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**CERCLA**

Re: Screening Site Investigation  
Southern Desk NCD 986 166 353  
Hickory, Catawba County, North Carolina

Dear Mr. Benedikt,

Enclosed is the Screening Site Investigation package for the above referenced site. The package includes a report and an HRS Score Sheets.

The Southern Desk site is located at 1720 1st Avenue W.S. in Hickory, Catawba County, NC. The site is located on the western edge of Hickory near the town border between Hickory and Longview in an industrial, business and residential area. The facility covers an entire city block and is surrounded by a fence with several gates that remain open. Two large buildings are located on the site, a main building is located on the northside of the property and a second building is located on the southside of the property. The northwest corner of the property contains a concrete pad. Drums containing wastes were located on the concrete pad and in the secondary building in a storage room and mixing room. The drums were removed in October of 1989.

The plant was built in the 1930's by the Southern Desk Company and has had several owners. The most recent owner to use the facility for furniture manufacturing was GTE Services Corporation, which purchased the plant from Champion International in 1976 and discontinued operations in 1981 (25:Nicosia, 1988). The current owner, Franklin Machinery Company, purchased the site in 1983 (49:Yoder, 1988) (25:Nicosia, 1988). The Franklin Machinery Hickory operation leases space to 11 tenants. The tenants use the facility for warehousing. The owner is Mr. Wayne Franklin who lives in Hampton, Virginia where he operates Franklin Machinery's other plant.

The site was discovered by the Hickory Fire Marshall during a building inspection on November 10, 1987. The NC Superfund made a site visit to the site September of 1988 and subsequently requested the USEPA to do an immediate removal. Remedial action took place in September and October of 1989, funded by GTE Services, and performed by Hart Environmental and GSX under the supervision of the USEPA (3:DiCarlo,1989) (7:Gallogly). The USEPA oversight contractor was Roy F. Weston. Post removal soil sampling was performed by Wadsworth/ALERT. This analysis, by method SW846 8240, of soil samples taken on four sides of the outside concrete pad, did not indicate the presence of volatile organic compounds. However, petroleum hydrocarbons were detected in amounts ranging in concentration from 61 ppm to 2500 ppm. The samples, taken by Hart Environmental in 1989, were collected on the north, south, east and west sides of the outside concrete pad.

Samples taken during the Screening Site Investigation by the North Carolina Superfund Section in 1991 did not indicate the presence of contamination. No further action is recommended under CERCLIS.

Sincerely,



Mary C. Ganley, PG  
NC Superfund Section

North  
Carolina

DEHNR/DSWM

Southern Desk  
NCD986166353  
Screening Site Investigation  
September 1991

Mary Ganley  
Hydrogeologist  
Superfund Section  
Division of Solid Waste Management

SCREENING SITE INVESTIGATION

Southern Desk  
NCD986166353  
Hickory, North Carolina.

September 1991

Superfund Section  
Division of Solid Waste Management  
Department of Environment, Health and Natural Resources  
State of North Carolina

Prepared by:

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Mary Ganley  
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## EXECUTIVE SUMMARY

The Southern Desk site is located at 1720 1st Avenue W.S. in Hickory, Catawba County, NC. The site is located on the western edge of Hickory near the town border between Hickory and Longview in an industrial, business and residential area. The facility covers an entire city block and is surrounded by a fence with several gates that remain open. Two large buildings are located on the site, a main building is located on the northside of the property and a second building is located on the southside of the property. The northwest corner of the property contains a concrete pad. Drums containing wastes were located on the concrete pad and in the secondary building in a storage room and mixing room. The drums were removed in October of 1989.

The plant was built in the 1930's by the Southern Desk Company and has had several owners. The most recent owner to use the facility for furniture manufacturing was GTE Services Corporation, which purchased the plant from Champion International in 1976 and discontinued operations in 1981 (25:Nicosia, 1988). The current owner, Franklin Machinery Company, purchased the site in 1983 (49:Yoder, 1988)(25:Nicosia, 1988). The Franklin Machinery Hickory operation leases space to 11 tenants. The tenants use the facility for warehousing. The owner is Mr. Wayne Franklin who lives in Hampton, Virginia where he operates Franklin Machinery's other plant.

The site was discovered by the Hickory Fire Marshall during a building inspection on November 10, 1987. The NC Superfund made a site visit to the site September of 1988 and subsequently requested the USEPA to do an immediate removal. Remedial action took place in September and October of 1989, funded by GTE Services, and performed by Hart Environmental and GSX under the supervision of the USEPA (3:DiCarlo,1989) (7:Gallogly). The USEPA oversight contractor was Roy F. Weston. Post removal soil sampling was performed by Wadsworth/ALERT. This analysis, by method SW846 8240, of soil samples taken on four sides of the outside concrete pad, did not indicate the presence of volatile organic compounds. However, petroleum hydrocarbons were detected in amounts ranging in concentration from 61 ppm to 2500 ppm. The samples, taken by Hart Environmental in 1989, were collected on the north, south, east and west sides of the outside concrete pad.

Samples taken during the Screening Site Investigation by the North Carolina Superfund Section in 1991 did not indicate the presence of contamination. No further action is recommended under CERCLIS.

## 1.0 BACKGROUND

### 1.1 Location

The Southern Desk site is located at 1720 1st Avenue W.S. in Hickory, Catawba County, NC. Site coordinates of the site are Longitude 81° 22' 07.76'' W and Latitude 35° 43' 16.66'' N (45:USGS, 1970) (10:Ganley, 1991b). The site is located on the western edge of Hickory near the town border between Hickory and Longview in an industrial, business and residential area. Figure 1 locates the site on a topographic map.

### 1.2 Site Layout

The facility covers an entire city block and is surrounded by a fence with several gates that remain open. Figure 2 illustrates the site layout. Two large buildings are located on the site, a main building is located on the northside of the property and a second building is located on the southside of the property. The northwest corner of the property contains a concrete pad. Drums containing wastes were located on the concrete pad and in the secondary building in a storage room and mixing room. The drums were removed in October of 1989.

The Southern Desk site is located in a business, industrial and residential site. To the north of the facility, across the road is an abandoned industrial facility. To the northwest is a operating warehouse. The block to the west is residential, the blocks to the south and southwest are business and residential.

### 1.3 Ownership

The plant was built in the 1930's by the Southern Desk Company. In the past twenty years, owners using the facility for furniture manufacturing have included by Drexel Furniture, Champion International and another unidentified company (49:Yoder, 1988). The most recent owner to use the facility for furniture manufacturing was GTE Services Corporation, which purchased the plant from Champion International in 1976 (25:Nicosia, 1988). GTE Services Corporation produced television cabinets on site until 1981. A RCRA file for the site contains only a change of status form (6:Fox, 1991) (27:NCDEHNR, 1991). The plant was closed and remained idle until it was sold to the current owner, Franklin Machinery Company in 1983 (49:Yoder, 1988) (25:Nicosia, 1988). The Franklin Machinery Hickory operation leases space to 11 tenants. The tenants use the facility for warehousing. The owner is Mr. Wayne Franklin who lives in Hampton, Virginia where he operates Franklin Machinery's other plant.

### 1.4 Site Use History

The Southern Desk site was a furniture manufacturing plant from the 1930's to 1989. Drums, that contained old wood stain, lacquers, and finishes were located both inside and outside of the

facility buildings (22:Nicholson, 1988a). Drums present on site constituted a fire hazard. Two separate areas of drum storage included an outdoor concrete pad and an indoor drum storage area. A concrete pad outside the main building in the northwest corner of the site contained 141 55-gallon drums of wood stains and finishes. The majority of the drums were intact, a few were leaking. Four large above ground tanks (8' diameters, 11' long) were adjacent to these drums. The tanks were intact and reportedly empty. The tanks, although not mentioned in the Hart or GSX closure reports, were not present during the Superfund Screening Site Investigation of May 1991. Staining and mixing rooms, located in the second building onsite, contained 44 55-gallon drums and 253 5-gallon drums. A chemical residue crust from leaking drums had coated the floor in both rooms. Labels on drums noted stains, lacquers, naptha and flammable liquid warnings. The leaking chemicals had run into the floor drains in both rooms. The drains are connected to the sewer.

#### 1.5 Permit and Regulatory History

The site was discovered by the Hickory Fire Marshall during a building inspection on November 10, 1987. The Fire Marshall asked Mr. Franklin to remove the drums, but Mr. Franklin claimed that the drums were left over from GTE Services and they were not his property. A RCRA file for the site contains only a change of status form (6:Fox,1991)(27:NCDEHNR,1991). Apparently the site was never permitted. The remedial action described in Section 1.6, was funded by GTE Services, performed by Hart Environmental and GSX under the supervision of the USEPA (3:DiCarlo,1989). The remedial action was a result of a immediate removal action request by the North Carolina Superfund Section (7:Gallogly) (23:Nicholson,1988a).

#### 1.6 Remedial Actions to Date

A removal was completed in October 1989 by Hart Environmental under contract to GTE (3:DiCarlo,1989). The USEPA oversight contractor was Roy F. Weston. Post removal soil analysis was performed by Wadsworth/ALERT. This analysis, by method SW846 8240, of soil samples taken on four sides of the outside concrete pad, did not indicate the presence of volatile organic compounds. However, petroleum hydrocarbons were detected in amounts ranging in concentration from 61 ppm to 2500 ppm. The samples, taken by Hart Environmental in 1989, were collected on the north, south, east and west sides of the outside concrete pad. Samples taken during the Screening Site Investigation by the North Carolina Superfund Section in 1991 did not indicate the presence of contamination.

#### 1.7 Summary Trip Report

The North Carolina Superfund Section has performed two separate sampling events at the Southern Desk site and both are summarized here. The September 29, 1988 sampling event was conducted by Jack Butler, Ed Wallingford, David Lilley and Bruce

Nicholson of the NC Superfund Section. On that date the following samples were collected:

- o Chemical residue from the storage and mixing room floors (Samples 1 and 2).
- o VOA samples from what appeared to be rainwater in the drums on the concrete pad (Sample 3).
- o A red gel material oozing from one drum on the concrete pad (Sample 4).
- o Composite soil/residue from the base of many drums on the concrete pad (Sample 5).
- o Liquid product from one drum on the concrete pad that appeared to be wood stain (Sample 7).
- o Soil sample from a 1 to 4 inch depth from a depression in the corner of the concrete pad approximately 10 feet from the nearest drums (Sample 6).
- o A composite soil sample from an area devoid of vegetation between the concrete pad and the fence line (Sample 8).
- o A background soil sample across the street from the facility (Sample 9).

Subsequent to the site visit a recommended immediate removal was performed under the oversight of the USEPA. Drums of contaminants were removed and the mixing and storage rooms were deconned.

On May 21, 1991, at 12 noon, Mary Ganley, Mark Duraway and David Lilley arrived at the site. Weather conditions were cool and cloudy. David Lilley was present to do health and safety monitoring. A hole was augered with the intention of installing a well point at the location of samples 1 and 2 as indicated on the map in Figure 2. The groundwater depth was estimated to be between 10 and 45 feet, however, it was not possible to reach the water table by hand auger. The auger hole was not damp at 16 feet and the effort to install a well point was abandoned. Ambient air and readings from the mouth of the hole using an OVA were 0 ppm throughout the augering. Soil sample 2 was taken from the auger hole at a depth of six feet at 12:45 PM. Soil sample 1 was taken at a depth of six inches in a separate shallow boring next to the deeper auger hole at 1:15 PM. The block directly north of the site was completely asphalted and abandoned, therefore, it was not possible to obtain a background soil sample from this location. At 2:35PM, a background soil, sample #3, was taken north of the facility outside the fence of the Century property. At 2:45 PM, David Lilley had completed his monitoring and left the site to

the NC Superfund Section. On that date the following samples were collected:

- o Chemical residue from the storage and mixing room floors (Samples 1 and 2).
- o VOA samples from what appeared to be rainwater in the drums on the concrete pad (Sample 3).
- o A red gel material oozing from one drum on the concrete pad (Sample 4).
- o Composite soil/residue from the base of many drums on the concrete pad (Sample 5).
- o Liquid product from one drum on the concrete pad that appeared to be wood stain (Sample 7).
- o Soil sample from a 1 to 4 inch depth from a depression in the corner of the concrete pad approximately 10 feet from the nearest drums (Sample 6).
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return to Raleigh.

After deconning equipment and packing the van, Mark Durway and Mary Ganley began searching the area for residential wells and potential creek sampling locations. The residential streets within a mile radius were searched for visual evidence of domestic wells. A home next to the facility did have a well head in the yard, but the residents had not used it in years, and claimed it was not possible to access it to get a sample. The sampling team spoke with two other home owners on the block west of the facility. Both were on city water and claimed that there were no residential wells in use in the area. They indicated that any old wells would be abandoned and nonaccessable. Next we drove north of the facility and searched the area for visual evidence of wells and asked a couple of residents whether they had wells. We were informed that the area was on city water. We then proceeded to the residential area south of the site and found the same situation.

South of the site, the area was also searched for the preferred surface water drainage path. The nearest permanent creek to the site runs east/west and is approximately one mile from the site. We investigated a drainage ditch, approximately 1/2 mile from the site, running in a southerly direction along 22nd St. We spoke to residents about it and although currently full of water, they said it was often dry. Before sampling we decided to scout out the drainage to the head of the intermittent creek directly south of the site. The head waters of the creek are feed by drainage grates directly across the street from the site. After circling the site it was apparent that this was the preferred drainage pathway. At 4:30 PM, surface water sample #5 and sediment sample #4 from the head waters of the intermittent creek south of the site were collected.

Subsequent to this sampling, another tour of the area was made to determine if there were any residential wells in the area. We departed the area around 6 PM and arrived in Raleigh around 10:30 PM. Samples were analyzed by the State Laboratory of Public Health for volatile organics, semi-volatile organics and inorganics. USEPA SOP's were followed in collecting and preserving all samples.

## 2.0 ENVIRONMENTAL SETTING

### 2.1 Topography

The elevation of the site is approximately 1120 feet above mean sea level (45:USGS,1970). The site slopes .001 percent to the south. The slope of terrain between the site and the head of the intermittent stream is approximately .03 percent.

### 2.2 Surface Water

The 15 mile surface water pathway from the site is to the south and includes an intermittent creek, the Longview Creek, the Henry Fork, and the South Fork of the Catawba River (45:USGS, 1970). Twelve hundred feet south of the site there is an intermittent creek that flows another .5 mile south of the site. The probable point of entry (PPOE) is the head of the Longview Creek and it is 3840' from the site. One mile from the PPOE, is the confluence of the Longview Creek and the Henry Fork. The Henry Fork flows in a southeasterly direction and 10.5 miles from the PPOE is its confluence with the South Fork of the Catawba River. The 15 mile surface water pathway ends 1 mile north of HWY 10 in Catawba County.

The Longview Creek and the Henry Fork are Class C streams that must be protected for fish and wildlife propagation, secondary recreation, and agriculture (29:NCDNRCD,1989). The South Fork Catawba River is a WS-III stream protected as a water supply with no categorical restrictions on watershed development or discharges and must be maintained for Class C uses. There are no surface water intakes on the 15 mile surface water pathway.

### 2.3 Geology, Soils and Groundwater

The crystalline rock in the entire northwestern section of Catawba County, including the Hickory area, is gneiss and mostly quartz biotite gneiss. These rock formations are strongly foliated and fractured in most parts of Catawba County. Static water levels range between 10 and 45 feet (15:LeGrand,1954).

According to the Catawba County Soil Survey, leveled clayey land is the soil type found on the site (39:USDA,1975). No interpretations have been made on this type of soil because it is too variable. However, soil observed during the Screening site investigation was clayey.

### 2.4 Climate and Meteorology

The annual precipitation in the Hickory area averages 44 to 48 inches and the annual lake evaporation 38 to 40 inches (41:USDC,1963). The 24-hour rainfall is approximately 2.9 inches (42:USDA,1979).

## 2.5 Land Use

The facility is currently used as a warehouse facility. The area surrounding the site includes industry, business and residential properties.

## 2.6 Population Distribution and Water Supply

Total population counts for each radii were obtained from PCGEMS database (33:PCGEMS). There are four public water systems within the four mile radius of the site; the Hickory Water System (2:COH,1982), the Brookford Water System (37:TOB,1981), the Longview Water System (19:Miscmore,1991) and the Icard Water System (13:ITWC,1989). These Systems are supplied by intakes on the Catawba River north of the site, which are not on the 15 mile surface pathway.

Counts were made of houses on the topographic maps that did not lay within the public water supply systems, and these houses were multiplied by the average number of persons per household (2.55 persons) to get the groundwater population (45:USGS,1970) (43:USDC,1990). Current community well data was obtained for a four mile radius surrounding the site (28:NCDHR,1991). Community wells were located on the topographic maps from which the house counts were made. None of the communities were represented on the 1970 maps, so the populations were added to the groundwater populations. Table 1 presents population calculations and data.

TABLE 1  
SOUTHERN DESK  
NCD 986 166 353  
POPULATION DATA

	Total Population (33:PCGEMS, 1988)  (1)	Cumula- tive Populat ion	Ground water House Counts (45:USGS, 1970)  (2)	Ground water Popul- ation  (2) x 2.55= (3)	Groundwater Population Public Water Supply Database (28: NCDHR, 1991)  (4)	Total Groundwater Population  (3)+(4)= (5)	Cumulat ive Groundw ater Populat ion
0-1/4	200		0	0	0	0	0
1/4-1/2	424	624	0	0	0	0	0
1/2-1	4598	5222	52	133	50	183	183
1-2	14942	20164	189	482	0	482	665
2-3	24769	44933	678	1729	723	2452	3117
3-4	38598	83531	829	2114	2862	4976	8093

## 2.7 Critical Environments

A wetlands inventory map has not been produced for the site area or the area surrounding the 15 mile surface water pathway (Leonard, 1991). Hydric soils do not exist on the site or along the 15 mile surface water pathway from the site (UDSA, 1975), (USDA, 1989). The site is in an area designated as outside a 500 year flood plain (FEMA, 1980). Critical habitats of endangered, threatened or sensitive species do not exist on the site or on the downstream 15 mile surface pathway.

*Helianthus Laevigatus* is a species of sunflower that is located approximately one mile southeast of the site (15:LeGrand, 1954) (32:NCNHP, 1990). This plant species has been designated by the state as significantly rare, and considered imperiled and rare or local throughout it's range (NCNHP, 1990). Location of this species are shown on Figure 1. The location is not thought to be impacted by the site.

### 3.0 WASTE TYPES AND QUANTITIES

#### 3.1 Wastes Types and Disposal Methods

The Southern Desk site was a furniture manufacturing plant. Drums, that contained old wood stain, lacquers, and finishes were located both inside and outside of the facility buildings (22:Nicholson, 1988a). Drums present on the site constituted a fire hazard. Two separate areas of drum storage included an outdoor concrete pad and an indoor drum storage area. A concrete pad outside the main building in the northwest corner of the site contained 55-gallon drums of wood stains and finishes. The majority of the drums were intact, but a few were leaking. Four large above ground tanks (8' diameters, 11' long) were adjacent to these drums. The tanks were intact and reportedly empty. Staining and mixing rooms, located in the second building onsite, contained 44 55-gallon drums and 253 5-gallon drums. A chemical residue crust from leaking drums had coated the floor in both rooms. Labels on drums noted stains, lacquers, naptha and flammable liquid warnings. The leaking chemicals had run into the floor drains in both rooms. The drains are connected to the sanitary sewer.

A sample taken from an onsite drum by the a North Carolina Superfund sampling team on September 29, 1988 (Nicholson,1988b) was found to contain the following:

Methylene chloride	571 ppm
1,2-Dichloroethane	205 ppm
Toluene	54,359 ppm
Methyl ethyl ketone	72,923 ppm
Methyl isobutyl ketone	6,262 ppm
Total xylenes	4,661 ppm
Benzene	100 ppm
Ethylene benzene	1,395 ppm

The drums were removed in October of 1989 (3:DiCarlo). Post removal sampling and sampling during the North Carolina Superfund Screening Site Investigation do not indicate the presence of contaminants regulated under CERCLA.

#### 3.2 Wastes Quantities

The concrete pad outside the main building in the northwest corner of the site contained 141 55-gallon drums of wood stains and finishes. Staining and mixing rooms located in the second building onsite, contained 44 55-gallon drums and 253 5-gallon drums. Calculated below is the amount of waste that was at the site prior to the October 1989 removal action.

Outside Area: 141x55 gallon drums =7755 gallons

Inside Area: 44x55 gallon drums =2420 gallons  
253x 5 gallon drums =1265 gallons  
11,440 gallons

Subsequent to 1989 removal: 0 gallons

## 4.0 LABORATORY DATA

### 4.1 Summary

Three sampling and analytical events have taken place with respect to the Southern Desk Site. The first was performed by the North Carolina Superfund Section and the State Laboratory of Public Health during a September 1988 Site Visit, prior to removal action. The second event was performed in September 1989 by Hart Environmental, GSX Services and Wadsworth Alert Laboratory, subsequent to removal action (3:DiCarlo,1989). Analytical data for this second event, including hazardous waste manifests are located with Reference 3 in Appendix C of this report. The third event was performed by the North Carolina Superfund Section and the State Laboratory of Public Health during a May 21, 1991 Screening Site Investigation. Analytical data for the first and third analytical events, both performed by the North Carolina Superfund Section and the State Laboratory of Public Health are included in Appendix B. Table 2 summarizes the analytical results of these events.

