH RESULTS
 BTEX
 SOIL GAS SURVEY
 EVEREADY FACILITY, GREENVILLE, NC
 JULY 1991

SAMPLE	GAS CHROMATOGRAPH RESULTS (ppb)				
	B	TOL	ETH	X	TOTAL PID
SG-31	—	—	—	20	20
SG-32	—	—	—	10	10
SG-33	—	<1	—	—	0
SG-34	—	—	—	—	0
SG-35	<1	—	—	<1	0
SG-36	<1	<1	—	5	5
SG-37	—	—	—	—	0
SG-38	—	—	—	—	0
SG-39	—	—	—	—	0
SG-40	—	—	—	—	0
SG-41	—	—	—	—	0
SG-42	—	—	—	—	0
SG-43	5	2	—	—	7
SG-44	—	—	—	—	0
SG-45	—	<1	—	—	0
SG-46	6	2	—	—	8
SG-47	—	—	—	—	0
SG-48	5	2	—	10	17
SG-49	—	—	—	—	0
SG-50	—	—	—	—	0
SG-51	—	—	—	—	0
SG-52	—	—	—	—	0
SG-53	—	—	—	—	0
SG-54	—	—	3	3	6

Notes:

B = benzene

TOL = toluene

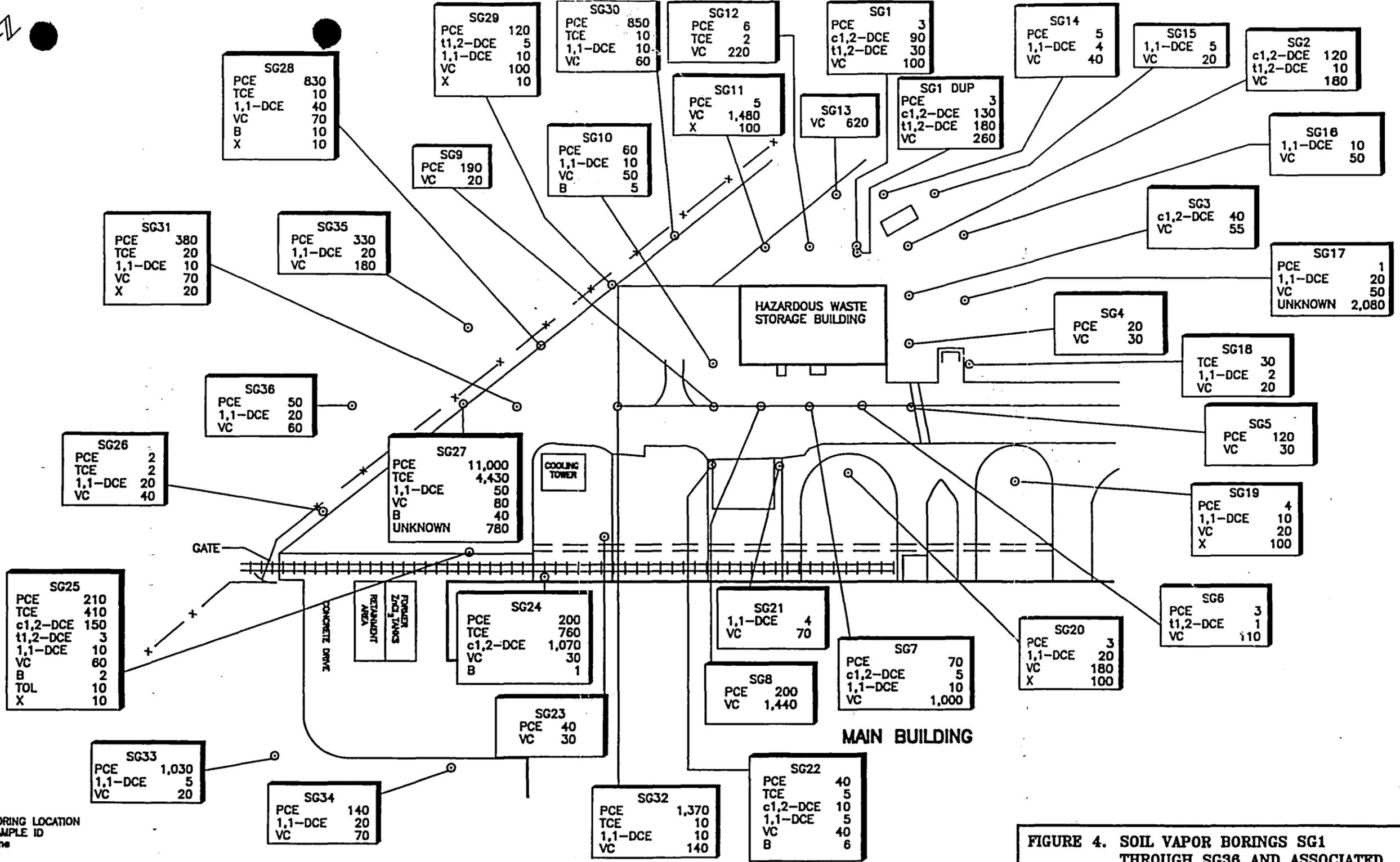
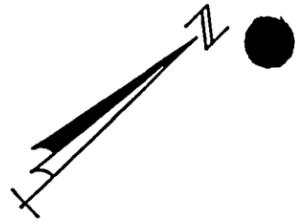
ETH = ethylbenzene

X = xylene

"—" indicates below detection limit of 1 ppb

Total PID = sum of subject compounds

Gas chromatograph data presented in parts per billion (ppb) as indicated by a Photovac 10S50 photoionization detector (PID).



LEGEND

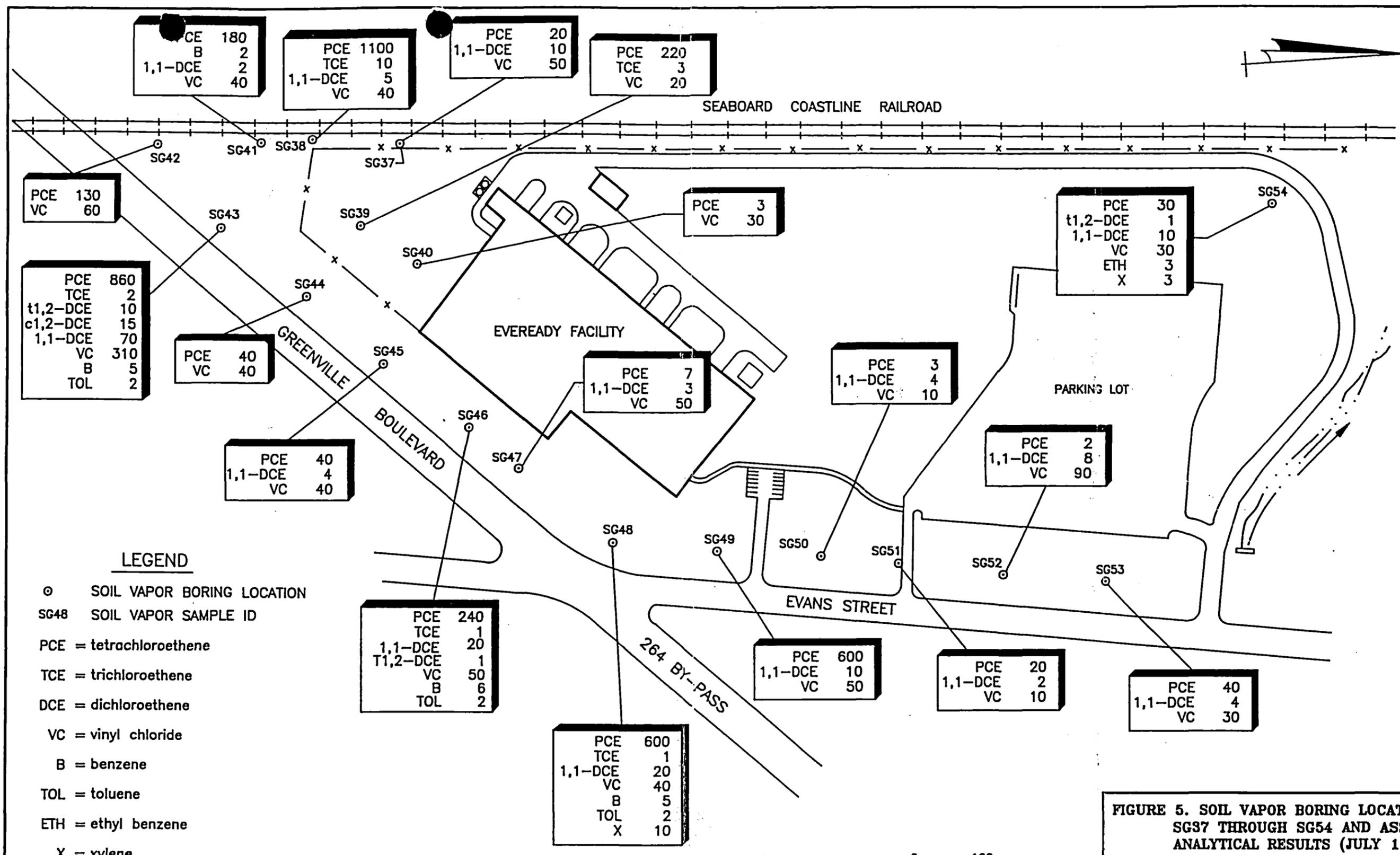
- ⊙ = SOIL VAPOR BORING LOCATION
- SG10 = SOIL VAPOR SAMPLE ID
- PCE = tetrachloroethene
- TCE = trichloroethene
- DCE = dichloroethene
- VC = vinyl chloride
- B = benzene
- TOL = toluene
- X = xylene

Gas Chromatograph data presented in ppb as indicated by a portable Photovac 10S50 Photolization Detector.



FIGURE 4. SOIL VAPOR BORINGS SG1 THROUGH SG36 AND ASSOCIATED ANALYTICAL DATA (JULY 1991) EVEREADY FACILITY GREENVILLE, NORTH CAROLINA.

ERM ERM-SOUTHEAST, INC



LEGEND

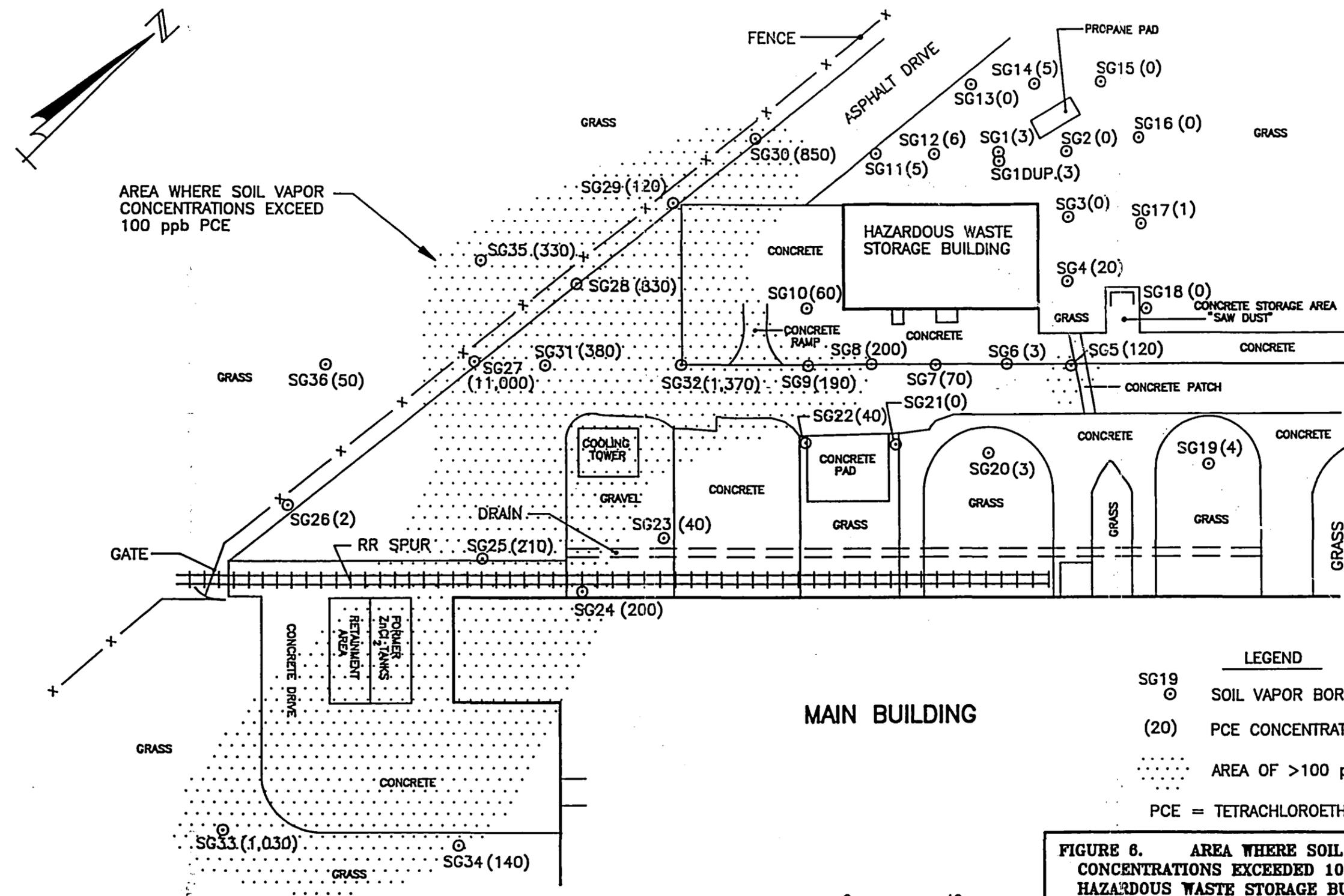
- ⊙ SOIL VAPOR BORING LOCATION
- SG48 SOIL VAPOR SAMPLE ID
- PCE = tetrachloroethene
- TCE = trichloroethene
- DCE = dichloroethene
- VC = vinyl chloride
- B = benzene
- TOL = toluene
- ETH = ethyl benzene
- X = xylene

Gas Chromatograph data presented in ppb as indicated by a portable Photovac 10S50 Photoionization Detector.



FIGURE 5. SOIL VAPOR BORING LOCATIONS - SG37 THROUGH SG54 AND ASSOCIATED ANALYTICAL RESULTS (JULY 1991) EVEREADY FACILITY GREENVILLE, NORTH CAROLINA

ERM ERM-SOUTHEAST, INC



AREA WHERE SOIL VAPOR CONCENTRATIONS EXCEED 100 ppb PCE

LEGEND

SG19
○ SOIL VAPOR BORING LOCATION

(20) PCE CONCENTRATIONS IN ppb

..... AREA OF >100 ppb PCE

PCE = TETRACHLOROETHENE

MAIN BUILDING



FIGURE 6. AREA WHERE SOIL VAPOR PCE CONCENTRATIONS EXCEEDED 100 ppb, HAZARDOUS WASTE STORAGE BUILDING, JULY 1991 EVEREADY FACILITY, GREENVILLE, NORTH CAROLINA

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ERM-Southeast, Inc.

Mr. Tom Houser
Eveready Battery Company
August 21, 1991
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Elevated PCE anomalies were also indicated in soil vapor borings SG38 (1,100 ppb), SG43 (860 ppb), SG46 (240 ppb), SG48 (600 ppb) and SG49 (600 ppb). These borings were advanced along the property boundary that fronts on Greenville Boulevard and Evans Street (Figure 5). PCE values along the property boundary could be interpreted to indicate potential off-site sources volatile compounds.

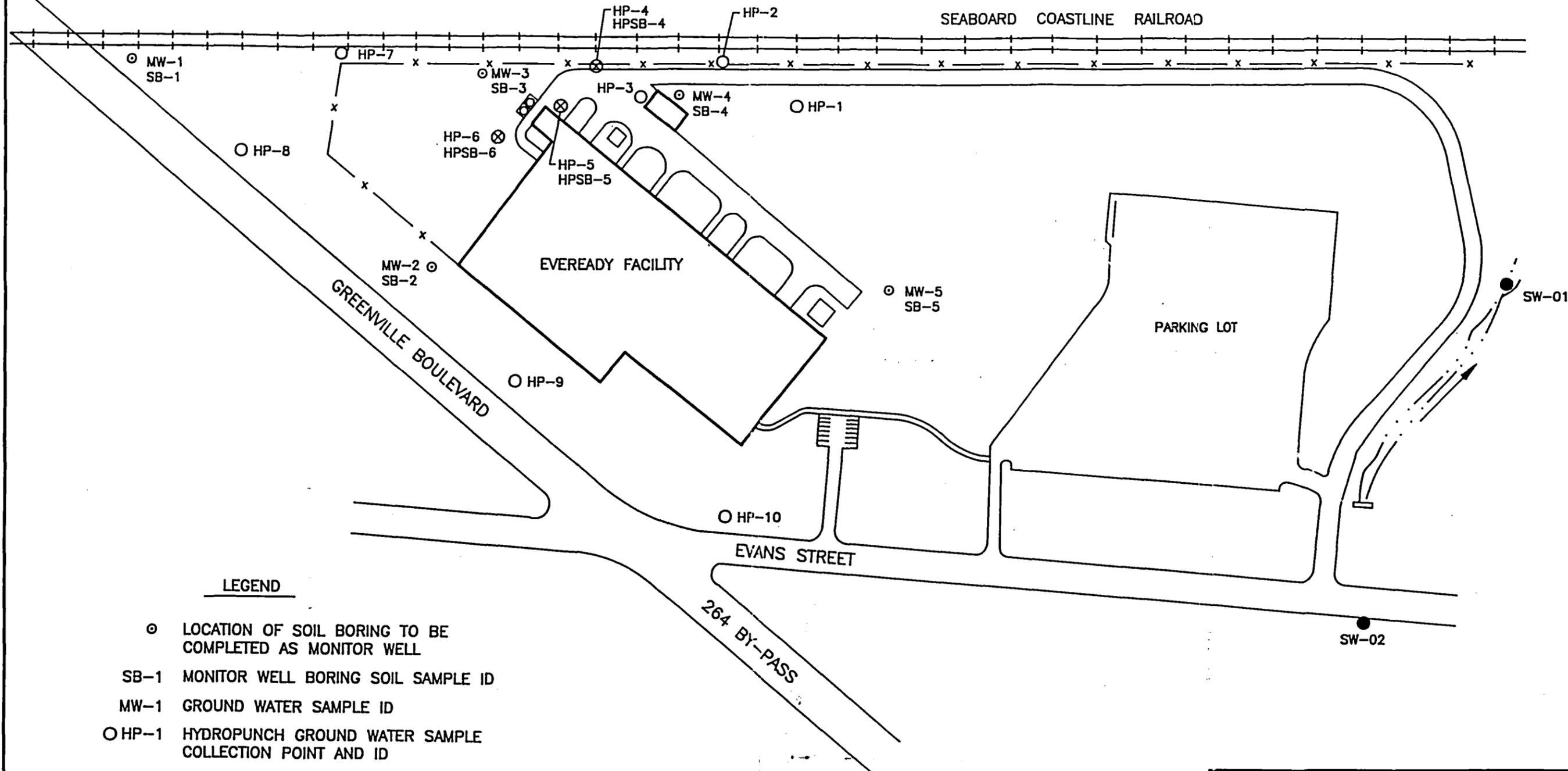
The alignment of elevated PCE concentrations in the vicinity of the hazardous waste storage building may be an indication of a plume of PCE affected ground water. The scattered nature of the data may then be an indication of localized releases associated with activities conducted in the loading dock area of the facility. Borings in this area, however, were advanced along seams in the asphalt drives and concrete loading ramps. The seams may act as conduits for surface water infiltration. These localized releases may have affected only the soil in the vicinity of the seams.

The difficulty at which the auger flights could be advanced from the two-to-three-foot depth interval across the site indicated the presence of a dense lithologic unit. This unit may act to influence the diffusion and migration of solvent-affected vapors beneath the site. The soil above and below this unit typically consisted of clayey to sandy silt.

Lithologic and hydrogeologic conditions at the site are unknown at this time and preclude a detailed interpretation of the soil vapor data. This investigation, however, indicates that solvent-affected soil vapor is present in the vicinity of the hazardous waste storage building and at the south and east property boundaries.

5.0 Recommendations

The objective of conducting this soil vapor survey were to detect volatile compounds in soil vapor as an indication of the extent and relative magnitude of subsurface contamination and to provide additional basis for the locations of planned monitor wells and soil sampling points. The monitor well and soil boring network presented by ERM in revised proposal #282 on May 22, 1991 (Option B) will provide sufficient information to determine general site lithology and to delineate the pattern of ground water flow and site hydrogeology. Based on the soil gas survey results, ERM recommends that seven additional hydropunch ground water sample collection points be utilized in the site investigation. Additional soil sampling is also recommended at three of the hydropunch locations. The soil sampling and monitor well locations and the revised hydropunch sampling locations are presented in Figure 7.



- LEGEND**
- ⊙ LOCATION OF SOIL BORING TO BE COMPLETED AS MONITOR WELL
 - SB-1 MONITOR WELL BORING SOIL SAMPLE ID
 - MW-1 GROUND WATER SAMPLE ID
 - ⊙ HP-1 HYDROPUNCH GROUND WATER SAMPLE COLLECTION POINT AND ID
 - ⊗ LOCATION OF SOIL BORING TO BE COMPLETED AS A HYDROPUNCH SAMPLE LOCATION
 - HPSB-4 HYDROPUNCH BORING SOIL SAMPLE ID
 - SW-01 ● SURFACE WATER SAMPLING LOCATION AND ID

0 160
SCALE IN FEET

**FIGURE 7. MODIFIED SOIL AND GROUND WATER SAMPLE LOCATIONS
EVEREADY FACILITY
GREENVILLE, NORTH CAROLINA**

ERM ERM-SOUTHEAST, INC

ERM-Southeast, Inc.

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We recommend the expanded hydropunch and soil sampling network in order to assess soil and ground water quality in the vicinity of the soil vapor points that indicated elevated PCE concentrations.

The ground water monitor well, soil boring and surface water sampling locations are the same as those presented in the May 22 proposal. The ground water and soil sample point designations, however, have been changed as illustrated in Figure 7. The method of sample collection and associated laboratory analyses for the proposed additional soil and ground water samples will be consistent with those described in the May 22, 1991 proposal.

Recall that soil boring HPSB-4 (previously designated SS-15) is to be advanced at the same location where SI composite soil sample SS-06 was collected. This sample location is in the same vicinity as soil vapor boring SG27, which is the site where the most elevated PCE soil vapor value was indicated. ERM recommends that soil samples be collected from the ground surface to two-foot and five-foot to seven-foot depth intervals at this location as proposed in May and that a ground water sample also be collected at this point by the hydropunch procedure (HP-4).

Two additional soil and hydropunch sampling borings are recommended to be advanced at the locations of soil vapor borings SG25 (HPSB-5 and HP-5) and SG33 (HPSB-6 and HP-6). Soil samples are proposed to be collected from the ground surface to two-foot and five-foot to seven-foot depth intervals.

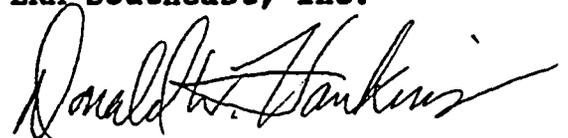
Additional hydropunch samples HP-2, HP-3, and HP-7, HP-8, HP-9 and HP-10 are also recommended in the vicinity of soil vapor borings SG30, SG10, SG38, SG43, SG46 and between SG48 and SG49, respectively. HP-1 is located approximately 300 feet in what is believed to be the downgradient direction of monitor well MW-4.

We would like to discuss the sampling and analysis plan revisions with you prior to preparing costs associated with the additional work.

Please contact me with your comments.

Sincerely,

ERM-Southeast, Inc.



Donald W. Hankins, P.G.

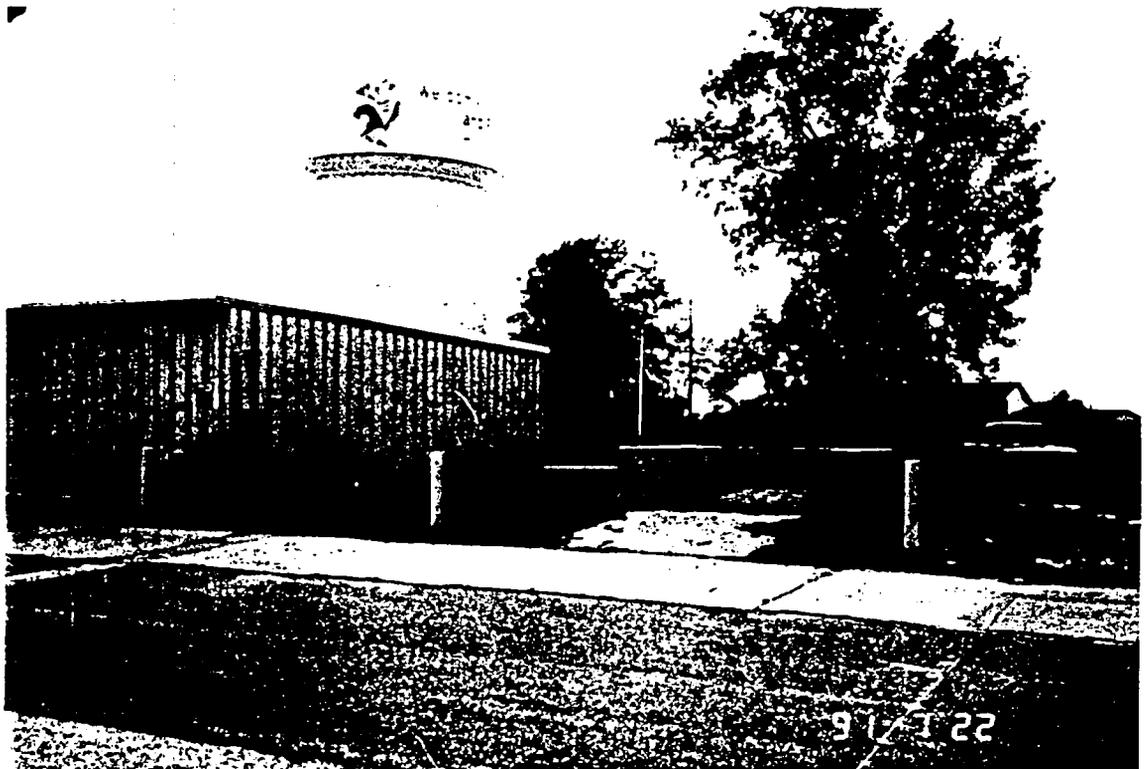
ERM-Southeast, Inc.

Appendix A

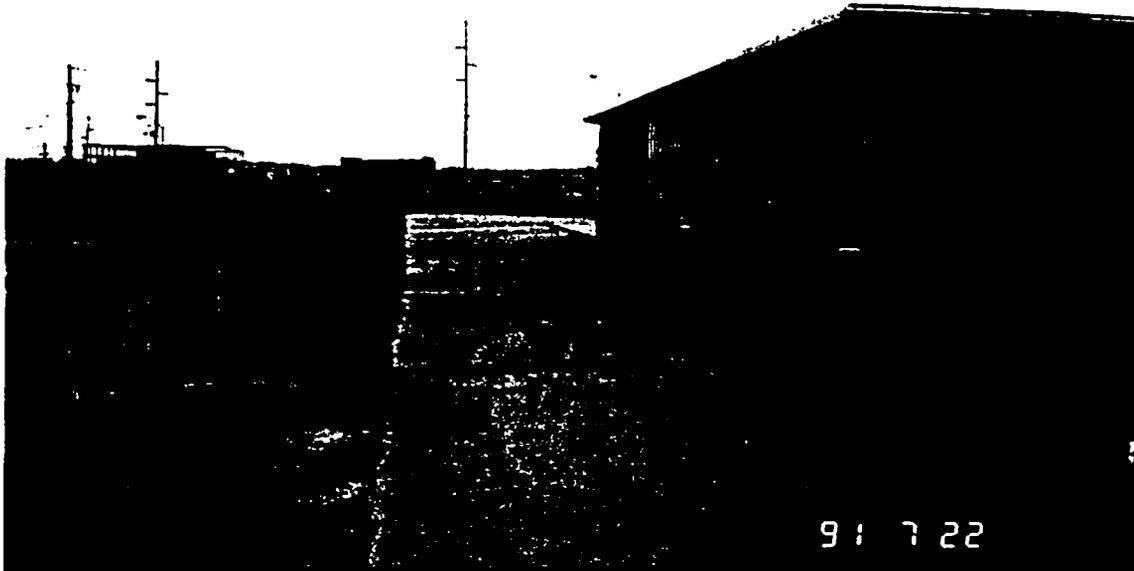
**Photographic Survey
of the
Soil Gas Investigation
Conducted at the Eveready Facility
Greenville, North Carolina**



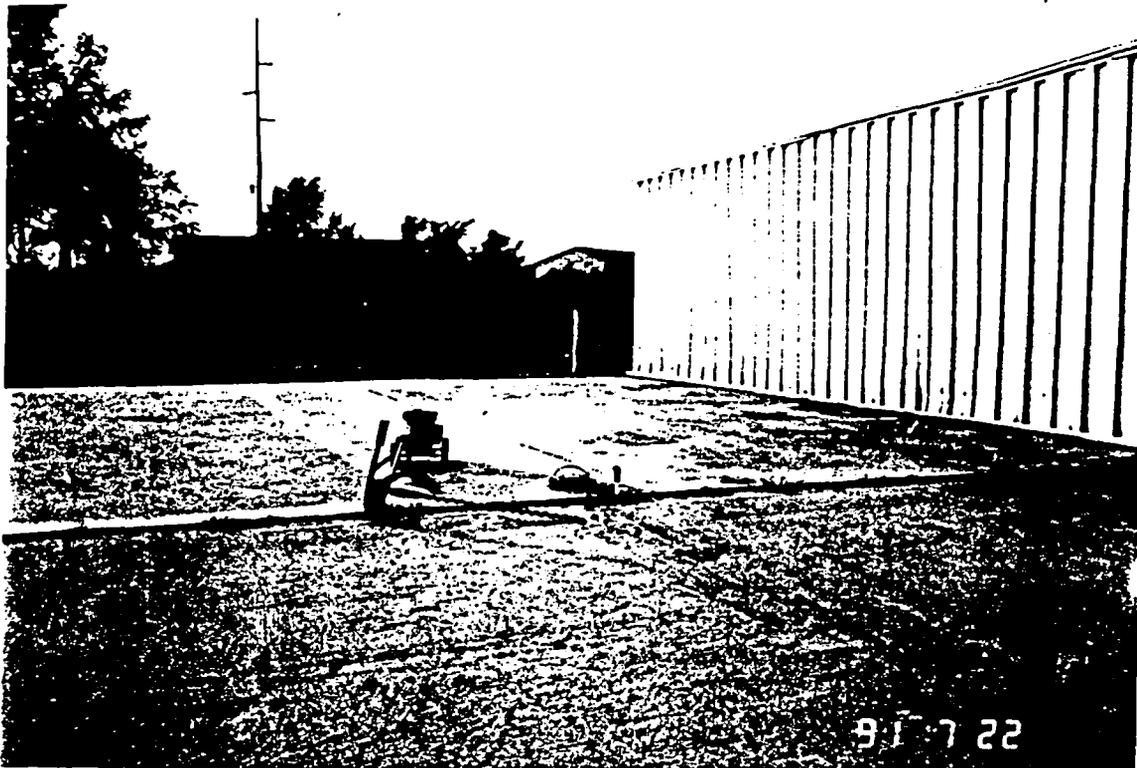
1. View of the northwest side of the hazardous waste storage building. Stake indicates location of temporary monitor well GW03 advanced and sampled during the Site Investigation conducted by the State.



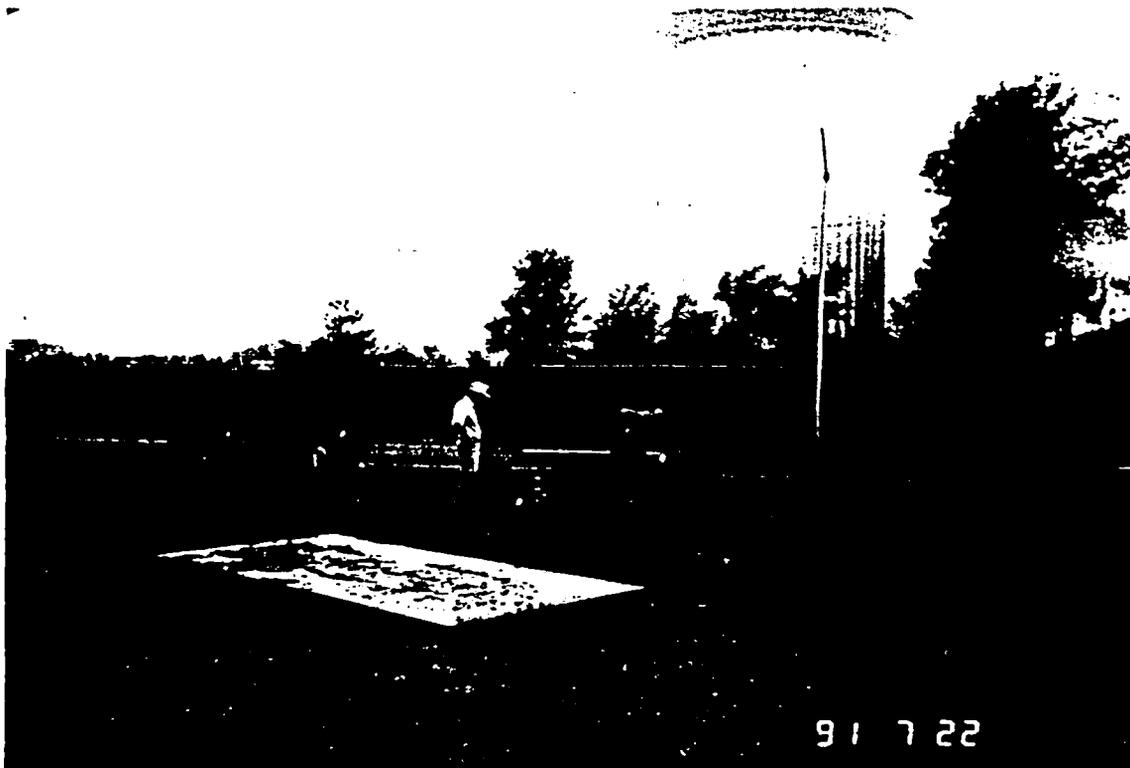
2. View of the northeast side of the hazardous waste storage building.



3. View of the southeast side of the hazardous waste storage building, including the locations of soil vapor borings SG5, SG6, SG7, SG8, and SG9 advanced along the seam between the asphalt and concrete.