The analysis indicated that although contaminants were once present onsite, the October 1989 removal action was effective in mitigating the migration of contaminants into the environment. During the May 1991 Superfund Screening Site Investigation a groundwater sample was not included because a domestic well within a mile could not be found and hand augering to 16 feet was not deep enough to reach groundwater.

TABLE 2  
 LABORATORY ANALYSIS  
 SOUTHERN DESK  
 NCD986166353

\*see text for explanation of Events

No	Media	Event*	Location	Organic Results
1	Residue	1	Storage Room Residue	ND
2	Residue	1	Mixing Room	82.1 ppm toluene 1 ppm ethylene benzene 374.5 ppm 4-methyl-2 pentanone 10 ppm xylenes .025 ppm naphthalene .052 ppm dibutyl phthalate 60500 ppm butylbenzyl phthalate 1100 ppm bis(2-ethylhexyl)phthalate 207 ppm di-n-octyl phthalate 149 ppm benzoic acid
3	Water	1	Rainwater in Drum	65.9 ppm toluene .01 ppm ethylene benzene 206 ppm 2-butanone .174 ppm 4-methyl-2 pentanone .560 ppm xylenes
4	Red Gel	1	Red Gel in Drum	ND
5	Soil/Residue	1	Composite near Drums	10 ppm phenanthrene 30 ppm dibutyl phthalate 150 ppm 15 ppm fluoranthene .005 ppm toluene .027 ppm xylenes 11.7 ppm pyrene 1464 ppm butyl benzyl phthalate 13.3 ppm benz(a)anthracene 15 ppm chrysene 121 ppm benzo(k)fluoranthene 55 ppm benzo(a)pyrene 80 ppm benzo(g,h,i)perylene 70 ppm benzoic acid
6	Soil	1	Corner	.583 ppm naphthalene .833 ppm acenaphthene .5 ppm fluorene 6 ppm phenanthrene 3 ppm anthracene 10.6 ppm fluoranthene 7 ppm pyrene 2.8 ppm benz(a)anthracene 3.3 ppm chrysene 23 ppm benzo(k)fluoranthene 8 ppm benzo(a)pyrene 15 ppm indeno(1,2,3-cd)pyrene 22 ppm benzo(g,h,i)perylene .42 ppm dibenzofuran

7	Contaminant	1	Drum	571 ppm methylene chloride 205 ppm 1,2-dichloroethane 100 ppm benzene 544359 ppm toluene 1395 ppm ethylene benzene 77923 ppm 2-butanone 6264 ppm 4-methyl-2 pentanone 4661 ppm xylenes 61 ppm naphthalene 685 ppm butyl benzyl phthalate 3729 ppm bis(2-ethylhexyl)phthalate
8	Soil	1	Outside Drum Area	330 ppm acenaphthene 1.2 ppm phenanthrene .5 ppm anthracene 2 ppm fluoranthene 1.5 ppm pyrene 1 ppm benz(a)anthracene 1.5 ppm chrysene 7 ppm benzo(k)fluoranthene 9.2 ppm indeno(1,2,3-cd)pyrene 3.6 ppm benzo(a)pyrene 15.8 ppm benzo(g,h,i)perylene
9	Soil	1	Background	330 ppm acenaphthene 1.0 ppm phenanthrene .33 ppm anthracene 1.3 ppm fluoranthene 1.0 ppm pyrene .5 ppm benz(a)anthracene .7 ppm chrysene 2.3 ppm benzo(k)fluoranthene 11.6 ppm benzo(a)pyrene
1	Soil	2	North side of outdoor concrete pad	No Volatile Organics Detected by Method 8240 61 TPH
2	Soil	2	East side of outdoor concrete pad	No Volatile Organics Detected by Method 8240 2500 TPH
3	Soil	2	West side of outdoor concrete pad	No Volatile Organics Detected by Method 8240 110 TPH
4	Soil	2	South side of outdoor concrete pad	No Volatile Organics Detected by Method 8240 220 TPH
1	Soil	3	North side of outdoor concrete pad 6"	Organics not detected Inorganics comparable to background

2	Soil	3	North side of outdoor concrete pad 6'	Organics not detected Inorganics comparable to background
3	Soil	3	Background from property to the northwest of site 6"-1'	Organics not detected Inorganics within naturally occurring range
4	Sediment	3	From drainage ditch south of site	Organics not detected Inorganics comparable to background
5	Soil	3	From drainage ditch south of site	Organics not detected Inorganics comparable to background

## 5.0 TOXICOLOGICAL AND CHEMICAL CHARACTERISTICS

Although contaminants are not currently detected at the site as discussed in Section 4.0, toxicological characteristics of contaminant that were present in drums removed from the site are summarized in Table 5-1. Data sheets for each substance are also presented (Sax and Lewis, 1989).

TABLE 3  
 TOXICOLOGICAL CHARACTERISTICS  
 SOUTHERN DESK  
 NCD 986166353

Substance	Hazard Ranking (Sax and Lewis, 1989)	Target Organs (NIOSH,1990)	Carcinogen (NIOSH,1990)
Methylene Chloride	3	Skin, cardiovascular system, eyes, central nervous system	yes
Dichloroethane	3	Information Not Available	
Toluene	3	Central nervous system, liver, skin, kidneys	no
Methyl Ethyl Ketone	3	Central nervous system, lungs	no
Methyl Isopropyl Ketone	3	Information not available	
Xylene	2	Central nervous system, eyes, GI tract, blood, liver, kidneys, skin	no
Benzene	3	Blood, central nervous system, skin, bone marrow, eyes, respiratory system	yes
Ethyl Benzene	2	Upper respiratory system, central nervous system, skin, eyes	no

## METHYLENE CHLORIDE

### METHANE DICHLORIDE

CAS RN: 75092  
mf: CH<sub>2</sub>Cl<sub>2</sub>; mw: 84.93

NIOSH #: PA 8050000

Colorless volatile liquid. bp: 39.8°, lel = 15.5% in O<sub>2</sub>, uel = 66.4% in O<sub>2</sub>, fp: -96.7°, d: 1.326 @ 20°/4°, autoign. temp.: 1139°F, vap. press: 380 mm @ 22°, vap. d: 2.93.

#### SYNS:

CHLORURE DE METHYLENE  
(FRENCH)  
DICHLOROMETHANE (DOT)  
FRÉON 30  
METHYLENE BICHLORIDE

METHYLENE CHLORIDE (DOT)  
METHYLENE DICHLORIDE  
METYLENU CHLOREK (POLISH)  
NCI-C50102

#### TOXICITY DATA: 3

skn-rbt 810 mg/24H SEV  
eye-rbt 162 mg MOD  
eye-rbt 10 mg MLD  
eye-rbt 17500 mg/m<sup>3</sup>/10M  
mmo-sat 5700 ppm  
mma-sat 5700 ppm  
dni-hmn: fbr 5000 ppm/1H-C  
dni-ham: lng 5000 ppm/1H-C  
sce-ham: lng 5000 ppm/1H-C  
ihl-rat TCLo: 4500 ppm/24H (1-17D preg)  
ihl-rat TCLo: 1250 ppm/7H (6-15D preg)  
ihl-mus TCLo: 1250 ppm/7H (6-15D preg)  
ihl-rat TCLo: 500 ppm/6H/2Y:ETA  
ihl-hmn TCLo: 500 ppm/1Y-1: CNS  
ihl-hmn TCLo: 500 ppm/8H: BLD  
orl-rat LD50: 167 mg/kg  
ihl-rat LC50: 88000 mg/m<sup>3</sup>/30M  
ihl-mus LC50: 14400 ppm/7H  
ipr-mus LD50: 1500 mg/kg  
scu-mus LD50: 6460 mg/kg  
orl-dog LDLo: 3000 mg/kg  
ihl-dog LCLo: 14108 ppm/7H  
ipr-dog LDLo: 950 mg/kg  
scu-dog LDLo: 2700 mg/kg  
ivn-dog LDLo: 200 mg/kg  
ihl-cat LCLo: 43400 mg/m<sup>3</sup>/4.5H  
orl-rab LDLo: 1900 mg/kg  
scu-rbt LDLo: 2700 mg/kg  
ihl-gpg LCLo: 5000 ppm/2H

#### CODEN:

JETOAS 9,171,76  
JETOAS 9,171,76  
TXCYAC 6,173,76  
TXCYAC 6,173,76  
MUREAV 56,245,78  
MUREAV 56,245,78  
MUREAV 81,203,81  
MUREAV 81,203,81  
MUREAV 81,203,81  
TXAPA9 52,29,80  
TXAPA9 32,84,75  
TXAPA9 32,84,75  
TXAPA9 48,185,79  
ABHYAE 43,1123,68  
SCIEAS 176,295,72  
DOWSD\* 1/26/76  
FAVUAI 7,35,75  
NIHBAZ 191,1,49  
TXAPA9 9,139,66  
TXAPA9 4,354,62  
QJPPAL 7,205,34  
NIHBAZ 191,1,49  
TXAPA9 10,119,67  
QJPPAL 7,205,34  
QJPPAL 7,205,34  
QJPPAL 7,205,34  
AHBAAM 116,131,36  
HBTXAC 1,94,56  
QJPPAL 7,205,34  
FLCRAP 1,197,67

Aquatic Toxicity Rating: TLM96:1000-100 ppm  
WQCHM\* 3,-,74. Carcinogenic Determination: Indefinite IARC\*\* 20,449,79.

TLV: Air: 100 ppm DTLVS\* 4,275,80. *Toxicology Review*: FAZMAE 18,365,74; 27ZTAP 3,94,69. OSHA Standard: Air: TWA 500 ppm; CL 1000; Pk 2000/5M/2H (SCP-J) FEREAC 39,23540,74. DOT-ORM-A, Label: None FEREAC 41,57018,76. Occupational Exposure to Methylene Chloride recm std: Air: TWA 75 ppm; Pk 500 ppm/15M NTIS\*\*. Currently tested by NTP for Carcinogenesis by Standard Bioassay Protocol as of December 1980. "NIOSH Manual of Analytical Methods" Vol 1 127, Vol 3 S329. Reported in EPA TSCA Inventory, 1980. EPA TSCA 8(a) Preliminary Assessment Information Proposed Rule FERREAC 45,13646,80.

THR: MUT data. A skn, eye irr. An exper ETA, ± CARC. A hmn CNS, BLD. HIGH orl, ivn; MOD ipr, orl, scu, ihl; LOW ihl, scu. See also chlorinated aliphatic hydrocarbons. Very dangerous to the eyes. Except for its property of inducing narcosis, it has very few other acute toxicity effects. Its narcotic powers are quite strong, and in view of its great volatility, care should be taken in its use. It will not form explosive mixtures with air at ordinary temp. However, it can be decomp by contact with hot surfaces and open flame, and it can then yield toxic fumes, which are irr and will thus give warning of their presence. It has been used as an anesthetic in Europe and is still used there for local anesthesia. Exper have shown that 25,000 ppm conc for 2 hr exposures were not lethal. Conc of 7,200 ppm after 8 min caused paresthesia of the extremities; after 16 min, acceleration of the pulse to 100; during the first 20 min, congestion in the head, a sense of heat and slight irr of the eyes. At a level of 2,300 ppm, there was no feeling of dizziness during 1-hr exposures, but nausea did occur after 30 min of exposure. The limit of perception by smell is set at 25-50 ppm conc. Can cause a dermatitis upon prolonged skin contact. A respirator for organic vapors and fumes should be worn to avoid excessive inhal. Used as a food additive permitted in food for human consumption:

**Fire Hazard:** Reacts violently with Li, NaK, potassium-tert-butoxide, (KOH + *n*-methyl-*n*-nitrosourea).

**Explosion Hazard:** None under ordinary conditions, but will form explosive mixtures in atmosphere having high oxygen content, in liquid O<sub>2</sub>, N<sub>2</sub>O<sub>4</sub>, K, Na, NaK.

**Disaster Hazard:** Dangerous; when heated to decomp, emits highly tox fumes of phosgene.

**DICHLOROETHANE**

CAS RN: 1300216  
mf: C<sub>2</sub>H<sub>4</sub>Cl<sub>2</sub>; mw: 98.96

NIOSH #: KH 9800000

Lel = 5.6%; uel = 11.4%.

**TOXICITY DATA: 2**

orl-rat LD50: 1120 mg/kg  
orl-mus LD50: 625 mg/kg  
ihl-mus LCLo: 10 gm/m<sup>3</sup>  
skn-rbt LD50: 3890 mg/kg  
ihl-rat TCLo: 6000 ppm (6-15D preg)  
TER

**CODEN:**

HYSAAV 32,349,67  
HYSAAV 32,349,67  
GISAAA 20(8),19,55  
UCDS\*\* 3/23/70  
TXAPA9 28,452,74

ihl-rat TCLo: 6000 ppm (6-15D preg) TXAPA9 28,452,74

*THR:* MOD orl in rat, mus. MOD skn in rbt.

*Disaster Hazard:* When heated to decomp it emits very tox fumes of Cl<sup>-</sup>.

**1,2-DICHLOROETHANE**

mf: C<sub>2</sub>H<sub>4</sub>Cl<sub>2</sub>; mw: 98.96

Lel = 6.2%; uel = 15.9%; flash p: 55.4°F.

*Incomp:* Dinitrogen tetraoxide; metals.

For further information see Vol. 1, No. 4 of *DPIM Report*.

**TOLUENE**

CAS RN: 108883

NIOSH #: XS 5250000

mf: C<sub>7</sub>H<sub>8</sub>; mw: 92.15

Colorless liquid, benzol-like odor. Flammable. mp: -95° to -94.5°, bp: 110.4°, flash p: 40°F (CC), ulc: 75-80, lel = 1.27%, uel = 7%, d: 0.866 @ 20°/4°, autoign. temp.: 896°F, vap. press: 36.7 mm @ 30°, vap. d: 3.14. Insol in water; sol in acetone; misc in absolute alc, ether, chloroform.

**SYNS:**

METHYLBENZENE  
METHYLBENZOL  
NCI-C07272  
PHENYLMETHANE

TOLUEN (DUTCH)  
TOLUEN (CZECH)  
TOLUOL  
TOLUOLO (ITALIAN)

**TOXICITY DATA:**

3  
cyt-rat-scu 12 gm/kg/12D-1  
ihl-rat TCLo: 1500 mg/m<sup>3</sup>/24H (1-8D preg)  
ihl-rat TCLo: 1000 mg/m<sup>3</sup>/24H (7-14D preg)  
orl-mus TDLo: 9 gm/kg (6-15D preg)  
orl-mus TDLo: 15 gm/kg (6-15D preg)  
orl-mus TDLo: 30 gm/kg (6-15D preg)  
ihl-mus TCLo: 500 mg/m<sup>3</sup>/24H (6-13D preg)  
unk-rat LD50: 6900 mg/kg  
unk-mus LD50: 2000 mg/kg  
eye-hmn 300 ppm  
skn-rbt 435 mg MLD  
eye-rbt 870 ug MLD  
eye-rbt 2 mg/24H SEV  
cyt-rat-ihl 610 mg/m<sup>3</sup>/16W-1  
ihl-hmn TCLo: 200 ppm: CNS  
ihl-man TCLo: 100 ppm: PSY  
orl-rat LD50: 5000 mg/kg  
ihl-rat LCLo: 4000 ppm/4H  
lpr-rat LDLo: 800 mg/kg  
ihl-mus LC50: 5320 ppm/8H  
lpr-mus LD50: 1120 ug/kg  
skn-rbt LD50: 14 gm/kg  
scu-frg LDLo: 920 mg/kg

**CODEN:**

GTPZAB 17(3),24,73  
TXCYAC 11,55,78  
FMORAO 28,286,80  
TJADAB 19,41A,79  
TJADAB 19,41A,79  
TJADAB 19,41A,79  
TXCYAC 11,55,78  
GISAAA 45(12),64,80  
GISAAA 45(12),64,80  
JIHTAB 25,282,43  
UCDS\*\* 7/23/70  
UCDS\*\* 7/23/70  
28ZPAK -,23,72  
GISAAA 42(1),32,77  
JAMAAP 123,1106,43  
WEHSAL 9,131,72  
AMIHAB 19,403,59  
AIHAAP 30,470,69  
TXAPA9 1,156,59  
JIHTAB 25,366,43  
AGGHAR 18,109,60  
UCDS\*\* 7/23/70  
AEPPE 130,250,28

Aquatic Toxicity Rating: TLM96: 100-10 ppm WQCHM\* 4,-,74.

TLV: Air: 100 ppm DTLVS\* 4,400,80. Toxicology Review: AEHLAU 22,373,71; CTOXAO 11(5),549,77; FNCSA6 2,67,73; MUREAV 47(2),75,78; CTOXAO 11(5),549,77; 27ZTAP 3,144,69. OSHA Standard: Air: TWA 200 ppm; CL 300; Pk 500/10M (SCP-V) FEREAC 39,23540,74. DOT: Flammable Liquid, Label: Flammable Liquid FEREAC 41,57018,76. Occupational Exposure to Toluene recm std: Air: TWA 100 ppm; CL 200 ppm/10M NTIS\*\*. Currently Tested by NTP for Carcinogenesis by Standard Bioassay Protocol as of December 1980. Reselected by NTP Carcinogenesis Bioassay as of December 1980. "NIOSH Manual of Analytical Methods" VOL 1 127, VOL 3 S343. Reported in EPA TSCA Inventory, 1980. EPA TSCA 8(a) Preliminary Assessment Information Proposed

Rule FERREAC 45,13646,80. EPA TSCA 8E No. 02780079P-Followup Sent as of April, 1979.

THR: MUT data. A skn, eye irr. A hmn CNS, PSY. MOD ihl, ipr, scu; HIGH ipr; LOW orl, skn. Toluene is derived from coal tar, and commercial grades usually contain small amounts of benzene as an impurity. Acute poisoning, resulting from exposures to high conc of the vapors, are rare with toluene. Inhal of 200 ppm of toluene for 8 hrs may cause impairment of coordination and reaction time; with higher conc (up to 800 ppm) these effects are increased and are observed in a shorter time. In the few cases of acute toluene poisoning reported, the effect has been that of a narcotic, the workman passing through a stage of intoxication into one of coma. Recovery following removal from exposure has been the rule. An occasional report of chronic poisoning describes an anemia and leucopenia, with biopsy showing a bone marrow hypoplasia. These effects, however, are less common in people working with toluene, and they are not as severe.

Exposure to conc up to 200 ppm produces few symptoms. At 200-500 ppm, headache, nausea, eye irr, loss of appetite, a bad taste, lassitude, impairment of coordination and reaction time are reported, but are not usually accompanied by any laboratory or physical findings of significance. With higher conc, the above complaints are increased and in addition, anemia, leucopenia and enlarged liver may be found in rare cases.

A common air contaminant.

**Fire Hazard:** Slight, when exposed to heat, flame or oxidizers.

**Explosion Hazard:** Mod, when exposed to flame or reacted with (H<sub>2</sub>SO<sub>4</sub> + HNO<sub>3</sub>), N<sub>2</sub>O<sub>4</sub>, AgClO<sub>4</sub>, BrF<sub>3</sub>, UF<sub>6</sub>.

**Disaster Hazard:** Mod dangerous; when heated it emits irr fumes; can react vigorously with oxidizing materials.

**To Fight Fire:** Foam, CO<sub>2</sub>, dry chemical.

For further information see Vol. 2, No. 1 of DPIM Report.

## 2-BUTANONE

CAS RN: 78933

NIOSH #: EL 6475000

mf: C<sub>4</sub>H<sub>8</sub>O; mw: 72.12

Colorless liquid, acetone-like odor. bp: 79.57°, fp: -85.9°,  
lcl = 1.8%, ucl = 11.5%, flash p: 22°F (TOC), d: 0.80615  
@ 20°/20°, vap. press: 71.2 mm @ 20°, autoign. temp.:  
960°F, vap. d: 2.42, ULC: 85-90.

### SYNS:

AETHYLMETHYLKETON (GER- MAN)	MEK
BUTANONE-2 (FRENCH)	METHYL ACETONE
ETHYL METHYL CETONE (FRENCH)	METHYL ETHYL KETONE
ETHYLMETHYLKETON (DUTCH)	METHYL ETHYL KETONE (DOT)
ETHYL METHYL KETONE	METILETILCHETONE (ITALIAN)
	METYLOETYLOKETON (POLISH)

### TOXICITY DATA: 3

eye-hmn 350 ppm  
skn-rbt 500 mg/24H MOD  
skn-rbt 402 mg/24H MLD  
skn-rbt 13780 ug/24H open MLD  
eye-rbt 80 mg  
ihl-rat TLo: 1000 ppm/(6-15D  
preg): TER  
ihl-hmn TLo: 100 ppm/5M: IRR  
orl-rat LD50: 3400 mg/kg  
ihl-rat LLo: 2000 ppm/4H  
i pr-mus LD50: 616 mg/kg  
skn-rbt LD50: 13 gm/kg  
i pr-gpg LDLo: 2000 mg/kg

### CODEN:

JIIITAB 25,282,43  
JIIITAB 25,282,43  
TXAPA9 19,276,71  
AIIIAAP 23,95,62  
TXAPA9 19,276,71  
TXAPA9 28,452,74  
  
JIIITAB 25,282,43  
TXAPA9 19,699,71  
JIIITAB 31,343,49  
SCCUR\* -,6,61  
UCDS\*\* 5/7/70  
FCTXAV 15,611,77

Aquatic Toxicity Rating: TLm96: over 1000 ppm.  
WQCHM\* 2,-,74.

TLV: Air: 200 ppm DTLVS\* 4,279,80. *Toxicology Re-  
view*: 27ZTAP 3,94,69. OSHA Standard: Air: TWA  
200 ppm (SCP-A) FERREAC 39,23540,74. DOT: Flam-  
mable Liquid, Label: Flammable Liquid FERREAC  
41,57018,76. Occupational Exposure to Ketones recm  
std: Air: TWA 590 mg/m<sup>3</sup> NTIS\*. "NIOSH Manual  
of Analytical Methods" VOL 1 127, VOL 2 S3. Re-  
ported in EPA TSCA Inventory, 1980. EPA TSCA  
8(a) Preliminary Assessment Information Proposed  
Rule FERREAC 45,13646,80.

**THR**: MOD via oral; LOW via dermal routes. A strong  
irr: Affects peripheral nervous system, CNS. is an exper  
TER. See ketones. Eye irr @ 350 ppm.

**Fire Hazard**: Dangerous when exposed to heat or  
flame.

**Spontaneous Heating**: No.

**Disaster Hazard**: Highly dangerous upon exposure to heat  
or flame.

**Explosion Hazard**: Mod, when exposed to flame.

**To Fight Fire**: Alcohol foam, CO<sub>2</sub>, dry chemical.

**Incomp**: Chlorosulfonic acid, oleum, potassium-tert-bu-  
toxide, heat or flame, chloroform, hydrogen peroxide,  
nitric acid.

**MLA750**

**HR: 3**

**METHYL ISOPROPYL KETONE**

CAS: 563-80-4

NIOSH: EL 9100000

DOT: 2397

mf: C<sub>5</sub>H<sub>10</sub>O      mw: 86.15

**SYNS:**

ISOPROPYL METHYL KETONE  
3-METHYL-2-BUTANONE

3-METHYL BUTAN 2-ONE (DOT)  
MIPK

**TOXICITY DATA:**

skn-rbt 500 mg/24H MOD  
skn-rbt 500 mg open MLD  
eye-rbt 100 mg/24H MLD  
mrc-smc 12300 ppm  
orl-rat LD50: 148 mg/kg  
ihl-rat LCLo: 5700 ppm/4H  
skn-rbt LD50: 6350 mg/kg

**CODEN:**

FCTXAV 16,819,78  
FCTXAV 16,637,78  
FCTXAV 16,819,78  
MUREAV 149,339,85  
SCCUR\* -7,61  
TXAPA9 28,313,74  
FCTXAV 16,819,78

Reported in EPA TSCA Inventory.

ACGIH TLV: TWA 200 ppm

DOT Classification: Flammable Liquid; Label: Flammable  
Liquid

THR: Poison by ingestion. Mildly toxic by inhalation and skin contact. Mutagenic data. A skin and eye irritant. Flammable when exposed to heat or flame; can react vigorously with oxidizing materials. When heated to decomposition it emits acrid smoke and irritating fumes. See also KETONES.

**XYLENE**CAS RN: 1330207  
mf: C<sub>8</sub>H<sub>10</sub>; mw: 106.18

NIOSH #: ZE 2100000

**SYNS:**DIMETHYLBENZENE  
KSYLEN (POLISH)  
XILOLI (ITALIAN)XYLENEN (DUTCH)  
XYLOL  
XYLOLE (GERMAN)**TOXICITY DATA:**ihl-rat TCLo: 1000 mg/m<sup>3</sup>/24H  
(9-14D preg)

eye-hmn 200 ppm

skn-rbt 100% MOD

skn-rbt 500 mg/24H MOD

eye-rbt 87 mg MLD

eye-rbt 5 mg/24H SEV

ihl-hmn TCLo: 200 ppm:IRR

ihl-man LCLo: 10000 ppm/6H

orl-rat LD50: 4300 mg/kg

ihl-rat LC50: 3000 ppm/4H

scu-rat LD50: 1700 mg/kg

ipr-mus LD50: 1570 ug/kg

ipr-gpg LDLo: 2000 mg/kg

ipr-mam LDLo: 2000 mg/kg

**3-2-1 CODEN:**

TXCYAC 11,55,78

JIHTAB 25,282,43

AMIHAB 14,387,56

28ZPAK -,24,72

AMIHAB 14,387,56

28ZPAK -,24,72

JIHTAB 25,282,43

BMJOAE 3,442,70

AMIHAB 14,387,56

NPIRI\* 1,123,74

NPIRI\* 1,123,74

AGGHAR 18,109,60

AIHAAP 35,21,74

AJHYA2 7,276,27

Aquatic Toxicity Rating: TLm96: 100-10 ppm WQCHM\*  
2,-,74.*Toxicology Review:* 27ZTAP 3,153,69. OSHA Standard:  
Air: TWA 100 ppm (SCP-U) FEREAC 39,23540,74.  
Occupational Exposure to Xylene recm std: Air: TWA  
100 ppm; CL 200 ppm/10M NTIS\*\*. "NIOSH Manual  
of Analytical Methods" VOL 1 127, VOL 3 S318. Re-  
ported in EPA TSCA Inventory, 1980. EPA TSCA  
8(a) Preliminary Assessment Information Proposed  
Rule FERREAC 45,13646,80.*THR:* A hmn eye irr; A skn eye irr. A hmn IRR and  
MOD ipr, scu, ihl; LOW orl.*Disaster Hazard:* When heated to decomp it emits acrid  
smoke and fumes.**XYLENE**

CAS RN: 1330207

NIOSH #: ZE 2190000

A clear liquid. bp: 138.5°, flash p: 100°F (TOC), d: 0.864  
@ 20°/4°, vap. press: 6.72 mm @ 21°. Composition  
as nonaromatics .07%, toluene 14%, ethyl benzene  
19.27%, p-xylene 7.84%, m-xylene 65.01%, o-xylene  
7.63%, C<sub>9</sub> and aromatics .04% (TXAPA9 33,543,75)  
**SYNS:**AROMATIC HYDROCARBONS,  
MIXED

NCI-C55232

**TOXICITY DATA:**

ihl-rat LC50: 6700 ppm/4H

**2 CODEN:**

TXAPA9 33,543,75

Currently Tested by NTP for Carcinogenesis by Standard  
Bioassay Protocol as of December 1980. Reported in  
EPA TSCA Inventory, 1980. EPA TSCA 8E No.  
12770025—Status Report Prepared as of April, 1979.*THR:* MOD via inhal and oral routes. Some temporary  
corneal effects are noted, as well as some conjunctival  
irr by instillation. Irr can start @ 200 ppm. Very little  
dermal toxicity.*Fire Hazard:* Mod, in the presence of heat or flame; can  
react with oxidizing materials.*To Fight Fire:* Foam, CO<sub>2</sub>, dry chemical.*Disaster Hazard:* When heated to decomp it emits acrid  
smoke and fumes.

**o-XYLENE**

CAS RN: 95476  
mf: C<sub>8</sub>H<sub>10</sub>; mw: 106.18

NIOSH #: ZE 2450000

Colorless liquid; d: 0.880 @ 20°/4°; mp: -25.2°; bp: 144.4°; flash p: 62.6°F. Lel = 1.0%; uel = 6.0%. Insol in water; misc in absolute alc; ether.

**SYNS:**

O-DIMETHYLBENZENE  
O-METHYLTOLUENE  
1,2-XYLENE

1,2-DIMETHYLBENZENE  
O-XYLOL

TOXICITY DATA:	3-2	CODEN:
ihl-rat TLo:150 mg/m <sup>3</sup> /24H (7-14D preg)		TXCYAC 18,61,80
ihl-rat TLo:1500 mg/m <sup>3</sup> /24H (7-14D preg)		TXCYAC 18,61,80
ihl-rat TLo:3000 mg/m <sup>3</sup> /24H (7-14D preg)		TXCYAC 18,61,80
orl-rat LDLo:5000 mg/kg		AMIHAB 19,403,59
ihl-rat LLo:6125 ppm/12H		JPBAA7 46,95,38
ihl-mus LLo:6920 ppm		AEPPAE 143,223,29

Aquatic Toxicity Rating: TLm96:100-10 ppm WQCHM\* 2,-,74.

**TLV:** Air: 100 ppm DTLVS\* 4,440,80. *Toxicology Review:* MUREAV 47(2),75,78. Occupational Exposure to Xylene recm std: Air: TWA 100 ppm; CL 200 ppm/10M NTIS\*\*. Reported in EPA TSCA Inventory, 1980. EPA TSCA 8(a) Preliminary Assessment Information Proposed Rule FERREAC 45,13646,80.

**THR:** HIGH-MOD orl, ihl. Eye irr @ 200 ppm. A common air contaminant.

**Fire Hazard:** Dangerous, when exposed to heat or flame.

**Explosion Hazard:** Slight, in the form of vapor, when exposed to heat or flame.

**Disaster Hazard:** When heated to decomp it emits acrid smoke and fumes.

**To Fight Fire:** Foam, CO<sub>2</sub>, dry chemical.

**Incomp:** Oxidizing materials.

**m-XYLENE**

CAS RN: 108383  
mf: C<sub>8</sub>H<sub>10</sub>; mw: 106.18

NIOSH #: ZE 2275000

Colorless liquid; mp: -47.9°; bp: 139°; lcl = 1.1%; uel = 7.0%; flash p: 77°F; d: 0.864 @ 20°/4°; vap press: 10 mm @ 28.3°; vap d: 3.66; autoign temp: 986°F. Insol in water; misc with alc, ether and some organic solvents.

**SYNS:**

M-DIMETHYLBENZENE  
1,3-XYLENE

1,3-DIMETHYLBENZENE  
M-XYLOL

TOXICITY DATA:	3-2	CODEN:
ihl-rat TLo:3000 mg/m <sup>3</sup> /24H (7-14D preg)		TXCYAC 18,61,80
orl-mus TLo:12 mg/kg (12-15D preg)		APTOD9 19,A22,80
orl-mus TLo:30 mg/kg (6-15D preg)		APTOD9 19,A22,80
ihl-man TLo:424 mg/m <sup>3</sup> /6H/6D		TOLED5 1000(Sp. Iss. I),74,8
skn-rbt 10 ug/24H open SEV		AIHAAP 23,95,62
orl-rat LD50:5000 mg/kg		AMIHAB 19,403,59
ihl-rat LLo:8000 ppm/4H		AIHAAP 23,95,62
ihl-mus LLo:2010 ppm/24H		JPBAA7 46,95,38

**TLV:** Air: 100 ppm DTLVS\* 4,439,80. *Toxicology Review:* MUREAV 47(2),75,78. Occupational Exposure to Xylene recm std: Air: TWA 100 ppm; CL 200 ppm/10M NTIS\*\*. Reported in EPA TSCA Inventory, 1980. EPA TSCA 8(a) Preliminary Assessment Information Proposed Rule FERREAC 45,13646,80.

**THR:** HIGH-MOD orl, ihl. A common air contaminant. Eye irr @ 200 ppm.

**Fire Hazard:** Dangerous, when exposed to heat or flame, can react with oxidizing materials.

**Explosion Hazard:** MOD, in the form of vapor when exposed to heat or flame.

**Disaster Hazard:** Dangerous; keep away from open flame. When heated to decomp it emits acrid smoke.

**To Fight Fire:** Foam, CO<sub>2</sub>, dry chemical.

For further information see Vol. 1, No. 7 of *DPIM Report*.

**p-XYLENE**

CAS RN: 106423  
mf: C<sub>8</sub>H<sub>10</sub>; mw: 106.18

NIOSH #: ZE 2625000

Clear plates; bp: 138.3°; lel: 1.1%; uel = 7.0%; flash p: 77°F (CC); d: 0.8611 @ 20°/4°; vap press: 10 mm @ 27.3°; vap d: 3.66; autoign temp: 986°F. mp: 13°-14°. Insol in water; sol in alc, ether, organic solvents.

**SYNS:**

P-DIMETHYLBENZENE	1,4-DIMETHYLBENZENE
P-METHYLTOLUENE	P-XYLOL
1,4-XYLENE	

<b>TOXICITY DATA:</b>	<b>3-2-1</b>	<b>CODEN:</b>
ihl-rat TLo: 3000 mg/m <sup>3</sup> /24H (9-10D preg)		TXCYAC 19,263,81
ihl-rat TLo: 150 mg/m <sup>3</sup> /24H (7-14D preg)		TXCYAC 18,61,80
ihl-rat TLo: 3000 mg/m <sup>3</sup> /24H (7-14D preg)		TXCYAC 18,61,80
orl-mus TLo: 12 mg/kg (12-15D preg)		APTOD9 19,A22,80
orl-rat LD50: 5000 mg/kg		AMIHAB 19,403,59
ihl-rat LLo: 4912 ppm/24H		JPBAA7 46,95,38
ihl-mus LLo: 3460 ppm		AEPPAE 143,223,29

Aquatic Toxicity Rating: Tlm96: 100-10 ppm WQCHM\* 2,-,74

*TLV:* Air: 100 ppm DTLWS\* -,30,76. *Toxicology Review:* MUREAV 47(2),75,78. Occupational Exposure to Xylene recm std: Air: TWA 100 ppm; CL 200 ppm/10M NTIS\*\*. Reported in EPA TSCA Inventory, 1980. EPA TSCA 8(a) Preliminary Assessment Information Proposed Rule FERREAC 45,13646,80.

*THR:* LOW orl, ihl. Eye irr @ 200 ppm. May be narcotic in high concs. Chronic tox not established; but is less tox than benzene.

*Fire Hazard:* Dangerous, when exposed to heat or flame; can react with oxidizing materials.

*Explosive Hazard:* MOD, in the form of vapor, when exposed to heat or flame.

*Disaster Hazard:* When heated to decomp it emits acrid smoke and fumes.

*To Fight Fire:* Foam, CO<sub>2</sub>, dry chemical.

*Incomp:* Acetic acid + air; HNO<sub>3</sub>; 1,3-dichloro-5,5-dimethyl-2,4-imid-azolidindione.

CAS RN: 71432

NIOSH #: CY 1400000

mf: C<sub>6</sub>H<sub>6</sub>; mw: 78.12

Clear colorless liquid. mp: 5.51°, bp: 80.093°-80.094°  
 flash p: 12°F (CC), d: 0.8794 @ 20°, autoign. temp.:  
 1044°F, lel: 1.4%, uel: 8.0%, vap. press: 100 mm @  
 26.1°, vap. d: 2.77, ulc: 95-100.

SYNS:

(6)ANNULENE  
 BENZEEN (DUTCH)  
 BENZEN (POLISH)  
 BENZOL  
 BENZOLENE  
 BENZOLO (ITALIAN)  
 BICARBURET OF HYDROGEN  
 CARBON OIL

COAL NAPHITHA  
 CYCLOHEXATRIENE  
 FENZEN (CZECH)  
 MINERAL NAPHITHA  
 MOTOR BENZOL  
 NCI-C5276  
 PHENYL HYDRIDE  
 PYROBENZOLE

TOXICITY DATA: 3

skn-rbt 15 mg/24H open MLD  
 eye-rbt 88 mg MOD  
 eye-rbt 2 mg/24H SEV  
 cyt-rat-scu 12 gm/kg/12D-1  
 mnt-mus-ldr 500 uL/kg  
 cyt-mus-ori 100 uL/kg  
 cyt-mus-ldr 100 uL/kg  
 dlt-mus-ldr 5 mg/kg  
 cyt-rbt-scu 8400 mg/kg  
 scu-mus TDLo:2700 mg/kg/(13D  
 preg):TER  
 ihl-hmn TCLO:100 ppm/10Y-1:CAR  
 ori-rat TDLo:52 gm/kg/52W-1:CAR  
 skn-mus TDLo:1200 gm/kg/  
 49W-1:NEO  
 scu-mus TDLo:600 mg/kg/  
 17W-1:ETA  
 par-mus TDLo:670 mg/kg/  
 19W-1:ETA  
 ihl-hmn TC:400 ppm/8Y-1:ETA  
 ihl-man TC:2100 mg/m3/4Y-1:CAR  
 ori-rat TD:10 gm/kg/52W-1:CAR  
 ori-hmn TDLo:130 mg/kg:CNS  
 ihl-hmn LCLo:20000 ppm/5M  
 ihl-hmn TCLO:210 ppm:BLD  
 ihl-rat TCLO:670 mg/m3/24H (15D  
 pre/1-22D preg)  
 ihl-rat TCLO:56600 ug/m3/24H  
 (1-22D preg)  
 ihl-rat TCLO:50 ppm/24H (7-14D  
 preg)  
 ihl-rat TCLO:150 ppm/24H (7-14D  
 preg)  
 scu-mus TDLo:1100 mg/kg (12D  
 preg)  
 scu-mus TDLo:2700 mg/kg/(13D  
 preg) TFX:TER  
 ori-mus TDLo:9 gm/kg (6-15D preg)  
 ori-mus TDLo:12 gm/kg (6-15D preg)  
 ori-rat TD:10 gm/kg/52W-1  
 TFX:CAR  
 ihl-hmn TCLO:100 ppm:CNS  
 unk-man LDLo:194 mg/kg  
 ori-rat LD50:3800 mg/kg  
 ihl-rat LC50:10000 ppm/7H  
 lpr-rat LDLo:1150 mg/kg  
 ori-mus LD50:4700 mg/kg  
 ihl-mus LC50:9980 ppm  
 lpr-mus LD50:990 ug/kg  
 ori-dog LDLo:2000 mg/kg  
 ihl-dog LCLo:146000 mg/m3  
 ihl-cat LCLo:170000 mg/m3  
 lvn-rbt LDLo:88 mg/kg  
 lpr-gpg LDLo:527 mg/kg  
 scu-ldr LDLo:1400 mg/kg  
 ihl-mam LCLo:20000 ppm/5M

CODEN:

AHHAAP 23,95,62  
 AMIHAB 14,387,56  
 28ZPAK -,23,72  
 GTPZAB 17(3),24,73  
 ENMUDM 2,43,80  
 ENMUDM 2,43,80  
 ENMUDM 2,43,80  
 TPKVAL 15,30,79  
 PSDTAP 15,275,74  
 AMBNAS 17,285,70  
 TRBMAV 37,153,78  
 MELAAD 70,352,79  
 BICAAI 16,275,62  
 KRANAW 9,403,32  
 KLWOAZ 12,109,33  
 BLOOAW 52,285,78  
 NEJMAG 271,872,64  
 MELAAD 70,352,79  
 AHYGAJ 31,336,1897  
 29ZUA8 -,53  
 27ZXA3 -,341,63  
 HYSAAV 33,327,68  
 HYSAAV 33,112,68  
 JHEMA2 24,363,80  
 JHEMA2 24,363,80  
 TOXID9 1,125,81  
 AMBNAS 17,285,70  
 TJADAB 19,41A,79  
 TJADAB 19,41A,79  
 MELAAD 70,352,79  
 INMEAF 17,199,48  
 83DCAI 2,73,70  
 TXAPA9 19,699,71  
 28ZRAQ -,113,60  
 TXAPA9 1,156,59  
 HYSAAV 32,349,67  
 JIHITAB 25,366,43  
 AGGIIAR 18,109,60  
 IIBAMAK 4,1313,35  
 IIBTXAC 1,324,56  
 IIBTXAC 1,324,56  
 JTEIID6 -(Suppl.2),45,77  
 IIBTXAC 1,42,56  
 IIBAMAK 4,1313,35  
 AEPPAE 138,65,28

Aquatic Toxicity Rating: TLM96:100-10 ppm WQCHM\*  
 2,-74. Carcinogenic Determination: Human Suspected  
 IARC\*\* 7,203,74.