4. Soil boring SG10 was advanced on the southwest side of the hazardous waste storage building.



5. View of the concrete pad that formerly housed a propane storage tank and the location of soil vapor boring SG14.



6. View toward the northwest of the locations of soil borings SG18, SG17, and SG16.



7. View toward the east of the loading dock area of the Eveready facility and the location of soil boring SG21.



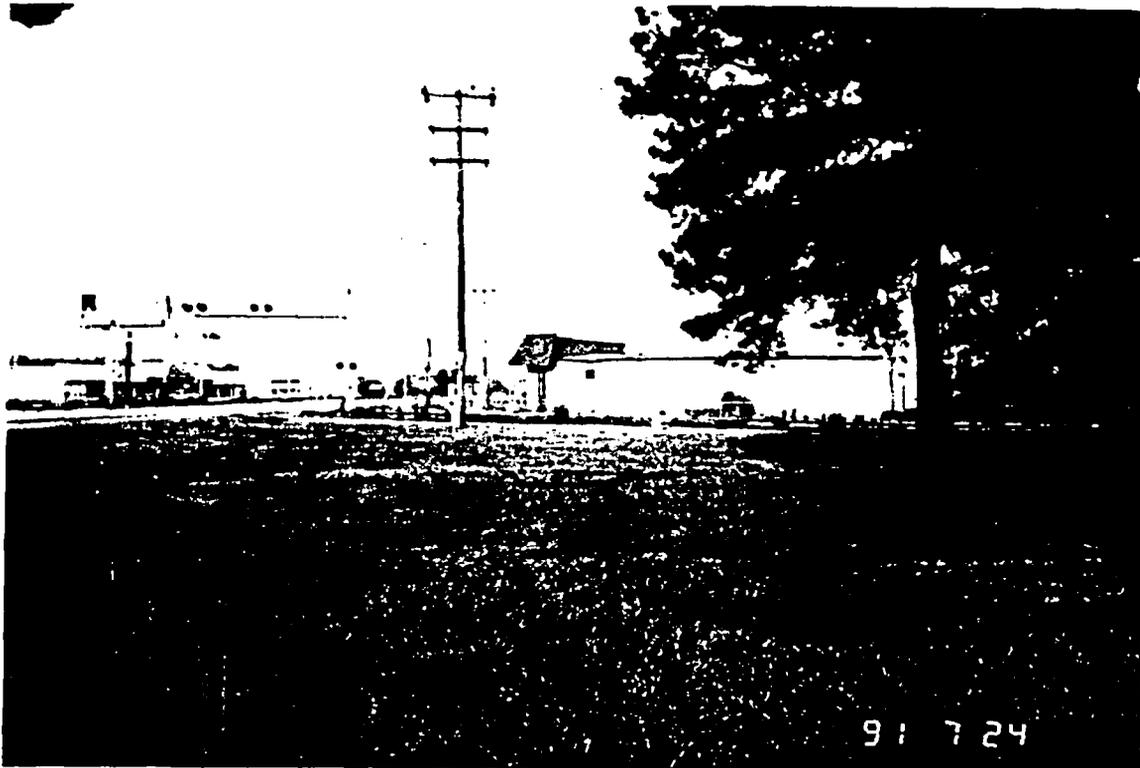
8. View toward the southwest of the location of soil vapor borings SG24 and SG25.



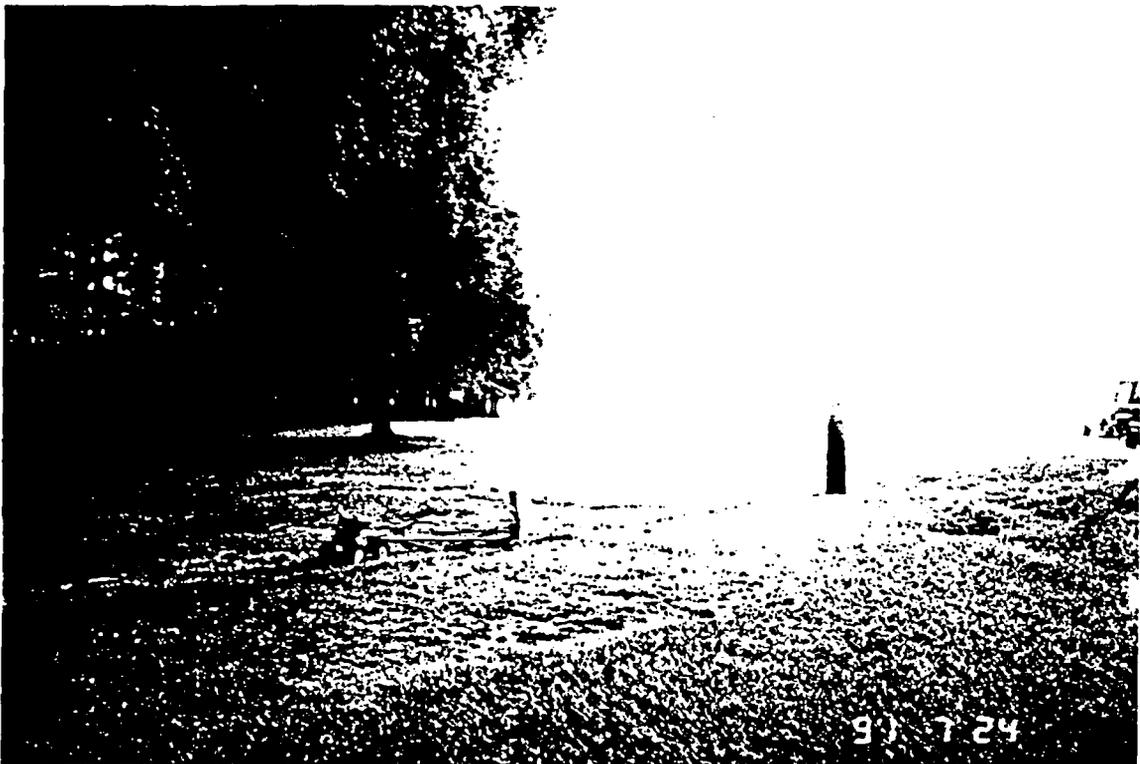
9. Area where soil vapor borings SG39 and SG40 were advanced.



10. View toward the north along the west boundary of the facility adjacent to the rail line. Soil vapor boring SG37 was advanced midway along this fence.



11. View toward the southwest along Greenville Boulevard, including the location of soil vapor boring SG42.



12. View toward the northeast along Greenville Boulevard, including the location soil vapor boring SG44.



13. View toward the north along Evans Street, including the locations of soil vapor borings SG52 and SG53.



14. View of the storm water retainment area from the location of soil vapor boring SG54.

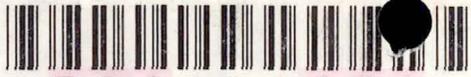
Appendix B

Soil Gas Survey Analytical Data Summary



INSTRUCTIONS-

- 1. Type or print firmly
- 2. Complete applicable units
- 3. Instructions in full on reverse
- 4. Call us if you have any questions



* 7 3 1 1 3 6 9 7 6 *

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EVEREADY BATTERY COMPANY INC		
TECHNOLOGY LABDRATORY		
25225 DETROIT ROAD		
WESTLAKE, OH		
44145	216	8357546

5	RECIPIENT (COMPANY NAME)
Mr. Willie Hardison	
Regional Groundwater Supervisor	
North Carolina DEHNR	
Northeastern Region	
1424 Carolina Ave.	
Washington, North Carolina	
	27889-1424

6	SERVICES	CHARGES
DOCUMENT	EXPRESS DOCUMENT	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
WORLDWIDE PACKAGE EXPRESS		
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OTHER		
<input type="checkbox"/>		
ONFORWARDING		
<input checked="" type="checkbox"/>		
EXPRESS CENTER/DROP BOX		
<input type="checkbox"/>		
TOTAL		

7	DESCRIPTION OF CONTENTS
Documents	
DIMENSIONS	DIMENSIONAL/CHARGED WEIGHT
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10	METHOD OF PAYMENT
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- (ii) The shipment requires any form of licensing; or
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Eveready Battery Company, Inc.
Technology Laboratory

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APR 15 1991

SUPERFUND SECTION

March 28, 1991

Mr. Harvey Allen
State of North Carolina DEHNR
Division of Solid Waste Management
Superfund Section
P. O. Box 27687
Raleigh, North Carolina 27611-7687

RE: Screening Site Investigation
Union Carbide Corporation (NCD 003184249)
(a.k.a. Eveready Battery Company, Inc. Facility
in Greenville, North Carolina)

Dear Mr. Allen:

The following reports have been prepared for Eveready Battery Company by ERM-Southeast, Inc.

1. Phase I Environmental Assessment Report, dated September 24, 1990
2. Evaluation of Soil and Ground Water Analytical Data, dated March 25, 1991

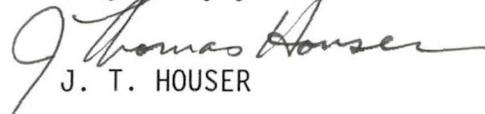
We feel these reports contain important information relative to the subject site and request that these reports be incorporated in the overall evaluations of the subject site.

Copies of these reports have been enclosed with this letter. Please see that this information is properly logged and included in the Eveready (Union Carbide) - Greenville facility file.

A duplicate set of these reports has been sent to Mr. Earl Bozeman in the Region IV office in Atlanta.

Please call if you have any comments or questions on this material. Thanks again for your assistance and cooperation.

Very truly yours,


J. T. HOUSER

JTH/nll
Att.

CC: Mr. Earl Bozeman - EPA Region IV, Atlanta

NOV 21 1991

March 25, 1991

D. E. M.

Mr. Tom Houser
Eveready Battery Company, Inc.
25225 Detroit Road
Westlake, Ohio 44145

RE: Evaluation of Soil and Ground Water Analytical Data
Eveready Battery Facility, Greenville, North Carolina

Dear Mr. Houser,

In accordance with your recent request, ERM-Southeast, Inc. (ERM) is pleased to submit an evaluation of the analytical results for six surface soil and four ground water samples collected at the Eveready Battery (Eveready) facility located in Greenville, North Carolina.

1.0 BACKGROUND

The Eveready property occupies 38.42 acres at the northwest intersection of Evans Street and West Greenville Boulevard (U.S. 264) in Greenville, North Carolina (Figure 1). Battery manufacturing operations were begun at this facility in 1963 by the Union Carbide Corporation and terminated by Eveready in 1990. Facility operations have generated D001, D002, D003, D006, D009 and F002 type hazardous wastes. The EPA hazardous waste generator number for the facility is NCD003184249.

The primary product manufactured at this Eveready plant has been the LeClanche or acidic dry cell battery (e.g., carbon-zinc cells used in flashlights, toys, and certain transistorized portable radios). In the early 1970s the facility manufactured a can which housed a magnesium type battery used by the United States military. A prototype assembly line was set up to manufacture alkaline batteries in the early 1980s. The actual production of alkaline batteries, however, was not initiated at the plant. As a protective measure, a Part A Permit application was filed for a potential alkaline battery process wastewater treatment system. Subsequent RCRA legislation changes exempted such wastewater treatment systems from a permit requirement. That rule change, in conjunction with a decision not to manufacture alkaline batteries at the Greenville Eveready facility, resulted in the withdrawal of the Part A Permit application. No wastewater treatment system ever

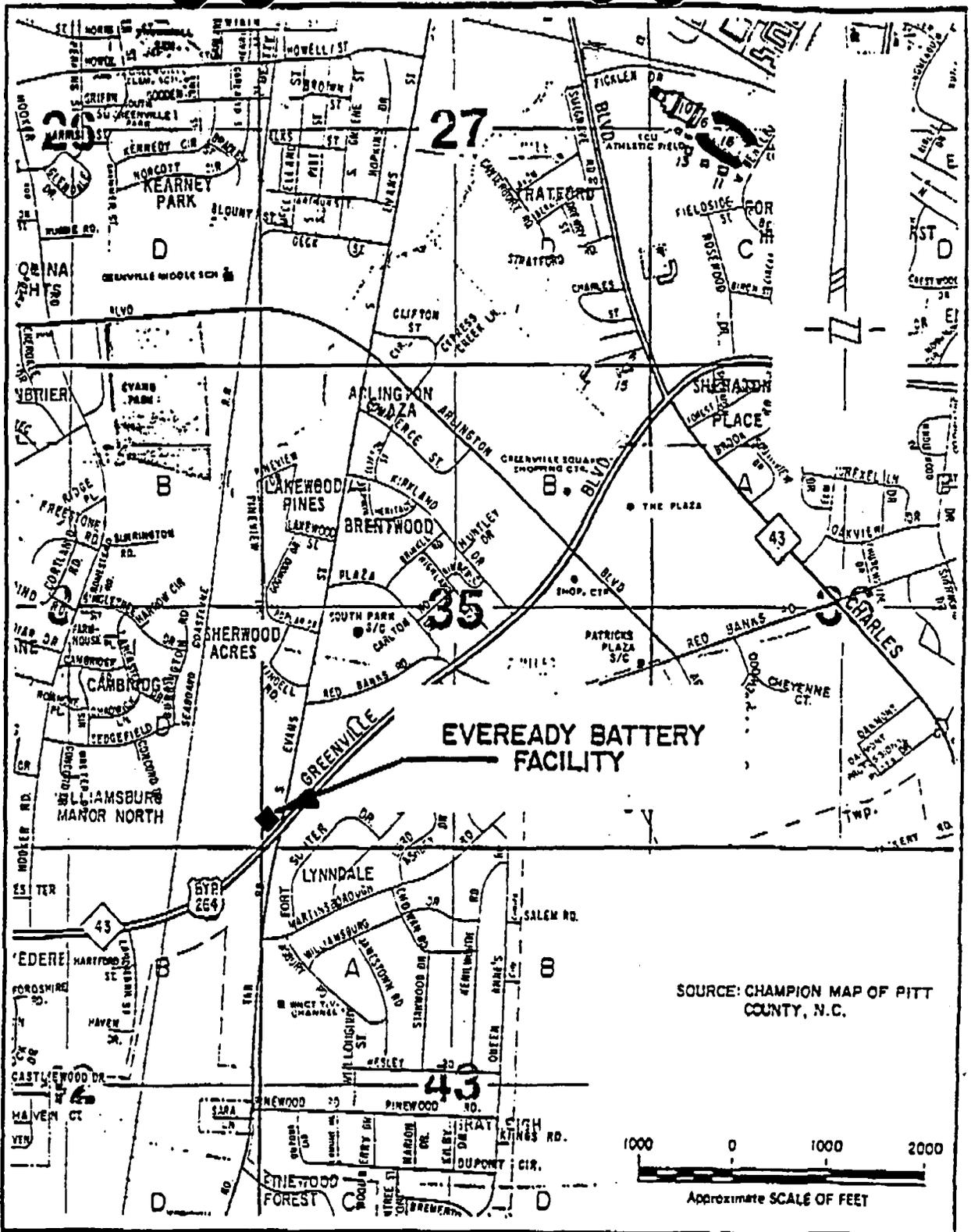


FIGURE 1. LOCATION OF EVEREADY BATTERY FACILITY
GREENVILLE, N.C.

ERM ERM-Southeast, Inc.
Environmental Resources Management

ERM-Southeast, Inc.

Mr. Tom Houser
March 25, 1991
Page 3

existed at the Greenville plant associated with the alkaline battery production process. The filing of a Part A Permit, however, automatically initiates inspections of the facility by North Carolina Solid and Hazardous Waste officials.

The facility was placed on the WASTLAN Preremedial Report by the Region IV EPA in August 1980. In February 1985, the North Carolina Department of Environment, Health and Natural Resources (DEHNR) completed a preliminary assessment of the facility. In response to a 1990 CERCLA screening of the facility, the Environmental Protection Agency (EPA) requested soil and ground water samples be collected at the site. In November 1990, Greenhorne and O'Mara of Greenbelt, Maryland conducted a soil and ground water program at the facility. The Superfund Section of the North Carolina Department of Solid Waste Management (DSWM) provided oversight of the investigation. This report evaluates the results of the November 1990 soil and ground water sampling program.

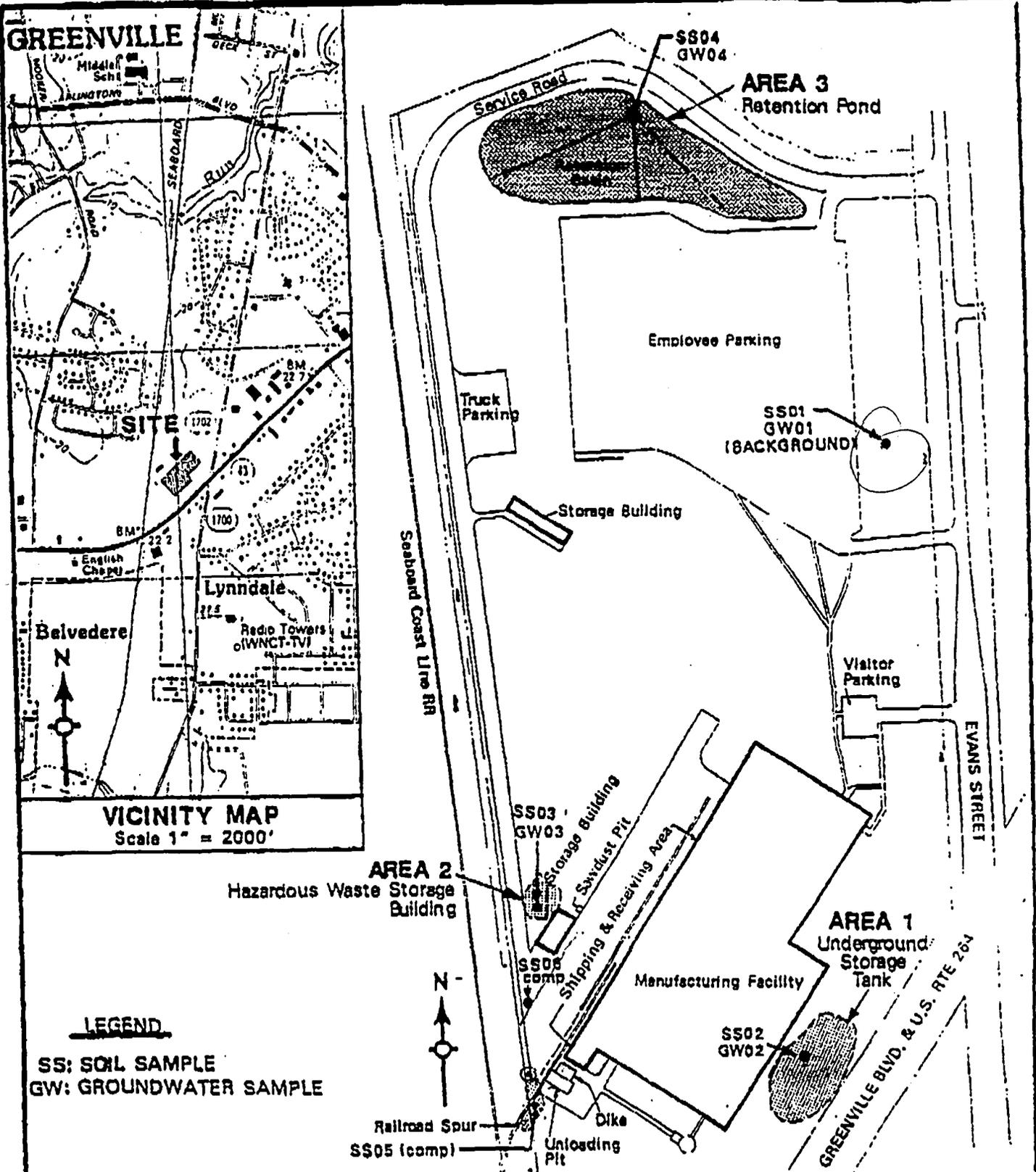
2.0 SOIL AND GROUND WATER COLLECTION METHODS AND ANALYSES

A soil and ground water sampling and analyses program was conducted at the Eveready Battery facility located at 100 West Greenville Boulevard in Greenville, North Carolina on November 8 and 9, 1990. Mr. Harvey Allen of the DSWM provided State oversight and directed Greenhorne and O'Mara personnel in the sampling program. A total of six soil samples (SS01 through SS06) and four ground water samples (GW01 through GW04) were collected at the site. Eveready representatives were allowed to collect split soil and ground water samples during the investigation. The soil and ground water sample collection points are illustrated in Figure 2.

The soil and ground water sampling methods were described by Mr. Mark Bailey, Geologist with Greenhorne and O'Mara, and Mr. Steve Jones, Lab Manager of Environment 1 Laboratory. Mr. Bailey can be contacted at (301) 982-2852. Mr. Jones collected split samples as an on-site representative for Eveready and can be contacted at (919) 756-6208. The sampling procedures discussed by Mr. Bailey and Mr. Jones are summarized in the following paragraphs.

2.1 Soil Sampling Methods

A hand auger was used to collect surface soil grab samples at the site. The sampling interval at each boring location extended from the ground level to an approximate depth of one half foot below the ground surface. The half foot lift of soil was removed from the auger bucket and placed into a stainless steel pan at the boring location. TCL volatile samples were then collected. Following sample homogenization with a stainless steel spatula, soil samples



UNION CARBIDE CORPORATION NCD003184249

FIGURE 2



ENGINEERS • ARCHITECTS • PLANNERS • SCIENTISTS • SURVEYORS • PHOTOGRAMMETRISTS

GREENHORNE & O'MARA, INC.

5001 EDMONSTON ROAD, GREENBELT, MARYLAND 20770

(301) 982-2800

MEMBERSHIP: AMERICAN SOCIETY OF CIVIL ENGINEERS • AMERICAN SOCIETY OF MECHANICAL ENGINEERS • AMERICAN SOCIETY OF SURVEYORS • AMERICAN SOCIETY OF LAND SURVEYORS • NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

SAMPLE LOCATION MAP

ERM-Southeast, inc.

Mr. Tom Houser
March 25, 1991
Page 5

were collected for TCL semi-volatiles and TAL metals including cyanide. Surface soil matrix spike and matrix spike duplicate samples (MS/MSD) were also collected from sampling point SS01, the background sampling location.

2.2 Ground Water Sampling Methods

At four of the soil sampling locations, the hand augered borings were advanced approximately five to ten feet below the initial depth that saturated conditions were encountered. A five foot long section of two inch stainless steel well screen covered by a nylon well-screen sock and attached to a 10 foot section of riser pipe was placed down the open bore holes. No well development was conducted prior to sampling. Ground water samples were then collected from the fifteen foot section of casing and screen using teflon bailers. Table 1 summarizes the total depth of the four borings from which the ground water samples were collected. The boring locations are designated on Figure 2 by the respective ground water sample number, GW01, GW02, GW03 and GW04.

Ground water samples collected from each open bore hole were analyzed for TCL volatiles, TCL semi-volatiles and TAL metals including cyanide. Ground water matrix spike and matrix spike duplicate samples (MS/MSD) were also collected from boring GW02. Water standing in the bore holes was not purged prior to the collection of water samples to be submitted for laboratory analyses. The pH, specific conductance and temperature of the collected ground water were not measured. The samples submitted for TAL analysis were not filtered.

Following the collection of ground water samples, the stainless steel screen and riser pipe were pulled from the ground. The bore holes were then back-filled with the hand auger cuttings.

The hand auger and ground water sampling equipment was decontaminated prior to and between each boring using the seven step RCRA procedure. Sample collection, handling and preservation procedures are assumed have been conducted in accordance with EPA accepted protocol.

The samples collected by the Eveready representatives were submitted to COMPUCHEM Laboratories Inc. located in Research Triangle Park, North Carolina. The TAL metals including cyanide analyses were then subcontracted to Skinner and Sherman Laboratories located in Waltham, Massachusetts. Analyses were conducted following current CLP statement of work.

TABLE I
TOTAL DEPTH OF BORINGS
EVEREADY BATTERY COMPANY, INC.
GREENVILLE, NORTH CAROLINA
FEBRUARY 1991

BORING NUMBER	TOTAL DEPTH BELOW GROUND LEVEL (FEET)
GW01	15
GW02	14
GW03	13
GW04	10

ERM-Southeast, Inc.

Mr. Tom Houser
March 25, 1991
Page 7

3.0 QA/QC ANALYTICAL CHECK

A routine quality check of the laboratory data was performed by an ERM geologist.

All samples collected at the Eveready facility were received at COMPUCHEM Laboratory and the Skinner and Sherman Laboratory within 36 hours of collection in the field. The samples arrived at the laboratories in good condition. The analyses requested on the chain-of-custody were performed for each sample in accordance with current CLP procedures.

Holding times for the cyanide analyses in soil and ground water were exceeded. Due to an instrument failure, the TCL semi-volatile analyses of sample SS06 were conducted outside of the holding times. Holding time requirements were met for each of the TCL volatile and semi-volatile ground water analyses. The matrix spike and matrix spike duplicate soil samples were analyzed outside the holding limits.

The TAL volatile analyses indicated methylene chloride and/or acetone in each of the soil samples at similar values to the associated method blanks. It was not determined if any trip blanks, field blanks, blind split or duplicate samples were collected and analyzed for QA/QC purposes.

The laboratory data and laboratory QA/QC documentation is presented in Attachment A.

4.0 DISCUSSION OF ANALYTICAL RESULTS

According to Mr. Harvey Allen of the DSWM, the Hazard Ranking System (HRS) will be used by the EPA Region IV office to evaluate the analytical data collected during this investigation. The HRS evaluation scheme relates the results of a chemical analysis of samples collected at a site to a specific background reference sample. Soil sample SS-01 and ground water sample GW-01 have been designated as the background samples at the Eveready facility (Figure 2). The suitability of the sample locations for providing representative background concentrations was not evaluated by ERM-Southeast. The HRS interprets sample measurement less than the sample quantitation limit as no observed release. In the event that sample measurement is three times or more of the background values or if the background value is below the detection limit and sample measurement is equal to or above the detection limit, then the HRS interprets the data as indicative of an observed release to the environment. The complete HRS document may be referenced in the Federal Register (55 FR 51582, December 14, 1990).

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Page 8

The data collected during the November 1990 sampling program is discussed in the following paragraphs in relation to the HRS evaluation scheme.

4.1 Surface Soils

The analytical results of the six surface soil grab samples collected at the Greenville - Eveready facility are summarized in Tables 2, 3 and 4.

TAL Metals and Cyanide

The background surface soil grab, SS01, was collected in the grass covered area located between the employee parking area and Evans Street (Figure 2). The TAL analyses indicate that five metal compounds were detected at concentrations greater than three times the background soil samples values. These compounds include barium (SS05), calcium (SS02, SS05 and SS06), manganese (SS05), zinc (SS02, SS05 and SS06) and cyanide (SS02, SS03 and SS06). Thallium was detected in SS03 (0.43ppb) and not in SS01. It should be noted that thallium was also detected in the blank.

TCL Semi-volatile Compounds

The laboratory analyses indicate that presumptive values of semi-volatile compounds were detected at concentrations lower than the detection limit in soil samples SS01 through SS06. The estimated compounds include phenanthrene (SS02, SS05 and SS06), anthracene (SS06), fluoranthene (SS02 and SS05), pyrene (SS02 and SS05), butylbenzylphthalate (SS06), benzo(a)anthracene (SS02, and SS05), chrysene (SS02 and SS05), bis(2-ethylhexyl)phthalate (SS01, SS02, SS03, SS04, SS05 and SS06), benzo(b)fluoranthene (SS02 and SS05), benzo(k)fluoranthene (SS02 and SS05), benzo(a)pyrene (SS05), indeno(1,2,3-cd)pyrene (SS05 and SS06) benzo(g,h)perylene (SS05 and SS06) and benzoic acid (SS06).

Fluoranthene (830ppb), pyrene (660ppb), benzo(a)anthracene (360ppb), chrysene (500ppb), benzo(b)fluoranthene (950ppb), benzo(k)fluoranthene (950ppb), and benzo(a)pyrene (400ppb) were indicated at concentrations above the detection limit in SS06. None of these seven compounds were detected in the background soil sample, SS01.

TABLE 2
 EVEREADY BATTERY COMPANY INC.
 SOIL SAMPLING ANALYTICAL RESULTS
 TAL METALS AND CYANIDE
 FEBRUARY 1991

SAMPLE ID:	UCB-SS01	UCB-SS02	UCB-SS03	UCB-SS04	UCB-SS05	UCB-SS06
LAB NUMBER:	379678	379686	379688	379689	379691	379692
CONSTITUENT						
ALUMINIUM	8200	6120	11800	2700	3670	3250
ANTIMONY						
ARSENIC	1.9B	1.3B	1.1B		5.4	1.1B
BARIUM	7.7B	13.4B	12.8B	2.5B	65.4	21.7B
BERYLLIUM		.42B			.24B	
CADMIUM						
CALCIUM	117B	723B	216B	31.5B	2610	2210
CHROMIUM	11	6.8	11.9	1.9B	260	6.2
COBALT						
COPPER	5.5B	1.5B	1.9B		5.5	3.5B
IRON	10700	6430	9980	420	4170	2820
LEAD	5.4	16.2	7	3.1	12.3	14.2
MAGNESIUM	132B	215B	192B	27B	152B	806B
MANGANESE	5.2	17.9	5.9	1.3B	62.8	117
MERCURY						
NICKEL	1.4B		1.9B		1.5B	
POTASSIUM	222B	226B	124B	48.6B	120B	82.8B
SELENIUM						
SILVER						
SODIUM	18.4B	44.6B	48.9	23.1B	41.5B	31.1B
THALLIUM			.42B			
VANADIUM	16.9	10.5B	19.5	2.1B	8.7B	5.6B
ZINC	3.5B	35.4	5	2.8B	3090	223
CYANIDE		6.4	3.4			9
NOTES:						
RESULTS REPORTED IN MILLIGRAMS PER KILOGRAM (mg/kg or parts per million)						
B = DETECTED IN BLANK						
BLANK SPACE INDICATES NOT DETECTED. SEE LAB REPORTS FOR						
DETECTION LIMITS.						
ANALYSIS PERFORMED BY COMPUCHEM LABORATORIES INC., RESEARCH TRIANGLE PARK,						
NORTH CAROLINA.						

TABLE 3
EVEREADY BATTERY COMPANY INC.
SOIL SAMPLING ANALYTICAL RESULTS
TCL SEMI-VOLATILE COMPOUNDS
FEBRUARY 1991

SAMPLE ID:	UCB-SS01	UCB-SS01MS	UCB-SS01MSD	UCB-SS02	UCB-SS03	UCB-SS04	UCB-SS05	UCB-SS06
LAB NUMBER:	379661	379665	379668	379670	379671	379672	379674	379678
CONSTITUENT								
PHENOL								
BIS(2-CHLOROETHYL)ETHER								
2-CHLOROPHENOL								
1,3-DICHLOROBENZENE								
1,4-DICHLOROBENZENE								
BENZYL ALCOHOL								
1,2-DICHLOROBENZENE								
2-METHYLPHENOL								
BIS(2-CHLOROISOPROPYL)ETHER								
4-METHYLPHENOL								
N-NITROSO-DI-N-PROPYLAMINE								
HEXACHLOROETHANE								
NITROBENZENE								
ISOPHORONE								
2-NITROPHENOL								
2,4-DIMETHYLPHENOL								
BENZOIC ACID								53J
BIS(2-CHLOROETHOXY)METHANE								
2,4-DICHLOROPHENOL								
1,2,4-TRICHLOROBENZENE								
NAPHTHALENE								
4-CHLOROANILINE								
HEXACHLOROBUTADIENE								
4-CHLORO-3-METHYLPHENOL								
2-METHYLNAPHTHALENE								
HEXACHLOROCYCLOPENTADIENE								
2,4,6-TRICHLOROPHENOL								
2,4,5-TRICHLOROPHENOL								
2-CHLORONAPHTHALENE								
2-NITROANILINE								
DIMETHYLPHTHALATE								
NOTES:								
RESULTS REPORTED IN MICROGRAMS PER KILOGRAM (ug/kg or parts per billion)								
J = PRESUMPTIVE ESTIMATE OF COMPOUND ESTIMATED AT A VALUES LESS THAN DETECTION LIMIT								
X = OTHER FOOTNOTES MAY BE REQUIRED TO PROPERLY DEFINE THE RESULTS - SEE DATA REPORTING QUALIFIERS								
BLANK SPACE INDICATES NOT DETECTED. SEE LAB REPORTS FOR DETECTION LIMITS.								
ANALYSIS PERFORMED BY COMPUCHEM LABORATORIES INC., RESEARCH TRIANGLE PARK, NORTH CAROLINA.								

TABLE 3 (con't)
 EVEREADY BATTERY COMPANY INC.
 SOIL SAMPLING ANALYTICAL RESULTS
 TCL SEMI-VOLATILE COMPOUNDS
 FEBRUARY 1991

SAMPLE ID:	UCB-SS01	UCB-SS01MS	UCB-SS01MSD	UCB-SS02	UCB-SS03	UCB-SS04	UCB-SS05	UCB-SS06
LAB NUMBER:	379661	379665	379666	379670	379671	379672	379674	379676
CONSTITUENT								
ACENAPHTHYLENE								
2,6-DINITROTOLUENE								
3-NITROANILINE								
ACENAPHTHENE								
2,4-DINITROPHENOL								
4-NITROPHENOL								
DIBENZOFURAN								
2,4-DINITROTOLUENE								
DIETHYLPHTHALATE								
4-CHLOROPHENYL-PHENYLETHER								
FLUORENE								
4-NITROANILINE								
4,6-DINITRO-2-METHYLPHENOL								
N-NITROSODIPHENYLAMINE (1)								
4-BROMOPHENYL-PHENYLETHER								
HEXACHLOROBENZENE								
PENTACHLOROPHENOL								
PHENANTHRENE				82J			94J	330J
ANTHRACENE								48J
DI-N-BUTYLPHTHALATE								
FLUORANTHENE				100J			250J	830J
PYRENE				100J			180J	660J
BUTYLBENZYLPHTHALATE								130J
3,3'-DICHLOROBENZIDINE								
BENZO(A)ANTHRACENE				40J			94J	360J
CHRYSENE				47J			150J	500J
BIS(2-ETHYLHEXYL)PHTHALATE	45J			230J	100J	210J	110J	45J
DI-N-OCTYLPHTHALATE								
BENZO(B)FLUORANTHENE				58J			220JX	950X
BENZO(K)FLUORANTHENE				59J			220JX	950X
BENZO(A)PYRENE							78J	400J
INDENO(1,2,3-CD)PYRENE							60J	270J
DIBENZ(A,H)ANTHRACENE								
BENZO(G,H,I)PERYLENE							69J	300J
NOTES:								
RESULTS REPORTED IN MICROGRAMS PER KILOGRAM (ug/kg or parts per billion)								
J = PRESUMPTIVE ESTIMATE OF COMPOUND ESTIMATED AT A VALUES LESS THAN DETECTION LIMIT								
X = OTHER FOOTNOTES MAY BE REQUIRED TO PROPERLY DEFINE THE RESULTS - SEE DATA REPORTING QUALIFIERS								
BLANK SPACE INDICATES NOT DETECTED. SEE LAB REPORTS FOR DETECTION LIMITS.								
ANALYSIS PERFORMED BY COMPUCHEM LABORATORIES INC., RESEARCH TRIANGLE PARK, NORTH CAROLINA.								