TLV: Air: 10 ppm DTLVS\* 4,37,80. Toxicology Review:  
 ARPAAQ 11,434,31; EVHPAZ 11,163,75; AEHLAU  
 22,373,71; PAREAQ 4,1,52; FNCSA6 2,67,73; MU-  
 REAV 47(2),75,78; AMSVAZ 118,354,44; ZHPMAT  
 166,113,78; JTEHD6 -(suppl.2),69,77; PHRPA6  
 41,1357,26; CTOXAO 11,531,77; BNYMAM 54,  
 413,78; KRANAW 9,403,32; 27ZTAP 3,22,69. OSHA  
 Standard: Air: TWA 10 ppm; CL 25 ppm; Pk 50 ppm/  
 10M/8H (SCP-U) FEREAC 39,23540,74. DOT: Flam-  
 mable Liquid, Label: Flammable Liquid FEREAC  
 41,57018,76. Occupational Exposure to Benzene recm  
 std: Air: CL 10 ppm/60M NTIS\*\*. Currently Tested  
 by NTP for Carcinogenesis by Standard Bioassay Pro-  
 tocol as of December 1980. "NIOSH Manual of Analyt-  
 ical Methods" VOL 1 127, VOL 3 S311. Reported in  
 EPA TSCA Inventory, 1980. EPA TSCA 8E  
 NO:12770027-Followup Sent as of April, 1979.

THR: Poisoning occurs most commonly through inhal  
 of the vapor, though benzene can penetrate the skin,  
 and poison in that way. Locally, benzene has a compar-  
 atively strong irr effect, producing erythema and burn-  
 ing, and, in more severe cases, edema and even blister-  
 ing. Exposure to high conc of the vapor (3000 ppm  
 or higher) may result from failure of equipment or  
 spillage. Such exposure, while rare in industry, may  
 result in acute poisoning, characterized by the narcotic  
 action of benzene on the CNS. The anesthetic action  
 of benzene is similar to that of other anesthetic gases,  
 consisting of a preliminary stage of excitation followed  
 by depression and, if exposure is continued, death  
 through respiratory failure. The chronic, rather than  
 the acute form, of benzene poisoning is important in  
 industry. It is a recog leukemogen. There is no specific  
 blood picture occurring in cases of chronic benzol poi-  
 soning. The bone marrow may be hypoplastic, normal,  
 or hyperplastic, the changes reflected in the peripheral  
 blood. Anemia, leucopenia, macrocytosis, reticulocyto-  
 sis, thrombocytopenia, high color index, and prolonged  
 bleeding time may be present. Cases of myeloid leuke-  
 mia have been reported. For the supervision of the  
 worker, repeated blood examinations are necessary, in-  
 cluding hemoglobin determinations, white and red cell  
 counts and differential smears. Where a worker shows  
 a progressive drop in either red or white cells, or where  
 the white count remains below 5,000 per cu mm or  
 the red count below 4.0 million per cu mm, on two  
 successive monthly examinations, he should be immedi-  
 ately removed from exposure. Following absorption of  
 benzene, elimination is chiefly through the lungs, when  
 fresh air is breathed. The portion that is absorbed is  
 oxidized, and the oxidation products are combined with  
 sulfuric and glycuronic acids and eliminated in the  
 urine. This may be used as a diagnostic sign. Benzene  
 has a definite cumulative action, and exposure to rela-  
 tively high conc is not serious from the point of view  
 of causing damage to the blood-forming system, pro-  
 vided the exposure is not repeated. On the other hand,

## ETHYL BENZENE

CAS RN: 100414  
mf: C<sub>8</sub>H<sub>10</sub>; mw: 106.18

NIOSH #: DA 0700000

Colorless liquid, aromatic odor. Misc in alcohol and ether, insol in NH<sub>3</sub>; sol in SO<sub>2</sub>. bp: 136.2°, fp: -94.9°, flash p: 59°F, d: 0.8669 @ 20°/4°, autoign. temp.: 810°F, vap. press: 10 mm @ 25.9°, vap. d: 3.66, lel = 1.2%, uel = 6.8%.

### SYNS:

AETHYLBENZOL (GERMAN)  
ETHYLBENZEEN (DUTCH)  
ETHYLBENZOL  
ETILBENZENE (ITALIAN)

ETYLOBENZEN (POLISH)  
NCI-C56393  
PHENYLETHANE

### TOXICITY DATA:

2-1

### CODEN:

skn-rbt 15 mg/24H open MLD	AIHAAP 23,95,62
eye-rbt 100 mg	AJOPAA 29,1363,46
ihl-rat TLo:97 ppm/7H (15D preg)	BATTL° JAN,81
ihl-rat TLo:985 ppm/7H (1-19D preg)	BATTL° JAN,81
ihl-rat TLo:96 ppm/7H (1-19D preg)	BATTL° JAN,81
ihl-rbt TLo:99 ppm/7H (1-18D preg)	BATTL° JAN,81
ihl-hmn TLo:100 ppm/8H	AIHAAP 31,206,70
TFX:IRR	
orl-rat LD50:3500 mg/kg	AMIHAB 14,387,56
ihl-rat LLo:4000 ppm/4H	AIHAAP 23,95,62
skn-rbt LD50:5000 mg/kg	FCTXAV 13,681,75
ihl-gpg LLo:10000 ppm	PHRPA6 45,1241,30

Aquatic Toxicity Rating: TLm96:100-10 ppm WQCHM\* 2,-,74.

TLV: Air: 100 ppm DTLVS\* 4,176,80. OSHA Standard: Air: TWA 100 ppm (skin) (SCP-C) FEREAC 39, 23540,74. DOT: Flammable Liquid, Label: Flammable Liquid FEREAC 41,57018,76. Selected by NTP Carcinogenesis Bioassay as of December 1980. "NIOSH Manual of Analytical Methods" VOL 2 S29. Reported in EPA TSCA Inventory, 1980. EPA TSCA 8(a) Preliminary Assessment Information Proposed Rule FERREAC 45,13646,80.

**THR:** MOD via irr to skn, eyes, mu mem and via oral and inhal routes. The liquid is an irr to the skn and mu mem. A conc of 0.1% of the vapor in air is an irr to the eyes of hmns, and a conc of 0.2% is extremely irr at first, then causes dizziness, irr of the nose and throat and a sense of constriction of the chest. Exposure of guinea pigs to 1% conc has been reported as causing ataxia, loss of consciousness, tremor of the extremities and finally death through respiratory failure. The pathological findings were congestion of the brain and lungs, with edema. No data are available regarding the effect of chronic exposure. An exper TER.

Erythema and inflammation of the skin may result from contact of the skn with the liquid. Exposure to the vapor causes lachrymation and irr of the nose and throat, dizziness, and a sense of constriction of the chest. The irr properties are sufficient to cause workers to leave an atmosphere containing 0.5% of the vapor.

**Fire Hazard:** Dangerous, when exposed to heat or flame; can react vigorously with oxidizing materials.

**Spontaneous Heating:** No.

**Disaster Hazard:** Dangerous; keep away from heat and open flame.

**To Fight Fire:** Foam, CO<sub>2</sub>, dry chemical.

For further information see Vol. 2, No. 6 of *DPIM Report*.

APPENDIX A  
MAPS AND PHOTOGRAPHS

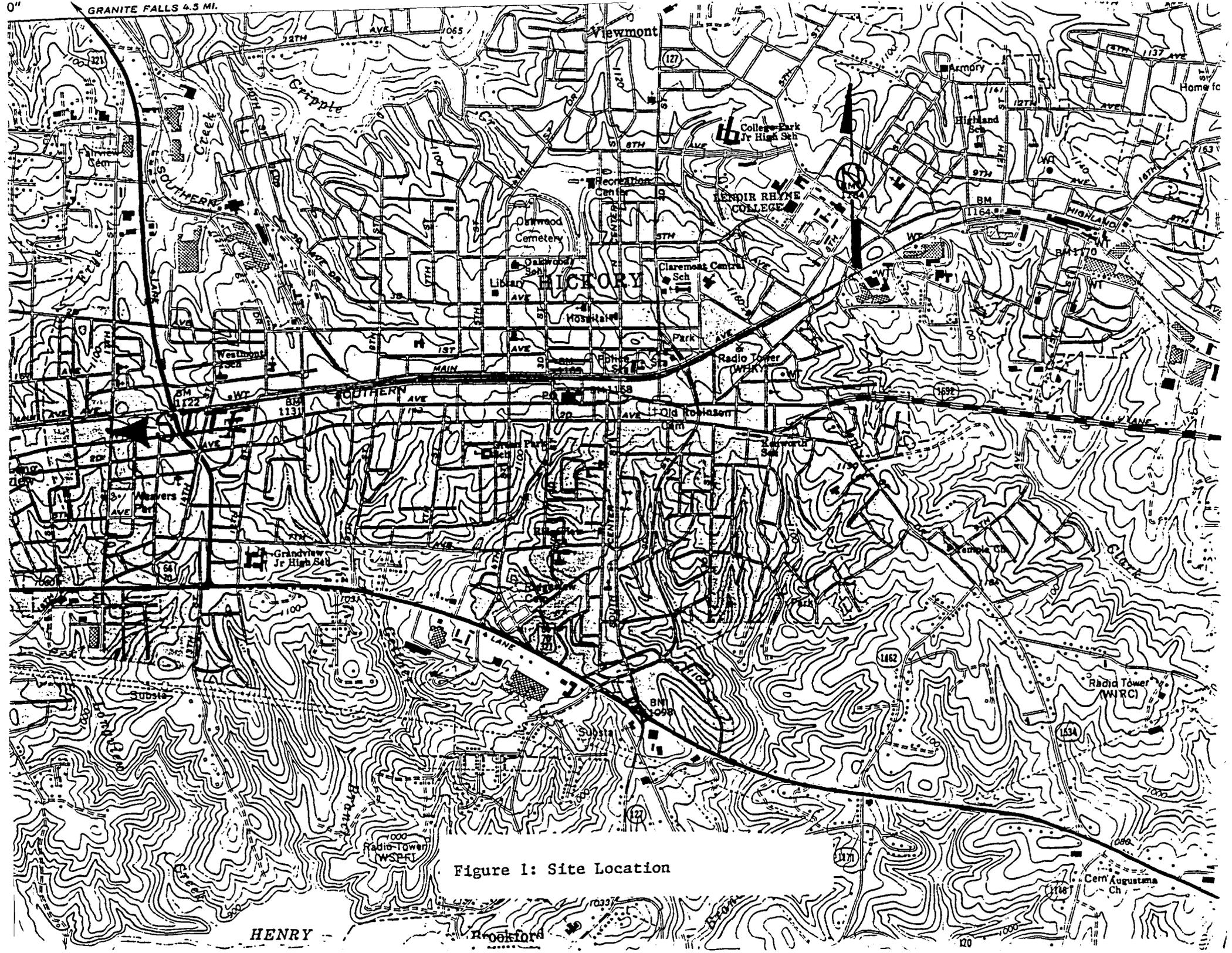


Figure 1: Site Location

HENRY

Rockford

120

GRANITE FALLS, N. C.  
N3545-W8122.5/7.5  
1970  
AMS 4755 IV SW-SERIES V842

BETHLEHEM, N. C.  
N3545-W8115/7.5  
1970  
AMS 4755 IV SE-SERIES V842

HICKORY, N. C.  
N3537.5-W8115/7.5  
1970  
AMS 4755 III NE-SERIES V842

- █ Hickory Water System (COW, 1982)
- █ Longview Water System (Wisemore, 1991)
- █ Icard Township Water System (ITWC, 1989)
- █ Brookford Water System (TOW, 1991)

Community Wells (NCDBR, 1991)

Name	Population Served	
A	Hollar MHP	130
B	Riverside MHP	124
C	Westview Acres	90
D	Lakeview Park	120
E	Eastview Height	105
F	Meadowbrook Village	350
G	Rolling Hills SD	50
H	Sherill	42
I	St Stephens MHP	148
J	Sunset Hills SD	350
K	Willow Oaks	160
L	Huffman MHP	186
M	Homestead SD	405
N	Woodridge SD	360
O	Jamestown SD	400
P	Forest Ridge	350
Q	K&L MHP	147

Sensitive Environment  
1 Helianthus Laevigatus

- ROAD CLASSIFICATION
- Primary highway, hard surface
  - Secondary highway, hard surface
  - Light-duty road, hard or improved surface
  - Unimproved road, hard surface
  - Interstate Route
  - U. S. Route
  - State Route

Map compiled, edited, and published by the Geological Survey  
control by USGS, USCGS, and North Carolina Geodetic Survey  
topography by photogrammetric methods from aerial  
photographs taken 1966. Field checked 1970.  
Projection: 1927 North American datum  
300-meter Universal Transverse Mercator grid ticks,  
page 17, shown in blue  
The red dashed lines indicate selected fence and field lines where  
generally visible on aerial photographs. This information is unchecked  
and tint indicates area in which only landmark buildings are shown

LONGVIEW, N. C.  
N3537.5-W8122.5/7.5  
1970  
AMS 4755 III NW-SERIES V842

UTM GRID and 1970 MAGNETIC NORTH  
DECLINATION AT CENTER OF SHEET

SCALE 1:24,000  
CONTOUR INTERVAL 20 FEET  
DATUM IS MEAN SEA LEVEL

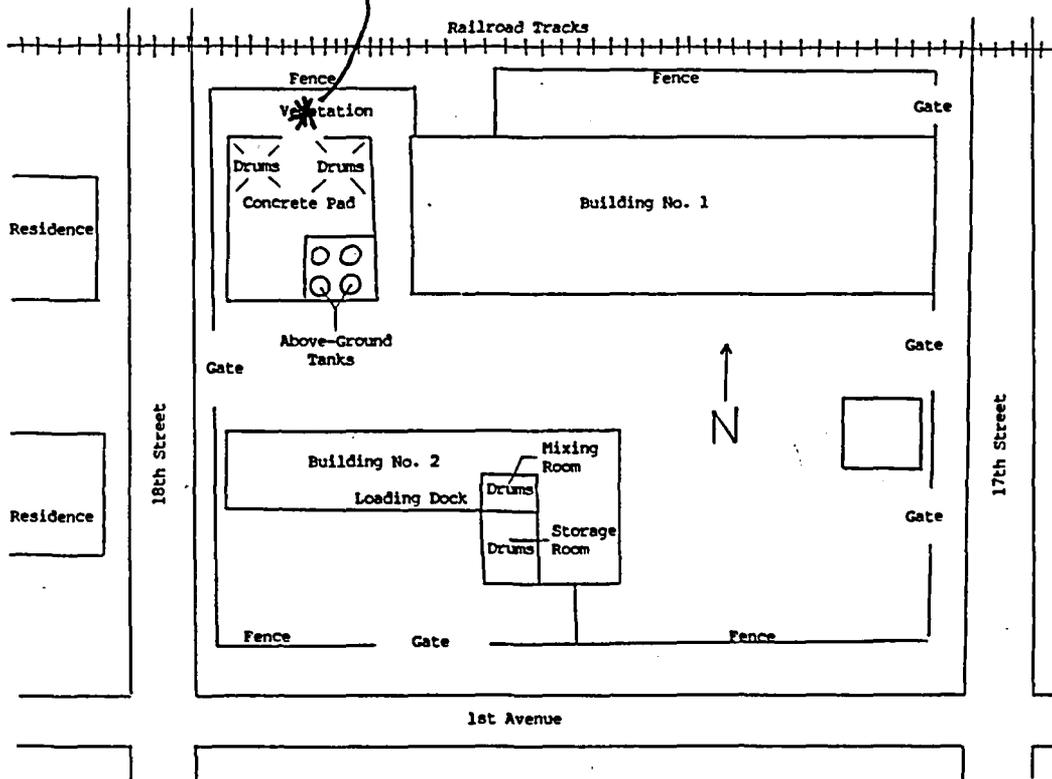
THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS  
FOR SALE BY U. S. GEOLOGICAL SURVEY, WASHINGTON, D. C. 20242  
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

*1 Helianthus laevigatus, 1953*

*1 Helianthus mollis var. mollis 003*

\* Sample 3

Samples 1+2



Map shows areas where drums were previously located

\* Samples 4+5

Sample locations shown are those taken by the NC Superfund in May of 1991.

Figure 2: Site Layout

SOUTHERN DESK  
NCD 986 166 353  
PHOTOGRAPHS



Photograph 1: Northwest corner of Southern Desk Site. Location of samples 1 and 2 collected during the NC Superfund Screening Site Investigation of May 21, 1991.



2. Northward view of Southern Desk Site from 1st Avenue. May 21, 1991.

16-982  
Made in France

National®

SOUTHERN DESK  
NCD 986 166 353  
PHOTOGRAPHS



Photograph 3: Drains on southside of 1st Avenue, across street from Southern Desk Site, that flow to a drainage ditch that leads to the head of an intermittent creek on the 15 mile surface water pathway. May 21, 1991.



Photograph 4. A southward view from 1st Avenue, looking down a path that leads to the drainage ditch that flows to the head of the intermittent creek. May 21, 1991.

SOUTHERN DESK  
NCD 986 166 353  
PHOTOGRAPHS



Photograph 5: Property to the northwest of Southern Desk Site.  
Sample 3, a background soil, location. May 21, 1991.

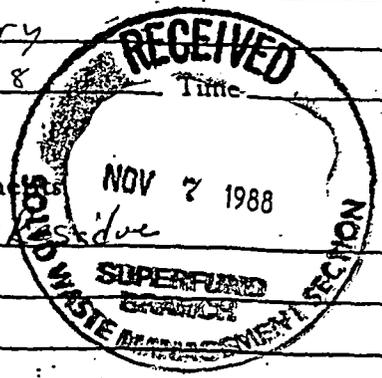
C-LINE #62067  
CLEAR TOPPER

APPENDIX B  
LABORATORY DATA

Appendix B

SAMPLE ANALYSES REQUEST

Number 18 D TBA Field Sample Number 4057  
 Name of Site FRANKLIN MACHINERY Site Location Hickory  
 Collected By BRUCE NICHOLSON ID# Superfund Date Collected 9/29/88 Time \_\_\_\_\_



Type of Sample:  
 Environmental Concentrate  
 Groundwater (1)  Solid (5) (#1) Storage Room Residue  
 Surface Water (2)  Liquid (6)  
 Soil (3)  Sludge (7)  
 Other (4)  Other (8) Residue

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
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/1	Parameter	Results mg/1	Parameter	Results mg/1
<input checked="" type="checkbox"/> P&T:GC/MS	_____	EDB	_____	Methoxychlor	_____
<input checked="" type="checkbox"/> Acid:B/N Ext.	_____	PCB's	_____	Toxaphene	_____
<input type="checkbox"/> TOX	_____	<input checked="" type="checkbox"/> Petroleum*	_____	2,4-D	_____
	_____	Endrin	_____	2,4,5-TP (silvex)	_____
	_____	Lindane	_____		_____

MICROBIOLOGY

\* Petroleum Distillates

RADIOCHEMISTRY

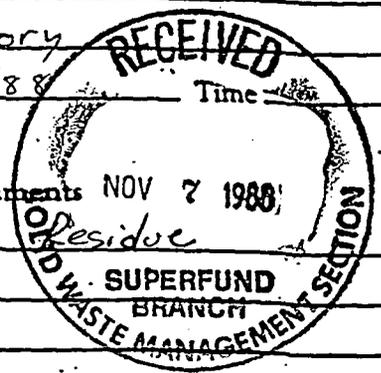
Parameter	Parameter	Results PCi/1
(MF) Coliform Colonies/100mls	Gross Alpha	_____
(MPN) Coliform Colonies/100mls	Gross Beta	_____
		_____
		_____

Date Received 9-30-88 JN Date Reported 11-2-88  
 Date Extracted 10-6-88 BD Date Analyzed 10-7-88 tw BNA 10-7-88 BD  
 Reported By [Signature] Lab Number 802394

#802394 - 802403

AMPLE ANALYSES REQUEST

Number 18 D TBA Field Sample Number 4058  
 Name of Site FRANKLIN MACHINERY Site Location Hickory  
 Collected By BRUCE NICHOLSON ID# Superfund Date Collected 9/29/88 Time 1:30



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

(#2) Mixing Room

Comments NOV 7 1988  
Residue

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
— 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/1	Parameter	Results mg/1	Parameter	Results mg/1
<input checked="" type="checkbox"/> P&T:GC/MS	_____	— EDB	_____	— Methoxychlor	_____
<input checked="" type="checkbox"/> Acid:B/N Ext.	_____	— PCB's	_____	— Toxaphene	_____
— TOX	_____	<input checked="" type="checkbox"/> Petroleum*	_____	— 2,4-D	_____
		— Endrin	_____	— 2,4,5-TP (silvex)	_____
		— Lindane	_____		

MICROBIOLOGY

\* Petroleum Distillates

RADIOCHEMISTRY

Parameter	Parameter	Results PCi/1
— (MF) Coliform Colonies/100mls	— Gross Alpha	_____
— (MPN) Coliform Colonies/100mls	— Gross Beta	_____

Date Received 9-30-88 JN Date Reported \_\_\_\_\_  
 Date Extracted 10-6-88 BD Date Analyzed PT 10-6-88 nw BWA 10-10-88 BD  
 Reported By \_\_\_\_\_ Lab Number 802395