TABLE 4
EVEREADY BATTERY COMPANY INC.
SOIL SAMPLING ANALYTICAL RESULTS
TCL VOLATILE COMPOUNDS
FEBRUARY 1991

SAMPLE ID:	UCB-SS01	UCB-SS01MS	UCB-SS01MSD	UCB-SS02	UCB-SS03	UCB-SS04	UCB-SS05	UCB-SS06
LAB NUMBER:	379861	379862	379863	379870	379871	379872	379874	379876
CONSTITUENT								
CHLOROMETHANE								
BROMOMETHANE								
VINYL CHLORIDE								
CHLOROETHANE								
METHYLENE CHLORIDE	65B	35B	35B	21B	21B	20B	21B	18B
ACETONE	23B	28B	29B	15B		14B		16B
CARBON DISULFIDE								
1,1-DICHLOROETHENE								
1,1-DICHLOROETHANE								
1,2-DICHLOROETHENE(TOTAL)								
CHLOROFORM								
1,2-DICHLOROETHANE								
2-BUTANONE								
1,1,1-TRICHLOROETHANE								
CARBON TETRACHLORIDE								
VINYL ACETATE								
BROMODICHLOROMETHANE								
1,2 DICHLOROPROPANE								
CIS-1,3-DICHLOROPROPENE								
TRICHLOROETHENE								
DIBROMOCHLOROMETHANE								
1,1,2-TRICHLOROETHANE								
BENZENE								
TRANS-1,3-DICHLOROPROPENE								
BROMOFORM								
4-METHYL-2-PENTANONE								
2-HEXANONE								
TETRACHLOROETHENE								
1,1,2,2-TETRACHLOROETHANE								
TOLUENE								
CHLOROBENZENE								
ETHYLBENZENE								
STYRENE								
XYLENE (TOTAL)								
NOTES:								
RESULTS REPORTED IN MICROGRAMS PER KILOGRAM (ug/kg or parts per billion)								
B = DETECTED IN BLANK								
RESULTS REPORTED ARE FOR DETECTED COMPOUNDS. SEE LAB REPORTS FOR OTHER NON-DETECTED COMPOUNDS AND DETECTION LIMITS								
ANALYSIS PERFORMED BY COMPUCHEM LABORATORIES INC., RESEARCH TRIANGLE PARK								
NORTH CAROLINA.								

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TCL Volatile Compounds

The laboratory analyses indicate that the volatile compounds methylene chloride and/or acetone were detected in the soil samples, including the background sample and the matrix spikes and laboratory blanks. The detection of these compounds may be attributable to laboratory contamination. All other TCL volatile compounds were below the detection limits.

4.2 Ground Water

The analytical results of the four ground water samples collected at the Eveready facility are summarized in Tables 5, 6 and 7. The background ground water sample, GW01, was collected adjacent to the employee parking area located next to Evans Street (Figure 2).

TAL Metals and Cyanide

The TAL analyses indicate that three metal compounds were detected at concentrations greater than three times the GW01 ground water sample values. These compounds include calcium in sample GW02, sodium in samples GW02 and GW03 and manganese in sample GW02.

TCL Semi-volatile Compounds

One semi-volatile compound, bis(2-ethylhexyl)phthalate, was indicated during the laboratory analyses of ground water collected from the open bore holes GW02 (24ppb), GW03 (22ppb) and GW04 (13ppb). The bis(2-ethylhexyl)phthalate (3ppb) detected in the background sample, SS01, and the di-n-octylphthalate (5ppb) detected in GW02 are presumptive estimates of concentrations below the detection limit. All other semi-volatile compounds were below the detection limit.

TCL Volatile Compounds

Volatile analyses indicate concentrations of methylene chloride in each ground water sample including the matrix spikes and blanks. Benzene (5ppb) and ethylbenzene (15ppb) were detected in the background sample, GW01, above the detection limit. Styrene (3ppb) was estimated in GW01 at a value below the detection limit. Toluene (1ppb) was also observed below the detection limit in GW02.

TABLE 5
 EVEREADY BATTERY COMPANY INC.
 GROUNDWATER ANALYTICAL RESULTS
 TAL METALS AND CYANIDE
 FEBRUARY 1991

SAMPLE ID:	UCB-GW01	UCB-GW02	UCB-GW03	UCB-GW04
LAB NUMBER:	379636	379644	379645	379646
CONSTITUENT				
ALUMINUM	381000	38800	24200	162000
ANTIMONY				
ARSENIC	2B			
BARIIUM	410	128B	382	85.4B
BERYLLIUM	3.5B	2.4B	2.4B	1.6B
CADMIUM	13.9			4B
CALCIUM	4510B	50900	4000B	2970B
CHROMIUM	243	51.5	264	180
COBALT	16B		11.2B	
COPPER	44.1	14.8B	47.6	32.1
IRON	209000	34400	162000	6670
LEAD	112	32.2	77	36.9
MAGNESIUM	6670	6220	6890	1610B
MANGANESE	173	552	156	42.1
MERCURY				
NICKEL	65.7	40.9	63.2	50.3
POTASSIUM	7760	8270	6610	3340B
SELENIUM				
SILVER				
SODIUM	5470	24600	10500	2910B
THALLIUM	2.2B			
VANADIUM	238	63.4	364	41B
ZINC	160	273	183	88.5
CYANIDE				
NOTES:				
RESULTS REPORTED IN MICROGRAMS PER LITER (ug/l or parts per billion)				
B = DETECTED IN BLANK				
BLANK SPACE INDICATES NOT DETECTED. SEE LAB REPORTS FOR				
DETECTION LIMITS.				
ANALYSIS PERFORMED BY COMPUCHEM LABORATORIES INC.,				
RESEARCH TRIANGLE PARK, NORTH CAROLINA.				

TABLE 6
 EVEREADY BATTERY COMPANY INC.
 GROUNDWATER ANALYTICAL RESULTS
 TCL SEMI-VOLATILE COMPOUNDS
 FEBRUARY 1991

SAMPLE ID:	UCB-GW01	UCB-GW02	UCB-GW03	UCB-GW04	BS-1	BS-2
LAB NUMBER:	379625	379627	379631	379635	379632	379633
CONSTITUENT						
PHENOL						
BIS(2-CHLOROETHYL)ETHER						
2-CHLOROPHENOL						
1,3-DICHLOROBENZENE						
1,4-DICHLOROBENZENE						
BENZYL ALCOHOL						
1,2-DICHLOROBENZENE						
2-METHYLPHENOL						
BIS(2-CHLOROISOPROPYL)ETHER						
4-METHYLPHENOL						
N-NITROSO-DI-N-PROPYLAMINE						
HEXACHLOROETHANE						
NITROBENZENE						
ISOPHORONE						
2-NITROPHENOL						
2,4-DIMETHYLPHENOL						
BENZOIC ACID						
BIS(2-CHLOROETHOXY)METHANE						
2,4-DICHLOROPHENOL						
1,2,4-TRICHLOROBENZENE						
NAPHTHALENE						
4-CHLOROANILINE						
HEXACHLOROBUTADIENE						
4-CHLORO-3-METHYLPHENOL						
2-METHYLNAPHTHALENE						
HEXACHLOROCYCLOPENTADIENE						
2,4,6-TRICHLOROPHENOL						
2,4,5-TRICHLOROPHENOL						
2-CHLORONAPHTHALENE						
2-NITROANILINE						
DIMETHYLPHTHALATE						
ACENAPHTHYLENE						
2,6-DINITROTOLUENE						
3-NITROANILINE						
NOTES:						
RESULTS REPORTED IN MICROGRAMS PER LITER (ug/l or parts per billion)						
B = DETECTED IN BLANK						
J = PRESUMPTIVE ESTIMATE OF COMPOUND ESTIMATED AT VALUE LESS THAN DETECTION LIMIT						
X = OTHER FOOTNOTES MAY BE REQUIRED TO PROPERLY DEFINE THE RESULTS - SEE DATA REPORTING QUALIFIERS						
BLANK SPACE INDICATES NOT DETECTED. SEE LAB REPORTS FOR						
DETECTION LIMITS.						
ANALYSIS PERFORMED BY COMPUCHEM LABORATORIES INC., RESEARCH TRIANGLE PARK, NORTH CAROLINA.						

TABLE 6(cont.)
 EVEREADY BATTERY COMPANY INC.
 GROUNDWATER ANALYTICAL RESULTS
 TCL SEMI-VOLATILE COMPOUNDS
 FEBRUARY 1991

SAMPLE ID:	UCB-GW01	UCB-GW02	UCB-GW03	UCB-GW04	BS-1	BS-2
LAB NUMBER:	379625	379627	379631	379635	379632	379633
CONSTITUENT						
ACENAPHTHENE						
2,4-DINITROPHENOL						
4-NITROPHENOL						
DIBENZOFURAN						
2,4-DINITROTOLUENE						
DIETHYLPHTHALATE						
4-CHLOROPHENYL-PHENYLETHER						
FLUORENE						
4-NITROANILINE						
4,6-DINITRO-2-METHYLPHENOL						
N-NITROSODIPHENYLAMINE (1)						
4-BROMOPHENYL-PHENYLETHER						
HEXACHLOROBENZENE						
PENTACHLOROPHENOL						
PHENANTHRENE						
ANTHRACENE						
DI-N-BUTYLPHTHALATE						
FLUORANTHENE						
PYRENE						
BUTYLBENZYLPHTHALATE						
3,3'-DICHLOROBENZIDINE						
BENZO(A)ANTHRACENE						
CHRYSENE						
BIS(2-ETHYLHEXYL)PHTHALATE	3J	24	22	13		
DI-N-OCTYLPHTHALATE		5J				
BENZO(B)FLUORANTHENE						
BENZO(K)FLUORANTHENE						
BENZO(A)PYRENE						
INDENO(1,2,3-CD)PYRENE						
DIBENZ(A,H)ANTHRACENE						
BENZO(G,H,I)PERYLENE						
NOTES:						
RESULTS REPORTED IN MICROGRAMS PER LITER (ug/l or parts per billion)						
B = DETECTED IN BLANK						
J = PRESUMPTIVE ESTIMATE OF COMPOUND ESTIMATED AT VALUE LESS THAN DETECTION LIMIT						
X = OTHER FOOTNOTES MAY BE REQUIRED TO PROPERLY DEFINE THE RESULTS - SEE DATA REPORTING QUALIFIERS						
BLANK SPACE INDICATES NOT DETECTED. SEE LAB REPORTS FOR						
DETECTION LIMITS.						
ANALYSIS PERFORMED BY COMPUCHEM LABORATORIES INC., RESEARCH TRIANGLE PARK, NORTH CAROLINA.						

TABLE 7
 EVEREADY BATTERY COMPANY INC.
 GROUNDWATER ANALYTICAL RESULTS
 TCL VOLATILE COMPOUNDS
 FEBRUARY 1991

SAMPLE ID:	UCB-GW01	UCB-GW02	JCS-GW02MS	UCB-GW02MSD	UCB-GW03	UCB-GW04
LAB NUMBER:	379625	379627	379628	379629	379631	379635
CONSTITUENT						
CHLOROMETHANE						
BROMOMETHANE						
VINYL CHLORIDE						
CHLOROETHANE						
METHYLENE CHLORIDE	21B	3BJ	7B	12B	54B	1BJ
ACETONE						
CARBON DISULFIDE						
1,1-DICHLOROETHENE						
1,1-DICHLOROETHANE						
1,2-DICHLOROETHENE(TOTAL)					42	
CHLOROFORM						
1,2-DICHLOROETHANE						
2-BUTANONE						
1,1,1-TRICHLOROETHANE						
CARBON TETRACHLORIDE						
VINYL ACETATE						
BROMODICHLORMETHANE						
1,2-DICHLOROPROPANE						
CIS-1,3-DICHLOROPROPENE						
TRICHLOROETHENE					44	
DIBROMOCHLOROMETHANE						
1,1,2-TRICHLOROETHANE						
BENZENE	5					
TRANS-1,3-DICHLOROPROPENE						
BROMOFORM						
4-METHYL-2-PENTANONE						
2-HEXANONE						
TETRACHLOROETHENE					930	
1,1,2,2-TETRACHLOROETHANE						
TOLUENE		1J				
CHLOROBENZENE						
ETHYLBENZENE	15					
STYRENE	3J					
XYLENE (TOTAL)						
NOTES:						
RESULTS REPORTED IN MICROGRAMS PER LITER (ug/l or parts per billion)						
UG/L = MICROGRAMS PER LITER						
B = DETECTED IN BLANK						
J = PRESUMPTIVE ESTIMATE OF COMPOUND ESTIMATED AT VALUE LESS THAN DETECTION LIMIT						
BLANK SPACE INDICATES NOT DETECTED. SEE LAB REPORTS FOR						
DETECTION LIMITS.						
ANALYSIS PERFORMED BY COMPUCHEM LABORATORIES INC., RESEARCH TRIANGLE PARK						
NORTH CAROLINA.						

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Analysis of sample GW03 indicates concentrations of 1,2 dichloroethene (42ppb), trichloroethene (44ppb), and tetrachloroethene (930 ppb). This ground water sample was collected from the open bore hole located behind the hazardous waste storage building. The detection limits were elevated for analyses of GW03 as a result of sample dilution.

5.0 CONCLUSIONS

Soils

The site-specific metals related to hazardous materials handled at the former facility are cadmium, mercury, potassium and zinc. Laboratory analyses of the soil samples collected at the site did not indicate detectable levels of cadmium or mercury. Potassium occurs naturally in soils and was detected in each of the six samples at levels equivalent to or below the background concentration (222 ppm). Potassium was also detected in the blank. Zinc was detected at levels greater than three times the background concentration at three soil sample locations. Other notable occurrences of metal concentrations relative to the background value include chromium at SS05 (260 ppm) and cyanide at SS02 (6.4 ppm), SS03 (3.4 ppm) and SS06 (9 ppm). The remaining TAL metal compounds are believed to have been detected within the naturally occurring range of concentrations of metals in the native soils.

Except in soil sample SS06, the TCL semi-volatile compounds detected in the soil samples were present at levels lower than the quantitation limit. At SS06, the concentration of semi-volatile compounds are relatively low. Some of the detected compounds are common constituents of asphalt which may be attributed to nearby asphalt paved areas.

No significant levels of TCL volatile organic compounds were found in any of the soil samples. The only compounds detected were relatively low levels of methylene chloride and acetone. These compounds are common lab contaminants and indeed were also found in the method blank.

ERM recommends that a literature search be conducted in order to determine typical values of TAL metals compounds in the native soils. In the event that the metal compounds detected at values greater than the EPA background concentration exceed the typical metal levels for the native soils, then an additional phase of soil sampling is recommended to confirm the initial analytical results and investigate the extent of the potential soil contamination.

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Ground Water

The site specific metals (cadmium, mercury, potassium, zinc) related to the hazardous materials handled at the site were not detected at levels greater than three times background levels at any of the observation wells. Mercury was not detected in any of the ground water samples. The other metal parameters occurred near or below background levels as measured at GW01 and are believed to occur at levels within the range of variability which is expected for the local shallow ground water.

Due to the methods of construction of the observation wells and the sample collection procedures, ERM does not believe that the ground water samples can be considered representative of the shallow ground water quality.

With the exception of GW03, no significant levels of any volatile or semi-volatile compounds were found in any of the observation wells. At GW03, 1,2-dichloroethene (42 ppb), trichloroethene (44 ppb) and tetrachloroethene (930 ppb) were detected in the ground water. These volatile compounds were not detected in any of the six soil samples collected at the site.

A summary of North Carolina and Federal water quality standards are presented in Attachment B. However, as discussed below, due to the apparent nature of the EPA ground water sampling techniques, the EPA ground water results to ground water quality criteria may be inappropriate and inconclusive.

No measures (e.g., surface casing installation) were taken to prevent carry down of potentially contaminated soils from near the surface to the saturated zone. No well development or purging was conducted to evacuate water which may have been affected by the boring and well installation operations prior to sampling. Consequently, analyses of ground water samples from the observation wells may only provide a gross indication of the presence or absence of ground water contaminants but should not be relied upon to provide a definitive characterization of ground water quality.

Regardless of the representativeness of the ground water samples, EPA will use the analytical results to develop an HRS score to evaluate the relative potential of the facility to cause human health problems or environmental damage. Even if the score indicates a relatively low threat, the EPA analytical results may be interpreted as evidence of site contamination to regulators and prospective buyers. Eveready should consider installing properly-constructed and developed monitor wells to allow the collection of

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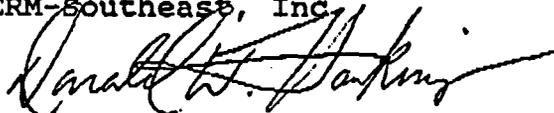
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representative ground water samples and water level data. ERM believes that this effort would produce more reliable analytical results and provide a more definitive evaluation of the ground water quality at the site.

Please call if you have any questions.

Sincerely,

ERM-Southeast, Inc

A handwritten signature in cursive script, appearing to read "Donald W. Hankins".

Donald W. Hankins, P.G.
Hydrogeologist

DWH;bah



State of North Carolina
Department of Environment, Health, and Natural Resources
Division of Solid Waste Management
P.O. Box 27687 · Raleigh, North Carolina 27611-7687

James G. Martin, Governor
William W. Cobey, Jr., Secretary

William L. Meyer
Director

March 18, 1991

Mr. Earl Bozeman
EPA NC CERCLA Project Officer
EPA Region IV Waste Division
345 Courtland Street, NE
Atlanta, Georgia 30365

Date: _____
Site Disposition: _____
EPA Project Manager: _____

RE: Phase II, Screening Site Investigation
Union Carbide Corporation (NCD 003 184 249)

Dear Mr. Bozeman:

Enclosed herewith is the Phase II, Screening Site Investigation Report by Greenhorne & O'Mara, Inc. for Union Carbide Corporation (NCD 003 184 249).

Based on the information gathered and presented in this report, it is believed that the site is a potential threat to public health and/or the environment.

A total of ten (10) environmental samples were collected to characterize the site. To characterize whether a release of contaminants has occurred, a limited subsurface and surficial investigation was conducted to obtain ground water and surface soil samples for laboratory analysis. The sampling locations are shown on Appendix A, Figure 2. These samples consisted of six (6) surface soil samples and four (4) ground water samples.

Soils

A background surface soil sample was collected at the site. No Purgable Organics were reported above CRDL in this sample. No BNA's were reported above CRDL in this sample. None of the metals found above CRDL in the background soil sample were higher than the observed naturally occurring concentrations for metals in the Eastern United States.

A surface soil sample was collected from the area where the

below-ground level spent chromic acid tank was located. No Purgable Organics were reported above CRDL in this sample. Bis(2-ethylhexyl)phthalate (500 ppb) was the only BNA reported above CRDL in this sample. The background CRDL value for the contaminant was 400 ppb. All inorganics found in this sample were below CRDL and/or were found in concentrations falling within the naturally occurring concentrations for metals in the Eastern United States. None of the inorganics found in this sample above CRDL were significantly above background surface soil sample levels.

A surface soil sample was collected from the hazardous waste storage area on the site. No Purgable Organics were reported above CRDL in this sample. No BNA's were reported above CRDL in this sample. All inorganics found in this sample were below CRDL and/or were found in concentrations falling within the naturally occurring concentrations for metals in the Eastern United States. None of the inorganics found in this sample above CRDL were significantly above background surface soil sample levels.

A composite surface soil sample was collected from the area around the railroad spur and unloading pit on the site. No Purgable Organics were reported above CRDL in this sample. Phenanthrene (230J ppb), fluoranthene (460 ppb), pyrene (290J ppb), chrysene (190J ppb), benzo[b]fluoranthene (240J ppb), benzo[k]fluoranthene (80J ppb), benzo[a]pyrene (160J ppb) and benzo[g,h,i]pyrene (110J ppb) were the only BNA's reported above CRDL in this sample. Those contaminants with a qualifier of "J", indicates that the concentrations were estimated. None of the BNA's found in this sample above CRDL were significantly above the respective BNA's background surface soil CRDL. Barium (46.3 ppm) was reported above CRDL in this sample. The background CRDL value for barium was 3.4 ppm. Chromium (195 ppm) was reported above CRDL in this sample. The background value for chromium was 7.7 ppm. Manganese (41.8 ppm) was reported above CRDL in this sample. The background value for manganese was 4.6 ppm. Zinc (1,860 ppm) was reported above CRDL in this sample. The background CRDL value for zinc was 3.9 ppm. All inorganics found in this sample were found in concentrations falling within the naturally occurring concentrations for metals in the Eastern United States.

A composite surface soil sample was collected downgradient of the hazardous waste storage area. No Purgable Organics were reported above CRDL in this sample. Phenanthrene (200J ppb), fluoranthene (530 ppb), pyrene (360 ppb), chrysene (250J ppb), benzo[b]fluoranthene (310J ppb), benzo[k]fluoranthene (130J ppb), benzo[a]pyrene (220J ppb), indeno[1,2,3-cd]pyrene (170J ppb) and benzo[g,h,i]pyrene (200J ppb) were the only BNA's reported above CRDL in this sample. Those contaminants with a qualifier of "J", indicates that the concentrations were estimated. None of the BNA's found in this sample above CRDL were significantly above the respective BNA's background

surface soil CRDL. Copper (9.5 ppm) was reported above CRDL in this sample. The background CRDL value for copper in this sample was 1.6 ppm. Magnesium (1,400 ppm) was reported above CRDL in this sample. The background CRDL value for magnesium was 103 ppm. Manganese (103 ppm) was reported above CRDL in this sample. The background value for manganese was 4.6 ppm. Zinc (308 ppm) was reported above CRDL in this sample. The background CRDL value for zinc was 3.9 ppm. All inorganics found in this sample were found in concentrations falling within the naturally occurring concentrations for metals in the Eastern United States.

A surface soil sample was collected in the area of the stormwater retention pond. No Purgable Organics were reported above CRDL in this sample. Bis(2-ethylhexyl)phthalate (160J ppb) was the only BNA reported above CRDL in this sample. This contaminant was given a qualifier of "J", indicating that the concentration was estimated. The background CRDL value for this contaminant was 400 ppb. All inorganics found in this sample were below CRDL and/or were found in concentrations falling within the naturally occurring concentrations for metals in the Eastern United States. None of the inorganics found in this sample above CRDL were significantly above background surface soil sample levels.

Ground Water

A background ground water sample was collected at the site. Benzene (11 ppb) was the only Purgable Organic reported above CRDL in this sample. Bis(2-ethylhexyl)phthalate (4J ppb) was the only BNA reported above CRDL in this sample. Cadmium (108 ppb) was reported above CRDL in this sample, while the North Carolina Maximum Contaminant Level (NCMCL) is 5 ppb and the EPA Maximum Contaminant Level (MCL) is 5 ppb. Chromium (526 ppb) was reported above CRDL in this sample, while the NCMCL is 50 ppb and the MCL is 100 ppb. Iron (421,000 ppb) was reported above CRDL in this sample, while the NCMCL is 300 ppb. Lead (167 ppb) was reported above CRDL in this sample, while the NCMCL is 50 ppb. Manganese (407 ppb) was reported above CRDL in this sample, while the NCMCL is 50 ppb. Nickel (155 ppb) was reported above CRDL in this sample, while the NCMCL is 150 ppb. All other inorganics were reported below CRDL and/or were less than the NCMCL and/or MCL.

A ground water sample was collected in the location of the former underground storage tank containing chromic acid. Acetone (7J ppb) was the only Purgable Organic reported above CRDL in this sample. A qualifier of "J" given to this concentration, indicates that the concentration was estimated. The background CRDL value for acetone was 10 ppb. Di-n-butylphthalate (10J ppb) and bis(2-ethylhexyl)phthalate (15 ppb) were the only BNA's reported above CRDL in this sample. These contaminants had background values of 10 ppb and 4J ppb, respectively. Cadmium (27.5 ppb) was reported above CRDL in this sample, while NCMCL and MCL are 5 ppb. Chromium

(246 ppb) was reported above CRDL in this sample, while NCMCL and MCL are 50 ppb and 100 ppb, respectively. Iron (169,000 ppb) was reported above CRDL in this sample, while NCMCL is 300 ppb. Lead (169 ppb) was reported above CRDL in this sample, while NCMCL is 50 ppb. Manganese (837 ppb) was reported above CRDL in this sample, while NCMCL is 50 ppb. These inorganics were not significantly greater than background levels. All other inorganics were reported below CRDL and/or were less than the NCMCL and/or MCL.

A ground water sample was collected in the vicinity of the hazardous waste storage area. Methylene Chloride (24J ppb), 1,2-dichloroethene(total) (42 ppb), trichloroethene (33 ppb) and tetrachloroethene (830 ppb) were the only Purgable Organics reported above CRDL in this sample. The qualifier of "J", indicates that the concentration was estimated. The background CRDL value for these contaminants is 5 ppb. Bis(2-ethylhexyl)phthalate (16 ppb) was the only BNA reported above CRDL in this sample. This contaminant had a background value 4J ppb. Cadmium (30.8 ppb) was reported above CRDL in this sample, while NCMCL and MCL are 5 ppb. Chromium (265 ppb) was reported above CRDL in this sample, while NCMCL and MCL are 50 ppb and 100 ppb, respectively. Iron (175,000 ppb) was reported above CRDL in this sample, while NCMCL is 300 ppb. Lead (67.5 ppb) was reported above CRDL in this sample, while NCMCL is 50 ppb. Manganese (177 ppb) was reported above CRDL in this sample, while NCMCL is 50 ppb. These inorganics were not significantly greater than background levels. All other inorganics were reported below CRDL and/or were less than the NCMCL and/or MCL.

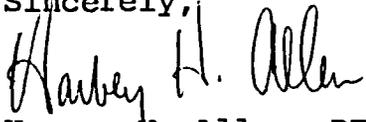
A ground water sample was collected in the vicinity of the stormwater retention basin on the site. No Purgable Organics were reported above CRDL in this sample. Bis(2-ethylhexyl)phthalate (7J ppb) was the only BNA reported above CRDL in this sample. This contaminant had a background value 4J ppb. Chromium (62.5 ppb) was reported above CRDL in this sample, while NCMCL and MCL are 50 ppb and 100 ppb, respectively. Iron (2,800 ppb) was reported above CRDL in this sample, while NCMCL is 300 ppb. No inorganics were significantly greater than background levels. All other inorganics were reported below CRDL and/or were less than the NCMCL and/or MCL.

An observed release to ground water has been documented, in that significant concentrations of 1,2-dichloroethene, trichloroethane and tetrachloroethene were reported in the ground water well in the hazardous waste storage area. Reference 6 identifies solvent laden rags as a waste stream.

Based on the information gathered and presented in this report, it is believed that the site may pose a threat to human health and/or the environment, therefore, the North Carolina Superfund Section is recommending an Expanded Site Investigation be performed at this site.

If you have any questions, please contact me at 919-733-2801.

Sincerely,

A handwritten signature in cursive script that reads "Harvey H. Allen". The signature is written in dark ink and is positioned above the typed name.

Harvey H. Allen, PE
Environmental Engineer

Enclosures



State of North Carolina
Department of Environment, Health, and Natural Resources
Division of Solid Waste Management
P.O. Box 27687 · Raleigh, North Carolina 27611-7687

James G. Martin, Governor
William W. Cobey, Jr., Secretary

William L. Meyer
Director

February 11, 1991

Mr. Earl Bozeman
EPA NC CERCLA Project Officer
EPA Region IV Waste Division
345 Courtland Street, NE
Atlanta, Georgia 30365

RE: Phase II, Screening Site Investigation
Hazard Ranking System (HRS) Scoring and Documentation
Union Carbide Corporation (NCD 003 184 249)

Dear Mr. Bozeman:

Please find enclosed the Phase II, Screening Site Investigation, Hazard Ranking System (HRS) Scoring and Documentation for the subject site.

If you have any questions, please contact me at 919-733-2801.

Sincerely,

A handwritten signature in blue ink that reads "Harvey H. Allen".

Harvey H. Allen, PE
Environmental Engineer

Enclosures



State of North Carolina
Department of Environment, Health, and Natural Resources
Division of Solid Waste Management
P.O. Box 27687 · Raleigh, North Carolina 27611-7687

James G. Martin, Governor
William W. Cobey, Jr., Secretary

William L. Meyer
Director

February 11, 1991

Mr. Earl Bozeman
EPA NC CERCLA Project Officer
EPA Region IV Waste Division
345 Courtland Street, NE
Atlanta, Georgia 30365

Date: _____
Site Disposition: _____
EPA Project Manager: _____

RE: Phase II, Screening Site Investigation
Union Carbide Corporation (NCD 003 184 249)

Dear Mr. Bozeman:

Enclosed herewith is the Phase II, Screening Site Investigation Report by Greenhorne & O'Mara, Inc. for Union Carbide Corporation (NCD 003 184 249).

Based on the information gathered and presented in this report, it is believed that the site is a potential threat to public health and/or the environment.

A total of ~~six~~^{ten} (10) environmental samples were collected to characterize the site. To characterize whether a release of contaminants has occurred, a limited subsurface and surficial investigation was conducted to obtain ground water and surface soil samples for laboratory analysis. The sampling locations are shown on Appendix A, Figure 2. These samples consisted of ~~one~~^{six} (6) surface soil samples and four (4) ground water samples.

Soils

A background surface soil sample was collected at the site. No Purgable Organics were reported above CRDL in this sample. No BNA's were reported above CRDL in this sample. None of the metals found above CRDL in the background soil sample were higher than the observed naturally occurring concentrations for metals in the Eastern United States.

A surface soil sample was collected from the area where the

below-ground level spent chromic acid tank was located. No Purgable Organics were reported above CRDL in this sample. Bis(2-ethylhexyl)phthalate (500 ppb) was the only BNA reported above CRDL in this sample. The background CRDL value for the contaminant was 400 ppb. All inorganics found in this sample were below CRDL and/or were found in concentrations falling within the naturally occurring concentrations for metals in the Eastern United States. None of the inorganics found in this sample above CRDL were significantly above background surface soil sample levels.

A surface soil sample was collected from the hazardous waste storage area on the site. No Purgable Organics were reported above CRDL in this sample. No BNA's were reported above CRDL in this sample. All inorganics found in this sample were below CRDL and/or were found in concentrations falling within the naturally occurring concentrations for metals in the Eastern United States. None of the inorganics found in this sample above CRDL were significantly above background surface soil sample levels.

A composite surface soil sample was collected from the area around the railroad spur and unloading pit on the site. No Purgable Organics were reported above CRDL in this sample. Phenanthrene (230J ppb), fluoranthene (460 ppb), pyrene (290J ppb), chrysene (190J ppb), benzo[b]fluoranthene (240J ppb), benzo[k]fluoranthene (80J ppb), benzo[a]pyrene (160J ppb) and benzo[g,h,i]pyrene (110J ppb) were the only BNA's reported above CRDL in this sample. Those contaminants with a qualifier of "J", indicates that the concentrations were estimated. None of the BNA's found in this sample above CRDL were significantly above background surface soil sample levels. Barium (46.3 ppm) was reported above CRDL in this sample. The background CRDL value for barium was 3.4 ppm. Chromium (195 ppm) was reported above CRDL in this sample. The background value for chromium was 7.7 ppm. Manganese (41.8 ppm) was reported above CRDL in this sample. The background value for manganese was 4.6 ppm. Zinc (1,860 ppm) was reported above CRDL in this sample. The background CRDL value for zinc was 3.9 ppm. All inorganics found in this sample were found in concentrations falling within the naturally occurring concentrations for metals in the Eastern United States.

A composite surface soil sample was collected downgradient of the hazardous waste storage area. No Purgable Organics were reported above CRDL in this sample. Phenanthrene (200J ppb), fluoranthene (530 ppb), pyrene (360 ppb), chrysene (250J ppb), benzo[b]fluoranthene (310J ppb), benzo[k]fluoranthene (130J ppb), benzo[a]pyrene (220J ppb), indeno[1,2,3-cd]pyrene (170J ppb) and benzo[g,h,i]pyrene (200J ppb) were the only BNA's reported above CRDL in this sample. Those contaminants with a qualifier of "J", indicates that the concentrations were estimated. None of the BNA's found in this sample above CRDL were significantly above background surface soil sample levels.

Copper (9.5 ppm) was reported above CRDL in this sample. The background CRDL value for copper in this sample was 1.6 ppm. Magnesium (1,400 ppm) was reported above CRDL in this sample. The background CRDL value for magnesium was 103 ppm. Manganese (103 ppm) was reported above CRDL in this sample. The background value for manganese was 4.6 ppm. Zinc (308 ppm) was reported above CRDL in this sample. The background CRDL value for zinc was 3.9 ppm. All inorganics found in this sample were found in concentrations falling within the naturally occurring concentrations for metals in the Eastern United States.

A surface soil sample was collected in the area of the stormwater retention pond. No Purgable Organics were reported above CRDL in this sample. Bis(2-ethylhexyl)phthalate (160J ppb) was the only BNA reported above CRDL in this sample. This contaminant was given a qualifier of "J", indicating that the concentration was estimated. The background CRDL value for this contaminant was 400 ppb. All inorganics found in this sample were below CRDL and/or were found in concentrations falling within the naturally occurring concentrations for metals in the Eastern United States. None of the inorganics found in this sample above CRDL were significantly above background surface soil sample levels.

Ground Water

A background ground water sample was collected at the site. Benzene (11 ppb) was the only Purgable Organic reported above CRDL in this sample. Bis(2-ethylhexyl)phthalate (4J ppb) was the only BNA reported above CRDL in this sample. Cadmium (108 ppb) was reported above CRDL in this sample, while the North Carolina Maximum Contaminant Level (NCMCL) is 5 ppb and the EPA Maximum Contaminant Level (MCL) is 5 ppb. Chromium (526 ppb) was reported above CRDL in this sample, while the NCMCL is 50 ppb and the MCL is 100 ppb. Iron (421,000 ppb) was reported above CRDL in this sample, while the NCMCL is 300 ppb. Lead (167 ppb) was reported above CRDL in this sample, while the NCMCL is 50 ppb. Manganese (407 ppb) was reported above CRDL in this sample, while the NCMCL is 50 ppb. Nickel (155 ppb) was reported above CRDL in this sample, while the NCMCL is 150 ppb. All other inorganics were reported below CRDL and/or were less than the NCMCL and/or MCL.

A ground water sample was collected in the location of the former underground storage tank containing chromic acid. Acetone (7J ppb) was the only Purgable Organic reported above CRDL in this sample. A qualifier of "J" given to this concentration, indicates that the concentration was estimated. The background CRDL value for acetone was 10 ppb. Di-n-butylphthalate (10J ppb) and bis(2-ethylhexyl)phthalate (15 ppb) were the only BNA's reported above CRDL in this sample. These contaminants had background values of 10 ppb and 4J ppb, respectively. Cadmium (27.5 ppb) was reported above CRDL in this sample, while NCMCL and MCL are 5 ppb. Chromium

(246 ppb) was reported above CRDL in this sample, while NCMCL and MCL are 50 ppb and 100 ppb, respectively. Iron (169,000 ppb) was reported above CRDL in this sample, while NCMCL is 300 ppb. Lead (169 ppb) was reported above CRDL in this sample, while NCMCL is 50 ppb. Manganese (837 ppb) was reported above CRDL in this sample, while NCMCL is 50 ppb. These inorganics were not significantly greater than background levels. All other inorganics were reported below CRDL and/or were less than the NCMCL and/or MCL.

A ground water sample was collected in the vicinity of the hazardous waste storage area. Methylene Chloride (24J ppb), 1,2-dichloroethene(total) (42 ppb), trichloroethene (33 ppb) and tetrachloroethene (830 ppb) were the only Purgable Organics reported above CRDL in this sample. The qualifier of "J", indicates that the concentration was estimated. The background CRDL value for these contaminants is 5 ppb. Bis(2-ethylhexyl)phthalate (16 ppb) was the only BNA reported above CRDL in this sample. This contaminant had a background value 4J ppb. Cadmium (30.8 ppb) was reported above CRDL in this sample, while NCMCL and MCL are 5 ppb. Chromium (265 ppb) was reported above CRDL in this sample, while NCMCL and MCL are 50 ppb and 100 ppb, respectively. Iron (175,000 ppb) was reported above CRDL in this sample, while NCMCL is 300 ppb. Lead (67.5 ppb) was reported above CRDL in this sample, while NCMCL is 50 ppb. Manganese (177 ppb) was reported above CRDL in this sample, while NCMCL is 50 ppb. These inorganics were not significantly greater than background levels. All other inorganics were reported below CRDL and/or were less than the NCMCL and/or MCL.

A ground water sample was collected in the vicinity of the stormwater retention basin on the site. No Purgable Organics were reported above CRDL in this sample. Bis(2-ethylhexyl)phthalate (7J ppb) was the only BNA reported above CRDL in this sample. This contaminant had a background value 4J ppb. Chromium (62.5 ppb) was reported above CRDL in this sample, while NCMCL and MCL are 50 ppb and 100 ppb, respectively. Iron (2,800 ppb) was reported above CRDL in this sample, while NCMCL is 300 ppb. No inorganics were significantly greater than background levels. All other inorganics were reported below CRDL and/or were less than the NCMCL and/or MCL.

An observed release to ground water has been documented, in that significant concentrations of 1,2-dichloroethene, trichloroethane and tetrachloroethene were reported in the ground water well in the hazardous waste storage area. Reference 6 identifies solvent laden rags as a waste stream.

Based on the information gathered and presented in this report, it is believed that the site may pose a threat to human health and/or the environment, therefore, the North

Carolina Superfund Section is recommending an Expanded Site Investigation be performed at this site.

If you have any questions, please contact me at 919-733-2801.

Sincerely,


Harvey H. Allen, PE
Environmental Engineer

Enclosures



State of North Carolina
Department of Environment, Health, and Natural Resources
Division of Solid Waste Management
P.O. Box 27687 · Raleigh, North Carolina 27611-7687

James G. Martin, Governor
William W. Cobey, Jr., Secretary

William L. Meyer
Director

January 29, 1991

Mr. Wadie Lewis
Greenville Utilities Commission
P.O. Box 1847
Greenville, NC 27835

RE: Southside Municipal Well
Greenville, NC

Dear Mr. Lewis:

On November 9, 1990, a water sample was collected from the outside spigot at the Southside Well in Greenville. This sample was collected as part of an environmental investigation being performed in the vicinity of your property.

Chemical analysis of the water sample was performed by the North Carolina State Laboratory of Public Health in Raleigh. Please see the enclosures for the analytical results.

If you have any questions, please contact me at 919-733-2801.

Sincerely,

A handwritten signature in cursive script that reads "Harvey H. Allen".

Harvey H. Allen, PE
Environmental Engineer

Enclosures



State of North Carolina
Department of Environment, Health, and Natural Resources
Division of Solid Waste Management
P.O. Box 27687 · Raleigh, North Carolina 27611-7687

James G. Martin, Governor
William W. Cobey, Jr., Secretary

William L. Meyer
Director

January 14, 1991

Mr. Bill Piske, PE
Greenhorne & O'Mara, Inc.
4101 Lake Boone Trail
The Summit - Suite 111
Raleigh, North Carolina 27607

RE: Union Carbide Corporation (NCD 003 216 462) Phase II
SSI Report and HRS Package

Dear Mr. Skinner:

The North Carolina Superfund Section is in receipt of your Phase II, Screening Site Investigation Report and HRS Package for the above referenced site. Your submission is deemed adequate.

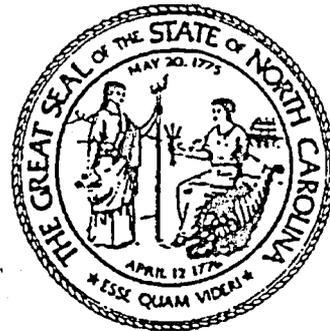
If you have any questions, please contact me at 733-2801.

Sincerely,

A handwritten signature in cursive script that reads "Harvey H. Allen".

Harvey H. Allen, PE
Environmental Engineer

STATE OF
NORTH CAROLINA



*Department of Environment, Health,
and Natural Resources
Division of Solid Waste Management
Superfund Section*

**Union Carbide Corporation
NCD 003184249**

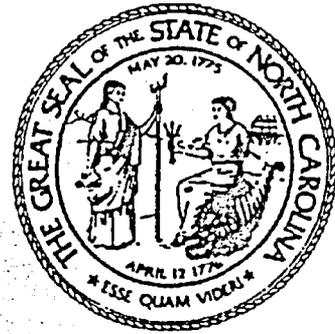
**Phase II
Screening Site Inspection
Volume IIa
Appendix D
Case Narrative & Volatile Analytical Data**

December 1990



By:
Greenhorne & O'Mara, Inc.

STATE OF
NORTH CAROLINA



*Department of Environment, Health,
and Natural Resources
Division of Solid Waste Management
Superfund Section*

**Union Carbide Corporation
NCD 003184249**

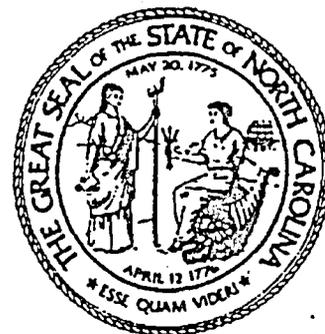
**Phase II
Screening Site Inspection
Volume IIb
Appendix D
Semi-Volatile Analytical Data**

December 1990



By:
Greenhorne & O'Mara, Inc.

STATE OF
NORTH CAROLINA



*Department of Environment, Health,
and Natural Resources
Division of Solid Waste Management
Superfund Section*

**Union Carbide Corporation
NCD 003184249**

**Phase II
Screening Site Inspection
Volume IIc
Appendix D
Metals Raw Data**

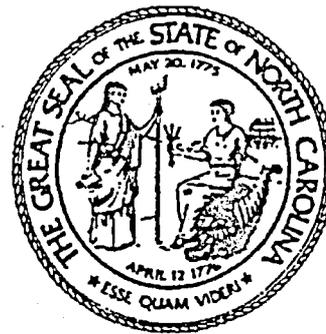
December 1990



By:
Greenhorne & O'Mara, Inc.

STATE OF NORTH CAROLINA

*Department of Environment, Health,
and Natural Resources
Division of Solid Waste Management
Superfund Section*



**Union Carbide Corporation
NCD 003184249**

**Phase II
Screening Site Inspection
Volume II d
Appendix D
Metals Data**

December 1990



By:
Greenhorne & O'Mara, Inc.

Site Number NCD 003 184 249 Field Sample Number 15904
Name of Site Union Carbide Site Location Greenville, NC
Collected By Harvey Allen ID# 76 Date Collected 11/9/90 Time 12:00

Type of Sample:

Environmental Concentrate
 Groundwater (1) Solid (5)
 Surface Water (2) Liquid (6)
 Soil (3) Sludge (7)
 Other (4) Other (8)

Comments
Greenville Municipal Well (Southside) cubes

RECEIVED

DEC 6 1990

SUPERFUND SECTION

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
_____ Arsenic	_____	<input checked="" type="checkbox"/> Arsenic	<u><0.01</u>	<input checked="" type="checkbox"/> Silver	<u>40.05</u>
_____ Barium	_____	<input checked="" type="checkbox"/> Barium	<u>0.06</u>	_____ Sulfates	_____
_____ Cadmium	_____	<input checked="" type="checkbox"/> Cadmium	<u><0.005</u>	_____ Zinc	_____
_____ Chromium	_____	_____ Chloride	_____	_____ Ph	_____
_____ Lead	_____	<input checked="" type="checkbox"/> Chromium	<u><0.01</u>	_____ Conductivity	_____
_____ Mercury	_____	_____ Copper	_____	_____ TDS	_____
_____ Selenium	_____	_____ Fluoride	_____	_____ TOC	_____
_____ Silver	_____	<input checked="" type="checkbox"/> Iron	_____		
		<input checked="" type="checkbox"/> Lead	<u>0.006</u>		
		<input checked="" type="checkbox"/> Manganese	_____		
		<input checked="" type="checkbox"/> Mercury	<u>10.0002</u>		
		<input checked="" type="checkbox"/> Nitrate	_____		
		_____ Selenium	<u><0.005</u>		

ORGANIC CHEMISTRY

Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
_____ P&T:GC/MS	_____	_____ EDB	_____	_____ Methoxychlor	_____
_____ Acid:B/N Ext.	_____	_____ PCB's	_____	_____ Toxaphene	_____
_____ TOX	_____	_____ Petroleum	_____	_____ 2,4-D	_____
		_____ Endrin	_____	_____ 2,4,5-TP (silvex)	_____
		_____ Lindane	_____		

MICROBIOLOGY

RADIOCHEMISTRY

Parameter	Parameter	Results PCi/l
_____ (MF) Coliform Colonies/100mls	_____ Gross Alpha	_____
_____ (MPN) Coliform Colonies/100mls	_____ Gross Beta	_____

Date Received _____ Date Reported _____

Date Extracted _____ Date Analyzed _____

Lab Number 05077 11/9/90

Chain of Custody Record

CERCLA

Hazardous Waste Materials

Location of Sampling: Generator Transporter Treatment Facility
Storage Facility Disposal Facility Landfill
 Other: Off-site Well

Company's Name Union Carbide Telephone (919) 756-9975

Address P.O. Box 1547, Greenville, NC 27835

Collector's Name Harvey H. Allen Telephone (919) 733-2801
signature

Date Sampled 11/9/90 Time Sampled 12:00

Type of Process Generating Waste _____

Field Information _____

RECEIVED
DEC 6 1990
SUPERFUND SECTION

Field Sample No. 15904

Chain of Possession:

1. Harvey Allen signature Env Engineer title 11/13/90 inclusive dates

2. McWalker signature Chemist title 13 Nov 90 inclusive dates

3. _____ signature _____ title _____ inclusive dates

Results reported McWalker signature Chemist title 4 Dec 90 date
13 Nov 90

Instructions: Complete all applicable information including signatures, and submit with analysis request forms.

Receipt for Samples

The samples described below were collected in connection with the administration, enforcement, and documentation of the:

- () North Carolina Hazardous Waste Management Rules, 10 NCAC 10F
- () North Carolina Solid Waste Management Rules, 10 NCAC 10G
- () Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)
- () Toxic Substances Control Act (TSCA), 15 U.S.C. §2601, et seq., specifically Section 11 of TSCA, 15 U.S.C. § 2610.

Inspector's Name _____ Inspector's Address _____

Name of Firm _____ Firm Address _____

Firm Owner, Operator, or Agent _____ Title _____

RECEIVED

SUPERVISOR SECTION

SAMPLE NUMBER	COLLECTED		SAMPLE TYPE			DUPLICATE SAMPLES			SAMPLE LOCATION	
	DATE	TIME	WATER	SOIL	OTHER	OFFERED	ACCEPTED	REJECTED	ON-SITE	OFF-SITE

Receipt for the sample(s) described above is hereby acknowledged:

Receipt/rejection of duplicate or split samples is hereby acknowledged:

Signature of Inspector _____

Signature of Firm Owner, Operator, or Agent _____

Title _____

Title _____

COMMENTS _____

STATE LABORATORY OF PUBLIC HEALTH
 DIVISION OF HEALTH SERVICES, N.C. DEPARTMENT OF HUMAN RESOURCES
 P.O. BOX 28047 - 306 N. WILMINGTON, ST., RALEIGH, N.C. 27611

ORGANIC CHEMICAL ANALYSIS

BASE/NEUTRAL AND ACID EXTRACTABLES	LAB NO	907195							
	FIELD #	12332							
COMPOUND	TYPE	(1)	()	()	()	()	()	()	()
	UNITS	μg/l	μg/kg	μg/l	μg/kg	μg/l	μg/kg	μg/l	μg/kg
N-nitrosodimethylamine	10/330	u							
bis(2-chloroethyl)ether									
2-chlorophenol									
phenol									
1,3-dichlorobenzene									
1,4-dichlorobenzene									
1,2-dichlorobenzene									
bis(2-chloroisopropyl)ether									
hexachloroethane									
N-nitroso-di-n-propylamine									
nitrobenzene									
isophorone									
2-nitrophenol									
2,4-dimethylphenol									
bis(2-chloroethoxy)methane									
2,4-dichlorophenol									
1,2,4-trichlorobenzene									
naphthalene									
hexachlorobutadiene									
4-chloro-m-cresol									
hexachlorocyclopentadiene									
2,4,6-trichlorophenol									
2-chloronaphthalene									
acenaphthylene									
dimethyl phthalate									
2,6-dinitrotoluene									
acenaphthene									
2,4-dinitrophenol	50/1650								
2,4-dinitrotoluene	10/330								
4-nitrophenol	50/1650								
fluorene	10/330								
4-chlorophenylphenylether									
diethyl phthalate									
4,6-dinitro-o-cresol	50/1650								
diphenylamine									
azobenzene									
4-bromophenylphenylether	10/330								
hexachlorobenzene	10/330								
pentachlorophenol	50/1650								
phenanthrene	10/330								
anthracene									
dibutyl phthalate									
fluoranthene									

RECEIVED
 NOV 30 1990
 SUPERFUND SECTION

MDL
 H₂O/SOIL

- J - Estimated value.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- U - Material was analyzed for but not detected. The number is the Minimum Detection Limit. MDL
- NA - Not analyzed.
- 1/ - Tentative identification.
- 2/ - On NRDC List of Priority Pollutants.

STATE LABORATORY OF PUBLIC HEALTH
 DIVISION OF HEALTH SERVICES, N.C. DEPARTMENT OF HUMAN RESOURCES
 P.O. BOX 28047 - 306 N. WILMINGTON, ST., RALEIGH, N.C. 27611

ORGANIC CHEMICAL ANALYSIS

BASE/NEUTRAL AND ACID EXTRACTABLES COMPOUND	LAB NO	907195						
	FIELD #	12332						
	TYPE	(1)	()	()	()	()	()	()
	UNITS	μg/l μg/kg						
pyrene	10/330	u						
benzidine	50/1650							
butyl benzyl phthalate	10/330							
benz(a)anthracene	↓							
chrysene	↓							
3,3-dichlorobenzidine	50/1650							
bis(2-ethylhexyl)phthalate	10/330							
di-n-octyl phthalate	10/330							
benzo(b)fluoranthene	50/1650							
benzo(k)fluoranthene	↓							
benzo(a)pyrene	↓							
indeno(1,2,3-cd)pyrene	↓							
dibenzo(a,h)anthracene	↓							
benzo(g,h,i)perylene	↓	✓						
aniline	50/1650	u						
benzoic acid	↓							
benzyl alcohol	↓							
4-chloroaniline	↓							
dibenzofuran	10/330							
2-methylnaphthalene	↓							
2-methylphenol	↓							
4-methylphenol	↓							
2-nitroaniline	50/1650							
3-nitroaniline	↓							
4-nitroaniline	↓							
2,4,5-trichlorophenol	↓	✓						

RECEIVED
 NOV 30 1990
 SUPERFUND SECTION

MDL
 H₂O/SOIL

- J - Estimated value.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- U - Material was analyzed for but not detected. The number is the Minimum Detection Limit. MDL
- NA - Not analyzed.
- 1/ - Tentative identification.
- 2/ - On NRDC List of Priority Pollutants.

Chain of Custody Record

CERCLA

Hazardous Waste Materials

Location of Sampling: Generator Transporter Treatment Facility

Storage Facility Disposal Facility Landfill

✓ Other: Off site Wells & Trip Blank

Company's Name Union Carbide Telephone(919) 756-9975

Address P.O. Box 100 W. Green P.O. Box 1547 , Greenville, NC 27835

Collector's Name Harvey H. Allen Telephone(919) 733-2801
signature

Date Sampled 11/8/90 - 11/9/90 Time Sampled 11/8/90 15:00 11/9/90 12:00

Type of Process Generating Waste _____

Field Information _____

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SUPERFUND SECTION

Field Sample No. 12331 12332 12335

Chain of Possession:

1. Harvey Allen Env. Engineer 11/8/90-11/9/90
signature title inclusive dates

2. William Desmet Chemist 11-13-90
signature title inclusive dates

3. _____
signature title inclusive dates

Results reported

John R. Neal Chemist 11-26-90
signature title date

Instructions: Complete all applicable information including signatures, and submit with analysis request forms.

Receipt for Samples

The samples described below were collected in connection with the administration, enforcement, and documentation of the:

- () North Carolina Hazardous Waste Management Rules, 10 NCAC 10F
- () North Carolina Solid Waste Management Rules, 10 NCAC 10G
- () Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)
- () Toxic Substances Control Act (TSCA), 15 U.S.C. §2601, et seq., specifically Section 11 of TSCA, 15 U.S.C. § 2610.

Inspector's Name _____ Inspector's Address _____

Name of Firm _____ Firm Address _____

RECEIVED

Firm Owner, Operator, or Agent _____ Title _____

SUPERVISOR SECTION

SAMPLE NUMBER	COLLECTED		SAMPLE TYPE			DUPLICATE SAMPLES			SAMPLE LOCATION	
	DATE	TIME	WATER	SOIL	OTHER	OFFERED	ACCEPTED	REJECTED	ON-SITE	OFF-SITE

Receipt for the sample(s) described above is hereby acknowledged:

Receipt/rejection of duplicate or split samples is hereby acknowledged:

Signature of Inspector _____

Signature of Firm Owner, Operator, or Agent _____

Title _____

Title _____

COMMENTS _____

SAMPLE ANALYSES REQUEST

Site Number NCD 003 184 249 Field Sample Number 12331
 Name of Site Union Carbide Site Location Greenville, NC
 Collected By Harvey Allen ID# 76 Date Collected 11/9/90 Time 12:00

Type of Sample:

- | | |
|---|-------------------------------------|
| Environmental | Concentrate |
| <input checked="" type="checkbox"/> Groundwater (1) | <input type="checkbox"/> Solid (5) |
| <input type="checkbox"/> Surface Water (2) | <input type="checkbox"/> Liquid (6) |
| <input type="checkbox"/> Soil (3) | <input type="checkbox"/> Sludge (7) |
| <input type="checkbox"/> Other (4) | <input type="checkbox"/> Other (8) |

Comments

* Greenville Municipal Well (Southside) VOA

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NOV 30 1990

SUPERFUND SECTION

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
<input type="checkbox"/> Arsenic		<input type="checkbox"/> Arsenic		<input type="checkbox"/> Silver	
<input type="checkbox"/> Barium		<input type="checkbox"/> Barium		<input type="checkbox"/> Sulfates	
<input type="checkbox"/> Cadmium		<input type="checkbox"/> Cadmium		<input type="checkbox"/> Zinc	
<input type="checkbox"/> Chromium		<input type="checkbox"/> Chloride		<input type="checkbox"/> Ph	
<input type="checkbox"/> Lead		<input type="checkbox"/> Chromium		<input type="checkbox"/> Conductivity	
<input type="checkbox"/> Mercury		<input type="checkbox"/> Copper		<input type="checkbox"/> TDS	
<input type="checkbox"/> Selenium		<input type="checkbox"/> Fluoride		<input type="checkbox"/> TOC	
<input type="checkbox"/> Silver		<input type="checkbox"/> Iron			
		<input type="checkbox"/> Lead			
		<input type="checkbox"/> Manganese			
		<input type="checkbox"/> Mercury			
		<input type="checkbox"/> Nitrate			
		<input type="checkbox"/> Selenium			

ORGANIC CHEMISTRY

Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
<input checked="" type="checkbox"/> P&T:GC/MS		<input type="checkbox"/> EDB		<input type="checkbox"/> Methoxychlor	
<input type="checkbox"/> Acid:B/N Ext.		<input type="checkbox"/> PCB's		<input type="checkbox"/> Toxaphene	
<input type="checkbox"/> TOX		<input type="checkbox"/> Petroleum		<input type="checkbox"/> 2,4-D	
		<input type="checkbox"/> Endrin		<input type="checkbox"/> 2,4,5-TP (silvex)	
		<input type="checkbox"/> Lindane			

MICROBIOLOGY

RADIOCHEMISTRY

Parameter	Parameter	Results PCI/l
<input type="checkbox"/> (MF) Coliform Colonies/100mls	<input type="checkbox"/> Gross Alpha	
<input type="checkbox"/> (MPN) Coliform Colonies/100mls	<input type="checkbox"/> Gross Beta	

Date Received 11-13-90 BND Date Reported 11-26-90

Date Extracted John R. Neal Date Analyzed 11-15-90 mw

907194-907196

Lab Number 907194

SAMPLE ANALYSES REQUEST

CERCLA

Site Number NCD 003 184 249 Field Sample Number 12332
Name of Site Union Carbide Site Location Greenville, NC
Collected By Harvey Allen ID# 76 Date Collected 11/9/90 Time 12:00

Type of Sample:

- | | |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Environmental | <input type="checkbox"/> Concentrate |
| <input type="checkbox"/> Groundwater (1) | <input type="checkbox"/> Solid (5) |
| <input type="checkbox"/> Surface Water (2) | <input type="checkbox"/> Liquid (6) |
| <input type="checkbox"/> Soil (3) | <input type="checkbox"/> Sludge (7) |
| <input type="checkbox"/> Other (4) | <input type="checkbox"/> Other (8) |

Comments
Greenville Municipal Well (Southside) ZL

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NOV 30 1990

INORGANIC CHEMISTRY

SUPERFUND SECTION

Extractables		Total			
Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
_____ Arsenic	_____	_____ Arsenic	_____	_____ Silver	_____
_____ Barium	_____	_____ Barium	_____	_____ Sulfates	_____
_____ Cadmium	_____	_____ Cadmium	_____	_____ Zinc	_____
_____ Chromium	_____	_____ Chloride	_____	_____ Ph	_____
_____ Lead	_____	_____ Chromium	_____	_____ Conductivity	_____
_____ Mercury	_____	_____ Copper	_____	_____ TDS	_____
_____ Selenium	_____	_____ Fluoride	_____	_____ TOC	_____
_____ Silver	_____	_____ Iron	_____	_____	_____
_____	_____	_____ Lead	_____	_____	_____
_____	_____	_____ Manganese	_____	_____	_____
_____	_____	_____ Mercury	_____	_____	_____
_____	_____	_____ Nitrate	_____	_____	_____
_____	_____	_____ Selenium	_____	_____	_____

ORGANIC CHEMISTRY

Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
<input checked="" type="checkbox"/> P&T:GC/MS	_____	_____ EDB	_____	_____ Methoxychlor	_____
_____ Acid:B/N Ext.	_____	_____ PCB's	_____	_____ Toxaphene	_____
_____ TOX	_____	_____ Petroleum	_____	_____ 2,4-D	_____
_____	_____	_____ Endrin	_____	_____ 2,4,5-TP (silvex)	_____
_____	_____	_____ Lindane	_____	_____	_____

MICROBIOLOGY

RADIOCHEMISTRY

Parameter	Parameter	Results PCI/l
_____ (MF) Coliform Colonies/100mls	_____ Gross Alpha	_____
_____ (MPN) Coliform Colonies/100mls	_____ Gross Beta	_____
_____	_____	_____
_____	_____	_____

Date Received 11-13-90 BQ Date Reported _____

Date Extracted 11-16-90 AA, NW, JM Date Analyzed 11-26-90 BQ

Lab Number 907195

CERCLA
SAMPLE ANALYSES REQUEST

Site Number NCD 003 184 299 Field Sample Number 12335
Name of Site Union Carbide Site Location Greenville, NC
Collected By Harvey Allen ID# 76 Date Collected 11/8/90 Time 15:00

Type of Sample:

- | | |
|---|-------------------------------------|
| Environmental | Concentrate |
| <input type="checkbox"/> Groundwater (1) | <input type="checkbox"/> Solid (5) |
| <input type="checkbox"/> Surface Water (2) | <input type="checkbox"/> Liquid (6) |
| <input type="checkbox"/> Soil (3) | <input type="checkbox"/> Sludge (7) |
| <input checked="" type="checkbox"/> Other (4) | <input type="checkbox"/> Other (8) |

Trip Blank

Comments VOA

RECEIVED

NOV 30 1990

SUPERFUND SECTION

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
<input type="checkbox"/> Arsenic	_____	<input type="checkbox"/> Arsenic	_____	<input type="checkbox"/> Silver	_____
<input type="checkbox"/> Barium	_____	<input type="checkbox"/> Barium	_____	<input type="checkbox"/> Sulfates	_____
<input type="checkbox"/> Cadmium	_____	<input type="checkbox"/> Cadmium	_____	<input type="checkbox"/> Zinc	_____
<input type="checkbox"/> Chromium	_____	<input type="checkbox"/> Chloride	_____	<input type="checkbox"/> Ph	_____
<input type="checkbox"/> Lead	_____	<input type="checkbox"/> Chromium	_____	<input type="checkbox"/> Conductivity	_____
<input type="checkbox"/> Mercury	_____	<input type="checkbox"/> Copper	_____	<input type="checkbox"/> TDS	_____
<input type="checkbox"/> Selenium	_____	<input type="checkbox"/> Fluoride	_____	<input type="checkbox"/> TOC	_____
<input type="checkbox"/> Silver	_____	<input type="checkbox"/> Iron	_____		
		<input type="checkbox"/> Lead	_____		
		<input type="checkbox"/> Manganese	_____		
		<input type="checkbox"/> Mercury	_____		
		<input type="checkbox"/> Nitrate	_____		
		<input type="checkbox"/> Selenium	_____		

ORGANIC CHEMISTRY

Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
<input checked="" type="checkbox"/> P&T:GC/MS	_____	<input type="checkbox"/> EDB	_____	<input type="checkbox"/> Methoxychlor	_____
<input type="checkbox"/> Acid:B/N Ext.	_____	<input type="checkbox"/> PCB's	_____	<input type="checkbox"/> Toxaphene	_____
<input type="checkbox"/> TOX	_____	<input type="checkbox"/> Petroleum	_____	<input type="checkbox"/> 2,4-D	_____
		<input type="checkbox"/> Endrin	_____	<input type="checkbox"/> 2,4,5-TP (silvex)	_____
		<input type="checkbox"/> Lindane	_____		

MICROBIOLOGY

RADIOCHEMISTRY

Parameter	Parameter	Results PCi/l
<input type="checkbox"/> (MF) Coliform Colonies/100mls	<input type="checkbox"/> Gross Alpha	_____
<input type="checkbox"/> (MPN) Coliform Colonies/100mls	<input type="checkbox"/> Gross Beta	_____

Date Received 11-13-90 BA Date Reported _____
Date Extracted _____ Date Analyzed 11-15-90 nw
Reported By _____ Lab Number 907196

SITE HEALTH AND SAFETY PLAN

A. General Information

Site Name Union Carbide Corp. ID # NCD 003 184 249
 Location Evans St. Extention, Greenville, Pitt Date November 5, 1990
County, NC 27834

Proposed Date of Investigation November 8, 1990
 Date of Briefing November 7, 1990
 Date of Debriefing November 10, 1990

Site Investigation Team: All site personnel have read the Site Health and Safety Plan and are familiar with its provisions.

<u>Personnel</u>	<u>Responsibilities</u>	<u>Signature</u>
Team 1 <u>Harvey Allen</u>	<u>team leader, sampling</u>	<u>Harvey H. Allen</u>
Team 1 <u>Grover Nicholson</u>	<u>sampling</u>	<u>Grover Nicholson</u>
Plan Preparation:		
Prepared By: <u>David Lilley, Industrial Hygienist</u>		<u>David B. Lilley</u>
Reviewed By: <u>Jack Butler, Environmental Engineer</u>		<u>Jack Butler</u>

B. SITE/WASTE CHARACTERISTICS

Waste Type(s) Liquid Solid Sludge Gas
 Characteristics Corrosive Ignitable Radioactive
 Volatile Toxic Reactive Other

List Known or Suspected Hazards (physical, chemical biological or radioactive) on Site and their toxicological effects. Also, if known, list chemical amounts

<u>HAZARD</u>	<u>WARNING PROPERTIES</u>	<u>TLV</u>
<u>Mercury</u>	<u>Odor Threshold (OT) = "odorless"</u>	<u>0.01 mg/m³</u>
<u>Nickel</u>	<u>OT = no data</u>	<u>0.1 mg/m³</u>
<u>Cadmium</u>	<u>OT = no data</u>	<u>0.05 mg/m³</u>
<u>Lithium Hydroxide</u>	<u>OT = 0.1 mg/m³</u>	<u>none</u>
<u>Potassium Hydroxide</u>	<u>OT = no data Ceiling=</u>	<u>2 mg/m³</u>
<u>Thionyl Chloride</u>	<u>OT = no data Ceiling=</u>	<u>1 ppm</u>
<u>Barium Carbonate</u>	<u>OT = no data</u>	<u>0.5 mg/m³</u>
<u>Barium Chromate</u>	<u>OT = no data</u>	<u>0.5 mg/m³</u>

Facility Description: Size 10 acres Buildings 1

Disposal Methods Being Investigated Possible leakage of above ground storage tanks.

Unusual Features on Site (dike integrity, power lines, terrain, etc.):
none known

History of the Site: The facility at this site has been manufacturing batteries since 1963. The Laclanche battery and a small number of lithium batteries were still being manufactured onsite until September of 1990. Magnesium canisters for magnesium batteries were manufactured onsite from 1970 to 1972. Prior to 1963, the site was used as farmland. Reportedly, all hazardous waste generated has always been disposed of off-site.

C. HAZARD EVALUATION

The site can be toured and sampled in level D protection. PE or PVC gloves will be worn while collecting water samples. Steel toed hiking boots may be worn while conducting tour or sampling on gravel, asphalt, or vegetated soil, steel toed work boots will be worn while conducting tour or sampling barren soil. Stay clear of contractors while they augur.

D. WORK PLAN INSTRUCTION

Map or Sketch Attached? yes

Perimeter Identified? no

Command Post Identified? no

Zones of Contamination Identified? no

Personal Protective Equipment/Level of Protection: C X D

Modifications Wear goggles and PVC gloves while preparing and collecting acid preserved samples. Avoid breathing acid vapors. Rinse pipetts with deionized water before disposing of in trash bag.

Surveillance Equipment:

<u> </u> HNU	<u> </u> Detector Tubes and Pumps
<u> </u> OVA	<u> </u> O2 Meter
<u> </u> Explosimeter	<u> </u> Radiation Monitor

Decontamination Procedures

 Level C Respirator wash, respirator removal, suit wash (if needed),
 suit removal, boot wash, boot removal and glove removal.

 X Level D Boot wash and rinse and boot removal, suit removal, glove
 and goggle removal.

Modifications Dispose of trash properly, on-site if possible.

Work Schedule/Visit Objectives The purpose of this visit is to determine
if the site poses a threat to the public health or environment because of
releases of contaminants to soil, surface water, groundwater, or air.
Sampling may consist of groundwater and, surfacewater sampling.

EMERGENCY PRECAUTIONS

<u>Route of Exposure</u>	<u>First Aid</u>
<u>Eyes</u>	<u>irrigate immediately</u>
<u>Skin</u>	<u>soap and water wash</u>
<u>Inhalation</u>	<u>fresh air and artificial respiration</u>
<u>Ingestion</u>	<u>get medical attention immediately</u>

ID # NCD 003 184 249

Location of Nearest Phone: unknown-this site is non-operational

Hospital (Address and Phone Number)

Pitt County Memorial Hospital, 200 Stantonsburg Road, PO Box 6028,
Greenville, NC (919) 551-4100 - can handle chemically contaminated patients

Emergency Transportation Systems (Phone Numbers)

Fire 911

Ambulance 911

Rescue Squad 911

Emergency Route to Hospital Take a right onto Route 43 and go to
Route 11/903/43 and go right (north). The hospital will be on the left.

PREVAILING WEATHER CONDITIONS AND FORECAST Partly cloudy with a chance of
rain, highs in the mid 60s.

EQUIPMENT CHECKLIST

<u> </u> Air purifying respirator	<u> X </u> First Aid Kit
<u> </u> Cartridges for respirator	<u> X </u> 3 gal. Deionized H2O
<u> </u> Dust Mask	<u> X </u> Rainsuit
<u> </u> O ₂ Indicator	<u> X </u> Gloves (<u>PE/PVC/nitrile/cloth</u>)
<u> X </u> Eye Wash Unit	<u> X </u> Boots/Boot Covers
<u> </u> H NU	<u> X </u> Coveralls (<u>tyvek/saranex</u>)
<u> </u> OVA	<u> X </u> Eye Protection
<u> </u> Explosimeter	<u> X </u> Hard Hat
<u> </u> Radioactive Monitor	<u> X </u> Decontamination
<u> </u> Detector Tubes and Pump	Materials.