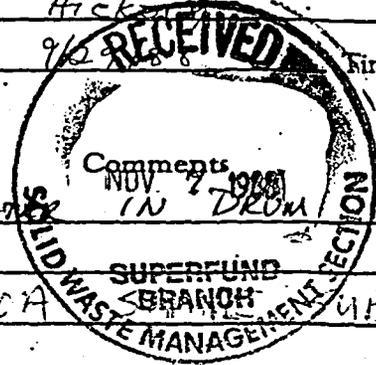
SAMPLE ANALYSES REQUEST

Number 18 D TBA Field Sample Number 4059  
 Name of Site FRANKLIN MACHINERY Site Location Hickory  
 Collected By BRUCE NICHOLSON ID# Superfund Date Collected 9/28/88 Time \_\_\_\_\_

Type of Sample:

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

#3 RAINWATER  
 ONLY VOA



INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
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/1	Parameter	Results mg/1	Parameter	Results mg/1
<input checked="" type="checkbox"/> P&T:GC/MS	_____	EDB	_____	Methoxychlor	_____
<input checked="" type="checkbox"/> Acid:B/N Ext.	_____	PCB's	_____	Toxaphene	_____
<input checked="" type="checkbox"/> TOX	_____	<input checked="" type="checkbox"/> Petroleum*	_____	2,4-D	_____
		Endrin	_____	2,4,5-TP (silvex)	_____
		Lindane	_____		

MICROBIOLOGY

\* Petroleum Distillates

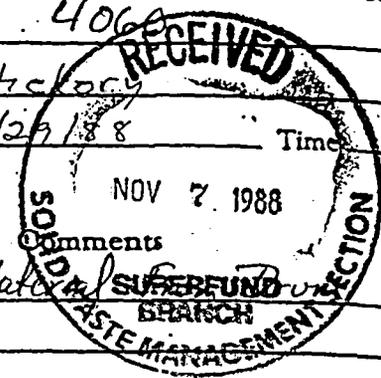
RADIOCHEMISTRY

Parameter	Parameter	Results PCi/1
(MF) Coliform Colonies/100mls	Gross Alpha	_____
(MPN) Coliform Colonies/100mls	Gross Beta	_____

Date Received 9-30-88 JN Date Reported \_\_\_\_\_  
 Date Extracted \_\_\_\_\_ Date Analyzed 10-3-88 NW  
 Reported By \_\_\_\_\_ Lab Number 802396

SAMPLE ANALYSES REQUEST

Number 18 D TBA Field Sample Number 4068  
 Name of Site FRANKLIN MACHINERY Site Location Hickory  
 Collected By BRUCE NICHOLSON ID# Superfund Date Collected 9/29/88 Time \_\_\_\_\_



Type of Sample:  
 Environmental Concentrate  
 Groundwater (1)  Solid (5) (Gel) #4 Red Gel Material  
 Surface Water (2)  Liquid (6)  
 Soil (3)  Sludge (7)  
 Other (4)  Other (8)

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
— 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/1	Parameter	Results mg/1	Parameter	Results mg/1
<input checked="" type="checkbox"/> P&T:GC/MS	_____	— EDB	_____	— Methoxychlor	_____
<input checked="" type="checkbox"/> Acid:B/N Ext.	_____	— PCB's	_____	— Toxaphene	_____
— TOX	_____	<input checked="" type="checkbox"/> Petroleum*	_____	— 2,4-D	_____
		— Endrin	_____	— 2,4,5-TP (silvex)	_____
		— Lindane	_____		

MICROBIOLOGY

\* Petroleum Distillates

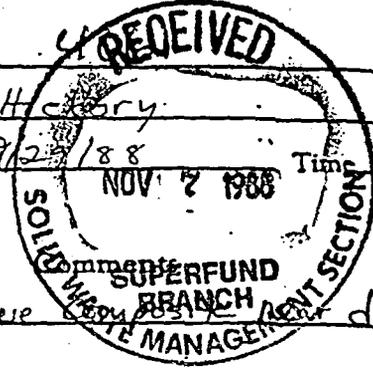
RADIOCHEMISTRY

Parameter	Parameter	Results PCi/1
— (MF) Coliform Colonies/100mls	— Gross Alpha	_____
— (MPN) Coliform Colonies/100mls	— Gross Beta	_____

Date Received 9-30-88 JN Date Reported \_\_\_\_\_  
 Date Extracted 10-6-88 B20 Date Analyzed 802397 PT 10-6-88-nw BNA 10-7-88 BS  
 Reported By \_\_\_\_\_ Lab Number \_\_\_\_\_

MPLE ANALYSES REQUEST

Number 18 D TBA Field Sample Number \_\_\_\_\_  
 Name of Site FRANKLIN MACHINERY Site Location Hickory  
 Collected By BRUCE NICHOLSON ID# Superfund Date Collected 9/25/88 Time \_\_\_\_\_



Type of Sample:  
 Environmental Concentrate  
 \_\_\_\_\_ Groundwater (1) \_\_\_\_\_ Solid (5)  
 \_\_\_\_\_ Surface Water (2) \_\_\_\_\_ Liquid (6)  
 Soil (3) \_\_\_\_\_ Sludge (7)  
 \_\_\_\_\_ Other (4) \_\_\_\_\_ Other (8)

#5 Soil/Residue drums

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
_____ 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/1	Parameter	Results mg/1	Parameter	Results mg/1
<input checked="" type="checkbox"/> P&T:GC/MS	_____	_____ EDB	_____	_____ Methoxychlor	_____
<input checked="" type="checkbox"/> Acid:B/N Ext.	_____	_____ PCB's	_____	_____ Toxaphene	_____
_____ TOX	_____	<input checked="" type="checkbox"/> Petroleum*	_____	_____ 2,4-D	_____
		_____ Endrin	_____	_____ 2,4,5-TP (silvex)	_____
		_____ Lindane	_____		

MICROBIOLOGY

\* Petroleum Distillates

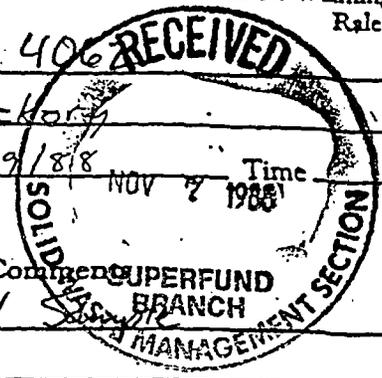
RADIOCHEMISTRY

Parameter	Parameter	Results PCI/1
_____ (MF) Coliform Colonies/100mls	_____ Gross Alpha	_____
_____ (MPN) Coliform Colonies/100mls	_____ Gross Beta	_____

Date Received 9-30-88 JN Date Reported \_\_\_\_\_  
 Date Extracted 10-6-88 BQ Date Analyzed 10-7-88 JNW BNA 10-11-88 BQ  
 Reported By \_\_\_\_\_ Lab Number 802398

COMPLE ANALYSES REQUEST

Number 18 D TBA Field Sample Number 406  
 Name of Site FRANKLIN MACHINERY Site Location Hickory  
 Collected By BRUCE NICHOLSON ID# Superfund Date Collected 9/29/88 Time NOV 2 1988  
 Type of Sample:



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

#6 Corner Soil

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
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/1	Parameter	Results mg/1	Parameter	Results mg/1
X P&T:GC/MS		EDB		Methoxychlor	
X Acid:B/N Ext.		PCB's		Toxaphene	
TOX		X Petroleum*		2,4-D	
		Endrin		2,4,5-TP (silvex)	
		Lindane			

MICROBIOLOGY

\* Petroleum Distillates

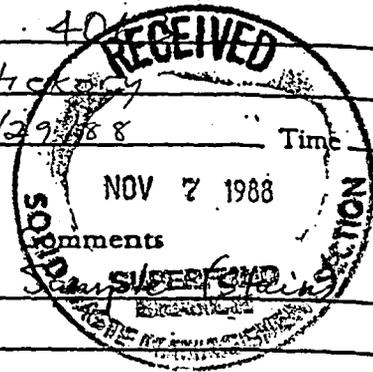
RADIOCHEMISTRY

Parameter	Parameter	Results PCi/1
(MF) Coliform Colonies/100mls	Gross Alpha	
(MPN) Coliform Colonies/100mls	Gross Beta	

Date Received 9-30-88, TN Date Reported PT  
 Date Extracted 10-6-88BD Date Analyzed 10-7-88TW BNA 10-7-88BD  
 Reported By \_\_\_\_\_ Lab Number 802399

SAMPLE ANALYSES REQUEST

Number 18 D TBA Field Sample Number 40  
 Name of Site FRANKLIN MACHINERY Site Location Hickory  
 Collected By BRUCE NICHOLSON ID# Superfund Date Collected 9/29/88 Time \_\_\_\_\_



Type of Sample:

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

(#7) Drum Product

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
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/1	Parameter	Results mg/1	Parameter	Results mg/1
<input checked="" type="checkbox"/> P&T:GC/MS	_____	EDB	_____	Methoxychlor	_____
<input checked="" type="checkbox"/> Acid:B/N Ext.	_____	PCB's	_____	Toxaphene	_____
<input type="checkbox"/> TOX	_____	<input checked="" type="checkbox"/> Petroleum*	_____	2,4-D	_____
		Endrin	_____	2,4,5-TP (silvex)	_____
		Lindane	_____		

MICROBIOLOGY

\* Petroleum Distillates

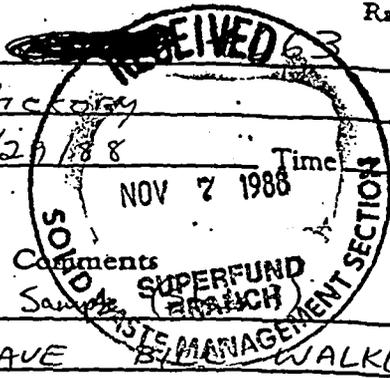
RADIOCHEMISTRY

Parameter	Parameter	Results PCI/1
(MF) Coliform Colonies/100mls	Gross Alpha	_____
(MPN) Coliform Colonies/100mls	Gross Beta	_____

Date Received 9-30-88 JN Date Reported \_\_\_\_\_  
 Date Extracted 10-6-88 BD Date Analyzed PT 10-5-88 nw BVA 10-11-88 BD  
 Reported By \_\_\_\_\_ Lab Number 802400

**SAMPLE ANALYSES REQUEST**

Number 18 D TBA Field Sample Number \_\_\_\_\_  
 Name of Site FRANKLIN MACHINERY Site Location Hickory  
 Collected By BRUCE NICHOLSON ID# Superfund Date Collected 9/27/88 Time \_\_\_\_\_  
 Type of Sample: \_\_\_\_\_



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

Comments  
#7 Drum Product Sample  
PLEASE HAVE WALKER  
DETERMINE FLASH POINT  
A.S.A.P. Thanks.

**INORGANIC CHEMISTRY**

Extractables		Total			
Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
Arsenic	_____	Arsenic	_____	Silver	_____
Barium	_____	Barium	_____	Sulfates	_____
Cadmium	_____	Cadmium	_____	Zinc	_____
Chromium	_____	Chloride	_____	Ph	_____
Lead	_____	Chromium	_____	Conductivity	_____
Mercury	_____	Copper	_____	TDS	_____
Selenium	_____	Fluoride	_____	TOC	_____
Silver	_____	Iron	_____	✓ flash point	_____
		Lead	_____		
		Manganese	_____		
		Mercury	_____		
		Nitrate	_____		
		Selenium	_____		

**ORGANIC CHEMISTRY**

Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
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**

\* Petroleum Distillates

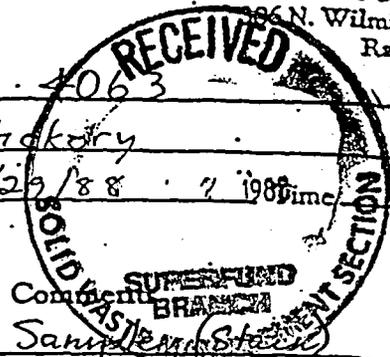
**RADIOCHEMISTRY**

Parameter	Parameter	Results PCi/1
(MF) Coliform Colonies/100mls	Gross Alpha	_____
(MPN) Coliform Colonies/100mls	Gross Beta	_____

Date Received 9-30-88 JN Date Reported \_\_\_\_\_  
 Date Extracted \_\_\_\_\_ Date Analyzed \_\_\_\_\_  
 Reported By \_\_\_\_\_ Lab Number 802401

SAMPLE ANALYSES REQUEST

Number 18 D TBA Field Sample Number 4063  
 of Site FRANKLIN MACHINERY Site Location Hickory  
 ed By BRUCE NICHOLSON ID# Superfund Date Collected 9/29/88 1988



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

#7 Drum Product Sample (Steel)

INORGANIC CHEMISTRY

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	_____	<input checked="" type="checkbox"/> Flash Point	$\leq 76^{\circ} F_a$
		Lead	_____		
		Manganese	_____		
		Mercury	_____		
		Nitrate	_____		
		Selenium	_____		

ORGANIC CHEMISTRY

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

MICROBIOLOGY

\* Petroleum Distillates

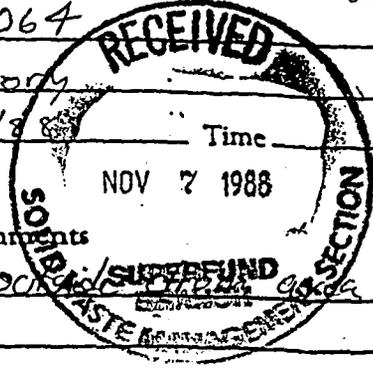
RADIOCHEMISTRY

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

Received 9-30-88 TN Date Reported \_\_\_\_\_  
 e Extracted \_\_\_\_\_ Date Analyzed \_\_\_\_\_  
 ted By \_\_\_\_\_ Lab Number 802400 018593 OCT 1 88

**SAMPLE ANALYSES REQUEST**

Number 18 D TBA Field Sample Number 4064  
 Name of Site FRANKLIN MACHINERY Site Location Hickory  
 Collected By BRUCE NICHOLSON ID# Superfund Date Collected 9/29/88 Time \_\_\_\_\_



- Type of Sample:
- |  |                                      |
|--|--------------------------------------|
| <input 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 checked="" type="checkbox"/> Soil (3) | <input type="checkbox"/> Sludge (7)  |
| <input type="checkbox"/> Other (4)           | <input type="checkbox"/> Other (8)   |

#8 Composite Soil Surface Comments  
 SUPERFUND SYSTEMS MANAGEMENT SECTION

**INORGANIC CHEMISTRY**

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	_____
<input checked="" type="checkbox"/> Acid:B/N Ext.	_____	PCB's	_____	Toxaphene	_____
<input type="checkbox"/> TOX	_____	<input checked="" type="checkbox"/> Petroleum*	_____	2,4-D	_____
	_____	Endrin	_____	2,4,5-TP (silvex)	_____
	_____	Lindane	_____		_____

**MICROBIOLOGY**

\* Petroleum Distillates

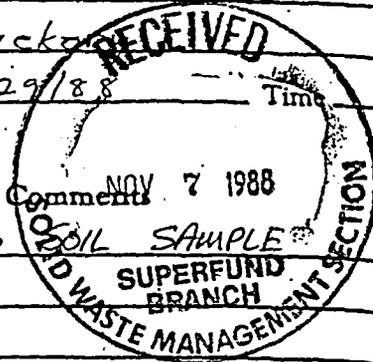
**RADIOCHEMISTRY**

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

Date Received 9-30-88 JN Date Reported \_\_\_\_\_  
 Date Extracted 10-6-88 BA Date Analyzed 10-10-88 JW BJA 10-7-88 BA  
 Reported By \_\_\_\_\_ Lab Number 802402

COMPLE ANALYSES REQUEST

Number 18 D TBA Field Sample Number 4065  
 Name of Site FRANKLIN MACHINERY Site Location Hickory  
 Collected By BRUCE NICHOLSON ID# Superfund Date Collected 9/29/88 Time \_\_\_\_\_



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

#9 BACKGROUND

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
Asenic	_____	Asenic	_____	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/1	Parameter	Results mg/1	Parameter	Results mg/1
X P&T:GC/MS	_____	EDB	_____	Methoxychlor	_____
X Acid:B/N Ext.	_____	PCB's	_____	Toxaphene	_____
TOX	_____	X Petroleum*	_____	2,4-D	_____
		Endrin	_____	2,4,5-TP (silvex)	_____
		Lindane	_____		

MICROBIOLOGY

\* Petroleum Distillates

RADIOCHEMISTRY

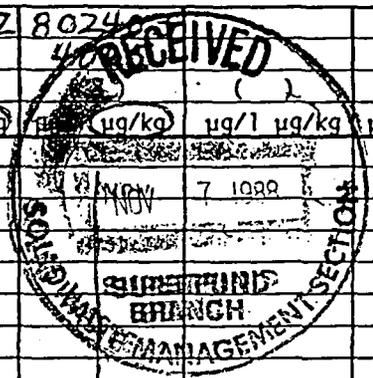
Parameter	Parameter	Results PCI/1
(MF) Coliform Colonies/100mls	Gross Alpha	_____
(MPN) Coliform Colonies/100mls	Gross Beta	_____

Date Received 9-30-88 JN Date Reported \_\_\_\_\_  
 Date Extracted 10-6-88 BD Date Analyzed 10-10-88 PT BNA  
 Reported By \_\_\_\_\_ Lab Number 802403

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	802398	802399	802402	802404		
	FIELD #	4061	4062	4064	4064		
	TYPE	(3)	(3)	(3)	(3)		
	UNITS	μg/l (μg/kg)	μg/l (μg/kg)	μg/l (μg/kg)	μg/l (μg/kg)	μg/l μg/kg	μg/l μg/kg
N-nitrosodimethylamine	10/330	u	u	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			583				
hexachlorobutadiene			u				
4-chloro-m-cresol							
hexachlorocyclopentadiene							
2,4,6-trichlorophenol							
2-chloronaphthalene							
acenaphthylene							
dimethyl phthalate							
2,6-dinitrotoluene							
acenaphthene			833	330K	330K		
2,4-dinitrophenol	50/1650		u	u	u		
2,4-dinitrotoluene	10/330						
4-nitrophenol	50/1650						
fluorene	10/330		500				
4-chlorophenylphenylether			u				
diethyl phthalate							
4,6-dinitro-o-cresol	50/1650						
diphenylamine							
azobenzene							
4-bromophenylphenylether	10/330						
hexachlorobenzene	10/330						
pentachlorophenol	50/1650						
phenanthrene	10/330	10,000	5,667	1,167	1,000		
anthracene		u	3,000	500	333		
dibutyl phthalate		30,000	u	u	u		
fluoranthene		15,000	10,667	2,000	1,333		



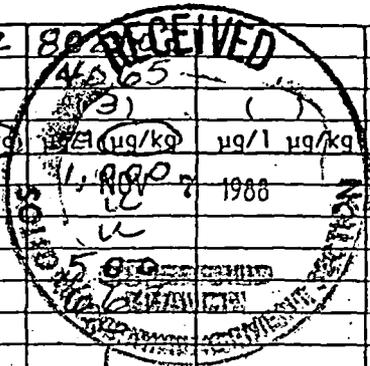
MDL  
 H<sub>2</sub>O/SOIL

- 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.
- Z/ - 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	LAB NO	802398	802399	802402	802405		
COMPOUND	FIELD #	4061	4062	4064	4065		
	TYPE	(3)	(3)	(3)	(3)		
	UNITS	μg/kg	μg/kg	μg/kg	μg/kg	μg/l	μg/kg
pyrene	10/330	11,667	7,000	1,500	1,000		
benzidine	50/1650	u	u	u	u		1988
butyl benzyl phthalate	10/330	1,464 μg/g	u	u	u		
benz(a)anthracene	↓	13,333	2,833	1,000	u		
chrysene	↓	15,000	3,333	1,500	u		
3,3-dichlorobenzidine	50/1650	u	u	u	u		
bis(2-ethylhexyl)phthalate	10/330	16,267 μg/g	↓	↓	↓		
di-n-octyl phthalate	10/330	u	↓	↓	↓		
benzo(b)fluoranthene	50/1650	u	↓	↓	↓		
benzo(k)fluoranthene	↓	121,667	23,167	7,000	2,333		
benzo(a)pyrene	↓	55,000	8,000	3,667	1,1667		
indeno(1,2,3-cd)pyrene	↓	u	15,000	9,167	u		
dibenzo(a,h)anthracene	↓	u	u	u	u		
benzo(g,h,i)perylene	↓	80,000	22,167	15,833	u		
aniline	50/1650	u	u	u	u		
benzoic acid	↓	70,000	↓	↓	↓		
benzyl alcohol	↓	u	↓	↓	↓		
4-chloroaniline	10/330	↓	↓	↓	↓		
dibenzofuran	↓	↓	417	↓	↓		
2-methylnaphthalene	↓	↓	u	↓	↓		
2-methylphenol	↓	↓	↓	↓	↓		
4-methylphenol	↓	↓	↓	↓	↓		
2-nitroaniline	50/1650	↓	↓	↓	↓		
3-nitroaniline	↓	↓	↓	↓	↓		
4-nitroaniline	↓	↓	↓	↓	↓		
2,4,5-trichlorophenol	↓	↓	↓	↓	↓		



MDL  
H2O/SOIL

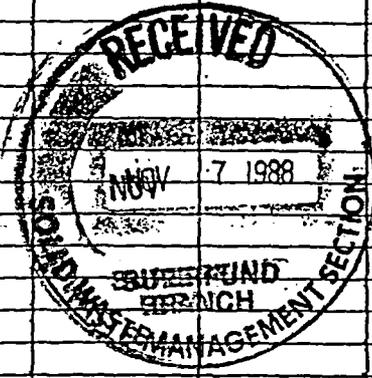
- J - Estimated value.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- U - Material was analyzed for but not detected. The number is the Minimum Detection Limit. MDL
- NA - Not analyzed.
- 1/ - Tentative identification.
- 2/ - On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

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ORGANIC CHEMICAL ANALYSIS

PURGEABLE COMPOUNDS	LAB NO	802400	802402	802403			
	FIELD #	4003	4004	4005			
COMPOUND	TYPE	(6)	(3)	(3)	( )	( )	( )
	UNITS	μg/l (μg/kg)	μg/l (μg/kg)	μg/l (μg/kg)	μg/l μg/kg	μg/l μg/kg	μg/l μg/kg
chloromethane		u	u	u			
bromomethane							
dichlorodifluoromethane							
vinyl chloride							
chloroethane							
methylene chloride		571					
trichlorofluoromethane		u					
ethene, 1,1-dichloro							
ethane, 1,1-dichloro-							
1,2-trans-dichloroethene							
chloroform							
ethane, 1,2-dichloro-		205					
ethane, 1,1,1-trichloro-		u					
carbontetrachloride							
bromodichloromethane							
propane, 1,2-dichloro-							
1,3-trans-dichloropropene							
trichloroethylene							
chlorodibromomethane							
benzene		100					
ethane, 1,1,2-trichloro-		u					
1,3-cis-dichloropropene							
2-chloroethyl vinyl ether							
bromoform							
ethane, 1,1,2,2-tetrachloro-							
ethene, tetrachloro-							
toluene		54,359					
chlorobenzene		u					
ethylbenzene		1,395	✓	✓			
acetone	(+)	(+)	u	u			
2-butanone (MEK)		77,923					
carbendisulfide		u					
2-hexanone							
4-methyl-2-pentanone (MIBK)		6,264					
styrene		u					
vinyl acetate							
xylene (total)		4,661					
other compounds		(+)	✓	✓			

Sample diluted in methanol - amounts reported are estimates.



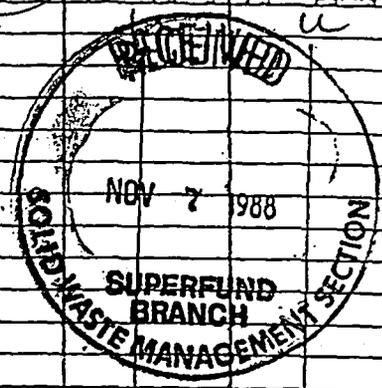
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802400 → results reported in ug/g (ppm)

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ORGANIC CHEMICAL ANALYSIS

PURGEABLE COMPOUNDS	LAB NO	802394	802395	802396	802397	802398	802399
	FIELD #	4057	4058	4059	4060	4061	4062
COMPOUND	TYPE	(8)	(8)	(6)	(5)	(3)	(3)
	UNITS	µg/l µg/kg	µg/l (µg/kg)	µg/l (µg/kg)	µg/l (µg/kg)	µg/l µg/kg	µg/l µg/kg
chloromethane		u	u	u	u		u
bromomethane							
dichlorodifluoromethane							
vinyl chloride							
chloroethane							
methylene chloride							
trichlorofluoromethane							
ethene, 1,1-dichloro							
ethane, 1,1-dichloro-							
1,2-trans-dichloroethene							
chloroform							
ethane, 1,2-dichloro-							
ethane, 1,1,1-trichloro-							
carbontetrachloride							
bromodichloromethane							
propane, 1,2-dichloro-							
1,3-trans-dichloropropene							
trichloroethylene							
chlorodibromomethane							
benzene							
ethane, 1,1,2-trichloro-							
1,3-cis-dichloropropene							
2-chloroethyl vinyl ether							
bromoform							
ethane, 1,1,2,2-tetrachloro-							
ethene, tetrachloro-			↓	↓		↓	
toluene			82,099	6,588		5	
chlorobenzene			u	u		u	
ethylbenzene		↓	1,025	138	↓	25	↓
acetone		u	u	u	u	u	u
2-butanone				20,644			
carbendisulfide				u			
2-hexanone			↓	↓			
4-methyl-2-pentanone			374,535	174			
styrene			u	u			
vinyl acetate			↓	↓		↓	
xylene (total)			10,207	560	↓	27	
1-butanol	⊕/⊖		⊕	⊕	⊕	⊖	
butyl acetate	⊕/⊖	↓	⊕	⊕	⊕	⊖	↓



Aeration limit value with sample type

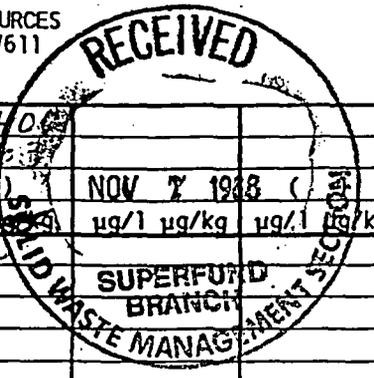
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802395, 802397 → diluted in methanol high detection limit

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ORGANIC CHEMICAL ANALYSIS



BASE/NEUTRAL AND ACID EXTRACTABLES	LAB NO	802394	802395	802397	802400		
COMPOUND	FIELD #	4057	4058	4060	4063		
	TYPE	(5)	(5)	(5)	(6)		
	UNITS	<del>µg/g</del> µg/kg	<del>µg/g</del> µg/kg	<del>µg/g</del> µg/kg	<del>µg/g</del> µg/kg		
N-nitrosodimethylamine		u	u	u	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			25		61		
hexachlorobutadiene			u		u		
4-chloro-m-cresol							
hexachlorocyclopentadiene							
2,4,6-trichlorophenol							
2-chloronaphthalene							
acenaphthylene							
dimethyl phthalate							
2,6-dinitrotoluene							
acenaphthene							
2,4-dinitrophenol							
2,4-dinitrotoluene							
4-nitrophenol							
fluorene							
4-chlorophenylphenylether							
diethyl phthalate							
4,6-dinitro-o-cresol							
diphenylamine							
azobenzene							
4-bromophenylphenylether							
hexachlorobenzene							
pentachlorophenol							
phenanthrene							
anthracene			↓				
dibutyl phthalate			52				
fluoranthene		↓	u	↓	↓		

samples diluted in methylene chloride

units: µg/g    µg/g    µg/g    µg/ml

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- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
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- NA - Not analyzed.
- 1/ - Tentative identification.
- 2/ - On NRDC List of Priority Pollutants.

STATE LABORATORY OF PUBLIC HEALTH  
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 P.O. BOX 28047 - 306 N. WILMINGTON, ST., RALEIGH, N.C. 27611

ORGANIC CHEMICAL ANALYSIS

BASE/NEUTRAL AND ACID EXTRACTABLES COMPOUND	LAB NO	802394	802395	802397	802400	RECEIVED	
	FIELD #	4057	4058	4060	4060	NOV 7 1988	
	TYPE	(5)	(5)	(5)	(6)	SUPERFUND BRANCH	
	UNITS	<del>µg/l</del> <del>µg/kg</del>	<del>µg/l</del> <del>µg/kg</del>	<del>µg/l</del> <del>µg/kg</del>	<del>µg/l</del> <del>µg/kg</del>	µg/l	µg/kg
pyrene		u	u	u	u		
benzidine			u		u		
butyl benzyl phthalate			60,500		608		
benz(a)anthracene			u		u		
chrysene			↓		↓		
3,3-dichlorobenzidine							
bis(2-ethylhexyl)phthalate			1,100		3,729		
di-n-octyl phthalate			207		u		
benzo(b)fluoranthene			u				
benzo(k)fluoranthene			↓		↓		
benzo(a)pyrene			↓		↓		
indeno(1,2,3-cd)pyrene			↓		↓		
dibenzo(a,h)anthracene			↓		↓		
benzo(g,h,i)perylene			↓		↓		
aniline		u	u	u	u		
benzoic acid			149				
benzyl alcohol			↓		↓		
4-chloroaniline			↓		↓		
dibenzofuran			↓		↓		
2-methylnaphthalene			↓		↓		
2-methylphenol			↓		↓		
4-methylphenol			↓		↓		
2-nitroaniline			↓		↓		
3-nitroaniline			↓		↓		
4-nitroaniline			↓		↓		
2,4,5-trichlorophenol			↓		↓		

UNITS µg/g µg/g µg/g µg/ml

- 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.
- NA - Not analyzed.
- 1/ - Tentative identification.
- 2/ - On NRDC List of Priority Pollutants.

SAMPLE ANALYSES REQUEST

Site Number 18D 986 166 353 Field Sample Number ~~1480~~ ~~14823~~ 14821  
Name of Site Southern Desk Site Location Hickory, NC  
Collected By M. Ganley ID# 77 Date Collected 5/21/91 Time ~~1:15 pm~~ 1:15 pm  
Type of Sample:

- |  |                                      |
|--|--------------------------------------|
| <input 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 checked="" type="checkbox"/> Soil (3) | <input type="checkbox"/> Sludge (7)  |
| <input type="checkbox"/> Other (4)           | <input type="checkbox"/> Other (8)   |

Comments #1, soil, 6"  
**RECEIVED**  
JUL 17 1991  
**SUPERFUND SECTION**

INORGANIC CHEMISTRY

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	___
<input checked="" type="checkbox"/> 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/1
___ (MF) Coliform Colonies/100mls	___ Gross Alpha	___
___ (MPN) Coliform Colonies/100mls	___ Gross Beta	___
___		
___		

Date Received MAY 22 1991 BD Date Reported 7-16-91  
Date Extracted 6-18-91 AA Date Analyzed 7-10-91 BD 7-15-91 NW  
Reported By John L. Neal Lab Number 911879

#911879 - 911885

SAMPLE ANALYSES REQUEST

Site Number 18-D 986 166 353 Field Sample Number H822  
Name of Site Southern Desk Site Location Hickory, NC  
Collected By M. Gamley ID# 77 Date Collected 5/21/91 Time 12:45pm

Type of Sample:

- |  |                                      |
|--|--------------------------------------|
| <input 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 checked="" type="checkbox"/> Soil (3) | <input type="checkbox"/> Sludge (7)  |
| <input type="checkbox"/> Other (4)           | <input type="checkbox"/> Other (8)   |

#2 soil, 6"

Comments

RECEIVED

JUL 17 1991

SUPERFUND SECTION

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
___ 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/1	Parameter	Results mg/1	Parameter	Results mg/1
<input checked="" type="checkbox"/> P&T:GC/MS	_____	___ EDB	_____	___ Methoxychlor	_____
<input checked="" type="checkbox"/> 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/1
___ (MF) Coliform Colonies/100mls	___ Gross Alpha	_____
___ (MPN) Coliform Colonies/100mls	___ Gross Beta	_____

Date Received MAY 22 1991 BD Date Reported \_\_\_\_\_  
Date Extracted 6-18-91 AA Date Analyzed BNA PT  
7-10-91 7-15-91 NW  
Reported By \_\_\_\_\_ Lab Number 911880

SAMPLE ANALYSES REQUEST

Site Number 18 D 986 166 353 Field Sample Number 014823

Name of Site Southern Desk Site Location Hickory, NC

Collected By M. Ganley ID# 77 Date Collected 5/21/91 Time 2:35pm

Type of Sample:

- |  |                                      |
|--|--------------------------------------|
| <input 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 checked="" type="checkbox"/> Soil (3) | <input type="checkbox"/> Sludge (7)  |
| <input type="checkbox"/> Other (4)           | <input type="checkbox"/> Other (8)   |

Comments

#3, soil, 6"

RECEIVED

JUL 17 1991

SUPERFUND SECTION

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
___ 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/1	Parameter	Results mg/1	Parameter	Results mg/1
<input checked="" type="checkbox"/> P&T:GC/MS	___	___ EDB	___	___ Methoxychlor	___
<input checked="" type="checkbox"/> Acid:B/N Ext.	___	___ PCB's	___	___ Toxaphene	___
___ TOX	___	___ Petroleum	___	___ 2,4-D	___
___	___	___ Endrin	___	___ 2,4,5-TP (silvex)	___
___	___	___ Lindane	___	___	___

MICROBIOLOGY

Parameter
___ (MF) Coliform Colonies/100mls
___ (MPN) Coliform Colonies/100mls
___
___

RADIOCHEMISTRY

Parameter	Results PCi/1
___ Gross Alpha	___
___ Gross Beta	___
___	___
___	___

Date Received MAY 22 1991 BD Date Reported BNA

Date Extracted 6-18-91 AA Date Analyzed 7-11-91/30 PT 7-15-91-nw

Reported By \_\_\_\_\_ Lab Number 911881

SAMPLE ANALYSES REQUEST

Site Number 18 D 986 146 353 Field Sample Number 14824  
Name of Site Southern Disk Site Location Hickory, NC  
Collected By M. Ganley ID# 77 Date Collected 5/21/91 Time 4:30 pm

Type of Sample:

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

#4, sediment

Comments

RECEIVED

JUL 17 1991

SUPERFUND SECTION

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
<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/1	Parameter	Results mg/1	Parameter	Results mg/1
<input checked="" type="checkbox"/> P&T:GC/MS		<input type="checkbox"/> EDB		<input type="checkbox"/> Methoxychlor	
<input checked="" 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

Parameter
<input type="checkbox"/> (MF) Coliform Colonies/100mls
<input type="checkbox"/> (MPN) Coliform Colonies/100mls

RADIOCHEMISTRY

Parameter	Results PCi/1
<input type="checkbox"/> Gross Alpha	
<input type="checkbox"/> Gross Beta	

Date Received MAY 22 1991 B&O Date Reported \_\_\_\_\_  
Date Extracted 6-18-91 AA Date Analyzed BNA 7-11-91 PT 7-15-91 TW  
Reported By \_\_\_\_\_ Lab Number 911882

SAMPLE ANALYSES REQUEST

Site Number 18-D 986 166 353 Field Sample Number 014825  
Name of Site Southern Disk Site Location Hickory, NC  
Collected By M. Gamley ID# 77 Date Collected 5/21/91 Time 4:35pm

Type of Sample:

- |   |                                      |
|---|--------------------------------------|
| <input type="checkbox"/> Environmental                | <input type="checkbox"/> Concentrate |
| <input type="checkbox"/> Groundwater (1)              | <input type="checkbox"/> Solid (5)   |
| <input checked="" 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

#5, surface water

RECEIVED

JUL 17 1991

SUPERFUND SECTION

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
___ 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/1	Parameter	Results mg/1	Parameter	Results mg/1
<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/1
___ (MF) Coliform Colonies/100mls	___ Gross Alpha	_____
___ (MPN) Coliform Colonies/100mls	___ Gross Beta	_____

Date Received MAY 22 1991 BA Date Reported \_\_\_\_\_  
Date Extracted \_\_\_\_\_ Date Analyzed 7-15-91 nw  
Reported By \_\_\_\_\_ Lab Number 911883

SAMPLE ANALYSES REQUEST

Site Number 18 D 986 166 353 Field Sample Number 014826

Name of Site Southern Disk Site Location Hickory, NC

Collected By M. Ganley ID# 77 Date Collected 5/21/91 Time 4:35pm

Type of Sample:

- |   |                                      |
|---|--------------------------------------|
| <input type="checkbox"/> Environmental                | <input type="checkbox"/> Concentrate |
| <input type="checkbox"/> Groundwater (1)              | <input type="checkbox"/> Solid (5)   |
| <input checked="" 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 #5 surface water

RECEIVED

JUL 11 1991

INORGANIC CHEMISTRY

SUPERFUND SECTION  
Total

Extractables		Total		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
___ P&T:GC/MS	___	___ EDB	___	___ Methoxychlor	___
<input checked="" type="checkbox"/> 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 MAY 22 1991 BD Date Reported \_\_\_\_\_

Date Extracted 6-10-91 JM, WG Date Analyzed 7-10-91 BD

Reported By \_\_\_\_\_ Lab Number 911884

SAMPLE ANALYSES REQUEST

Site Number 18D 986 166 353 Field Sample Number 0148207

Name of Site Southern Desk Site Location Hickory NC

Collected By M. Ganley ID# 77 Date Collected 5/21/91 Time \_\_\_\_\_

Type of Sample:

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

Comments

Trip Blank

RECEIVED

JUL 17 1991

SUPERFUND SECTION

INORGANIC CHEMISTRY

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 MAY 22 1991 BD Date Reported \_\_\_\_\_

Date Extracted \_\_\_\_\_ Date Analyzed 7-15-91 mw

Reported By \_\_\_\_\_ Lab Number 911885

DIVISION OF HEALTH SERVICES  
SOLID AND HAZARDOUS WASTE MANAGEMENT BRANCH

Chain of Custody Record

CERCLA

Hazardous Waste Materials

Location of Sampling: Generator Transporter Treatment Facility  
Storage Facility Disposal Facility Landfill  
 Other: Furniture plant

Company's Name Southern Desk Telephone (704) 324 0884

Address 1720 1st Avenue SW Hickory NC 28601

Collector's Name Mary Gamley Telephone (919) 733 2801  
signature

Date Sampled 5/21/91 Time Sampled 12:45 - 4:30pm

Type of Process Generating Waste Furniture Finishing

Field Information

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JUL 17 1991

SUPERFUND SECTION

Field Sample No. 014821 014822 014823 014824 014825 014826 014827

Main of Possession:

Organics

William DeMent, Jr.  
signature

Chemist  
title

5-22-91  
inclusive dates

signature

title

inclusive dates

signature

title

inclusive dates

Results reported

John L. Neal  
signature

Chemist  
title

7-16-91  
date

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

SOLID AND HAZARDOUS WASTE MANAGEMENT BRANCH

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

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

REMARKS

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	911879	911880	911881	911882	911884	
COMPOUND	FIELD #	14821	14822	14823	14824	14826	
	TYPE	(3)	(3)	(3)	(4)	(2)	( )
	UNITS	μg/l μg/kg					
N-nitrosodimethylamine	10/330	u	u	u	u	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  
 JUL 1 1991  
 SUPERFUND SECTION

MDL  
 H<sub>2</sub>O/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	911879	911880	911881	911882	911884	
	FIELD #	14821	14822	14823	14824	14826	
	TYPE	(3)	(3)	(3)	(4)	(2)	( )
	UNITS	µg/l µg/kg					
pyrene	10/330	u	u	u	u	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	u	u	u	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  
 JUL 17 1991  
 SUPERFUND SECTION

MDL  
 H<sub>2</sub>O/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.

DIVISION OF HEALTH SERVICES  
SOLID AND HAZARDOUS WASTE MANAGEMENT BRANCH

Chain of Custody Record **CERCLA**

Hazardous Waste Materials

Location of Sampling:  Generator  Transporter  Treatment Facility

Storage Facility  Disposal Facility  Landfill

Other: former furniture plant

Company's Name Southern Desk Telephone (704) 324-0884

Address 1720 15th Avenue, SW - Hickory NC 28601

Collector's Name Mary Ganley Telephone (919) 733-2801  
signature

Date Sampled 5/21/91 Time Sampled 12:45 - 4:30 pm

Type of Process Generating Waste Furniture Finishing

Additional Information

Field Sample No. 016185 016186 016187 016188 016189

~~016186~~  
inorganics metals

Chain of Possession:

Mary Ganley Geologist 5/21-5/22/91  
signature title inclusive dates

Robert Davis Chem Tech III 22 May 91  
signature title inclusive dates

signature title inclusive dates

Results reported W. E. Walker Chemist 21 Aug 91  
signature title date

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

SOLID AND HAZARDOUS WASTE MANAGEMENT BRANCH

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 \_\_\_\_\_

Name of Owner, Operator, or Agent \_\_\_\_\_ Title \_\_\_\_\_

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 \_\_\_\_\_

REMARKS \_\_\_\_\_

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

TRIP BLK.