Poison Control Center - State Coordinator

Duke University Medical Center

Telephone: 1-800-672-1697

Box 3024

Durham, NC 27710

ASHEVILLE 704-255-4490	Western NC Poison Control Center Memorial Mission Hosp. 509 Biltmore Ave. 28801	HENDERSONVILLE 704-693-6522 Ext. 555,556	Margaret R. Pardee Memorial Hospital Fleming St., 28739
CHARLOTTE 704-379-5827	Mercy Hospital 2001 Vail Ave, 28207	HICKORY 704-322-6649	Catawba Mem. Hosp. Fairgrove Chur. Rd 28601
DURHAM 1-800-672-1697	Duke Univ. Med. Center Box 3007, 27710	JACKSONVILLE 919-577-2555	Onslow Mem. Hospital Western Blvd. 28540
GREENSBORO 919-379-4105	Moses Cone Hospital 1200 N. Elm St. 27420	WILMINGTON 919-343-7046	New Hanover Mem. Hospital 2131 S. 17th St. 28401

safeform.070

TO BE COMPLETED BY PROJECT MANAGER

PROJECT MANAGER: Harvey Allen PROJECT: Union Carbide
INVESTIGATION DATE: November 8, 1990

Materials Used (Please insert a number in the blank)

<u>0</u> Air Purifying respirator cartridges	<u>0</u> Gloves (nitrile)
<u>0</u> Detector tubes	<u>0</u> Gloves (cloth)
<u>0</u> Eye Wash Units	<u>0</u> Boot covers
<u>0</u> First Aid Kit	<u>0</u> Coveralls (tyvek)
<u>0</u> Gloves (polyethylene)	<u>0</u> Coveralls (saranex)
<u>4</u> Gloves(PVC)	<u>0</u> Auger Brushes

Respirator Worn By	Approximate Time in Respirator
<u>NA</u>	
_____	_____
_____	_____

Air Monitoring Data (Include Calibration Reading)

HNU: NA

OVA: NA

Explosimeter: NA

Radiation Meter: NA

If the maximum personal protective equipment as outlined in the Hazard Evaluation Section was not used, please justify:

NA, No subsurface augering performed by NC Superfund personnel.

Visitors Present

Jones Card

Steve Jones

Mark Bailey, Jeff Suhr, Bill Piske

Mark Lottin, Terry Johnson, Billy Dixon

Harvey Allen, Grover Nicholson

Organization Represented

Eveready Battery

Environment One

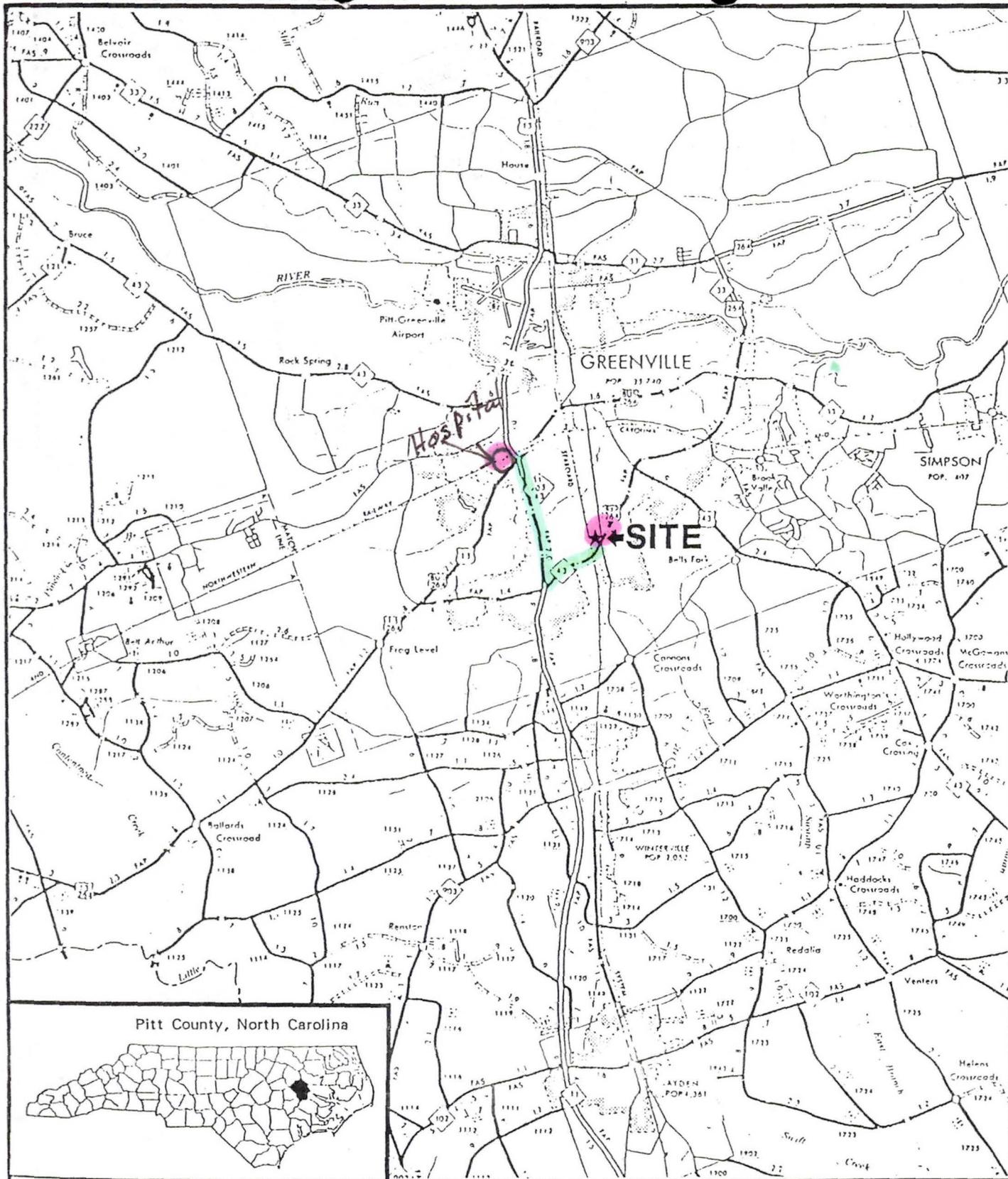
Greenhorne & O'Mara

Greenhorne & O'Mara

NC Superfund

Harvey Allen

Signature



Pitt County, North Carolina



UNION CARBIDE CORPORATION

0 1 2 3 4 MILES

FIGURE 1



ENGINEERS • ARCHITECTS • PLANNERS • SCIENTISTS • SURVEYORS • PHOTOGRAMMETRISTS

GREENHORNE & O'MARA, INC.

9001 EDMONSTON ROAD, GREENBELT, MARYLAND 20770
(301) 982-2800

ANNAPOLIS MD • ATLANTA GA • AURORA CO • BALTIMORE MD • CHARLOTTE VA • DEKATH GA
EXPORT PA • FARMAX VA • MANASSAS VA • RALEIGH NC • ROCKVILLE MD • TAMPA FL

SITE LOCATION

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Mercury-inorganic

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula <u>Hg</u>	<u>1</u>
Natural Physical State at 25°C <u>liquid</u>	<u>2</u>
Vapor Pressure <u>0.0012</u> mm Hg at 20°C	<u>2</u>
Melting Point <u>-38</u> °F/°C Boiling Point <u>674</u> °F/°C	<u>2</u>
Flash Point (open or closed cup) <u>None</u> °C/°F	<u>2</u>
Solubility - H ₂ O <u>0.002%</u>	<u>2</u>
Other _____	_____

Physical Features: (odor, color, etc.) Silvery, mobile odorless liquid
(2)

II. TOXICOLOGICAL DATA

Standards: 0.01 mg/m³ (3) TLV 1 mg/10m³ (4) PEL 28 mg/m³ (2) IDLH

Routes of Exposure: Inhalation, skin and/or eye absorption, Ingestion (2)

Acute/Chronic Symptoms: Acute: soluble salts have violent corrosive effect on skin and mucous membranes, severe nausea, vomiting, abdominal pains, blood, diarrhea, kidney damage, death usually with 10 days; Chronic: inflammation of mouth and gums, excessive salivation, loosening of teeth, kidney damage, muscle tension, jerky gait, spasms of extremities, personality changes, depression, irritability, nervousness(1).

First Aid: Inhalation: artificial respiration; Ingestion: get medical attention immediately; Eye contact: irrigate immediately; Skin contact: soap and water wash immediately

Chemical Name: Mercury-inorganic

III. HAZARDOUS CHARACTERISTICS

Reference

A. Combustibility Yes No 2
Toxic by-products _____

B. Flammability LEL none UEL none 2

C. Reactivity Hazard Incompatible with acetylenes, 2
ammonia gases

(insoluable salts)

D. Corrosivity Hazard yes/no pH: _____ 1

Neutralizing agent: _____

E. Radioactive Hazard	Exposure Rate	
Background yes/no	_____	_____
Alpha particles yes/no	_____	_____
Beta particles yes/no	_____	_____
Gamma radiation yes/no	_____	_____

IV. REFERENCES

- (1) The Merck Index, 11th Edition, 1989
- (2) Pocket Guide to Chemical Hazards, NIOSH, 1985
- (3) Threshold Limit Values and Biological Exposure
Indices for 1990-91, ACGIH.
- (4) 29 CFR 1910.1000

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Nickel - soluble salts (soluble salts of nickel include the chloride, sulfate and nitrate)

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula <u>vary depending on compound</u>	
Natural Physical State at 25°C <u>solid</u>	<u>1,2</u>
Vapor Pressure _____ mm Hg at 20°C	
Melting Point <u>1550</u> °F/°C Boiling Point <u>2837 (calc)</u> °F/°C	<u>1,2</u>
Flash Point (open or closed cup) _____ °C/°F	
Solubility - H ₂ O _____	
Other _____	

Physical Features: (odor, color, etc.) vary depending on compound

II. TOXICOLOGICAL DATA

for soluble
compounds

Standards: 0.1 mg/m³ (3) TLV 0.1 mg/m³ (4) PEL potential IDLH 5
carcinogen

Routes of Exposure: Inhalation, skin - dermatitis, eye - mild eye irritant

Acute/Chronic Symptoms: Irritation of skin and mucous membrane, chronic symptoms: is considered a potential occupational carcinogen. Ingestion of soluble salts may cause nausea, vomiting, diarrhea. (1)

First Aid: Inhalation: artificial respiration; Ingestion: get medical attention immediately; Eye contact: irrigate immediately; Skin contact: soap and water wash immediately

Chemical Name: Nickel - soluble salts

III. HAZARDOUS CHARACTERISTICS

Reference

A. Combustibility Yes No 1,2
Toxic by-products _____

B. Flammability LEL _____ UEL _____

C. Reactivity Hazard nitric acid readily attacks nickel 1

D. Corrosivity Hazard yes/no pH: _____

Neutralizing agent: _____

E. Radioactive Hazard	Exposure Rate	
Background yes/no	_____	_____
Alpha particles yes/no	_____	_____
Beta particles yes/no	_____	_____
Gamma radiation yes/no	_____	_____

IV. REFERENCES

- (1) Documentation of the TLV, 4th Edition, 1980.
- (2) The Merck Index, 11th Edition, 1989.
- (3) Threshold Limit Values and Biological Exposure Indices
for 1990-91, ACGIH.
- (4) 29 CFR 1910.1000.

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Cadmium dust (as Cd)

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula <u>Cd</u>	<u>1</u>
Natural Physical State at 25°C <u>solid</u>	<u>1</u>
Vapor Pressure <u>N/A</u> mm Hg at 20°C	<u> </u>
Melting Point <u> </u> °F/°C Boiling Point <u> </u> °F/°C	<u> </u>
Flash Point (open or closed cup) <u>N/A</u> °C/°F	<u> </u>
Solubility - H ₂ O <u>not soluble</u>	<u>1</u>
Other <u> </u>	<u> </u>

Physical Features: (odor, color, etc.) appearance and odor vary for specific compound.

II. TOXICOLOGICAL DATA

Standards: 0.05 mg/m³ (2) TLV 0.2 mg/m³ (3) PEL potential IDLH 4
carcinogen

Routes of Exposure: Inhalation and ingestion, skin contact, eye contact

Acute/Chronic Symptoms: Acute: cough, tight chest, headache, chills, muscle aches, nausea, diarrhea. Target Organs: respiratory system, kidneys, prostate and blood. Chronic: human carcinogen. (4)

First Aid: Inhalation: artificial respiration; Ingestion: get medical attention immediately; Eye contact: irrigate immediately; Skin contact: soap and water wash immediately

Chemical Name: Cadmium dust (as Cd)

III. HAZARDOUS CHARACTERISTICS

Reference

A. Combustibility Yes No
Toxic by-products _____

2

B. Flammability LEL N/A UEL _____

C. Reactivity Hazard strong oxidizers, elemental sulfur,
selenium and tellurium.

2

D. Corrosivity Hazard yes/no pH: _____

Neutralizing agent: _____

E. Radioactive Hazard		Exposure Rate	
Background	yes/no	_____	_____
Alpha particles	yes/no	_____	_____
Beta particles	yes/no	_____	_____
Gamma radiation	yes/no	_____	_____

IV. REFERENCES

(1) The Merck Index, 11th Edition, 1989.
(2) Threshold Limit Values and Biological Exposure Indices
for 1990-1991, ACGIH.
(3) 29 CFR 1910.1000
(4) Pocket Guide To Chemical Hazards, NIOSH, 1987.

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Lithium Hydroxide

I. PHYSICAL/CHEMICAL PROPERTIES

	Refere
Chemical Formula <u>LiOH</u>	<u>1</u>
Natural Physical State at 25°C <u>solid</u>	<u>2</u>
Vapor Pressure _____ mm Hg at 20°C	_____
Melting Point <u>471</u> °F/°C Boiling Point _____ °F/°C	<u>1</u>
Flash Point (open or closed cup) _____ °C/°F	_____
Solubility - H ₂ O <u>soluble</u>	<u>1,2</u>
Other <u>alcohol</u>	<u>1,2</u>

Physical Features: (odor, color, etc.) Colorless crystals, granular, free-flowing powder; acrid, strongly alkaline (1,2)

II. TOXICOLOGICAL DATA

Standards: none TLV none PEL no data IDLH

Routes of Exposure: Ingestion, Inhalation, Skin and/or eye contact

Acute/Chronic Symptoms: Strongly alkaline and hence caustic. Very irrita to skin. (1)

First Aid: Inhalation: artificial respiration; Ingestion: get medical attention immediately; Eye contact: irrigate immediately; Skin contact: soap and water wash immediately

Chemical Name: Lithium Hydroxide

III. HAZARDOUS CHARACTERISTICS

Ref

A. Combustibility Yes ___ No ___
Toxic by-products _____

B. Flammability LEL _____ UEL _____

C. Reactivity Hazard _____

D. Corrosivity Hazard yes/no pH: 1.0 N solution: 14

1

Neutralizing agent: _____

E. Radioactive Hazard	Exposure Rate	
Background yes/no	_____	_____
Alpha particles yes/no	_____	_____
Beta particles yes/no	_____	_____
Gamma radiation yes/no	_____	_____

IV. REFERENCES

1. The Condensed Chemical Dictionary, Hawley, 11th, Edition, 1987.

2. The Merck Index, 11th Edition, 1989.

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Potassium hydroxide

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula <u>KOH</u>	<u>1</u>
Natural Physical State at 25°C <u>solid</u>	<u>1</u>
Vapor Pressure _____ mm Hg at 20°C	_____
Melting Point <u>360</u> °F/°C Boiling Point _____ °F/°C	<u>1</u>
Flash Point (open or closed cup) _____ °C/°F	_____
Solubility - H ₂ O <u>soluble in 0.9 parts water</u>	<u>1</u>
Other <u>alcohol, glycerol</u>	<u>1</u>

Physical Features: (odor, color, etc.) rapidly absorbs water and CO2 from the air and deliquesces.

II. TOXICOLOGICAL DATA

Standards: ceiling = 2mg/m³ (2) TLV ceiling = 2mg/m³ (3) PEL no data (4) IDLH

Routes of Exposure: Inhalation, Ingestion, Skin/Eye contact

Acute/Chronic Symptoms: extremely corrosive to skin (1)

First Aid: Inhalation: artificial respiration; Ingestion: get medical attention immediately; Eye contact: irrigate immediately; Skin contact: soap and water wash immediately

Chemical Name: potassium hydroxide

III. HAZARDOUS CHARACTERISTICS

Reference

A. Combustibility Yes No _____
Toxic by-products _____

B. Flammability LEL _____ UEL _____ _____

C. Reactivity Hazard _____ _____

D. Corrosivity Hazard yes/no pH: 13.5 for a 0.1 _____
Mag. soln. _____

Neutralizing agent: _____ _____

E. Radioactive Hazard		Exposure Rate	
Background	yes/no	_____	_____
Alpha particles	yes/no	_____	_____
Beta particles	yes/no	_____	_____
Gamma radiation	yes/no	_____	_____

IV. REFERENCES

1. The Merck Index, 11th Edition, 1989.
2. Threshold Limit Values and Biological Exposure Indices
for 1990-1991, ACGIH
3. 29 CFR 1910.1000
4. Chemical Hazard Response Information System, DOT, 1985

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Thionyl Chloride

I. PHYSICAL/CHEMICAL PROPERTIES

	Refere
Chemical Formula <u>SOCl₂</u>	<u>1</u>
Natural Physical State at 25°C <u>liquid</u>	<u>1,2</u>
Vapor Pressure _____ mm Hg at 20°C	_____
Melting Point <u>-104.5</u> °F/°C Boiling Point <u>79</u> °F/°C	<u>1,2</u>
Flash Point (open or closed cup) _____ °C/°F	_____
Solubility - H ₂ O <u>decomposes</u>	_____
Other <u>miscible with benzene, chloroform,</u> <u>carbon tetrachloride</u>	<u>1,2</u>

Physical Features: (odor, color, etc.) Colorless to pale yellow or reddish, fuming, refractive liquid with a suffocating odor (1,2)

II. TOXICOLOGICAL DATA

Standards: ceiling= 1 ppm (3) TLV ceiling= 1 ppm (4) PEL no data IDLH

Routes of Exposure: Ingestion, Inhalation, Skin and/or eye contact

Acute/Chronic Symptoms: Vapors and liquid are strongly irritating and corrosive to skin, mucous membranes, and eyes. (2)

First Aid: Inhalation: artificial respiration; Ingestion: get medical attention immediately; Eye contact: irrigate immediately; Skin contact: soap and water wash immediately

Chemical Name: Thionyl Chloride

III. HAZARDOUS CHARACTERISTICS

Ref

A. Combustibility Yes No _____
Toxic by-products _____

B. Flammability LEL _____ UEL _____ _____

C. Reactivity Hazard _____ _____

D. Corrosivity Hazard yes/no pH: _____ _____

Neutralizing agent: _____ _____

E. Radioactive Hazard		Exposure Rate	
Background	yes/no	_____	_____
Alpha particles	yes/no	_____	_____
Beta particles	yes/no	_____	_____
Gamma radiation	yes/no	_____	_____

IV. REFERENCES

1. The Condensed Chemical Dictionary, Hawley, 11th, Edition, 1987.
1. The Merck Index, 11th Edition, 1989.
3. Threshold Limit Values and Biological Exposure Indices for 1990-1991, ACGIH
4. 29 CFR 1910.1000.

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Barium Carbonate

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula <u>BaCO₃</u>	<u>1</u>
Natural Physical State at 25°C <u>solid</u>	<u>1</u>
Vapor Pressure _____ mm Hg at 20°C	_____
Melting Point <u>811</u> °F/°C Boiling Point _____ °F/°C	<u>1</u>
Flash Point (open or closed cup) <u>NA</u> °C/°F	_____
Solubility - H ₂ O <u>0.024g/liter</u>	<u>2</u>
Other <u>hydrochloric, nitric, and acetic acid,</u>	<u>2</u>
<u>ammonium nitrate, ammonium chloride</u>	_____

Physical Features: (odor, color, etc.) white, heavy powder (2)

II. TOXICOLOGICAL DATA as barium

Standards: 0.5mg/m³ (3) TLV 0.5mg/m³ (4) PEL 250mg/m³ (5) IDLH

Routes of Exposure: Ingestion, Inhalation, Skin/Eye contact

Acute/Chronic Symptoms: Acute: excessive salivation, vomiting, colic, violent diarrhea, convulsive tremors, increased blood pressure, bleeding of the GI tract and kidneys, muscular paralysis (2)

First Aid: Ingestion: get medical attention; Inhalation: fresh air, artificial respiration; Skin contact: soap and water wash; Eye contact: flush with water

Chemical Name: Barium Carbonate

III. HAZARDOUS CHARACTERISTICS

Reference

A. Combustibility Yes No
Toxic by-products _____

B. Flammability LEL _____ UEL _____

C. Reactivity Hazard _____

D. Corrosivity Hazard yes/no pH: _____

Neutralizing agent: _____

E. Radioactive Hazard		Exposure Rate	
Background	yes/no	_____	_____
Alpha particles	yes/no	_____	_____
Beta particles	yes/no	_____	_____
Gamma radiation	yes/no	_____	_____

IV. REFERENCES

1. The Condensed Chemical Dictionary, 11th Edition, 1987
2. The Merck Index, 11th Edition, 1989.
3. Threshold Limit Values and Biological Exposure Indices
for 1990-1991
4. 29 CFR 1910.1000
5. NIOSH Pocket Guide to Chemical Hazards, 1987

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Barium Chromate

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula <u>BaCO₃</u>	<u>1</u>
Natural Physical State at 25°C <u>solid</u>	<u>2</u>
Vapor Pressure _____ mm Hg at 20°C	_____
Melting Point _____ °F/°C Boiling Point _____ °F/°C	_____
Flash Point (open or closed cup) _____ °C/°F	_____
Solubility - H ₂ O <u>partially insoluble</u>	<u>1,2</u>
Other _____	_____

Physical Features: (odor, color, etc.) yellow, heavy crystals (1,2)

II. TOXICOLOGICAL DATA as barium

Standards: 0.5mg/m³ (3) TLV 0.5mg/m³ (4) PEL 250mg/m³ (5) IDLH

Routes of Exposure: Ingestion, Inhalation, Skin/Eye contact

Acute/Chronic Symptoms: respiratory tract irritation, muscle spasms, GI tract infection (3)

First Aid: Inhalation: artificial respiration; Ingestion: get medical attention immediately; Eye contact: irrigate immediately; Skin contact: soap and water wash immediately

Chemical Name: BaCrO4

III. HAZARDOUS CHARACTERISTICS

Reference

A. Combustibility Yes No 1,2,3
Toxic by-products _____

B. Flammability LEL _____ UEL _____

C. Reactivity Hazard _____

D. Corrosivity Hazard yes/no pH: _____ 1,2,3

Neutralizing agent: _____

E. Radioactive Hazard	Exposure Rate	
Background yes/ <u>no</u>	_____	_____
Alpha particles yes/ <u>no</u>	_____	_____
Beta particles yes/ <u>no</u>	_____	_____
Gamma radiation yes/ <u>no</u>	_____	_____

IV. REFERENCES

1. The Merck Index, 11th Edition, 1989.
2. Documentation of the TLV's, Fourth Edition, 1980
3. Pocket Guide to Chemical Hazards, NIOSH, 1987



Greenhorne & O'Mara, Inc.

MAIN OFFICE • 9001 EDMONSTON ROAD • GREENBELT, MD. 20770 • (301) 982-2800

ENGINEERS ARCHITECTS PLANNERS SCIENTISTS SURVEYORS PHOTOGRAMMETRISTS

November 6, 1990

North Carolina Department of Environment, Health
and Natural Resources
Division of Solid Waste Management - Superfund Section
401 Oberlin Road
Raleigh, North Carolina 27605

Attention: Mr. Harvey Allen

Re: Phase II Health and Safety Plan and Proposed Sampling Points and
for the Union Carbide Corporation Site
NCD003184249

Dear Mr. Allen:

Enclosed please find the Health and Safety Plan for the Union Carbide Corporation site. In addition, the proposed sampling point locations are included as an attachment to this letter. A sampling trip is scheduled for November 8, 1990 for the Union Carbide Corporation site.

If you have any further questions or need additional information, please call me or Helene Kasser at (301) 982-2800.

Sincerely,

GREENHORNE & O'MARA, INC.

Marie Fisher
Environmental Scientist

Attachment

cc: D. K. Whitenight
W. Piske
M. Bailey
H. Kasser



State of North Carolina
Department of Environment, Health, and Natural Resources
Division of Solid Waste Management
P.O. Box 27687 · Raleigh, North Carolina 27611-7687

James G. Martin, Governor
William W. Cobey, Jr., Secretary

William L. Meyer
Director

November 5, 1990

Mr. Paul Andrews
Environmental Health Supervisor
Pitt County Health Department
1825 W. 6th Street
Greenville, NC 27834

RE: Phase II Screening Site Investigation
Pitt County Landfill, NCD 980 557 672
Union Carbide, NCD 003 184 249

Dear Mr. Andrews:

David Lilley of the North Carolina Superfund Section spoke with Ms. Cheryl Baker of your office today to notify you that the North Carolina Superfund Section's contractor will conduct screening site investigations of the subject sites located in Pitt County, North Carolina. The investigation will be conducted on November 8 and 9, 1990 by Greenhorne and O'Mara, Inc.

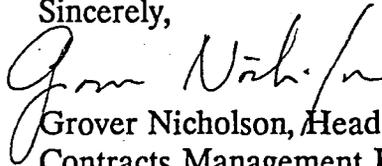
The purpose of the investigations is to determine if the sites pose a hazard to public health or the environment because of releases of contaminants to soil, surface water, groundwater, or air. The investigation team will take samples on and around the sites to determine if a hazardous condition exists. Additionally, they will locate all nearby water supplies (surface and groundwater, community and private) and any close sensitive environments, schools, and day care centers.

These investigations are not an emergency situation but are a normal step in the evaluation of all uncontrolled and unregulated potential hazardous waste sites in North Carolina. You may want to have your representative meet the investigation team at the sites. If so, please contact Joe Skinner at (919) 782-9088 and he will coordinate a meeting. I am enclosing background data on the sites for your information.

Mr. Andrews
11-5-90
Page 2

If these investigations indicate the need for future study of the sites, we will contact your office to advise. If you have any questions, please don't hesitate to call David Lilley or me at (919) 733-2801.

Sincerely,



Grover Nicholson, Head
Contracts Management Branch
Superfund Section

Enclosures

cc: Gordon Layton
Doug Holyfield
Steve Reid
Pat Bowden
David Lilley
Ann Rudd
File

Federal
Trip Notification & Authorization

Prepared by: Harvey Allen

Today's Date: November 2, 1990

*Use Black Ink or Typewriter only-Staff to fill out first 2 blocks only.

Site Trip

Date of Trip: November 8, 1990

If trip date changed or cancelled note below:

Trip Date Changed To: _____ Cancelled: _____

NCD#: 003 184 249

Site Name: Union Carbide

City: Greenville

County: Pitt

Reason for Trip: Phase II, SSI ~~_____~~ ~~_____~~

Name of Hotel (Overnight Trip): _____ Hotel Telephone Number: () _____

Authorized by: [Signature]
Industrial Hygienist

Project Team Leader: G & O Engineer

Assistants: Harvey Allen, _____

Attach To Notification Form: 1 copy each: Preliminary Assessment Form (First page only)
Submit to the Industrial Hygienist Site Map
PA Transmittal Letter

(Please list appropriate County Health Department contact person to call to advise of trip)
Environmental Supervisor or Health Director to call: Paul Andrews Title: Supervisor *Env. Health*
(Note if Dr., M.P., etc.)
Telephone Number: (919) 830-6380

Notes: Health Department Official Contacted: X Cheryl Parker
Back Up Letter Required: Yes No

Notified Ms. Parker on 11-5-90 (OBL)

Note: Signed original to Data Manager



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

4WD-WPB

OCT 15 1990

Ms. Pat DeRosa
North Carolina Department of Environment
Health and Natural Resources
Division of Solid Waste Management
P.O. Box 27687
Raleigh, North Carolina 27611

RECEIVED
OCT 17 1990
SUPERFUND SECTION

Dear Ms. DeRosa:

The following is a list of North Carolina site reports received by me in the fourth quarter of FY90. The list also includes my disposition on what, if any, further action is presently needed at the sites.

<u>Site Name</u>	<u>EPA ID #</u>	<u>Disposition</u>
Baker, Maggie Property	NCD986166155	NFRAP
CCFC Pesticide Disposal	NCD986180883	PA
Durham Coal Gasification Plant	NCD986173938	PA
Fawn Plastics Co., Inc. Middlesex	NCD067178707	SSI PHASE II
Fieldcrest Mills, Inc. Smithfield	NCD003528825	SSI PHASE II
Hope Mills Landfill	NCD980502983	SSI PHASE II
Ideal Basic Ind/Plant Marl	NCD980557839	SSI PHASE II
Masonite Corp. Fiberboard Div.	NCD055359079	SSI PHASE II
Spann Property	NCD986180917	PA
Triangle Pacific Corp.	NCD000648451	SSI PHASE II
Union Carbide Corp. Greenville	NCD003184249	SSI PHASE II
Western N.C. Fairgrounds, Old Carochem	TBA	SSI PHASE II
Carolina Galvinizing Corp.	NCD991278714	LSIE
Creek Bridge Landfill	NCD048181218	LSIE
Georgia Pacific Corp. Richmond	NCD980502892	NFRAP
Gen Elec Med Steam Turbine Prod	NCD000616219	NFRAP
GTE Sylvania, Inc. Johnston Co.	NCD072018252	LSIE
Intern'l Paper Richmond Gravure	NCD009305699	SSI PHASE II
Red Cap Dog Food	NCD003186004	NFRAP
Union Carbide Corp.	NCD986167104	Incomplete
Asheboro Plant 1	NCD003216462	NFRAP
Union Carbide Corp. Asheboro Plant 2	NCD000822957	NFRAP

I have also attached copies of the lists of sites in North Carolina that I have reviewed.

If you have any questions about the above, please call me at (404) 347-5065.

Sincerely,

A handwritten signature in cursive script, appearing to read "Robert Morris".

Robert Morris

Attachment

cc: Kelly Cain
Harvey Allen, NCDEHNR



Rec'd
AUG 31 1990

State of North Carolina
Department of Environment, Health, and Natural Resources
Division of Solid Waste Management
P.O. Box 27687 · Raleigh, North Carolina 27611-7687

James G. Martin, Governor
William W. Cobey, Jr., Secretary

William L. Meyer
Director

August 28, 1990

Mr. Robert Morris
EPA NC CERCLA Project Officer
EPA Region IV Waste Division
345 Courtland Street, NE
Atlanta, Georgia 30365

Date: 9/29/90
Site Disposition: SSZ Ph II
EPA Project Manager: RM

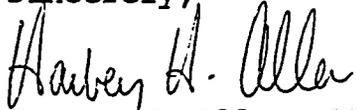
RE: Phase I, Screening Site Investigation
Hazard Ranking System (HRS) Scoring and Documentation
Union Carbide Corporation
Greenville, Pitt County, North Carolina #2626
EPA ID No. NCD 003 184 249

Dear Mr. Morris:

Please find enclosed the Phase I, Screening Site Investigation, Hazard Ranking System (HRS) Scoring and Documentation for the subject site.

If you have any questions, please contact me at 919-733-2801.

Sincerely,


Harvey H. Allen, PE
Environmental Engineer

Enclosures

cc: Grover Nicholson



State of North Carolina
 Department of Environment, Health, and Natural Resources
 Division of Solid Waste Management
 P.O. Box 27687 · Raleigh, North Carolina 27611-7687

Rec'd
 AUG 31 1990

James G. Martin, Governor
 William W. Cobey, Jr., Secretary

William L. Meyer
 Director

August 28, 1990

Mr. Robert Morris
 EPA NC CERCLA Project Officer
 EPA Region IV Waste Division
 345 Courtland Street, NE
 Atlanta, Georgia 30365

Date: 9/29/90
 Site Disposition: SSI Ph II
 EPA Project Manager: AM

RE: Phase I, Screening Site Investigation
 Union Carbide Corporation
 Greenville, Pitt County, North Carolina #2626
 EPA ID No. NCD 003 184 249

Dear Mr. Morris:

Enclosed herewith is the Phase I, Screening Site Investigation Report by Greenhorne & O'Mara, Inc. for Union Carbide Corporation (NCD 003 184 249).

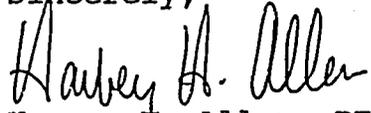
Based on the available information for the subject site, The North Carolina Superfund Section has recommended that a Phase II, Screening Site Investigation not be performed at this time.

The above recommendation is based on:

- There is no evidence of present or past waste disposal on-site.
- All hazardous waste have been disposed of offsite since the facilities beginnings.
- There are no known surface water intakes within 3-miles or 15-miles downstream of the facility.
- One UST has been removed from the site. The tank and the integrity of its' vault were reportedly in good condition.
- There are approximately 56,224 residents served by groundwater within the area of concern. These residents are served by the City of Greenville's Municipal Water System. The systems closest well is approximately 1500 feet topographically upgradient from the site. The next closest well is approximately 1-mile from the site and is on the other side of Greens Mill Run, which is presumed to act as a discharge point.

If you have any questions, please contact me at 919-733-2801.

Sincerely,

A handwritten signature in cursive script that reads "Harvey H. Allen".

Harvey H. Allen, PE
Environmental Engineer

Enclosures

cc: Grover Nicholson



State of North Carolina
Department of Environment, Health, and Natural Resources
Division of Solid Waste Management
P.O. Box 27687 · Raleigh, North Carolina 27611-7687

James G. Martin, Governor
William W. Cobey, Jr., Secretary

William L. Meyer
Director

August 28, 1990

Mr. Joseph Skinner, PE
Greenhorne & O'Mara, Inc.
4101 Lake Boone Trail
The Summit - Suite 111
Raleigh, North Carolina 27607

RE: Union Carbide Corporation (NCD 003 184 249) Phase I, SSI
Report and HRS Package; and Subsequent North Carolina
Superfund Section Recommendations

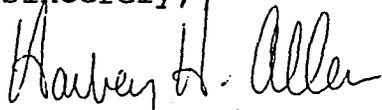
Dear Mr. Skinner:

The above referenced SSI Report and HRS Package are deemed adequate.

The North Carolina Superfund Section has carefully reviewed and evaluated the available data for the subject site, and concurs with Greenhorne & O'Mara's recommendation that a Phase II, Screening Site Investigation is not warranted at this time.

If you have any questions, please contact me at 733-2801.

Sincerely,


Harvey H. Allen, PE
Environmental Engineer

cc: Grover Nicholson

April 18, 1990

TO: File

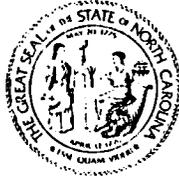
FROM: Pat DeRosa PD

RE: Coastal Chemical, NCD003186178
Greenville City Landfill, NCD980557698
Union Carbide Corp, NCD003184249
Greenville, NC, Pitt County

I spoke by telephone today with Don Belk, Environmental Planner, City of Greenville (919) 830-4486 regarding the Superfund process in general and the status of the subject sites. The current status as related to him is listed below:

1. Coastal Chemical - An SSI was conducted by EPA FIT in November 1989. We have not yet received the report of this investigation.
2. Greenville City Landfill - An SSI was conducted by EPA FIT in October 1988. We have a copy of this report in our files. EPA has recommended NFRAP on this site under CERCLA.
3. Union Carbide - An SSI is scheduled to be conducted this year by private contractors overseen by the State Superfund Section. The county health department will be notified prior to the inspection.

PD/pb/coast.pat



State of North Carolina
Department of Environment, Health, and Natural Resources
Division of Solid Waste Management
P.O. Box 27687 · Raleigh, North Carolina 27611-7687

James G. Martin, Governor
William W. Cobey, Jr., Secretary

William L. Meyer
Director

August 15, 1990

Mr. Robert Morris
EPA NC CERCLA Project Officer
EPA Region IV Waste Division
345 Courtland Street, NE
Atlanta, Georgia 30365

Date: _____
Site Disposition: _____
EPA Project Manager: _____

RE: Phase I, Screening Site Investigation
Hazard Ranking System (HRS) Scoring and Documentation
Union Carbide Corporation
Asheboro, Randolph County, North Carolina
EPA ID No. NCD 000 822 957

Dear Mr. Morris:

Please find enclosed the Phase I, Screening Site Investigation, Hazard Ranking System (HRS) Scoring and Documentation for the subject site.

If you have any questions, please contact me at 919-733-2801.

Sincerely,

A handwritten signature in cursive script that reads "Harvey H. Allen".

Harvey H. Allen, PE
Environmental Engineer

Enclosures

cc: Grover Nicholson



State of North Carolina
Department of Environment, Health, and Natural Resources
Division of Solid Waste Management
P.O. Box 27687 · Raleigh, North Carolina 27611-7687

James G. Martin, Governor
William W. Cobey, Jr., Secretary

William L. Meyer
Director

August 15, 1990

Mr. Robert Morris
EPA NC CERCLA Project Officer
EPA Region IV Waste Division
345 Courtland Street, NE
Atlanta, Georgia 30365

Date: _____
Site Disposition: _____
EPA Project Manager: _____

RE: Phase I, Screening Site Investigation
Union Carbide Corporation
Asheboro, Randolph County, North Carolina
EPA ID No. NCD 000 822 957

Dear Mr. Morris:

Enclosed herewith is the Phase I, Screening Site Investigation Report by Greenhorne & O'Mara, Inc. for Union Carbide Corporation (NCD 000 822 957).

Based on the available information for the subject site, The North Carolina Superfund Section has recommended that a Phase II, Screening Site Investigation not be performed at this time.

The above recommendation is based on:

- There are no known disposals of hazardous wastes on-site.
- Environmental pathways are practically non-existent due to being enclosed and/or diked.
- There are an estimated 2791 people drinking groundwater from the aquifer of concern with the nearest drinking water well being an estimated 3000 feet from the site.
- There are no surface water targets within 15 miles downstream of the site.

If you have any questions, please contact me at 919-733-2801.

Sincerely,

Harvey H. Allen

Harvey H. Allen, PE
Environmental Engineer

Enclosures

cc: Grover Nicholson



State of North Carolina
Department of Environment, Health, and Natural Resources
Division of Solid Waste Management
P.O. Box 27687 · Raleigh, North Carolina 27611-7687

James G. Martin, Governor
William W. Cobey, Jr., Secretary

William L. Meyer
Director

August 28, 1990

Mr. Robert Morris
EPA NC CERCLA Project Officer
EPA Region IV Waste Division
345 Courtland Street, NE
Atlanta, Georgia 30365

Date: _____
Site Disposition: _____
EPA Project Manager: _____

RE: Phase I, Screening Site Investigation
Hazard Ranking System (HRS) Scoring and Documentation
Union Carbide Corporation
Greenville, Pitt County, North Carolina
EPA ID No. NCD 003 184 249

Dear Mr. Morris:

Please find enclosed the Phase I, Screening Site Investigation, Hazard Ranking System (HRS) Scoring and Documentation for the subject site.

If you have any questions, please contact me at 919-733-2801.

Sincerely,

A handwritten signature in cursive script that reads "Harvey H. Allen".

Harvey H. Allen, PE
Environmental Engineer

Enclosures

cc: Grover Nicholson



State of North Carolina
Department of Environment, Health, and Natural Resources
Division of Solid Waste Management
P.O. Box 27687 · Raleigh, North Carolina 27611-7687

James G. Martin, Governor
William W. Cobey, Jr., Secretary

William L. Meyer
Director

August 6, 1990

Mr. Robert Morris
EPA NC CERCLA Project Officer
EPA Region IV Waste Division
345 Courtland Street, NE
Atlanta, Georgia 30365

Date: _____
Site Disposition: _____
EPA Project Manager: _____

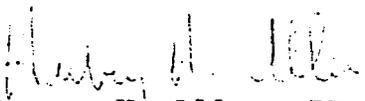
RE: Phase I, Screening Site Investigation
Hazard Ranking System (HRS) Scoring and Documentation
Union Carbide Corporation
Asheboro, Randolph County, North Carolina
EPA ID No. NCD 003 216 462

Dear Mr. Morris:

Please find enclosed the Phase I, Screening Site Investigation, Hazard Ranking System (HRS) Scoring and Documentation for the subject site.

If you have any questions, please contact me at 919-733-2801.

Sincerely,


Harvey H. Allen, PE
Environmental Engineer

Enclosures

cc: Grover Nicholson



State of North Carolina
Department of Environment, Health, and Natural Resources
Division of Solid Waste Management
P.O. Box 27687 · Raleigh, North Carolina 27611-7687

James G. Martin, Governor
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William L. Meyer
Director

August 6, 1990

Mr. Robert Morris
EPA NC CERCLA Project Officer
EPA Region IV Waste Division
345 Courtland Street, NE
Atlanta, Georgia 30365

Date: _____
Site Disposition: _____
EPA Project Manager: _____

RE: Phase I, Screening Site Investigation
Union Carbide Corporation
Asheboro, Randolph County, North Carolina
EPA ID No. NCD 003 216 462

Dear Mr. Morris:

Enclosed herewith is the Phase I, Screening Site Investigation Report by Greenhorne & O'Mara, Inc. for Union Carbide Corporation (NCD 003 216 462).

Based on the available information for the subject site, The North Carolina Superfund Section has recommended that a Phase II, Screening Site Investigation not be performed at this time.

The above recommendation is based on:

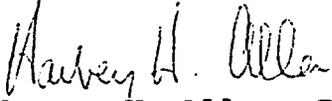
- A leaking UST has been removed from the site. The tank contained gasoline, diesel fuel, a degreaser solvent or some combination of those materials.
- Contamination was confirmed in both the soil and groundwater. Contaminates found included benzene, chloroethane, 1-1 dichloroethane, 1-1 dichloroethene, 1-1-1 trichloroethane, trichloroethene and vinyl chloride.
- The North Carolina Division of Environmental Management, Ground Water Section (NCDEM-GW), is actively monitoring the site. Levels have been low and semi-annual monitoring is being performed to establish a trend and see if remediation is warranted.
- The contaminated soils have been removed as much as practical without jeopardizing the integrity of the building foundation.
- There are an estimated 7,623 people drinking groundwater from the

aquifer of concern with the nearest drinking well an estimated 3,500 feet from the site.

- There are no surface water targets within 15 miles downstream of the site.

If you have any questions, please contact me at 919-733-2801.

Sincerely,



Harvey H. Allen, PE
Environmental Engineer

Enclosures

cc: Grover Nicholson



State of North Carolina
Department of Environment, Health, and Natural Resources
Division of Solid Waste Management
P.O. Box 27687 · Raleigh, North Carolina 27611-7687

James G. Martin, Governor
William W. Cobey, Jr., Secretary

William L. Meyer
Director

August 2, 1990

Mr. Joseph Skinner, PE
Greenhorne & O'Mara, Inc.
4101 Lake Boone Trail
The Summit - Suite 111
Raleigh, North Carolina 27607

RE: Union Carbide Corporation (NCD 000 822 957) Revised Phase
I, SSI Report and HRS Package

Dear Mr. Skinner:

The North Carolina Superfund Section is in receipt of your Revised Report and HRS Package for the above referenced site. Your submission to our comments is deemed adequate.

As stated in my July 16, 1990 memo to you referencing the subject site, the North Carolina Superfund Section has carefully reviewed and evaluated the available data for the subject site, and concurs with Greenhorne & O'Mara's recommendation that a Phase II, Screening Site Investigation is not warranted at this time.

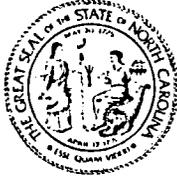
If you have any questions, please contact me at 733-2801.

Sincerely,

A handwritten signature in cursive script that reads "Harvey H. Allen".

Harvey H. Allen, PE
Environmental Engineer

cc: Grover Nicholson



State of North Carolina
Department of Environment, Health, and Natural Resources
Division of Solid Waste Management
P.O. Box 27687 · Raleigh, North Carolina 27611-7687

James G. Martin, Governor
William W. Cobey, Jr., Secretary

William L. Meyer
Director

July 30, 1990

Mr. Joseph Skinner, PE
Greenhorne & O'Mara, Inc.
4101 Lake Boone Trail
The Summit - Suite 111
Raleigh, North Carolina 27607

RE: Union Carbide Corporation (NCD 003 216 462) Revised Phase
I, SSI Report and HRS Package

Dear Mr. Skinner:

The North Carolina Superfund Section is in receipt of your Revised Report and HRS Package for the above referenced site. Your submission to our comments is deemed adequate.

As stated in my July 12, 1990 memo to you referencing the subject site, the North Carolina Superfund Section has carefully reviewed and evaluated the available data for the subject site, and concurs with Greenhorne & O'Mara's recommendation that a Phase II, Screening Site Investigation is not warranted at this time.

If you have any questions, please contact me at 733-2801.

Sincerely,

A handwritten signature in cursive script that reads "Harvey H. Allen".

Harvey H. Allen, PE
Environmental Engineer

cc: Grover Nicholson



State of North Carolina
Department of Environment, Health, and Natural Resources
Division of Solid Waste Management
P.O. Box 27687 · Raleigh, North Carolina 27611-7687

James G. Martin, Governor
William W. Cobey, Jr., Secretary

William L. Meyer
Director

July 16, 1990

Mr. Joseph Skinner, PE
Greenhorne & O'Mara, Inc.
4101 Lake Boone Trail
The Summit - Suite 111
Raleigh, North Carolina 27607

RE: Union Carbide Corporation (NCD 000 822 957) Phase I, SSI
Report and HRS Package; and Subsequent North Carolina
Superfund Section Recommendations

Dear Mr. Skinner:

Transmitted herewith are the comments concerning the above
referenced subject.

The North Carolina Superfund Section has carefully reviewed and
evaluated the available data for the subject site, and concurs
with Greenhorne & O'Mara's recommendation that a Phase II,
Screening Site Investigation is not warranted at this time.

If you have any questions, please contact me at 733-2801.

Sincerely,

Harvey H. Allen

Harvey H. Allen, PE
Environmental Engineer

Enclosures

cc: Grover Nicholson

COMMENTS FOR UNION CARBIDE CORPORATION (NCD 000 822 957)

1. General Comment:

Reference is made to a Site Layout Figure (Fig.3, Appendix A) in the text. There is no Figure 3 in Appendix A. Provide this information.

2. General Comment:

The HRS Package gives a value for Physical State and Toxicity/Persistence for both the Ground Water and Surface Water Routes, yet there is a containment value of zero (0). Physical State and Toxicity/Persistence are evaluated only for those wastes with a non-zero containment. Correct this discrepancy. All relevant sections must be revised as necessary.

3. General Comment:

The HRS Package gives a Surface Water Use value of zero (0), yet Hasketts Creek and Deep River are both Class C waters. Clarify this discrepancy. All relevant sections must be revised as necessary.

4. General Comment:

A Site Inspection Form must be provided. This must be provided with all Phase I Reports as well as all Phase II Reports. The reason for this is that a site may not go to Phase II.



State of North Carolina
Department of Environment, Health, and Natural Resources
Division of Solid Waste Management
P.O. Box 27687 · Raleigh, North Carolina 27611-7687

James G. Martin, Governor
William W. Cobey, Jr., Secretary

William L. Meyer
Director

July 12, 1990

Mr. Joseph Skinner, PE
Greenhorne & O'Mara, Inc.
4101 Lake Boone Trail
The Summit - Suite 111
Raleigh, North Carolina 27607

RE: Union Carbide Corporation (NCD 003 216 462) Phase I, SSI
Report and HRS Package; and Subsequent North Superfund
Section Recommendations

Dear Mr. Skinner:

Transmitted herewith are the comments concerning the above
referenced subject.

The North Carolina Superfund Section has carefully reviewed and
evaluated the available data for the subject site, and concurs
with Greenhorne & O'Mara's recommendation that a Phase II,
Screening Site Investigation is not warranted at this time.

If you have any questions, please contact me at 733-2801.

Sincerely,

A handwritten signature in cursive script that reads "Harvey H. Allen".

Harvey H. Allen, PE
Environmental Engineer

Enclosures

cc: Grover Nicholson

COMMENTS FOR UNION CARBIDE CORPORATION (NCD 003 216 462)

1. Page 4: It is stated that prior to 1987, contained runoff was analyzed and discharged to the storm drains (Ref. 15 & 16).

Comment: References 15 and 16 have no mention of analyzing runoff prior to discharging to the storm sewer. Correct this discrepancy. All relevant sections must be revised as necessary.

2. General Comment:

The HRS Ground Water Route Work Sheet must be amended to show an observed release score of 45, and then proceed to line 4. Delete documentation for line items 2 and 3. Correct this information. All relevant sections must be revised as necessary.

3. General Comment:

The HRS reference for the groundwater observed release must be based on groundwater analytical data. Correct this information. All relevant sections must be revised as necessary.

4. General Comment:

The HRS Surface Water Route Work Sheet must be amended for Surface Water Use. Usage is WS-III which includes Class C uses as well. Correct this information. All relevant sections must be revised as necessary.

5. General Comment:

A Site Inspection Form must be provided. This must be provided with all Phase I Reports as well as all Phase II Reports. The reason for this is that a site may not go to Phase II.



State of North Carolina
Department of Environment, Health, and Natural Resources
Division of Solid Waste Management
P.O. Box 27687 · Raleigh, North Carolina 27611-7687

James G. Martin, Governor
William W. Cobey, Jr., Secretary

William L. Meyer
Director

19 January 1990

Mr. Clinton Harley, Environmental Coordinator
Everready Battery Company
100 Evans Street
Greenville, NC 27834

RE: Union Carbide Corporation
KNA - Everready Battery Company
NCD003184249

Dear Mr. Harley:

The purpose of this letter is to notify you that the above-referenced site has been included on a list of sites for which Superfund site screening investigations will be conducted within the calendar year.

The North Carolina Superfund Section, pursuant to the authority and requirements of G.S. 130A-310.22 and the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), 42 U.S.C. 9601 et seq., as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), Public Law 99-499, is responsible for conducting site screening investigations at sites reported to the United States Environmental Protection Agency (EPA) as posing a potential hazard to public health and the environment through the release, or threat of release of hazardous substances to the environment. The purpose of the investigation is to determine whether the site contains hazardous substances which have or might contaminate the soil, surface water, groundwater or air and thus pose a hazard to public safety or the environment. These investigations are not emergency situations, but are normal steps in the evaluation of all such sites reported to EPA.

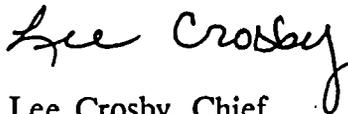
Mr. Clinton Harley
19 January 1990
Page 2

The above-referenced site is one of 75 which the EPA has requested that the Superfund Section investigate within the next year. To assist us in conducting these investigations, the Superfund Section intends to hire one or more private contractors to perform a portion of these investigations under State supervision. Before any investigative activities are actually conducted at the site, you will be notified of the date of the inspection and specific activities to be conducted. These activities may include:

- 1) inspecting, sketching and photographing the premises;
- 2) collecting of surface and subsurface soil samples;
- 3) collecting sediment samples;
- 4) air monitoring;
- 5) collecting groundwater and surface water samples;
- 6) hand augering boreholes and emplacing temporary monitoring wells;
- 7) conducting geophysical surveys; and
- 8) transporting equipment onto and about the site as necessary to accomplish the above activities, including trucks and sampling equipment.

If you have any questions regarding this notice, please contact Grover Nicholson or me at (919) 733-2801.

Sincerely,



Lee Crosby, Chief
Superfund Section

LC/acr



State of North Carolina
Department of Environment, Health, and Natural Resources
Division of Solid Waste Management
P.O. Box 27687 · Raleigh, North Carolina 27611-7687

James G. Martin, Governor
William W. Cobey, Jr., Secretary

William L. Meyer
Director

6 October 1989

Mr. Paul Andrews
Environmental Health Director
Pitt County Health Department
1825 West Sixth Street
Greenville, NC 27834 Courier 01-48-40

RE: Off Site Reconnaissances
Proctor and Gamble Paper Products Company NCD 072 020 399
Reed National Corporation NCD 075 575 191
Union Carbide Corporation NCD 003 184 249

Dear Mr. Andrews:

Grover Nicholson of the NC Superfund Section spoke with you today to notify you that the EPA Field Investigation Team (FIT) will conduct off-site reconnaissances of the subject sites located in Pitt County. The reconnaissances will be conducted on 1-3 November 1989 by Kenneth Sanders and Joan Dupont of NUS Corporation.

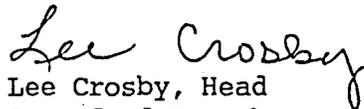
The purpose of these reconnaissances is to determine if the sites pose hazards to public health or the environment because of potential releases of contaminants to soil, surface water, groundwater, or air. The investigation team will locate all nearby water supplies (surface and groundwater, community and private) and any close sensitive environments, schools, and day care centers.

These reconnaissances are not emergency situations but are normal steps in the evaluation of all uncontrolled and unregulated potential hazardous waste sites in North Carolina. You may want to have your representative meet with the investigation team. If so, please contact Kenneth Sanders at 1-800-888-7710 and he will coordinate a meeting. I am enclosing background data on the sites for your information.

Mr. Andrews
10-6-89
Page 2

If the reconnaissances indicate the need for future study of the sites, we will contact your office to advise. If you have any questions, please don't hesitate to call Grover Nicholson or me at (919)733-2801.

Sincerely,



Lee Crosby, Head
Superfund Branch
Solid Waste Management Section

LC/db/5.doc

Enclosures

cc: Gordon Layton
Doug Holyfield
Steve Reid
Lois Walker
Ann Rudd
Grover Nicholson

FEDERAL
TRIP
NOTIFICATION
& AUTHORIZATION

TODAY'S DATE: 5 Oct 89
PREPARED BY: J. Nicholson (Staff member filling out form)

SITE TRIP

DATE OF TRIP: 1-3 Nov 89
If trip date changed or cancelled note below:.....
CHANGE OF DATE TO: _____ OR CANCELLED: _____

SITE NAME: Union Carbide Co.
NCD#: 003 184 249
REASON FOR TRIP: off site Reconnaissance
CITY: Greenville COUNTY: Pitt

If Overnight trip, Hotel staying at: _____
Telephone Number: _____

(Please list appropriate county health person to call to advise of trip)
ENVIRONMENTAL SUPERVISOR OR

HEALTH DIRECTOR TO CALL: Mr. Paul Andrews TITLE: Enviro. Health Dir.
(Note if Dr., M.P., etc.)

Telephone Number: (919) 830-6380

Project Team Leader: EPA FIT. NUS
Assistants: Jean Dupont

AUTHORIZED BY:

J. Nicholson
CERCLA Unit Supervisor

ATTACHMENT

TO NOTIFICATION FORM: 4 copies each of PRELIMINARY ASSESSMENT FORM (1st page only)
NOTIFICATION FORM, & EPA TRANSMITTAL LETTER

- Staff Notification Procedure: (Use black ink or Typewriter Only)
1. Above form goes to Data Management Coordinator (DMC) 10 days prior to trip
 2. If date of trip changes - note changed date, or mark "X" if cancelled
 3. DAY AFTER TRIP, submit to Lee Crosby a short paragraph on site trip.

NOTES:

HEALTH DEPT. OFFICIAL CONTACTED: J. Nicholson contacted P. Andrews on 6 Oct 89.
BACK UP LETTER REQUIRED: Yes No



1927 LAKESIDE PARKWAY
 SUITE 614
 TUCKER, GEORGIA 30084
 404-838-7710

RECEIVED

C-586-9-9-175
 SEP 27 1989

SUPERFUND BRANCH

September 25, 1989

Mr. Grover Nicholson
 Superfund Branch
 North Carolina Department of Human Resources
 P. O. Box 2091
 Raleigh, North Carolina 27602-2091

Subject: Scheduled FIT Reconnaissances in
 North Carolina

Dear Mr. Nicholson:

The EPA Field Investigation Team (FIT) will be visiting the state of North Carolina during October and November, 1989. FIT will be conducting offsite reconnaissances and gathering information to investigate the following sites:

Date	EPA ID No.	Site Name	County	FIT Project Mgr.
Oct. 16-19	NCD991279118	Meredith/Burda, Inc.	Catawba	Eric Corbin
	NCD044440642	Lane Company, Inc.	Catawba	Clifford Leonard
	NCD066304627	Premium Coatings, Inc.	Catawba	Clifford Leonard
	NCD003228087	S & W Chemicals, Inc.	Catawba	Prince Goins
	NCD105797922	Technibilt (Div. of Whittar)	Catawba	Eric Corbin
	NCD000648436	Trend Line Furniture Corp.	Catawba	Prince Goins
	NCD081332991	Trend Line Furniture Corp.	Catawba	Prince Goins
Nov. 1-3	NCD072012354	Singer Co. Furniture Division Washington	Beaufort	Bob Donaghue
	NCD003197704	Salt Wood Products	Craven	Bob Donaghue
	NCD072020399	Proctor & Gamble Paper Products Company	Pitt	Kenneth Sanders
	NCD075575191	Reed National Corp.	Pitt	Kenneth Sanders
	NCD003184249	Union Carbide Corp.	Pitt	Joan Dupont

These reconnaissance trips are in addition to the ones listed in my letter of September 18, 1989. Please notify the appropriate local agencies. I appreciate your help in this matter.

Very truly yours,

Joan J. Dupont
 Joan J. Dupont
 North Carolina Coordinator

Approved:

Greg Schank

JJD/kw

cc: Kelly Cain, USEPA
 Robert Morris, USEPA



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

RECEIVED

SEP 5 1989

SUPERFUND BRANCH

4WD-SISB

SEP 0 1 1989

Mr. Greg Shank
NUS Corporation
1927 Lakeside Parkway, Suite 614
Tucker, GA 30084

Dear Mr. Shank:

Please open TDD's on the following North Carolina sites for completion of the Two-Phase Site Screening Investigations. The sites are arranged by geographical area.

<u>NO.</u>	<u>REF. NO.</u>	<u>I.D. NO.</u>	<u>NAME</u>	<u>COUNTY</u>
1	2538	NCD000623140	Duracell Intl Lithium Systems	Burke
2	2616	NCD003163888	Henredon Furniture, Inc.	Burke
3	2786	NCD049997786	Iumont Corporation	Burke ?
4	2620	NCD003167988	Marantz Piano Co., Inc.	Burke
5	2525	NCD000609784	PT Components, Inc.	Burke
6	2810	NCD055161186	Romarco LTD	Burke
7	4284	NCD981472624	US 70 Drum Dump	Burke
8	2518	NCD000604322	Singer Co. Furniture Div. Plants 3-4	Caldwell RCRA TSD
9	3171	NCD991279118	Meredith/Burda, Inc.	Catawba
10	2754	NCD044440642	Lane Company, Inc.	Catawba
11	2848	NCD066304627	Premium Coatings, Inc.	Catawba
12	2671	NCD003228087	S&W Chemicals, Inc.	Catawba
13	2966	NCD105797922	Technibilt (Div. of Whittar)	Catawba
14	2544	NCD000648436	Trend Line Furniture Corp.	Catawba
15	2903	NCD081332991	Trend Line Furniture Corp	Catawba

16	2875	NCD072012354	Singer Co. Furniture Division Washington	Beaufort
17	2740	NCD042091215	RJR Tech Co.	Bertie
18	2644	NCD003197704	Salt Wood Products	Craven
19	2540	NCD000623223	Martin Manufacturing Properties	Martin
20	2877	NCD072020399	Proctor & Gamble Paper Products Co.	Pitt
21	2887	NCD075575191	Reed National Corp.	Pitt
22	2626	NCD003184249	Union Carbide Corp.	Pitt
23	2563	NCD000813592	GA-Pacific Corp. HDWD Saw	Washington
24	2554	NCD000773507	GA-Pacific Corp. HDWD Saw	Halifax

*Check for
RJR Staples*

If you have any questions, please call Kelly Cain at (404) 347-5065.

Sincerely,

Susan M. Deihl, Chief
North Unit
Site Assessment Section

cc: Grover Nicholson, NCDHR



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

4WD-SISB

Mr. Greg Shank
NUS Corporation
1927 Lakeside Parkway, Suite 614
Tucker, GA 30084

RECEIVED

AUG 14 1989

SUPERFUND BRANCH

Dear Mr. Shank:

Please open TDD's on the following North Carolina sites for completion of the Two-Phase Site Screening Investigations. The sites are arranged by geographical area.

<u>NO.</u>	<u>REF. NO.</u>	<u>I.D. NO.</u>	<u>NAME</u>	<u>COUNTY</u>
1	2538	NCD000623140	Duracell Intl Lithium Systems	Burke
2	2616	NCD003163888	Henredon Furniture Inc.	Burke
3	2786	NCD049997786	Dumont Corporation	Burke
4	2620	NCD003167988	Marantz Piano Co., Inc.	Burke
5	2525	NCD000609784	PT Components, Inc.	Burke
6	2810	NCD055161186	Romarco LTD	Burke
7	4284	NCD981472624	US 70 Drum Dump	Burke
8	2518	NCD000604322	Singer Co. Furniture Div. Plants 3-4	Caldwell JFF
9	2686	NCD003237948	General Electric Co.	Catawba
10	2754	NCD044440642	Lane Company, Inc.	Catawba JFF
11	2848	NCD066304627	Premium Coatings, Inc.	Catawba
12	2671	NCD003228087	SRW Chemicals, Inc.	Catawba
13	2966	NCD105797922	Technibilt (Div. of Whittar)	Catawba
14	2544	NCD000648436	Trend Line Furniture Corp.	Catawba
15	2903	NCD081332991	Trend Line Furniture Corp	Catawba

16	2875	NCD072012354	Singer Co. Furniture Division. Wash.	Beaufort	JFR
17	2740	NCD042091215	RTR Tech Co.	Bertie	
18	2644	NCD003197704	Salt Wood Products	Craven	
19	2882	NCD075550517	Swiss Bear, Inc.	Craven	?
20	2540	NCD000623223	Martin Manufacturing Properties	Martin	
21	2877	NCD072020399	Proctor & Gamble Paper Products Co.	Pitt	
22	2887	NCD075575191	Reed National Corp.	Pitt	
23	2626	NCD003184249	Union Carbide Corp.	Pitt	JFR
24	2563	NCD000813592	GA-Pacific Corp. HDWD Saw	Washington	

If you have any questions, please call Kelly Cain at (404) 347-5065.

Sincerely,

Susan M. Deihl, Chief
North Unit
Site Assessment Section

cc: Grover Nicholson, NCDHR



Ronald H. Levine, M.D., M.P.H.
STATE HEALTH DIRECTOR

DIVISION OF HEALTH SERVICES
P.O. Box 2091
Raleigh, N.C. 27602-2091

Ms. Denise Bland
NC 3012 Project Officer
Air & Hazardous Materials Division
U.S. Environmental Protection Agency
345 Courtland Street, N.E.
Atlanta, Ga 30365

Re: Preliminary Assessment Reports
Transmittal Letter

Aberdeen Pesticides Twin Sites NC D980843346
Aberdeen, Moore Co., N.C.

Aberdeen Pesticides Fairway Six Site NC D980843403
Aberdeen, Moore Co., N.C.

Daugherty Chemical Co. NC D080885551
Durham, Durham Co., NC

David Starling Property NC D003185311
Farmville, Pitt Co., NC

Union Carbide Agric. Prod. Co. NC D980600274
Research Triangle Park, Durham Co., NC

Union Carbide Corp. NC D003184249
Greenville, Pitt Co., NC

Waste Industries NC D065302267
Raleigh, Wake Co., NC

Dear Denise:

Submitted herewith are final Preliminary Assessment reports for the subject sites.

Based on the N.C. RCRA 3012 Program Review of the available data, we have concluded the following:

Aberdeen Pesticides Twin Sites is situated upgradient from a public lake and recreation area and a Jaycees Lodge. Samples collected on-site indicated DDT levels as high as 11,700 ppm; other toxic compounds were also identified, but in lesser quantities. The area surrounding and including the site is expected to be developed into a recreation area in the future. Priority assigned is Medium.

Ms. Denise Bland
December 28, 1984
Page 2

Aberdeen Pesticides Fairway Six Site soil samples indicated DDT levels as high as 2200 ppm; other toxic compounds were also identified, but in lesser quantities. Because of rural location, the priority assigned is Low.

Daugherty Chemical Company has effectively eliminated 75 or so drums of illegally stored hazardous waste. Contaminated dirt remains on site. Priority assigned is Low.

David Starling Property is presently being monitored and evaluated by Union Carbide Corporation, which is responsible for on-site disposal of 10,000 gallons barium carbonate, barium chromate, and chromic acid in 1971. Presently, UCC indicates that the waste represents no environmental hazard to surface or ground-water resources outside the immediate disposal area. It is believed that with time the contaminants will migrate off-site to areas where there are drinking water wells. Priority assigned is Medium.

Union Carbide Agriculture Products Company commenced operation in 1980. They function primarily as a pesticide research and development facility, and not as a manufacturer. Status assigned is No Further Action.

Union Carbide Corporation, Greenville, generates waste paper impregnated with mercury at a rate of less than 1000 kg/month. UCC officials indicate no history of on-site releases of hazardous substances. Status assigned is No Further Action.

Waste Industries is a transporter with no history of on-site releases of hazardous substances. Status assigned is No Further Action.

If further information is required, contact me at 919/733-2178.

Sincerely,

D. Mark Durway

D. Mark Durway, Geologist
Solid & Hazardous Waste Management Branch
Environmental Health Section

DMD/lw/1711A

GREENVILLE SW QUADRANGLE
NORTH CAROLINA - PITT CO.
7.5 MINUTE SECTION (TOPOGRAPHIC)

5555 III NE
 (GREENVILLE NE)

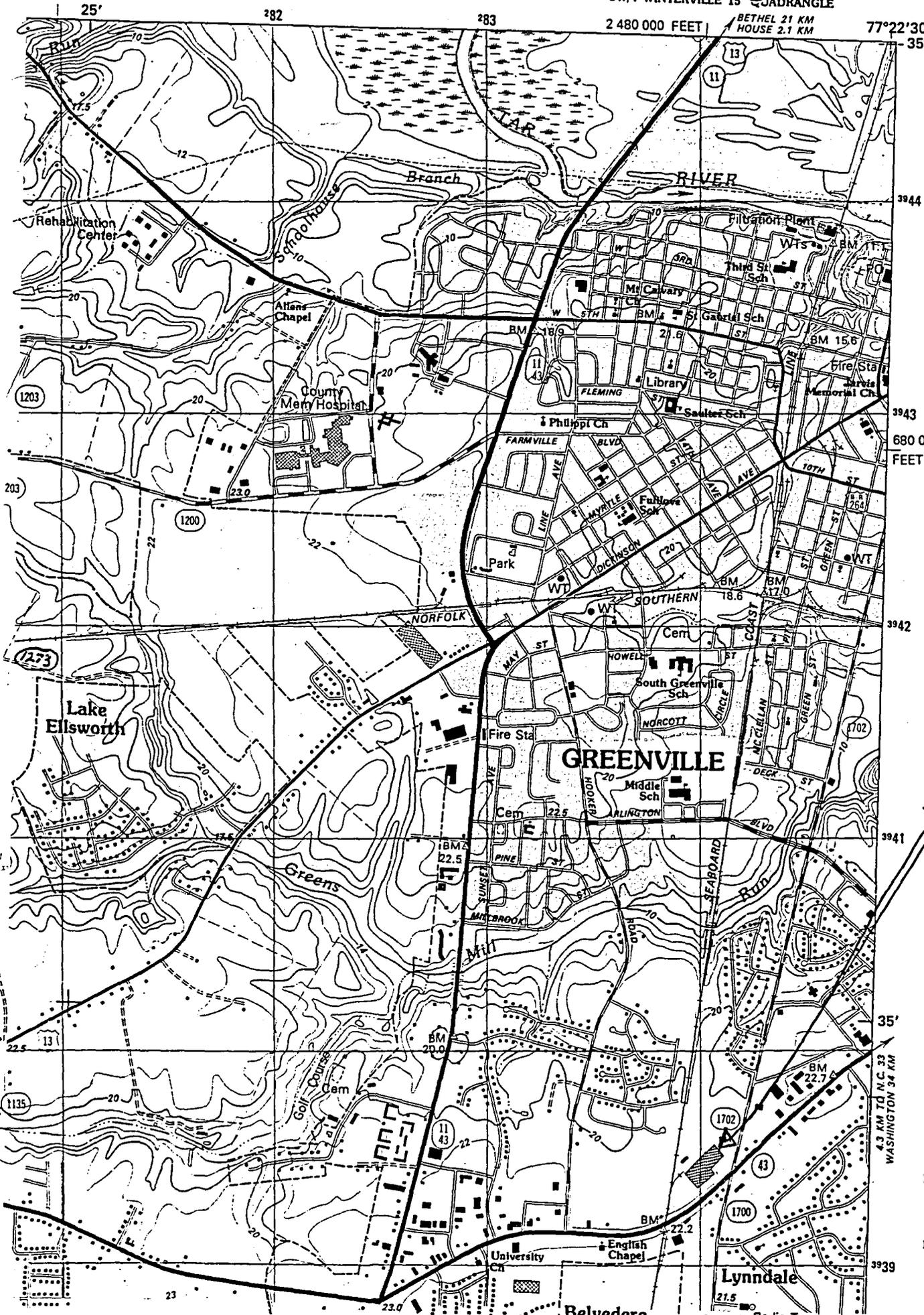
SW/4 WINTERVILLE 15' QUADRANGLE

2 480 000 FEET

BETHEL 21 KM
 HOUSE 2.1 KM

77°22'30"

35°37'30"



680 000
 FEET

CONVERSION SCALES



ucc

4.3 KM TO N.C. 33
 WASHINGTON 34 KM

Belvedere

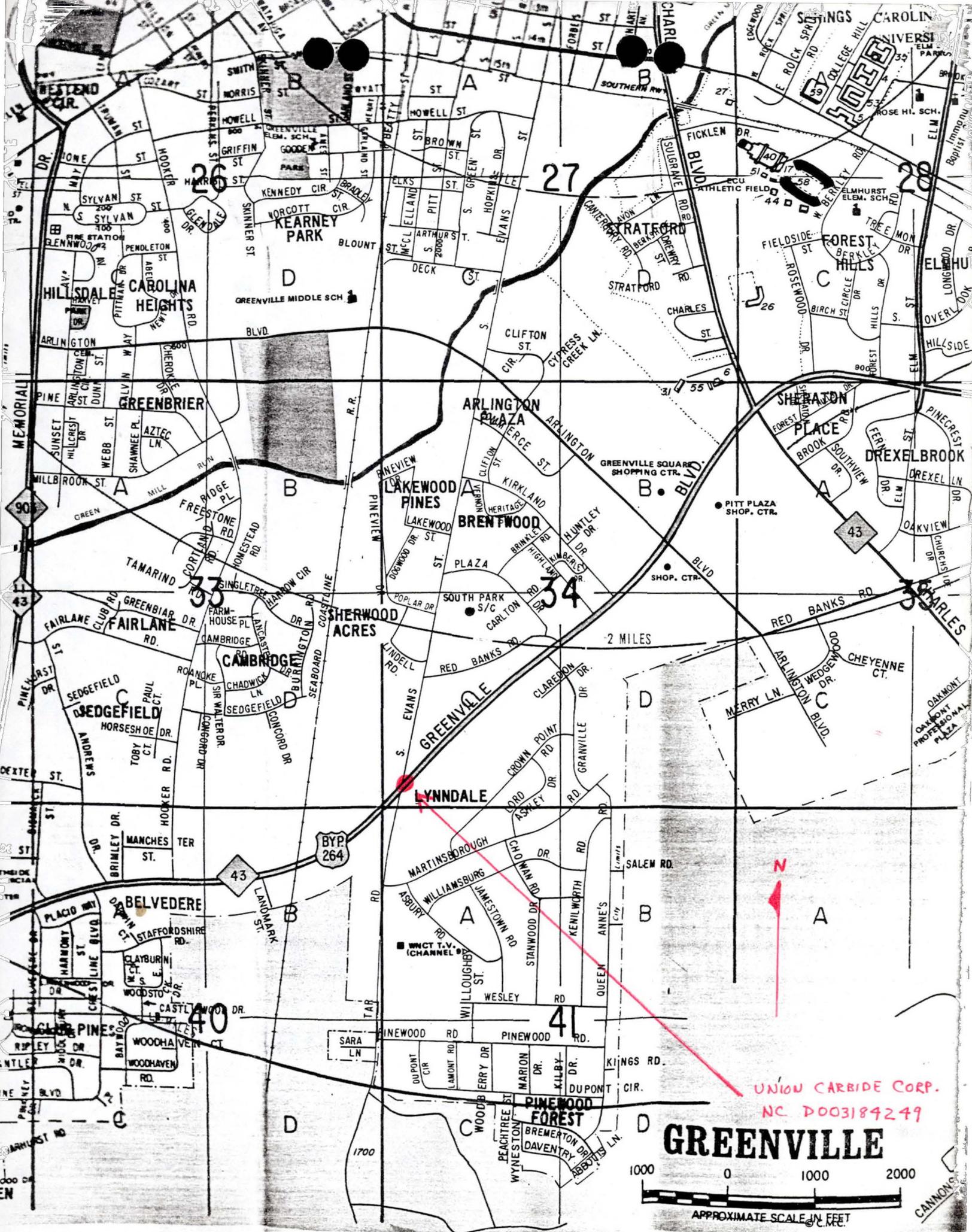
Radio Tc

Lynndale

University Cn

English Chapel

Belvedere



UNION CARBIDE CORP.
NC D003184249

GREENVILLE

1000 0 1000 2000

APPROXIMATE SCALE IN FEET

Teleph. cony

J.M. (MICKY) MAXO

at manager

FILE

UCC - Guillo

→ NC D003184249

27 Nov. 84

This info was taken from UCC's Part A (10-18-80), which they no longer have; waste has never been disposed of on site at this facility.