PURGEABLE COMPOUNDS	LAB NO	911879	911880	911881	911882	911883	911885
COMPOUND	FIELD #	14821	14822	14823	14824	14825	14827
	TYPE	(3)	(3)	(3)	(4)	(2)	(1)
	UNITS	µg/l (µg/kg)					
chloromethane	10ppb	u	u	u	u	u	u
bromomethane	10	↓	↓	↓	↓	↓	↓
dichlorodifluoromethane	5	↓	↓	↓	↓	↓	↓
vinyl chloride	10	↓	↓	↓	↓	↓	↓
chloroethane	10	↓	↓	↓	↓	↓	↓
methylene chloride	5	39 C	15 C		18 C		
trichlorofluoromethane		u	u		u		
ethene, 1,1-dichloro		↓	↓		↓		
ethane, 1,1-dichloro-		↓	↓		↓		
1,2-trans-dichloroethene		↓	↓		↓		
chloroform		↓	↓		↓		
ethane, 1,2-dichloro-		↓	↓		↓		
ethane, 1,1,1-trichloro-		↓	↓		↓		
carbontetrachloride		↓	↓		↓		
bromodichloromethane		↓	↓		↓		
propane, 1,2-dichloro-		↓	↓		↓		
1,3-trans-dichloropropene		↓	↓		↓		
trichloroethylene		↓	↓		↓		
chlorodibromomethane		↓	↓		↓		
benzene		↓	↓		↓		
ethane, 1,1,2-trichloro-		↓	↓		↓		
1,3-cis-dichloropropene	✓						
2-chloroethyl vinyl ether	10	↓	↓		↓		
bromoform	10	↓	↓		↓		
ethane, 1,1,2,2-tetrachloro-	5	↓	↓		↓		
ethene, tetrachloro-		↓	↓		↓		
toluene		↓	↓		↓		
chlorobenzene		↓	↓		↓		
ethylbenzene		✓	✓	✓	✓	✓	✓
acetone	10ppb	u	u	u	u	u	u
2-butanone	10	↓	↓		↓		
carbonylsulfide	5	↓	↓		↓		
2-hexanone	10	↓	↓		↓		
4-methyl-2-pentanone	10	↓	↓		↓		
styrene	5	↓	↓		↓		
vinyl acetate	10	↓	↓		↓		
xylene (total)	5	↓	↓	↓	↓	↓	↓

RECEIVED  
 JUL 17 1991  
 SUPERFUND SECTION

- 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.
- NA - Not analyzed.
- 1/ - Tentative identification.
- Z/ - On NRDC List of Priority Pollutants.

C - SUSPECT CONTAMINATION FROM SAMPLE STORAGE REFRIGERATOR IN LAB.

N.C. Division of Health Services

DHS 3068-0 (4/86 Laboratory)

SAMPLE ANALYSES REQUEST

Site Number 18D 986 166 353 Field Sample Number 016185  
 Name of Site Southern Desk Site Location Hickory, NC  
 Collected By M. Ganley ID# 47 Date Collected 5/21/91 Time 1:15 pm

Type of Sample:

- |  |                                      |
|--|--------------------------------------|
| <input 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 checked="" type="checkbox"/> Soil (3) | <input type="checkbox"/> Sludge (7)  |
| <input type="checkbox"/> Other (4)           | <input type="checkbox"/> Other (8)   |

#1 soil  
 6" RECEIVED  
 SEP 6 1991  
 SUPERFUND SECTION

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
<input checked="" type="checkbox"/> Arsenic	<0.01	<input checked="" type="checkbox"/> Arsenic	15	<input checked="" type="checkbox"/> Silver	<20
<input checked="" type="checkbox"/> Barium	0.22	<input checked="" type="checkbox"/> Barium	45	_____ Sulfates	_____
<input checked="" type="checkbox"/> Cadmium	<0.08	<input checked="" type="checkbox"/> Cadmium	<15	_____ Zinc	_____
<input checked="" type="checkbox"/> Chromium	<0.10	_____ Chloride	_____	_____ Ph	_____
<input checked="" type="checkbox"/> Lead	<0.50	<input checked="" type="checkbox"/> Chromium	32	_____ Conductivity	_____
<input checked="" type="checkbox"/> Mercury	<0.02	<input checked="" type="checkbox"/> Copper	60	_____ TDS	_____
<input checked="" type="checkbox"/> Selenium	<0.005	_____ Fluoride	_____	_____ TOC	_____
<input checked="" type="checkbox"/> Silver	<0.10	_____ Iron	_____	_____	_____
_____	_____	<input checked="" type="checkbox"/> Lead	62	_____	_____
_____	_____	_____ Manganese	_____	_____	_____
_____	_____	<input checked="" type="checkbox"/> Mercury	<0.09	_____	_____
_____	_____	_____ Nitrate	_____	_____	_____
_____	_____	<input checked="" type="checkbox"/> Selenium	<1	_____	_____

ORGANIC CHEMISTRY

Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
_____ 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/1
_____ (MF) Coliform Colonies/100mls	_____ Gross Alpha	_____
_____ (MPN) Coliform Colonies/100mls	_____ Gross Beta	_____
_____	_____	_____
_____	_____	_____

Date Received \_\_\_\_\_ Date Reported \_\_\_\_\_  
 Date Extracted \_\_\_\_\_ Date Analyzed \_\_\_\_\_  
 Reported By \_\_\_\_\_ Lab Number 01157 001070

SAMPLE ANALYSES REQUEST

Site Number 18 D 986 166 353 Field Sample Number 016186  
Name of Site Southern Desk Site Location Hickory, NC  
Collected By M. Ganley ID# 77 Date Collected 5/21/94 Time 12:45pm  
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 checked="" type="checkbox"/> Soil (3) | <input type="checkbox"/> Sludge (7) |
| <input type="checkbox"/> Other (4)           | <input type="checkbox"/> Other (8)  |

#2, soil, 6'

Comments

RECEIVED

SEP 6 1994

SUPERFUND SECTION

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
<input checked="" type="checkbox"/> Arsenic	<0.01	<input checked="" type="checkbox"/> Arsenic	2	<input checked="" type="checkbox"/> Silver	<20
<input checked="" type="checkbox"/> Barium	0.22	<input checked="" type="checkbox"/> Barium	66	Sulfates	
<input checked="" type="checkbox"/> Cadmium	<0.08	<input checked="" type="checkbox"/> Cadmium	<14	Zinc	
<input checked="" type="checkbox"/> Chromium	<0.10	Chloride		Ph	
<input checked="" type="checkbox"/> Lead	<0.50	<input checked="" type="checkbox"/> Chromium	<20	Conductivity	
<input checked="" type="checkbox"/> Mercury	<0.02	<input checked="" type="checkbox"/> Copper	<10	TDS	
<input checked="" type="checkbox"/> Selenium	<0.005	Fluoride		TOC	
<input checked="" type="checkbox"/> Silver	<0.10	Iron			
		<input checked="" type="checkbox"/> Lead	60		
		Manganese			
		<input checked="" type="checkbox"/> Mercury	<0.09		
		Nitrate			
		<input checked="" type="checkbox"/> Selenium	<1		

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 \_\_\_\_\_  
Reported By \_\_\_\_\_ Lab Number 011758 06/10/94

SAMPLE ANALYSES REQUEST

Site Number 18D 986 166 353 Field Sample Number 016187  
 Name of Site Southern Desk Site Location Hickory, NC  
 Collected By M. Ganley ID# 77 Date Collected 5/21/91 Time 2:35pm  
 Type of Sample:

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

Comments  
#3, soil, 1'-6"  
 RECEIVED  
 SEP 6 1991  
 SUPERFUND SECTION

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
<input checked="" type="checkbox"/> Arsenic	<0.01	<input checked="" type="checkbox"/> Arsenic	6	<input checked="" type="checkbox"/> Silver	<20
<input checked="" type="checkbox"/> Barium	0.22	<input checked="" type="checkbox"/> Barium	41	<input type="checkbox"/> Sulfates	
<input checked="" type="checkbox"/> Cadmium	<0.08	<input checked="" type="checkbox"/> Cadmium	<15	<input type="checkbox"/> Zinc	
<input checked="" type="checkbox"/> Chromium	<0.10	<input type="checkbox"/> Chloride		<input type="checkbox"/> Ph	
<input checked="" type="checkbox"/> Lead	<0.50	<input checked="" type="checkbox"/> Chromium	28	<input type="checkbox"/> Conductivity	
<input checked="" type="checkbox"/> Mercury	<0.02	<input checked="" type="checkbox"/> Copper	11	<input type="checkbox"/> TDS	
<input checked="" type="checkbox"/> Selenium	<0.005	<input type="checkbox"/> Fluoride		<input type="checkbox"/> TOC	
<input checked="" type="checkbox"/> Silver	<0.10	<input type="checkbox"/> Iron			
		<input checked="" type="checkbox"/> Lead	34		
		<input type="checkbox"/> Manganese			
		<input checked="" type="checkbox"/> Mercury	<0.09		
		<input type="checkbox"/> Nitrate			
		<input checked="" type="checkbox"/> Selenium	<1		

ORGANIC CHEMISTRY

Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
<input 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/1
<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 \_\_\_\_\_ Date Reported \_\_\_\_\_  
 Date Extracted \_\_\_\_\_ Date Analyzed \_\_\_\_\_  
 Reported By \_\_\_\_\_ Lab Number 011759 001071

SAMPLE ANALYSES REQUEST

Site Number 18D 986 166 353 Field Sample Number 016188  
 Name of Site Southern Desk Site Location Hickory, NC  
 Collected By M. Ganley ID# \_\_\_\_\_ Date Collected 5/21/91 Time 4:30pm  
 Type of Sample: \_\_\_\_\_

Environmental	Concentrate	Comments
<input type="checkbox"/> Groundwater (1)	<input type="checkbox"/> Solid (5)	<u>#4, sediment</u>
<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) <u>sediment</u>	<input type="checkbox"/> Other (8)	

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SEP 6 1991  
SUPERFUND SECTION

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
<input checked="" type="checkbox"/> Arsenic	<u>&lt;0.01</u>	<input checked="" type="checkbox"/> Arsenic	<u>2</u>	<input checked="" type="checkbox"/> Silver	<u>&lt;20</u>
<input checked="" type="checkbox"/> Barium	<u>0.50</u>	<input checked="" type="checkbox"/> Barium	<u>40</u>	Sulfates	
<input checked="" type="checkbox"/> Cadmium	<u>&lt;0.08</u>	<input checked="" type="checkbox"/> Cadmium	<u>&lt;20</u>	Zinc	
<input checked="" type="checkbox"/> Chromium	<u>&lt;0.10</u>	Chloride		Ph	
<input checked="" type="checkbox"/> Lead	<u>&lt;0.50</u>	<input checked="" type="checkbox"/> Chromium	<u>&lt;20</u>	Conductivity	
<input checked="" type="checkbox"/> Mercury	<u>&lt;0.02</u>	<input checked="" type="checkbox"/> Copper	<u>20</u>	TDS	
<input checked="" type="checkbox"/> Selenium	<u>&lt;0.005</u>	Fluoride		TOC	
<input checked="" type="checkbox"/> Silver	<u>&lt;0.10</u>	Iron			
		<input checked="" type="checkbox"/> Lead	<u>30</u>		
		Manganese			
		<input checked="" type="checkbox"/> Mercury	<u>&lt;0.09</u>		
		Nitrate			
		<input checked="" type="checkbox"/> Selenium	<u>&lt;1</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 \_\_\_\_\_  
 Reported By \_\_\_\_\_ Lab Number 011760

SAMPLE ANALYSES REQUEST

Site Number 18D 986 166 353 Field Sample Number 014189  
Name of Site Southern Desk Site Location Hickory, NC  
Collected By M. Ganley ID# \_\_\_\_\_ Date Collected 5/21/91 Time 4:35 pm  
Type of Sample: \_\_\_\_\_

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

#5 surface water

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JUN 20 1991  
SUPERFUND SECTION

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
<input checked="" type="checkbox"/> Arsenic	_____	<input checked="" type="checkbox"/> Arsenic	<u>40.01</u>	<input checked="" type="checkbox"/> Silver	<u>40.05</u>
<input checked="" type="checkbox"/> Barium	_____	<input checked="" type="checkbox"/> Barium	<u>0.08</u>	_____ Sulfates	_____
<input checked="" type="checkbox"/> Cadmium	_____	<input checked="" type="checkbox"/> Cadmium	<u>40.005</u>	_____ Zinc	_____
<input checked="" type="checkbox"/> Chromium	_____	_____ Chloride	_____	_____ Ph	_____
<input checked="" type="checkbox"/> Lead	_____	<input checked="" type="checkbox"/> Chromium	<u>40.01</u>	_____ Conductivity	_____
<input checked="" type="checkbox"/> Mercury	_____	<input checked="" type="checkbox"/> Copper	<u>40.05</u>	_____ TDS	_____
<input checked="" type="checkbox"/> Selenium	_____	_____ Fluoride	_____	_____ TOC	_____
<input checked="" type="checkbox"/> Silver	_____	<input checked="" type="checkbox"/> Iron	_____	_____	_____
_____	_____	<input checked="" type="checkbox"/> Lead	<u>0.14</u>	_____	_____
_____	_____	<input checked="" type="checkbox"/> Manganese	_____	_____	_____
_____	_____	<input checked="" type="checkbox"/> Mercury	<u>40.0002</u>	_____	_____
_____	_____	_____ Nitrate	_____	_____	_____
_____	_____	<input checked="" type="checkbox"/> Selenium	<u>40.005</u>	_____	_____

ORGANIC CHEMISTRY

Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
_____ 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	Results	Parameter	Results PCi/1
_____ (MF) Coliform Colonies/100mls	_____	_____ Gross Alpha	_____
_____ (MPN) Coliform Colonies/100mls	_____	_____ Gross Beta	_____
_____	_____	_____	_____
_____	_____	_____	_____

Date Received \_\_\_\_\_ Date Reported 24 June 91  
 Date Extracted \_\_\_\_\_ Date Analyzed \_\_\_\_\_  
 Reported By M & W Lab Number 011756 000071

APPENDIX C

REFERENCES

Appendix C

Appendix C  
References

1. Buff, Keith, 1988, Town of Hickory Plant Supervisor, October 5 Telecommunication with Bruce Nicholson NCDEHNR, SWMD, Superfund Section.
2. City of Hickory, 1982, Hickory City and Regional Water Map, 1"=1000'.
3. DiCarlo, 1989, Final Report/Hickory, North Carolina, Drum and Decontamination Job, Phase I & Phase II (Project #89403), October 11, GSX Services, Inc., Remedial Services Group.
4. Federal Emergency Management Agency, 1981, City of Hickory Flood Insurance Rate Map., National Flood Insurance Program, Scale: 1 inch= 800 feet.
5. Fox, Larry, 1988, Old Southern Desk Building Record Communication., October 4., North Carolina Department of Environment Health and Natural Resources, Division of Solid Waste Management, Hazardous Waste Section.
6. Fox, Larry, 1991, North Carolina Department of Environment Health and Natural Resources, Division of Solid Waste Management, Hazardous Waste Section. September 20 Telecommunication.
7. Gallogly, Vincent, 1991, GTE Services Corporation, September 1991 Telecommunication and subsequent transmittal of closure documentation.
8. McCormick, Charles, 1991, Hart Environmental, September 20, 1991 Telecommunication.
9. Ganley, Mary, 1991a, May 21, 1991 Trip Report, North Carolina Department of Environment Health and Natural Resources, Division of Solid Waste Management, Superfund Section.
10. Ganley, Mary, 1991b, Latitude and Longitude Worksheet, Stream Flow Calculations, and Population Counts. North Carolina Department of Environment Health and Natural Resources, Division of Solid Waste Management, Superfund Section.
11. Glenn, Robert, 1988, Town of Longview Administrator, October 5 Telecommunication with Bruce Nicholson NCDEHNR, SWMD, Superfund Section.

12. Heath, Ralph, 1980, Basic Elements of Groundwater Hydrology with Reference to Conditions in North Carolina, USGS Water Resource Investigation Open File Report 80-44. 86 pp.
13. Icard Township Water Corporation, 1989, Hildebran Area Water Line Information. 1:24000.
14. LeGrand, Harry, 1954, Geology and Groundwater of the Statesville Area, North Carolina. (Bulletin No. 68). North Carolina Department of Conservation and Development. 68pp.
15. LeGrand, Harry, 1991, North Carolina Natural Heritage Program Database Printout of Rare Plant and Animal Species of North Carolina., NCDEHNR, Division of Parks and Recreation.
16. Leonard, Steve, 1991, United States Department of the Interior, National Wetlands Inventory, Fish and Wildlife Service, September 18 Telecommunication.
17. McCormick, Charles, 1989, Notification letter regarding Completion of Southern Desk and Cabinet CERCLA 106(a) Cleanup., October 13., Fred C. Hart Associates.
18. Merck & Co., 1989, The Merck Index: An encyclopedia of Chemicals, Drugs, and Biologicals, Merck & CO., Rahway, N.J., 10100 pp.
19. Misemore, Bruce, 1991, Town of Longview, September 23 Telecommunication.
20. National Institute for Occupational Safety and Health, 1990, NIOSH Pocket Guide to Chemical Hazards, United States Department of Health and Human Services, US Government Printing Office, Washington DC, 245 pp.
21. Nelson, Perry, 1991, North Carolina Division of Environmental Management, Groundwater Section Chief, March 20 Telecommunication
22. Nicholson, Bruce, 1988a, Site Visit Report to Susan Diehl, USEPA. October 5. North Carolina Department of Environment Health and Natural Resources, Division of Solid Waste Management, Superfund Section.
23. Nicholson, Bruce, 1988b, Immediate Removal Request Letter to Robert Jourdan, USEPA, Emergency Response and Control Section. October 7. North Carolina Department of Environment Health and Natural Resources, Division of Solid Waste Management, Superfund Section.

24. Nicholson, Bruce, 1988c, Preliminary Assessment of the Southern Desk Site. October 11. North Carolina Department of Environment Health and Natural Resources, Division of Solid Waste Management, Superfund Section.
25. Nicosia, Nancy, 1988, GTE Services Corporation. October 11 Telecommunication with Bruce Nicholson of the North Carolina Department of Environment Health and Natural Resources, Division of Solid Waste Management, Superfund Section.
26. North Carolina Department of Environment Health and Natural Resources, 1990a, File Review, Division of Environmental Management, Groundwater Section, Mooresville Regional Office Regional Office.
27. North Carolina Department of Environment Health and Natural Resources, 1991, RCRA File Review, Hazardous Waste Section, Permitting Branch.
28. North Carolina Department of Human Resources, 1991, Public Water Supply Database, September 1991 retrieval by Martha Moore, Division of Health Services.
29. North Carolina Department of Natural Resources and Community Development, 1989, Classifications and Water Quality Standards Assigned to the Water of the Catawba River Basin., NCAC 2B .0315, Division of Environmental Management, Raleigh, North Carolina, 25pp.
30. North Carolina Geologic Survey, 1985, Geologic Map of North Carolina, Scale 1:500,000
31. North Carolina Geologic Survey, 1988, Preliminary Explanatory Text For the 1985 Geologic Map of North Carolina., Contractual Report 88-1, vol 1, 162pp.
32. North Carolina Natural Heritage Program, 1990, Natural Heritage Program List of Rare Plant Species of North Carolina., NCDEHNR, Division of Parks and Recreation, 54pp.
33. Personal Computer Version of the Graphical Exposure Modeling System, 1988, by General Sciences Corporation for the USEPA Office of Pesticides and Toxic Substances Exposure Evaluation Division.
34. Sax N.I. and Lewis R.J., 1989, Dangerous Properties of Industrial Materials, 7th edition, Van Nostrand Reinhold, New York, 3 volumes, 3527 pp.
35. Spurling, Tom, 1991, Catawba County Environmental Health Supervisor, September 26 Telecommunication.

36. Spurling, Tom, 1988, Catawba County Environmental Health Supervisor, October 6 Telecommunication with Bruce Nicholson, NCDEHNR DSWM Superfund Section.
37. Town of Brookford, 1981, Water System Map., 1"=200'.
38. Wagner, Travis, 1990, Hazardous Waste Identification and Classification Manual, Van Nostrand Reinhold, New York, 239 pp.
39. United States Department of Agriculture, 1975, Catawba County Soil Survey., Soil Conservation Service, 48 pp.
40. United States Department of Agriculture, 1989, Hydric Soils of North Carolina., USDA Soil Conservation Service, Raleigh, North Carolina.
41. United States Department of Commerce, 1963, Rainfall Frequency Atlas of the United States, Technical Paper no. 40, US Government Printing Office, Washington DC.
42. United States Department of Commerce, 1979, Climatic Atlas of the United States., National Climatic Center, Asheville, NC
43. United States Department of Commerce, 1990, County and City Data Book., Table 6: Household, Family and Group Characteristics., U.S. Bureau of the Census, U.S. Government Printing Office, 996pp.
44. United States Environmental Protection Agency, 1984, Uncontrolled Hazardous Waste Site Ranking System, A User Manual., HW-10, 61pp.
45. United States Geological Survey, 1970, Hickory, Longview, Granite Falls, Bethlehem and Reepsville Quadrangles, 7.5 Minute Series, Scale 1:24,000
46. United States Geologic Survey, 1984, National Water Summary:Hydrologic Events; Selected Water-Quality Trends and Ground-Water Resources., Water Supply Paper 2275, 467 pp.
47. United States Geologic Survey, 1983, Drainage Areas of Selected Sites on Streams in North Carolina, Open-File Report 83-211 163pp.
48. United States Geologic Survey, 1990, Map of Mean Annual Runoff for the Northeastern, Southeastern, and Mid-Atlantic United States, Water Years 1951-80, Water-Resources Investigations Report 88-4094, 11pp.