① either TSD



- 1) treatment tank
- 2) storage tank
- 3) incinerator



* Incinerate and REFL on site 1400 PPS/yr. :

ignitable
corrosive
chrome (blue) shavings

* 20, K Tons MERCURY
" " Corrosive charac.

} highly dilute stream
goes to WWTP

↓
now dilute in ppm.

SP?
NASIB HABIBI and RUSSELL GIBBS work together on environmental concerns. GIBBS is an environmental officer.

- ① R. Guy recently inspected plant; they are in compliance
- ② ~~detected as small generator~~
- ③ 82-83 got rid of solvents

~~Hg present in process~~
presently, their only waste is paper impregnated w/ Hg. produced at rate of < 1000 kg/mo

in 1980, UCC had considered making plant an alkaline plant; ~~reasonably~~
∴ they applied for PART A.

Annotations:

- 1) they have no part A, ~~as~~ they are SMALL GENERATOR only.
- 2) originally they had part A. (applied for 10-18-80)

FORM 1		ENVIRONMENTAL PROTECTION AGENCY GENERAL INFORMATION <i>Consolidated Permits Program</i> <i>(Read the "General Instructions" before starting.)</i>
LABEL ITEMS		
I. EPA I.D. NUMBER	U 0 2 4 3 U	
III. FACILITY NAME	RECEIVED PLEASE PLACE LABEL IN THIS SPACE GREENVILLE, N.C.	
V. FACILITY MAILING ADDRESS		
VI. FACILITY LOCATION		
VII. FACILITY LOCATION		

I. EPA I.D. NUMBER									
E	F	G	H	I	J	K	L	M	N
1	2	3	4	5	6	7	8	9	0
1	2	3	4	5	6	7	8	9	0
GENERAL INSTRUCTIONS									
If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (the area to the left of the label space lists the information that should appear), please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete items I, III, V, and VI (except V-F which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.									

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms.

SPECIFIC QUESTIONS	MARK "X"			SPECIFIC QUESTIONS	MARK "X"		
	YES	NO	FORM ATTACHED		YES	NO	FORM ATTACH
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> *	D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S.? (FORM 2D)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> *	F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing within one quarter mile of the well bore underground sources of drinking water? (FORM 4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

III. NAME OF FACILITY:

1	UNION CARBIDE CORPORATION
---	---------------------------

IV. FACILITY CONTACT

A. NAME & TITLE (last, first, & title)	B. PHONE (area code & no.)
2 MCLAUGHLIN JOHN QC ENGINEER	919 756 2171

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX			
3	P O BOX 1547		
B. CITY OR TOWN		C. STATE	D. ZIP CODE
4	GREENVILLE	NC	27834

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER			
5	EVANS ST EXT & 264 BY PASS		
B. COUNTY NAME			
6	PITT		
C. CITY OR TOWN		D. STATE	E. ZIP CODE
6	GREENVILLE	NC	27834

VCC - Greenville no longer has this permit, as they are a small generator.

VII: SIC CODES (4-digit in order of priority)

A. FIRST		B. SECOND	
3	6	9	2
(specify) PRIMARY BATTERIES, DRY			
C. THIRD		D. FOURTH	
(specify)		(specify)	

VIII: OPERATOR INFORMATION

A. NAME			B. Is the name listed in Item VIII-A also the owner?	
UNION CARBIDE CORPORATION			<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other" specify)				
F - FEDERAL	M - PUBLIC (other than federal gov't)	P (specify)	D. PHONE (area code & no.)	
S - STATE	O - OTHER (specify)		9 1 9 7 5 6 2 1 7 1	
P - PRIVATE				

E. STREET ADDRESS	
P O BOX 1547	

F. CITY OR TOWN		G. STATE	H. ZIP CODE	I. INDIAN LAND
GREENVILLE		NC	27834	Is the facility located on Indian land? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water)		B. PSL (Air Emissions from Proposed Sources)	
9	N	9	P
C. UIC (Underground Injection of Fluids)		D. OTHER (specify)	
5	U	(specify)	
E. RCRA (Hazardous Wastes)		F. OTHER (specify)	
9	R	(specify)	

XI: MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

XII: NATURE OF BUSINESS (provide a brief description)

MANUFACTURE OF PRIMARY DRY CELL BATTERIES.

XIII: CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)	B. SIGNATURE	C. DATE SIGNED
Mr. P. J. Kennedy Vice President - Production		

COMMENTS FOR OFFICIAL USE ONLY

COMMENTS FOR OFFICIAL USE ONLY	
--------------------------------	--

FORM 3 ENVIRONMENTAL PROTECTION AGENCY
HAZARDOUS WASTE PERMIT APPLICATION
Consolidated Permits Program
(This information is required under Section 3005 of RCRA.)

I. EPA I.D. NUMBER

F	N	C	D	O	O	3	1	8	4	2	4	9	7/2

FOR OFFICIAL USE ONLY

APPLICATION APPROVED	DATE RECEIVED (yr. mo. & day)	COMMENTS

II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below (mark one box only) to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

A. FIRST APPLICATION (place an "X" below and provide the appropriate data):

1. EXISTING FACILITY (See instructions for definition of "existing" facility. Complete item below.)

2. NEW FACILITY (Complete item below.)

FOR EXISTING FACILITIES, PROVIDE THE DATE (yr. mo. & day) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED (use the boxes to the left):

YR.	MO.	DAY
80	05	22

FOR NEW FACILITIES, PROVIDE THE DATE (yr. mo. & day) CONSTRUCTION BEGAN OR IS EXPECTED TO BEGIN:

YR.	MO.	DAY

B. REVISED APPLICATION (place an "X" below and complete Item I above):

1. FACILITY HAS INTERIM STATUS

2. FACILITY HAS A RCRA PERMIT

III. PROCESSES—CODES AND DESIGN CAPACITIES

A. PROCESS CODE—Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process (including its design capacity) in the space provided on the form (Item III-C).

B. PROCESS DESIGN CAPACITY—For each code entered in column A, enter the capacity of the process.

1. AMOUNT—Enter the amount.

2. UNIT OF MEASURE—For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY	PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage			Treatment		
CONTAINER (barrel, drum, etc.)	S01	GALLONS OR LITERS	TANK	T01	GALLONS PER DAY OR LITERS PER DAY
TANK	S02	GALLONS OR LITERS	SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS	INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS			GALLONS PER HOUR OR LITERS PER HOUR
Disposal			OTHER (Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided. Item III-C)	T04	GALLONS PER DAY OR LITERS PER DAY
INJECTION WELL	D79	GALLONS OR LITERS			
LANDFILL	D80	ACRE-FEET (the volume that would cover one acre to a depth of one foot) OR HECTARE-METER			
LAND APPLICATION	D81	ACRE OR HECTARES			
OCEAN DISPOSAL	D82	GALLONS PER DAY OR LITERS PER DAY			
SURFACE IMPOUNDMENT	D83	GALLONS OR LITERS			
UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE
GALLONS	G	LITERS PER DAY	ACRE-FEET	A	
LITERS	L	TONS PER HOUR	HECTARE-METER	H	
CUBIC YARDS	Y	METRIC TONS PER HOUR	ACRES	A	
CUBIC METERS	C	GALLONS PER HOUR	HECTARES	H	
GALLONS PER DAY	U	LITERS PER HOUR			

EXAMPLE FOR COMPLETING ITEM III (shows in line numbers X-1 and X-2 below): A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY			FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY			FOR OFFICIAL USE ONLY
		1. AMOUNT (specify)	2. UNIT OF MEASURE (enter code)					1. AMOUNT	2. UNIT OF MEASURE (enter code)		
X-1	S 0 2	600	G			5					
X-2	T 0 3	20	E			6					
1	T 0 1	20,000	U			7					
2						8					
3						9					
4						10					

III. PROCESSES (continued)

C. SPACE FOR ADDITIONAL PROCESS CODES DESCRIBING OTHER PROCESSES (code) FOR EACH PROCESS ENTERED HERE
 INCLUDE DESIGN CAPACITY.

IV. DESCRIPTION OF HAZARDOUS WASTES

A. EPA HAZARDOUS WASTE NUMBER — Enter the four-digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four-digit number(s) from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

B. ESTIMATED ANNUAL QUANTITY — For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.

C. UNIT OF MEASURE — For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES
 For listed hazardous wastes: For each listed hazardous waste entered in column A, select the code(s) from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.
 For non-listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.
 Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code(s).

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER — Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

- Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B, C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
- In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
- Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV (shown in line numbers X-1, X-2, X-3, and X-4 below) — A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES	
				1. PROCESS CODES (enter)	2. PROCESS DESCRIPTION (if a code is not entered in D(1))
X-1	K 0 5 4	900	P	T 0 3 D 8 0	
X-2	D 0 0 2	400	P	T 0 3 D 8 0	
X-3	D 0 0 1	100	P	T 0 3 D 8 0	
X-4	D 0 0 2				included with above

*EXPLANATION - PART II C

Process Waste Water from the facility is discharged to the Greenville Utilities Commission, a public owned treatment works. No permit application is enclosed, herewith, for plant storm water discharges. The storm water discharges at this facility are currently being reviewed in light of the EPA's May 19, 1980 Consolidated Permit Regulation. A decision on whether or not to submit NPDES Application in the future will depend on factual circumstances and the response of EPA Headquarters to the Chemical Manufacturing Association letter to R. Sarah Compton on the subject of Storm Water Discharges, dated September 25, 1980.

*EXPLANATION - PART II E

Current regulations appear to require treatment permit for included pre-treatment operations going to municipal treatment systems. However, the EPA may issue interpretative memos or regulatory changes which will negate this requirement for our type operations. If so, we will request a withdrawal of this part of the application. In the meantime, this application is being submitted to protect interim status.

IV. DESCRIPTION OF HAZARDOUS WASTE (Continued)**E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 3.**

EPA I.D. NO. (enter from page 1)

F	N	C	D	0	0	3	1	8	4	2	4	9	6
												T/A/C	

V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility (see instructions for more detail).

VI. PHOTOGRAPHS

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).

VII. FACILITY GEOGRAPHIC LOCATION

LATITUDE (degrees, minutes, & seconds)

LONGITUDE (degrees, minutes, & seconds)

35 34 42 N

77 22 59 W

VIII. FACILITY OWNER
 A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

 B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER

2. PHONE NO. (area code & no.)

3. STREET OR P.O. BOX

4. CITY OR TOWN

5. ST.

6. ZIP CODE

IX. OWNER CERTIFICATION

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. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)

Mr. P. J. Kennedy

B. SIGNATURE



C. DATE SIGNED

10/18/80

X. OPERATOR CERTIFICATION

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. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)

B. SIGNATURE

C. DATE SIGNED

EPA I.D. NUMBER (enter from page 1)													FOR OFFICIAL USE ONLY														
W	N	C	D	0	0	3	1	8	4	2	4	9	T/A/C	1	W	DUP					T/A/C	2	DUP				

IV. DESCRIPTION OF HAZARDOUS WASTES (continued)

EPA I.D. NO.	A. EPA HAZARD. WASTE NO. (enter code)			B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNITS OF MEASURE (enter code)	D. PROCESSES																
	22	23	24			1. PROCESS CODES (enter)					2. PROCESS DESCRIPTION (if a code is not entered in D(1))											
1	D	0	0	9	20,000*	T	T	0	1													
2	D	0	0	2	20,000*	T	T	0	1													
3																						
4																						
5																						
6																						
7																						
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25																						
26																						

*NOTE IN REFERENCE TO PAGE 3 LINES 1 AND 2

This represents maximum expected volume during interim status. This is a highly dilute stream which goes to the municipal waste treatment system.



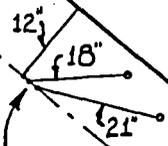
PROPOSED HAZARDOUS WASTE TREATMENT FACILITY

RAILROAD



36" STORM WATER DISCHARGE

THREE STORM WATER DISCHARGES



----- BLDG. UNDER CONST.
----- PROPERTY LINE

SCALE: 1"=300'

IV. DESCRIPTION OF HAZARDOUS WASTE (continued)

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE

EPA I.D. NO. (enter from page 1)

E	F	N	C	D	0	0	3	1	8	4	2	4	9	T/A/C
														6

V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility (see instructions for more detail).

VI. PHOTOGRAPHS

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).

VII. FACILITY GEOGRAPHIC LOCATION

LATITUDE (degrees, minutes, & seconds)

LONGITUDE (degrees, minutes, & seconds)

35 34 42 N

77 22 59 W

VIII. FACILITY OWNER
 A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

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1. NAME OF FACILITY'S LEGAL OWNER

2. PHONE NO. (area code & no.)

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6. ZIP CODE

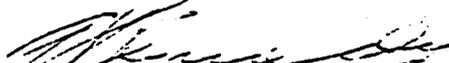
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I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)

Mr. P. J. Kennedy

B. SIGNATURE



C. DATE SIGNED


X. OPERATOR CERTIFICATION

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. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)

B. SIGNATURE

C. DATE SIGNED

EPA

FORM 1 GENERAL		ENVIRONMENTAL PROTECTION AGENCY GENERAL INFORMATION <i>Consolidated Permits Program</i> <i>(Read the "General Instructions" before starting.)</i>		EPA I.D. NUMBER ENCD003184249	
II. LABEL ITEMS I. EPA I.D. NUMBER III. FACILITY NAME V. FACILITY MAILING ADDRESS VI. FACILITY LOCATION		U 0 2 4 3 U PLEASE PLACE LABEL IN THIS SPACE		GENERAL INSTRUCTIONS If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (that is, to the left of the label space lists the information that should appear); please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete items I, III, V, and VI (except VFB which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorization under which this data is collected.	

III. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit applications forms to the EPA. If you answer "yes" to any question, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements, see Section C of the instructions. See also Section II of the instructions for definitions of bold-faced terms.

SPECIFIC QUESTIONS	MARK X IF FORM ATTACHED			SPECIFIC QUESTIONS	MARK X IF FORM ATTACHED		
	YES	NO	FORM ATTACHED		YES	NO	FORM ATTACHED
A. Is this facility a publicly owned treatment works which results in or discharges to waters of the U.S.? (FORM 2A)		X		B. Does or will this facility (either existing or proposed) include or concentrate animal feeding operations or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)		X	
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)	X		*	D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S.? (FORM 2D)		X	
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)	X		X*	F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing within one quarter mile of the well bore underground sources of drinking water? (FORM 4)		X	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production; inject fluids used for enhanced recovery of oil or natural gas; or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process; solution mining of minerals; in situ combustion of fossil fuel; or recovery of geothermal energy? (FORM 4)		X	
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X		J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X	

III. NAME OF FACILITY:
 UNION CARBIDE CORPORATION

IV. FACILITY CONTACT:
 A. NAME & TITLE (last, first, & title): MCLAUGHLIN JOHN QC ENGINEER
 B. PHONE (area code & no.): 919 756 2171

V. FACILITY MAILING ADDRESS:
 A. STREET OR P.O. BOX: P.O. BOX 1547
 B. CITY OR TOWN: GREENVILLE
 C. STATE: NC
 D. ZIP CODE: 27834

VI. FACILITY LOCATION:
 A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER: EVANS ST EXT 6 264 BY PASS
 B. COUNTY NAME: PITT

C. CITY OR TOWN: GREENVILLE
 D. STATE: NC
 E. ZIP CODE: 27834
 F. COUNTY CODE (if known):

SIC CODES (4-digit in order of priority)

A. FIRST				E. SECOND				
7	3	6	9	2	(specify)	PRIMARY BATTERIES, DRY		(specify)
C. THIRD				D. FOURTH				
7				(specify)			(specify)	

VIII. OPERATOR INFORMATION

A. NAME								B. Is the name listed in Item VIII-A also the owner?	
UNION CARBIDE CORPORATION								<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	

C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box. (C-Other specify))						D. PHONE (area code & no.)									
F-FEDERAL	M-PUBLIC (other than federal or state)	P (specify)		C	A	9	1	9	7	5	6	2	1	7	1
S-STATE	O-OTHER (specify)														
P-PRIVATE															

E. STREET OR ROUTE OR BOX											
P O BOX 1547											

F. CITY OR TOWN						G. STATE		H. ZIP CODE		I. IN INDIAN LAND	
GREENVILLE						NC		27834		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Waters)				B. PSL (Air Emissions from Proposed Sources)			
C	T	F		C	T	F	
9	N			9	P		
C. UIC (Underground Injection of Fluids)				D. OTHER (specify)			
C	T	F		(specify)			
9	U						
E. RCRA (Hazardous Wastes)				F. OTHER (specify)			
C	T	F		(specify)			
9	R						

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS (provide a brief description)

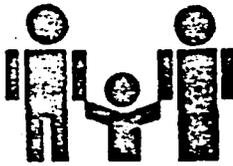
MANUFACTURE OF PRIMARY DRY CELL BATTERIES

XIII. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in this application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)		B. SIGNATURE		C. DATE SIGNED	
Mr. P. J. Kennedy Vice President - Production					

COMMENTS FOR OFFICIAL USE ONLY											



Ronald H. Levine, M.D., M.P.H.
STATE HEALTH DIRECTOR

DIVISION OF HEALTH SERVICES
P.O. Box 2091
Raleigh, N.C. 27602-2091

Date: October 3, 1984

Mr. J. M. Maxon
Union Carbide Corporation
Post Office Box 1547
Greenville, NC 27834

Re: Facility ID No. NCD 003 184 249

Dear Mr. Maxon:

Based on information supplied by you we have processed and accepted at the State level your request for the facility identified with the above ID number to receive the indicated change in classification under RCRA:

<u>Add As</u>	<u>Delete As</u>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	generator
<input type="checkbox"/>	<input type="checkbox"/>	transporter
<input type="checkbox"/>	<input type="checkbox"/>	treater
<input type="checkbox"/>	<input type="checkbox"/>	storer
<input type="checkbox"/>	<input type="checkbox"/>	disposer
<input checked="" type="checkbox"/>	<input type="checkbox"/>	small generator

We are advising EPA of the change in your status. Please notify us if there is any further change in your operations which would again affect your status. Your EPA ID NO. is is not being cancelled.

Cordially,

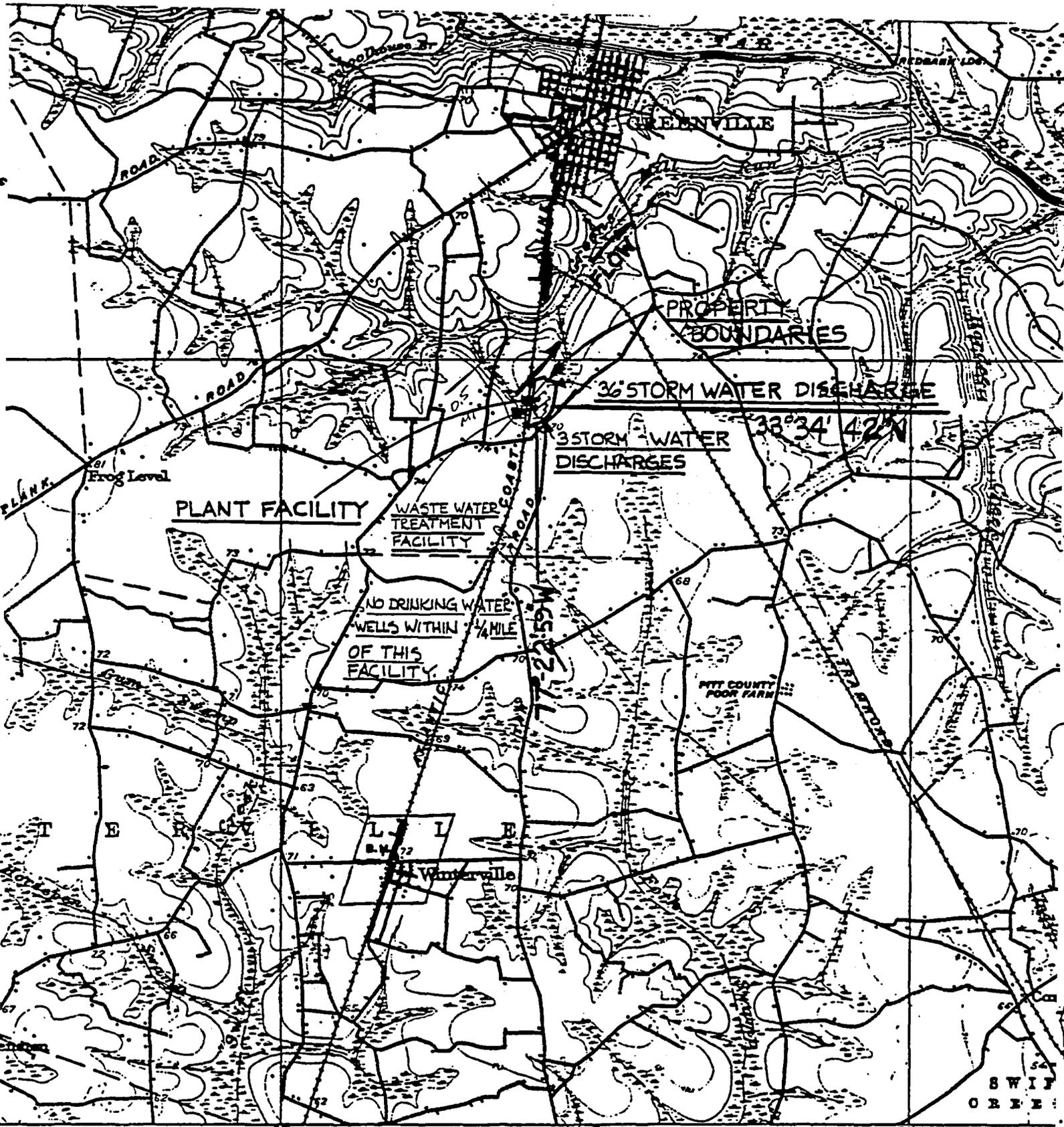

O. W. Strickland, Head

Solid & Hazardous Waste Management Branch
Environmental Health Section

OWS

cc: Doug McCurry
EPA Region IV
Emil Breckling
Richard Gay
Pitt County Health Department

DHS Form 3048 3/82
Solid & Haz. Waste Mgt. Branch



SCALE 1:62500

0 1 2 3 4 5 6 MILES

0 3000 6000 9000 12000 15000 18000 21000 FEET

5 KILOMETERS

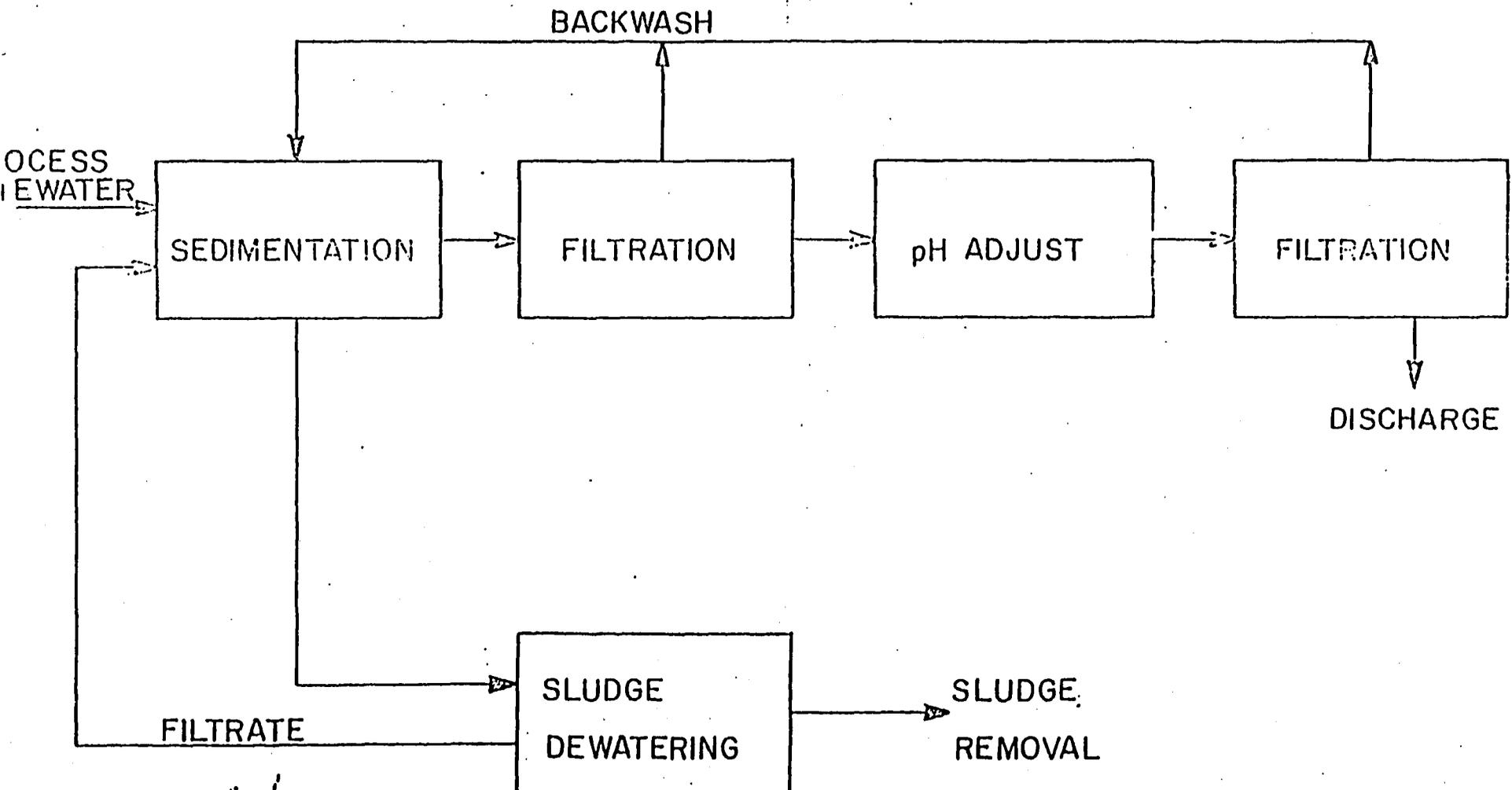
P. 7 Coe.

APPROXIMATE MEAN
NAD 83 DATUM
NAD 83 STATE

APPROXIMATE MEAN

SWIN
ORNE

PROPOSED ALKALINE PROCESS WASTEWATER TREATMENT FACILITY



NOTE: This system is intended to be included in a plant expansion now in progress. There is no waste treatment system currently located at this site since the present manufacturing process does not require one. For these reasons no photographs of waste treatment facilities are included with this application.

ATTACHMENT I

APPLICATION FOR CHANGE IN CLASSIFICATION UNDER RCRA

DATE: 9/20/84
 COMPANY NAME: Union Carbide Corp.
 COMPANY ADDRESS: Greenville, N. C.
 EPA ID NO: NCD003184249

Mr. O. W. Strickland, Head
 Solid & Hazardous Waste Management Branch
 Division of Health Services
 P. O. Box 2091
 Raleigh, North Carolina 27602

Dear Mr. Strickland:

Our company requests the following change in its classification under RCRA (check all that apply):

<u>Add As</u>	<u>Delete As</u>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	GENERATOR
<input type="checkbox"/>	<input type="checkbox"/>	TRANSPORTER
<input type="checkbox"/>	<input type="checkbox"/>	TREATER
<input type="checkbox"/>	<input type="checkbox"/>	STORER
<input type="checkbox"/>	<input type="checkbox"/>	DISPOSER
<input checked="" type="checkbox"/>	<input type="checkbox"/>	SMALL GENERATOR

Our reason for this request is:

Reference cover letter and Attachment I and Attachment II _____

(NOTE: Give any pertinent information. This may be a change in your process, a new calculation of the volume of your waste, new analyses of your waste, etc. Be specific. Please note that this is not a petition for delisting a listed waste, which requires totally different handling).

If your request takes you out of the regulated system, but you wish to retain your EPA ID No., please state why.

As a good business practice, this facility will continue to dispose of wastes at qualified disposal sites and will maintain all appropriate records. This requires that UCC - Greenville continue to possess an EPA ID Number to provide adequate traceability of disposal activities.

ATTACHMENT II

Summary of Disposal of Solid Hazardous Wastes

<u>Disposal Date</u>	<u>Manifest Document No.</u>	<u>No. Of Containers*</u>	<u>Wt. Of Hazardous Waste (Kg.)</u>	<u>Disposal Site</u>
8/16/83	732-002-83	30 1 - 55 Gal. Drum	2471**	SCA Services Pinewood, S. C.
(9/19/83 Notification of classification change to Generator)				
11/22/83	732-005-83	10	885	SCA Services Pinewood, S. C.
1/31/84	732-001-84	14	939	SCA Services Pinewood, S. C.
4/17/84	732-002-84	12	857	SCA Services Pinewood, S. C.
7/17/84	732-003-84	8	517	SCA Services Pinewood, S. C.
7/17/84	732-004-84	4 - 55 Gal. Drums	349	B.D.T. Clarence, N. Y.
			<u>430***</u>	

Total weight generated since 8/16/83 3977 Kg.

Therefore, 3977 kg. ÷ 13 months = 306 kg./month avg.

*Containers are .93 yd.³ cardboard boxes except as noted.

**Includes 993 kg. of wood pallets erroneously shipped and considered hazardous waste.

***As of 9/17/84, 430 kg. have been generated since 7/17/84.

RWG/wjb

10/1/84



O.R. to change
o.s.



UNION CARBIDE CORPORATION
P. O. BOX 1547, GREENVILLE, NORTH CAROLINA 27834
Battery Products Division

September 28, 1984

Mr. O. W. Strickland, Head
Solid & Hazardous Waste Management Branch
Division of Health Services
P. O. Box 2091
Raleigh, N. C. 27602

Subject: Hazardous Waste Activity Status—Union Carbide Corporation,
Greenville, North Carolina (EPA ID No. NCD 003184249)

Dear Mr. Strickland:

We received your letter dated September 19, 1983 informing Union Carbide Corporation, Greenville, N. C. of the change in our Hazardous Waste Activity status under RCRA. On the basis of two shipments of hazardous waste to SCA Services (SCD 078375985) exceeding 1000 Kgs. made on 12/10/82 and 8/16/83 you changed our classification from Small Quantity Generator to Hazardous Waste Generator. A different interpretation of 40CFR Section 261.5 Paragraph (f) apparently caused us to be in violation of the Small Generator requirements.

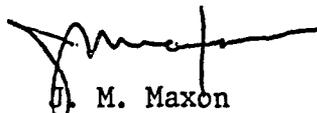
Our letter to you dated October 4, 1983 explaining our situation and asking for reclassification as a Small Quantity Generator was denied. We have, therefore, been operating for the last year as a Generator, observing and practicing all requirements of that classification.

Based on our generation of solid hazardous waste for the past year, which demonstrates that we are generating considerably less than 1000 kilograms per month and that procedures are in place to insure that this limit is not exceeded at any time, we respectfully request that our status as a Small Quantity Generator be reinstated.

Please refer to ATTACHMENT I for our formal Application for Change in Classification under RCRA. Additionally, refer to ATTACHMENT II for a Summary of Disposal of Solid Hazardous Wastes.

Thank you for attention to this matter and if you have questions please call me or R. W. Gibbs at (919)-756-2171.

Very truly yours,


M. Maxon
Plant Manager

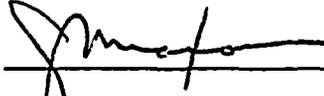
WJB

Attachments

I understand that my company must supply information about any changes in its operations which might change its status again on its own initiative.

I certify that the information supplied is accurate and correct to the best of my knowledge and belief. I am authorized to make this request on behalf of my company at the location given.

SIGNATURE:

A handwritten signature in black ink, appearing to be 'J. M. ...', written over a horizontal line.

COMPANY TITLE:

Plant Manager



Leith

Ronald H. Levine, M.D., M.P.H.
STATE HEALTH DIRECTOR

DIVISION OF HEALTH SERVICES
P.O. Box 2091
Raleigh, N.C. 27602-2091

Date: September 19, 1983

Mr. S. W. Perry
Plant Manager
Union Carbide Corporation
P.O. Box 1547
Greenville, NC 27834

Re: Facility ID No. NCD003184249

Dear Mr. Perry:

Based on information supplied by you we have processed and accepted at the State level your request for the facility identified with the above ID number to receive the indicated change in classification under RCRA:

<u>Add As</u>	<u>Delete As</u>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	generator
<input type="checkbox"/>	<input type="checkbox"/>	transporter
<input type="checkbox"/>	<input type="checkbox"/>	treater
<input type="checkbox"/>	<input type="checkbox"/>	storer
<input type="checkbox"/>	<input type="checkbox"/>	disposer
<input type="checkbox"/>	<input checked="" type="checkbox"/>	small generator

We are advising EPA of the change in your status. Please notify us if there is any further change in your operations which would again affect your status. Your EPA ID NO. is is not being cancelled.

Cordially,

O. W. Strickland
O. W. Strickland, Head
Solid & Hazardous Waste Management Branch
Environmental Health Section

OWS
cc: *all*
Doug McCurry
EPA Region IV
Emil Breckling

Application for Change in Classification RCRA

date: 2/26/82
 company name: Union Carbide Corp.
 company address: Box 1547, Greenville 27834
 EPA ID No: NCD003184249

Mr. O. W. Strickland, Head
 Solid & Hazardous Waste Management Branch
 Division of Health Services
 P.O. Box 2091
 Raleigh, NC 27602

Dear Mr. Strickland:

Our company requests the following change in its classification under RCRA (check all that apply):

Add asDelete as

generator

transporter

treater

storer

disposer

small generator

Our reason for this request is:

Refer to Attachment I

(Note: Give any pertinent information. This may be a change in your process, a new calculation of the volume of your waste, new analyses of your waste, etc. Be specific. Please note that this is not a petition for delisting a listed waste, which requires totally different handling).

If your request takes you out of the regulated system, but you wish to retain your EPA ID No., please state why.

As a good business practice, this facility will continue to dispose of wastes at qualified disposal sites and will maintain all appropriate records. This requires that UCC - Greenville continue to possess an EPA ID Number to provide adequate traceability of disposal activities.

(over)

I understand that my company must supply information about any changes in its operations which might change its status again on its own initiative.

I certify that the information supplied is accurate and correct to the best of my knowledge and belief. I am authorized to make this request on behalf of my company at the location given.

signature:

James H. Seary

company title:

Plant Manager

DIVISION OF HEALTH SERVICES
P.O. Box 2091
Raleigh, N.C. 27602-2091

Emil

Date: March 26, 1982

Mr. S. W. Perry
Union Carbide Corporation
Box 1547
Greenville, NC 27834

Re: Facility ID NO. NCD003184249

Dear Mr. Perry:

Based on information supplied by you we have processed and accepted at the State level your request for the facility identified with the above ID number to receive the indicated change in classification under RCRA:

Add as

Delete as

generator

transporter

treater

storer

disposer

small generator

We are advising EPA of the change in your status. Please notify us if there is any further change in your operations which would again affect your status. Your EPA ID NO. is is not being cancelled.

Cordially,

O. W. Strickland
O. W. Strickland, Head

Solid & Hazardous Waste Management Branch
Environmental Health Section

OWS

cc: John Herrmann
EPA Region IV
Emil Breckling

*Entered
3-30-82*

Keith

DIVISION OF HEALTH SERVICES
P.O. Box 2091
Raleigh, N.C. 27602-2091

Date: March 26, 1982

Mr. S. W. Perry
Union Carbide Corporation
Box 1547
Greenville, NC 27834

Re: Facility ID NO. NCD003184249

Dear Mr. Perry:

Based on information supplied by you we have processed and accepted at the State level your request for the facility identified with the above ID number to receive the indicated change in classification under RCRA:

Add as

Delete as

- | | | |
|-------------------------------------|-------------------------------------|-----------------|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | generator |
| <input type="checkbox"/> | <input type="checkbox"/> | transporter |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | treater |
| <input type="checkbox"/> | <input type="checkbox"/> | storer |
| <input type="checkbox"/> | <input type="checkbox"/> | disposer |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | small generator |

We are advising EPA of the change in your status. Please notify us if there is any further change in your operations which would again affect your status. Your EPA ID NO. is is not being cancelled.

Cordially,

O. W. Strickland
O. W. Strickland, Head
Solid & Hazardous Waste Management Branch
Environmental Health Section

ONS

cc: John Herrmann
EPA Region IV
Emil Breckling

ATTACHMENT I

Reasons for Changes in RCRA Classification

The Notification of Hazardous Waste Activity submitted in August 1980 identified this facility as both a generator and treater (T/S/D). In November 1980 we submitted Part A of our RCRA Treatment Facility Permit Application based on the projected expansion of this plant, that expansion including a Wastewater Treatment Unit. Due to a business decision in 1981, those plans have been discontinued. We wish to withdraw our Part A application. As no treatment unit was ever actually constructed at this plant, closure requirements do not apply. All hazardous wastes generated at this plant are shipped off-site for disposal.

Based on actual 1981 monthly waste generation rates, this facility qualifies as a small quantity waste generator and is therefore not subject to the full range of RCRA regulations. For your reference, a copy of the 1981 NC Annual Report for this facility is provided as Attachment II.

ATTACHMENT I

N. C. DEPARTMENT OF HUMAN RESOURCES
DIVISION OF HEALTH SERVICES

N. C. 1981 HAZARDOUS WASTE ON-SITE TSD FACILITY
ANNUAL PART B REPORT *

I. Installation EPA ID Number: N C D 0 0 3 1 8 4 2 4 9

II. Name of Installation: Union Carbide Corporation - Battery Products Division

III. Location of Installation: Evans St. Ext. & 264 By-Pass
(Street or Route Number)
Greenville Pitt North Carolina 27834
(City or Town) (County) (State) (Zip Code)

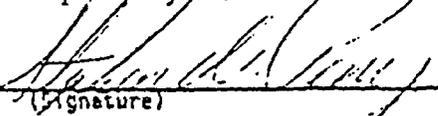
IV. Installation Contact: Gene A. Babcock 919 756-2171 Ext. 230
(Name) (Area Code) (Phone Number)

V. Waste Identification:

Line Number	A. EPA Waste Number	B. Description of Waste	C. Quantity Generated (000's LBS)	D. Amount of Waste by Handling Method			
				1. Handling Method Code	2. Quantity Stored, Treated, Disposed, or Recovered On-Site	3. Quantity (000's) lbs.	4. Facility EPA ID No./Recovery Facility Name
1	D001, D008	Waste Solvent Nos. & Waste Poisonous Liquid	.882	T01	-0-	.882	VAD077942266 Oldover Corp.
2		Nos. from cleaning of Dry Cell Battery Manu-					
3		facturing equipment					
4	D004, D005, D006, D007	Poisonous Waste	-0-	D01 (85)	-0-	5.74	SCD070375985 SCA Services
5	D008, D009	Solid from Chrome Plating Operation					
6		Poison (B)					
7	D002	Waste Zinc Chloride Soln. from Dry Cell Battery Manufacture	2.0	D01	-0-	42.40	SCD070375985 SCA Services
8							
9							
10	D009	Waste Solid Paper from Dry Cell Battery Manufacture	3.0	D01	.93 yds. Gaybord -0-	2.82	SCD070375985 SCA Services
11							
12							

(If more space is needed check and complete attachment 1)

VI. Comments: The disposal quantity of Items 2 & 3 for the 1981 Year varies from the generated quantity 1981 because the balance was generated prior to January 1, 1981.

Signature: 
(Signature)

Steve W. Perry
(Print or Type Name)

*Read instructions before completing form.

APPLICATION FOR CHANGE IN CLASSIFICATION UNDER RCRA

DATE: 10/4/83
 COMPANY NAME: Union Carbide Corp.
 COMPANY ADDRESS: Greenville, N. C.
 EPA ID NO: NCD003184249

Mr. O. W. Strickland, Head
 Solid & Hazardous Waste Management Branch
 Division of Health Services
 P. O. Box 2091
 Raleigh, North Carolina 27602

Dear Mr. Strickland:

Our company requests the following change in its classification under RCRA (check all that apply):

<u>Add As</u>	<u>Delete As</u>	
()	(x)	GENERATOR
()	()	TRANSPORTER
()	()	TREATER
()	()	STORER
()	()	DISPOSER
(x)	()	SMALL GENERATOR

Our reason for this request is:

Reference cover letter

(NOTE: Give any pertinent information. This may be a change in your process, a new calculation of the volume of your waste, new analyses of your waste, tec. Be specific. Please note that this is not a petition for delisting a listed waste, which requires totally different handling).

If your request takes you out of the regulated system, but you wish to retain your epa ID No., please state why.

As a good business practice, this facility will continue to dispose of wastes at qualified disposal sites and will maintain all appropriate records. This requires that UCC - Greenville continue to possess an EPA ID Number to provide adequate traceability of disposal activities.

Over

ATTACHMENT II

SUMMARY OF DISPOSAL OF SOLID HAZARDOUS WASTES

<u>DISPOSAL DATE</u>	<u>GROSS WT. (LBS.)</u>	<u>NO. OF CONTAINERS</u>	<u>PALLET WEIGHT</u>		<u>NET WT. OF WASTE</u>	<u>MOS. SINCE LAST DISPOSAL</u>
			<u>AVERAGE</u>	<u>TOTAL</u>		
12/10/82	2,950	23	N/A	N/A	2,950 lbs.	8
8/16/83	5,630	30	73 lbs.	2,190 lbs.	3,440 lbs.	9

Total Quantity

6,390 LBS.
 - 182 LBS. (1-time disposal of Sodium Dichromate)
 6,208 LBS.
 ÷ 17 MOS.
 365 LBS. AVG. Accumulation/Mo.

I understand that my company must supply information about any changes in its operations which might change its status again on its own initiative..

I certify that the information supplies is accurate and correct to the best of my knowledge and belief. I am authorized to make this request on behalf of my company at the location given.

SIGNATURE: _____

A handwritten signature in black ink, appearing to be 'J. M. ...', written over a horizontal line.

COMPANY TITLE: _____

Plant Manager

Pitt Co.

STATE LABORATORY OF PUBLIC HEALTH
DIVISION OF HEALTH SERVICE
N.C. DEPARTMENT OF HUMAN RESOURCES
P.O. BOX 28047 - 306 N. WILMINGTON ST., RALEIGH 27611

CHEMICAL ANALYSES - SOLID AND HAZARDOUS WASTE

Source: Union Carbide Corp
 Address: Greenville N.C.
 Zip: _____
 County: Pitt
 Report To: Terry Douca or Bill Meyer
 Address: Raleigh office
 Zip: _____
 Telephone Number: () - _____
 Collected By: Bill Morris
 Date Collected: 6-9-83 Time _____ AM/PM
 Location of Sampling Point: _____

Remarks:
 12 MW-5
 912 BATTERIES SCRAP
 Le Clanche
 Carbon zinc Battery

* Battery core material

	Results		Results expressed in ppm unless otherwise indicated;	
	Total	Extract.	Total	Extractable
<input checked="" type="checkbox"/> Extractable Metals				
<input checked="" type="checkbox"/> Total Metals				
<input checked="" type="checkbox"/> Arsenic	<2.6	<0.05	Zinc	
<input checked="" type="checkbox"/> Barium	9.1	<0.1	Ignitability	
<input checked="" type="checkbox"/> Cadmium	182	0.02	Corrosivity	
Chloride			Reactivity	
<input checked="" type="checkbox"/> Chromium	<0.6	0.05	Spec. Conductivity	
Color			Chlorinated Hydrocarbons	
Copper			Endrin	
Flammability			Lindane	
Fluoride			Methoxychlor	
Iron			Toxaphene	
<input checked="" type="checkbox"/> Lead	300	<0.1	2,4-D	
Manganese			2,4,5-TP	
<input checked="" type="checkbox"/> Mercury	*1.21	0.033	0.002 mg/l.	
Nitrate				
<input checked="" type="checkbox"/> pH in H ₂ O	6.7			
<input checked="" type="checkbox"/> Selenium	<0.12	0.02		
<input checked="" type="checkbox"/> Silver	1.3	<0.05		

Date Received _____ Date Reported _____ Reported By _____
 Laboratory Number 13039 JUN 16 83

STATE LABORATORY OF PUBLIC HEALTH
 DIVISION OF HEALTH SERVICES
 N.C. DEPARTMENT OF HUMAN RESOURCES
 P.O. BOX 28047 - 306 N. WILMINGTON ST., RALEIGH 27611

CHEMICAL ANALYSES - SOLID AND HAZARDOUS WASTE

Source: Union Carbide Corp.
 Address: Greenville, N.C.
 Zip: _____
 County: P. H.
 Report To: TERRY DOWEN or Bill Morris
 Address: Raleigh office
 Zip: _____
 Telephone Number: () - _____
 Collected By: Bill Morris
 Date Collected: 6-9-83 Time _____
 Location of Sampling Point: _____

Remarks:

15 MA-11
 1015 BATTERIES SCRAP

* This battery ~~core~~ core material gave inconsistent readings ranging from 0.16ppm to >1.4 ppm

Extractable Metals Total Metals	Results		Results expressed in ppm unless otherwise indicated;	Total	Extractable
	Total	Extract.			
Arsenic	<0.37	<0.05	Zinc		
Barium	22	0.1	Ignitability		
Cadmium	142	0.01	Corrosivity		
Chloride			Reactivity		
Chromium	1.2	<0.05	Spec. Conductivity		
Color			Chlorinated Hydrocarbons		
Copper			Endrin		
Flammability	.		Lindane		
Fluoride			Methoxychlor		
Iron			Toxaphene		
Lead	270	<0.1	2,4-D		
Manganese			2,4,5-TP		
Mercury	*	0.033			
Nitrate					
pH in H ₂ O	6.7				
Selenium	<0.15	0.01			
Silver	1.1	<0.05			

Received _____ Date Reported _____ Reported By _____
 Laboratory Number 13040 JUN 16 83

CHEMICAL ANALYSES - SOLID AND HAZARDOUS WASTE

Source: Union Carbide Corp
 Address: Greenville N.C.
 Zip: _____
 County: Pitt
 Report To: TERRI ROVER or Bill Meyer
 Address: Raleigh office
 Zip: _____
 Telephone Number: () - _____
 Collected By: Bill Morris
 Date Collected: 6-9-83 Time _____ AM/PM
 Location of Sampling Point: _____

Remarks:

15 CL - 18X
 1215 BATTERIES SCRAP

* Battery core material

Extractable Metals Total Metals	Results.		Results expressed in ppm unless otherwise indicated.		
	Total	Extract.	Total	Extractable	
Arsenic	<0.69	<0.05	Zinc		
Barium	1.4	0.1	Ignitability		
Cadmium	145	0.04	Corrosivity		
Chloride			Reactivity		
Chromium	41.4	<0.05	Spec. Conductivity		
Color			Chlorinated Hydrocarbons		
Copper			Endrin		
Flammability			Lindane		
Fluoride			Methoxychlor		
Iron			Toxaphene		
Lead	210	<0.1	2,4-D		
Manganese			2,4,5-TP		
Mercury	22.7	0.062	Limit: 0.002 mg/l		
Nitrate					
✓ pH in H ₂ O	5.7				
Selenium	<0.07	<0.01			
Silver	1.2	<0.05			

Date Received _____ Date Reported _____ Reported By _____
 Laboratory Number 13041 JUN 16 83



Ronald H. Levine, M.D., M.P.H.
STATE HEALTH DIRECTOR

DIVISION OF HEALTH SERVICES
P.O. Box 2091
Raleigh, N.C. 27602-2091

September 19, 1983

Mr. S. W. Perry
Plant Manager
Union Carbide Corporation
P.O. Box 1547
Greenville, NC 27834

RE: Classification Under RCRA

Dear Mr. Perry:

North Carolina Hazardous Waste Management Rules 10 NCAC 10F .0029(a), Section 261.5 states that a person who generates in a calendar month or accumulates at any time less than 1000 kilograms of hazardous waste need not comply with 10 NCAC 10F regulations and is classified as a small generator. The Union Carbide Greenville Plant, EPA ID #NCD003184249, was classified as a small generator on March 26, 1982. However, on two recent occasions, 12/10/82 and 8/16/83, shipments of hazardous waste exceeding 1000 kilograms were sent to SCA Services, EPA ID SCD070375985. Therefore, we are changing your classification from small generator to hazardous waste generator.

The Union Carbide Greenville Plant will be expected to be in compliance with 10 NCAC 10F .0030, Standards for Hazardous Waste Generators within 30 days of your receipt of this letter.

Sincerely,

O. W. Strickland, Head
Solid & Hazardous Waste Management Branch
Environmental Health Section

OWS:nlc

cc: Mr. Billy Morris



Ronald H. Levine, M.D., M.P.H.
STATE HEALTH DIRECTOR

DIVISION OF HEALTH SERVICES
P.O. Box 2091
Raleigh, N.C. 27602-2091

Date: September 19, 1983

Mr. S. W. Perry
Plant Manager
Union Carbide Corporation
P.O. Box 1547
Greenville, NC 27834

Re: Facility ID No. NCD003184249

Dear Mr. Perry:

Based on information supplied by you we have processed and accepted at the State level your request for the facility identified with the above ID number to receive the indicated change in classification under RCRA:

<u>Add As</u>	<u>Delete As</u>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	generator
<input type="checkbox"/>	<input type="checkbox"/>	transporter
<input type="checkbox"/>	<input type="checkbox"/>	treater
<input type="checkbox"/>	<input type="checkbox"/>	storer
<input type="checkbox"/>	<input type="checkbox"/>	disposer
<input type="checkbox"/>	<input checked="" type="checkbox"/>	small generator

We are advising EPA of the change in your status. Please notify us if there is any further change in your operations which would again affect your status. Your EPA ID NO. is is not being cancelled.

Cordially,

O. W. Strickland, Head
Solid & Hazardous Waste Management Branch
Environmental Health Section

OWS

cc: Doug McCurry
EPA Region IV
Emil Breckling

DHS Form 3048 3/82
Solid & Haz. Waste Mgt. Branch

HAZARDOUS WASTE MANIFEST

Manifest Document Number
Nº 26468

A. Name	I.D. Code	Address	Phone Number (area code & number)	Date Shipped or Accepted
(1) Generator Union Carbide Corp. Battery Products Div	NCD003184249	P.O. Box 1547 Greenville, NC 27834	919-756-2171	12 / 10 / 82 year month day
(2) Transporter No. 1 Bryson Environmental Services	SCD000822312	108 White Oak Lane Lexington, SC 29012	803-796-6408	12 / 10 / 82 year month day
Transporter No. 2 NONE				year month day
(3) TSDF SCA Services Inc.	SCD070375985	Rt. #1, Box 55, Pinewood, SC 29125	803-452-5003	82 / 12 / 10 year month day

(1) Generator Item Count		(2) DOT Proper Shipping Name/Hazard Class/ DOT Identification Number	(3) Total Quantity	(4) Weight (pounds)	(5) Waste Code	(6) TSDF Item Check		(7) Quantity by Weight (pounds)
Number	Container Type					Number	Container Type	
23	Cardboard Boxes	Hazardous Waste Solid NOS (ORM-E)	23	2300#	D009 Hg	23	Cardboard Boxes	2,950

C. Emergency Response Information:
 In event of an emergency, phone the Generator at:
 (919) 756-2171
 In event of a spill in South Carolina,
 call the Department at (803) 758-5531

D. Special Handling Instructions:
 NONE PLACARD POISON

E. Comments:
 WORK CODE 26071
 SCA WASTE CODE 810-1102,
 1103, 1104 and 1105

F. This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to all applicable regulations of the U.S. DOT, U.S. EPA, the S.C. PSC and the S.C. DHEC.

Gene A Babcock GENE A BABCOCK ENVIRONMENTAL COORDINATOR 12-10-82
 Signature Name and Title Date

G. I hereby certify that I am an authorized representative of the transporter and that the waste(s) and quantity described in this Manifest have been accepted by us for ultimate delivery to the TSDF identified above.

Transporter No. 1: [Signature] Bryson Inc 12-10-82
 Signature Name Date

Transporter No. 2: _____ _____ _____
 Signature Name Date

H. I hereby certify that I am an authorized representative of the TSDF identified above and that the waste(s) and quantity in this Manifest have been accepted by me for treatment, storage, and/or disposal.

Hope B Babcock [Signature], Technician 12-10-82
 Signature Name and Title Date

HAZARDOUS WASTE MANIFEST

Manifest Document Number

No. 8 5781

A. Name	I.D. Code	Address	Phone Number (area code & number)	Date Shipped or Accepted
(1) Generator Union Carbide Corp Battery Products Div.	SG NGD 003184249	Evans St. & 264 By-Pass Greenville, NC 27834	(919)-756-2171	83, 8, 16 year month day
(2) Transporter No. 1 Bryson Environmental Serv	SCD 000822312	108 White Oak Lane Lexington, SC 29072	(803)-796-6408	83, 8, 16 year month day
(3) TSDF South Carolina SCA Services, Inc.	SCD 070375985	RT. 1, Box 255 Pinewood, SC 29125	(803)-452-5003	83, 8, 16 year month day

(1) Generator Item Count		(2) DOT Proper Shipping Name/Hazard Class/ DOT Identification Number	(3) Total Quantity	(4) Weight (pounds)	(5) Waste Code	(6) TSDF Item Check		(7) Quantity by Weight (pounds)
Number	Container Type					Number	Container Type	
30	Cardboard Containers .93 Yd ³ each	Hazardous Waste Solid (Liner Paper) NOS DOT ID#NA 9189	30 Containers	2400	EPA Hazardous Waste D009	30	Boxes	5,448
1	55-gal. Drum	Hazardous Waste Sodium Dichromate (ORM-A) DOT ID#NA 1479	1 Drum	150	EPA Hazardous Waste D007	1	Drums	182

C. Emergency Response Information:
 In event of an emergency, phone the Generator at: (919) 756-2171
 In event of a spill in South Carolina, call the Department at (803) 758-5531

D. Special Handling Instructions: * Boxes 1yd³ each. Total = 30 yds³

E. Comments: SCA Work Code #24674
Enclosed Van

F. This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to all applicable regulations of the U.S. DOT, U.S. EPA, the S.C. PSC and the S.C. DHEC.

R. W. Gibbs Signature R. W. Gibbs, Environmental Coordinator Name and Title 8/16/83 Date

G. I hereby certify that I am an authorized representative of the transporter and that the waste(s) and quantity described in this Manifest have been accepted by us for ultimate delivery to the TSDF identified above.

Transporter No. 1: *Shirley Adams* Signature *Bryson* Name 8-16-83 Date

Transporter No. 2: _____ Signature _____ Name _____ Date

H. I hereby certify that I am an authorized representative of the TSDF identified above and that the waste(s) and quantity in this Manifest have been accepted by me for treatment, storage, and/or disposal.

Nope Barwick Signature *SCA Services, Technician* Name and Title 8-16-83 Date



UNION CARBIDE CORPORATION
P. O. BOX 1547, GREENVILLE, NORTH CAROLINA 27834
Battery Products Division



October 4, 1983

Mr. O. W. Strickland, Head
SOLID & HAZARDOUS WASTE MANAGEMENT BRANCH
Division of Health Services
P. O. Box 2091
Raleigh, North Carolina 27602

SUBJECT: Hazardous Waste Activity Status
Union Carbide Corporation -
Greenville, North Carolina
(EPA ID No. NC003184249)

Dear Mr. Strickland:

We have received your letter dated September 19, 1983 informing Union Carbide, Greenville, N. C. (EPA ID No. 003184249) of the change in our Hazardous Waste activity status under RCRA. This facility applied for and was granted small quantity status in the 1st Quarter of 1982. On the basis of two shipments of hazardous waste to SCA Services (SCD 078375985) exceeding 1000 kgs made on 12/10/82 and 8/16/83 you have changed our classification from Small Quantity Generator to Hazardous Waste Generator.

Union Carbide has been and will continue to be a good neighbor and good corporate citizen. We have every intention of complying with all requirements of State and Federal Hazardous Waste Regulations and believed we were doing so until we received your notice. The discrepancy has apparently occurred as a result of a different interpretation of 40CFR Section 261.5 Paragraph (f).

We interpreted this to mean that a small quantity generator could accumulate wastes on site for a period of up to 90 days once the 1000 kg limit is attained without a change in status if the requirements for generators are met for that lot of waste for the 90 day period. As indicated on our Change of Status Request of February 26, 1982 (attached), we have continued to dispose of wastes at qualified disposal sites and have maintained all appropriate records and procedures required of Hazardous Waste generators. Notification of change in status required under Section 3010 of RCRA was not done since, based on our interpretation we did not feel that our status had changed.

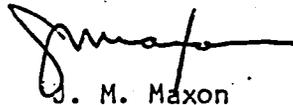
Attachment II is a summary of our solid hazardous waste disposals in the last year which you referenced in your letter. Please note that the weight of waste shipped to SCA on 8/16/83 included the weight of wooden pallets, which totalled over 2,000 lbs.

Our generation of solid hazardous waste is at a uniform rate, and as this summary demonstrates, considerably less than 1000 kilograms is generated on a monthly basis (approximately 160 kg/Mo.). More frequent scheduling of disposal is all that is necessary to limit accumulations to less than 1000 kilograms, and procedures are now in place to insure this limit is not exceeded at any time. We, therefore, request that our status as a small quantity generator be reinstated. Our request is enclosed as Attachment III.

As part of our continuing program to minimize hazardous waste generation and to maximize the use of recycling rather than disposal, we are converting to the use of a readily recyclable mineral spirits solvent. In order to make this change we must remove all of the solvent presently in the plant parts cleaners. This will result in the one-time disposal of approximately 2300 kg of hazardous waste. The waste solvent will be disposed of in less than 90 days; during that time we will manage the waste in accordance with all generator requirements.

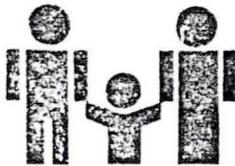
In light of our request to be reclassified as a small quantity generator, we ask your understanding and consideration regarding this one-time solvent disposal. Please let us know if there are any additional specific actions required to allow disposal of this material without jeopardizing our reclassification request.

Very truly yours,



J. M. Maxon

STL
attachments



William

Ronald H. Levine, M.D., M.P.H.
STATE HEALTH DIRECTOR

DIVISION OF HEALTH SERVICES
P.O. Box 2091
Raleigh, N.C. 27602-2091

November 2, 1983

Mr. J. M. Maxon
Union Carbide Corporation
P.O. Box 1547
Greenville, NC 27834

RE: Your 10/4/83 letter to Mr. Strickland

Dear Mr. Maxon:

The Solid & Hazardous Waste Management Branch along with the U.S. Environmental Protection Agency, Region IV interpretes 40 CFR Section 261.5 paragraph (f) to mean that once a small quantity generator exceeds 1000 kg or more of hazardous waste, except acutely hazardous waste, he becomes subject to generator standards (40 CFR 262). Waste meeting the acute criteria is regulated at 1 Kg.

As stated in your letter, Union Carbide recently manifested two shipments of hazardous waste to SCA Services (SCD078375985) exceeding 1000 Kgs. The shipments were made on 12/10/82 and 8/16/83. It is on these basis that we have changed your classification from Small Quantity Generator to Generator status.

If you have any questions concerning this matter, please contact me at (919) 733-2178.

Sincerely,

William Paige, Environmental Chemist
Solid & Hazardous Waste Management Branch
Environmental Health Section

WP:lc

cc: Mr. Billy Morris



UNION CARBIDE CORPORATION
BATTERY PRODUCTS DIVISION

P. O. BOX 1547, GREENVILLE, NORTH CAROLINA 27834



November 17, 1983

Mr. O. W. Strickland, Head
SOLID & HAZARDOUS WASTE MANAGEMENT BRANCH
Division of Health Services
P. O. Box 2091
Raleigh, North Carolina 27602

Dear Mr. Strickland:

On November 8, 1983 Union Carbide Corporation, Greenville, N. C. (EPA I.D. No. NCD003184249) received a request from the North Carolina EPA to formally acknowledge our intentions with respect to a Part B Permit Application. This letter is to reaffirm our withdrawal of application for interim status under Part A. As a reference, attached is our formal request for change of status dated February 26, 1982 (Presented in Attachment A) by which we applied for and were granted small generator status as well as withdrawing our application for treatment status. On this basis no Part B application is necessary.

Union Carbide also wishes to take this opportunity to rediscuss our recent reclassification (Reference your September 19, 1983 letter) by which this Greenville facility was removed from small generator status and assigned generator status. This arose from a misinterpretation of Part 262 on the part of Union Carbide which we outlined in detail in our October 4, 1983 letter to you. A copy of this letter is presented as Attachment A. Union Carbide does not disagree that a mistake was made and for intermittent periods during the prior year Union Carbide should have refiled under Part A to change our status. As stated in our October 4, 1983 letter Union Carbide has made the appropriate changes in its procedures to allow operation as a small quantity generator. Union Carbide requests that you honor our application for change in status presented at the back of Attachment A. Please call us if you have any questions or comments regarding this reclassification request at

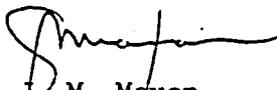
November 17, 198

Page 2

J. M. Maxon
Plant Manager
Union Carbide Corporation
Battery Products Division
Greenville, N. C. 27834
(919) 756-2171. Ext. 252

A response to this request within 30 days would be appreciated.

Very truly yours,


J. M. Maxon
Plant Manager

JMM/wjb

Attachments

cc: Al Nash
Billy Morris



UNION CARBIDE CORPORATION
P. O. BOX 1547, GREENVILLE, NORTH CAROLINA 27834
Battery Products Division

October 4, 1983

Mr. O. W. Strickland, Head
SOLID & HAZARDOUS WASTE MANAGEMENT BRANCH
Division of Health Services
P. O. Box 2091
Raleigh, North Carolina 27602

SUBJECT: Hazardous Waste Activity Status
Union Carbide Corporation.-
Greenville, North Carolina
(EPA ID No. NC003184249)

Dear Mr. Strickland:

We have received your letter dated September 19, 1983 informing Union Carbide, Greenville, N. C. (EPA ID No. 003184249) of the change in our Hazardous Waste activity status under RCRA. This facility applied for and was granted small quantity status in the 1st Quarter of 1982. On the basis of two shipments of hazardous waste to SCA Services (SCD 078375985) exceeding 1000 kgs made on 12/10/82 and 8/16/83 you have changed our classification from Small Quantity Generator to Hazardous Waste Generator.

Union Carbide has been and will continue to be a good neighbor and good corporate citizen. We have every intention of complying with all requirements of State and Federal Hazardous Waste Regulations and believed we were doing so until we received your notice. The discrepancy has apparently occurred as a result of a different interpretation of 40CFR Section 261.5 Paragraph (f).

We interpreted this to mean that a small quantity generator could accumulate wastes on site for a period of up to 90 days once the 1000 kg limit is attained without a change in status if the requirements for generators are met for that lot of waste for the 90 day period. As indicated on our Change of Status Request of February 26, 1982 (attached), we have continued to dispose of wastes at qualified disposal sites and have maintained all appropriate records and procedures required of Hazardous Waste generators. Notification of change in status required under Section 3010 of RCRA was not done since, based on our interpretation we did not feel that our status had changed.

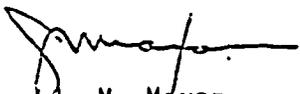
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As part of our continuing program to minimize hazardous waste generation and to maximize the use of recycling rather than disposal, we are converting to the use of a readily recyclable mineral spirits solvent. In order to make this change we must remove all of the solvent presently in the plant parts cleaners. This will result in the one-time disposal of approximately 2300 kg of hazardous waste. The waste solvent will be disposed of in less than 90 days; during that time we will manage the waste in accordance with all generator requirements.

In light of our request to be reclassified as a small quantity generator, we ask your understanding and consideration regarding this one-time solvent disposal. Please let us know if there are any additional specific actions required to allow disposal of this material without jeopardizing our reclassification request.

Very truly yours,


J. M. Maxon

STL
attachments

- CC: Messrs: A. M. Nash
J. C. Card
R. H. Toyne
R. W. Gibbs
D. J. Pfeifer
H. A. Allen
W. E. Towslee



UNION CARBIDE CORPORATION
P. O. BOX 1547, GREENVILLE, NORTH CAROLINA 27834
Battery Products Division

February 19, 1982

Solid and Hazardous Waste
Management Branch
Department of Human Resources
P. O. Box 2091
Raleigh, NC 27602

Re: NCD003184249
EPA ID No.

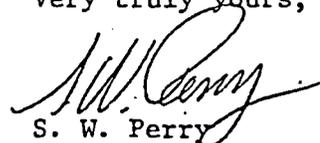
Gentlemen:

Attached is the annual report for our Greenville facility as required by the North Carolina Hazardous Waste Management Regulations. The report covers the period January 1, 1981 through December 31, 1981.

In November 1980, we submitted Part A of our RCRA treatment facility permit application based on the projected expansion of this plant, that expansion including a wastewater treatment unit. Due to a business decision in 1981, those plans have been discontinued. We wish to withdraw our Part A application and retain only our generator status. As no treatment unit was ever actually constructed at this plant, closure requirements do not apply. All hazardous wastes generated at this plant are shipped off-site for disposal as indicated in the annual report.

Should there be any concern or questions with respect to our application withdrawal or the information provided in the annual report, please notify us immediately.

Very truly yours,


S. W. Perry
Plant Manager

HFR

Attachment

Quate T
R-1
sent 2/26/82

NOTIFICATION

indicates plant
started in 1980.

This is either

- ① mistake
- ② or there are two plants