49. Yoder, Bill, 1988, Hickory Fire Marshall, September 26 and October 4 Telecommunication with Bruce Nicholson of NCDEHNR, SWMD, Superfund Section.
50. Franklin, Wayne, 1991, Owner of Southern Desk Facility., September 24 Telecommunication.
51. Workman, David, 1991, Manager of the Icard Township Water System. September 30 Telecommunication.

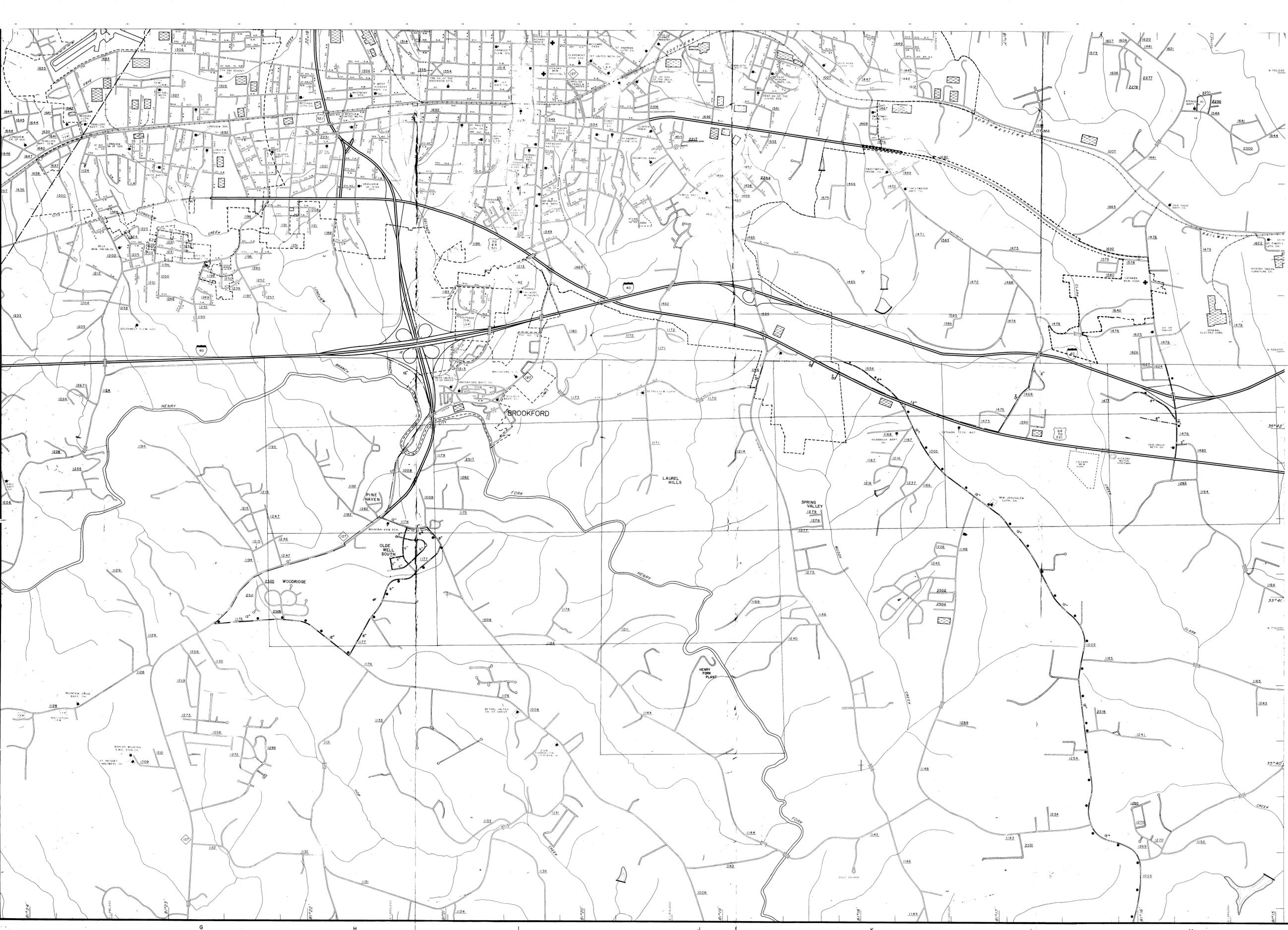
DATE: October 5, 1988  
FROM: Bruce Nicholson  
TO: Southern Desk Files  
SUBJECT: Telecon with Keith Buff, Plant Supervisor,  
Town of Hickory, (704) 322-2605

Mr. Buff said all of Hickory's water was drawn from Lake Hickory (the Catawba River above the Oxford Dam). The intake is located 300 to 400 yards below the Highway 321 Bridge. Mr. Buff said there are 11,000 connections on the city water system and the city estimates the city population has risen from 21,000 in 1980 to 26,000 or 27,000 today. I asked Mr. Buff if the water distribution system had any major additions since 1982 (the date of the water map on file). Mr. Buff indicated the only major change he knew of is that a water line was extended along Highway 127 south to the Mountain View area (1 1/2 miles past the Mountain View School).

Concerning the town of Longview which borders Hickory on the West, Mr. Buff said that they also draw their water from Lake Hickory with an intake located approximately 400 yards above the Highway 321 bridge. For more information on the Longview system he referred me to Mr. Robert Glenn, Town Administrator of Longview, (704) 322-5919.

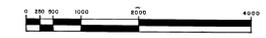
BN/ds/ibm.40





HICKORY  
 REGIONAL WATER  
 MAP  
 1982

SCALE: 1" = 1000'



-LEGEND-

- — — — — 20"
- — — — — 16"
- — — — — 12"
- — — — — 10"
- — — — — 8"
- — — — — 6"
- — — — — 4"
- — — — — 2"



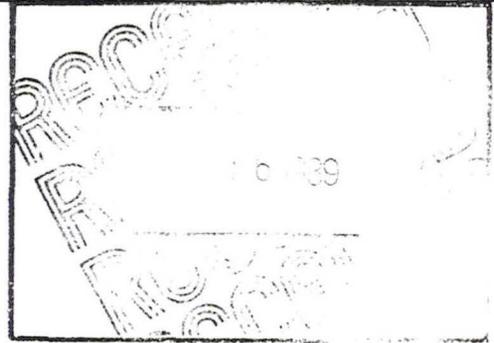
GSX Services, Inc.  
Remedial Services Group  
1415 Woodside Drive  
P.O. Box 14964  
Greensboro, NC 27415-4964  
919-272-0185  
919-373-0308 FAX#

3  
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SUPERFUND SECTION

89403-GHN-43

October 11, 1989

Mr. Vincent Gallogly  
Assistant General Counsel  
GTE SERVICE CORPORATION  
One Stamford Court  
Stamford, Connecticut 06904



REFERENCE: FINAL REPORT/HICKORY, NORTH CAROLINA, DRUM AND  
DECONTAMINATION JOB, PHASE I & PHASE II (PROJECT  
#89403)

Dear Mr. Gallogly:

Enclosed is the final report summarizing the work performed by GSX Services Inc., Remedial Services Group at the Franklin Machinery Plant located in Hickory, North Carolina. Phase I, which took place from April 18-27, 1989, consisted of preshipment and site stabilization, Phase II, took place from September 11-20, 1989 and entailed the removal, transportation, and disposal of the material.

SEQUENCE OF EVENTS:

Tuesday, April 18, 1989 - Friday, April 21, 1989

Equipment and supplies were mobilized this week. Site preparation and personnel orientation took place prior to work commencing. A staging area was constructed and fenced in. The week's work consisted of drum sampling and drum stabilization. GSX completed the bulking of the unstable five-gallon pails of paint solvents into 55-gallon drums. All drums and five-gallon pails were placed in the fenced-in drum storage area. All unstable 55-gallon drums were overpacked and placed in the staging area as well.

Monday, April 24, 1989 - Thursday, April 27, 1989

GSX began the week by removing debris from the paint storage rooms, and placing it on plastic inside the fenced staging area. The vats from one of the storage rooms were also disconnected and placed in the staging area on plastic. On Tuesday, GSX decontaminated the storage rooms by sandblasting the walls and floors. The crew used a scarifier on Wednesday and Thursday to remove heavy contamination from the floors. On Friday, GSX cleared and secured the work areas. GSX demobilized personnel from the site.

Samples of the waste that GSX had obtained while on site were sent to approved laboratories. After analyses were received completed profile/disposal forms were sent to all the necessary disposal outlets for approvals.

Monday, September 11, 1989 - Friday, September 15, 1989

This phase of the operation (Phase II) began after the necessary approvals and identification numbers for the client/site were obtained. On Monday, GSX mobilized its equipment and personnel and pumped the contents of the drums into a conical tanker. Most of the drums had to be spiked or deheaded for pumping access due to the physical condition of the drums. Drum pumping continued until Wednesday, the 13th. GSX then began crushing the emptied drums and placing them into poly lined roll-off boxes. By Friday afternoon GSX had filled two roll-offs and one tanker with waste. A Change Order to Contract was drafted by GSX and signed by Chuck McCormick, GTE's Representative, for additional waste containers (tanker and roll-off box) to be able to finish the job.

Monday, September 18, 1989 - Wednesday, September 20, 1989

On Monday, September 18th, the last roll-off was picked up and disposed of at GSX's secure landfill located in Pinewood, South Carolina and a second tanker arrived to pick up liquids. A total of approximately 6000-gallons of liquids were transferred into the tankers to be disposed of at Oldover Corporation. On Tuesday, GSX began sandblasting and scarifying the drum storage pad. This activity was finished by Wednesday noon at which time GSX cleared and secured the site.

Final Summary

GSX Remedial Services personnel removed approximately 63-cubic yards of crushed empty drums, and 6000-gallons of liquid waste from the Franklin Machinery plant. All wastes were disposed of at approved disposal sites. GSX also decontaminated two small storage rooms and a drum storage pad at the Hickory, North Carolina site.

On Friday, September 29; the remaining drums of solid waste were picked up and transferred to GSX's facility in Reidsville, North Carolina and await approval and scheduling for disposal at Ensco. GSX will then transfer these drums to the Ensco facility.

All on site work was done in accordance with GSX Services, Inc., February 6, 1989 work plan.

If you have any questions regarding the sequence of events which occurred, please feel free to contact me at 919/272-0185.

Sincerely,

GSX SERVICES, INC.

*John D. DiCarlo*

John D. DiCarlo  
Project Manager  
Remedial Services Group

cc: Bernard Jones  
Stan Coates  
Randy Garner *[Signature]*  
Chuck McCormick

1938-1988

**WADSWORTH/ALERT  
LABORATORIES, INC.**

Sampling, testing, mobile labs

4101 Shuffel Drive N.W. / North Canton, Ohio 44720

**ANALYTICAL REPORT**

**PROJECT NO. GHN-43**

**GTE HICKORY, NC.**

**Presented to :**

**JOHN DICARLO**

**GSX REMEDIAL SERVICES**

**WADSWORTH/ALERT LABORATORIES, INC.**

*Denise Pohl*

**Denise Pohl  
Project Manager**

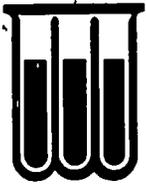
*Marvin W. Stephens*

**Marvin W. Stephens, Ph.D.  
Vice President & Corporate Technical Director**

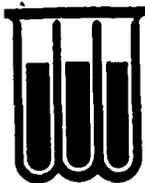
**October 6, 1989**



CORPORATE AND LABORATORY: North Canton, Ohio (216) 497-9396  
LABORATORY: Cleveland, Ohio (216) 642-9151  
LABORATORY: Bartow, Florida (813) 533-2150  
SOUTHEAST REGIONAL OFFICE: Lexington, South Carolina (803) 957-6590  
24-HOUR ALERT LINE: (216) 497-9338



WADSWORTH/ALERT  
LABORATORIES, INC.



WADSWORTH/ALERT  
LABORATORIES, INC.

#### NARRATIVE

The following report contains the analytical results for samples submitted to Wadsworth/ALERT Laboratories, Inc. The samples were received into the laboratory in accordance with documented sample acceptance procedures.

Wadsworth/ALERT Laboratories, Inc. utilizes USEPA approved methods and instrumentation in all analytical work. The methods used for the analyses presented in this study can be found in the following chart. A summary of QC data for these analyses is included at the rear of the report.

#### ANALYTICAL METHODS

<u>Parameters</u>	<u>Methods</u>
Volatile Organic Compounds	SW846 8240
Tot Recoverable Pet Hydrocarbons	USEPA 418.1 (modified)

SW846. "Test Methods for Evaluating Solid Waste Physical/Chemical Methods," Third Edition, September, 1986.

USEPA. EPA 600/4-79-02, "Methods for Chemical Analysis of Water and Wastes," March, 1983.

DSWORTH/ALERT  
LABORATORIES, INC.

COMPANY: GSX REMEDIAL SERVICES  
LAB #: 2042-32262  
MATRIX: SOLID

DATE RECEIVED: 9/27/89  
DATE EXTRACTED: 9/28/89  
DATE ANALYZED: 10/ 3/89

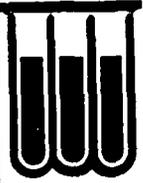
SAMPLE ID: #1 NORTH SIDE OF PAD 9-20-89 11:30

VOLATILE ORGANICS  
USEPA METHOD 8240 - GC/MS

Acetone	ND**	cis-1,3-Dichloropropene	ND
Benzene	ND	trans-1,3-dichloropropene	ND
Bromodichloromethane	ND	Ethylbenzene	ND
Bromoform	ND	2-Hexanone	ND**
Bromomethane	ND*	Methylene chloride	ND
2-Butanone	ND**	4-Methyl-2-pentanone	ND**
Carbon disulfide	ND	Styrene	ND
Carbon tetrachloride	ND	1,1,2,2-Tetrachloroethane	ND
Chlorobenzene	ND	Tetrachloroethene	ND
Chlorodibromomethane	ND	Toluene	ND
Chloroethane	ND	1,1,1-Trichloroethane	ND
Chloroform	ND	1,1,2-Trichloroethane	ND
Chloromethane	ND*	Trichloroethene	ND
1,1-Dichloroethane	ND	Vinyl chloride	ND*
1,2-Dichloroethane	ND	Xylene(Total)	ND
1,1-Dichloroethene	ND		
1,2-Dichloroethene(Total)	ND		
1,2-Dichloropropane	ND		

NOTE: ND (None Detected, lower detectable limit = 1 mg/kg) as rec'd  
ND\* (None Detected, lower detectable limit = 2 mg/kg) as rec'd  
ND\*\* (None Detected, lower detectable limit = 10 mg/kg) as rec'd  
J (Detected, but below quantitation limit; quantitation suspect)  
B (Compound detected in method blank associated with this sample)  
-- (Not Analyzed)

SURROGATE RECOVERY:	%	ACCEPTABLE LIMITS	
		WATER	SOLID
1,2-Dichloroethane-d4	100	(76-114)	(70-121)
Toluene-d8	94	(88-110)	(81-117)
Bromofluorobenzene	104	(86-115)	(74-121)



WADSWORTH/ALERT  
LABORATORIES, INC.

COMPANY : GSX REMEDIAL SERVICES  
LAB #: 2042-32262  
MATRIX : SOLID

DATE RECEIVED: 9/27/89

SAMPLE ID : #1 NORTH SIDE OF PAD 9-20-89 11:30

**ANALYTICAL REPORT**

---

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT
Tot Recoverable Pet Hydrocarbons	10/ 2-10/ 3/89	61	15 mg/kg

NOTE: ND (None Detected)

COMPANY: GSX REMEDIAL SERVICES  
LAB #: 2042-32263  
MATRIX: SOLID

DATE RECEIVED: 9/27/89  
DATE EXTRACTED: 9/28/89  
DATE ANALYZED: 10/ 3/89

SAMPLE ID: #2 EAST SIDE OF PAD 9-20-89 11:32

VOLATILE ORGANICS  
USEPA METHOD 8240 - GC/MS

Acetone	ND**	cis-1,3-Dichloropropene	ND
Benzene	ND	trans-1,3-dichloropropene	ND
Bromodichloromethane	ND	Ethylbenzene	ND
Bromoform	ND	2-Hexanone	ND**
Bromomethane	ND*	Methylene chloride	ND
2-Butanone	ND**	4-Methyl-2-pentanone	ND**
Carbon disulfide	ND	Styrene	ND
Carbon tetrachloride	ND	1,1,2,2-Tetrachloroethane	ND
Chlorobenzene	ND	Tetrachloroethene	ND
Chlorodibromomethane	ND	Toluene	ND
Chloroethane	ND	1,1,1-Trichloroethane	ND
Chloroform	ND	1,1,2-Trichloroethane	ND
Chloromethane	ND*	Trichloroethene	ND
1,1-Dichloroethane	ND	Vinyl chloride	ND*
1,2-Dichloroethane	ND	Xylene(Total)	ND
1,1-Dichloroethene	ND		
1,2-Dichloroethene(Total)	ND		
1,2-Dichloropropane	ND		

NOTE: ND (None Detected, lower detectable limit = 1 mg/kg) as rec'd  
 ND\* (None Detected, lower detectable limit = 2 mg/kg) as rec'd  
 ND\*\* (None Detected, lower detectable limit = 10 mg/kg) as rec'd  
 J (Detected, but below quantitation limit; quantitation suspect)  
 B (Compound detected in method blank associated with this sample)  
 -- (Not Analyzed)

SURROGATE RECOVERY:	%	ACCEPTABLE LIMITS	
		WATER	SOLID
1,2-Dichloroethane-d4	102	(76-114)	(70-121)
Toluene-d8	94	(88-110)	(81-117)
Bromofluorobenzene	100	(86-115)	(74-121)



WADSWORTH/ALERT  
LABORATORIES, INC.

COMPANY : GSX REMEDIAL SERVICES  
LAB #: 2042-32263  
MATRIX : SOLID

DATE RECEIVED: 9/27/89

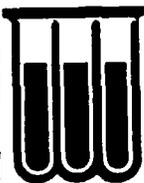
SAMPLE ID : #2 EAST SIDE OF PAD 9-20-89 11:32

ANALYTICAL REPORT

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PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT
Tot Recoverable Pet Hydrocarbons	10/ 2-10/ 3/89	2,500	210 mg/kg

NOTE: ND (None Detected)



WADSWORTH/ALERT  
LABORATORIES, INC.

COMPANY: GSX REMEDIAL SERVICES  
LAB #: 2042-32264  
MATRIX: SOLID

DATE RECEIVED: 9/27/89  
DATE EXTRACTED: 9/28/89  
DATE ANALYZED: 10/ 3/89

SAMPLE ID: #3 WEST SIDE OF PAD 9-20-89 11:34

VOLATILE ORGANICS  
USEPA METHOD 8240 - GC/MS

Acetone	ND**	cis-1,3-Dichloropropene	ND
Benzene	ND	trans-1,3-dichloropropene	ND
Bromodichloromethane	ND	Ethylbenzene	ND
Bromoform	ND	2-Hexanone	ND**
Bromomethane	ND*	Methylene chloride	ND
2-Butanone	ND**	4-Methyl-2-pentanone	ND**
Carbon disulfide	ND	Styrene	ND
Carbon tetrachloride	ND	1,1,2,2-Tetrachloroethane	ND
Chlorobenzene	ND	Tetrachloroethene	ND
Chlorodibromomethane	ND	Toluene	ND
Chloroethane	ND	1,1,1-Trichloroethane	ND
Chloroform	ND	1,1,2-Trichloroethane	ND
Chloromethane	ND*	Trichloroethene	ND
1,1-Dichloroethane	ND	Vinyl chloride	ND*
1,2-Dichloroethane	ND	Xylene(Total)	ND
1,1-Dichloroethene	ND		
1,2-Dichloroethene(Total)	ND		
1,2-Dichloropropane	ND		

NOTE: ND (None Detected, lower detectable limit = 1 mg/kg) as rec'd  
 ND\* (None Detected, lower detectable limit = 2 mg/kg) as rec'd  
 ND\*\* (None Detected, lower detectable limit = 10 mg/kg) as rec'd  
 J (Detected, but below quantitation limit; quantitation suspect)  
 B (Compound detected in method blank associated with this sample)  
 -- (Not Analyzed)

SURROGATE RECOVERY:	%	ACCEPTABLE LIMITS	
		WATER	SOLID
1,2-Dichloroethane-d4	103	(76-114)	(70-121)
Toluene-d8	96	(88-110)	(81-117)
Bromofluorobenzene	103	(86-115)	(74-121)



WADSWORTH/ALERT  
LABORATORIES, INC.

COMPANY : GSX REMEDIAL SERVICES  
LAB #: 2042-32264  
MATRIX : SOLID

DATE RECEIVED: 9/27/89

SAMPLE ID : #3 WEST SIDE OF PAD 9-20-89 11:34

ANALYTICAL REPORT

---

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT
Tot Recoverable Pet Hydrocarbons	10/ 2-10/ 3/89	110	15 mg/kg

NOTE: ND (None Detected)



WADSWORTH/ALERT  
LABORATORIES, INC.

COMPANY: GSX REMEDIAL SERVICES  
LAB #: 2042-32265  
MATRIX: SOLID

DATE RECEIVED: 9/27/89  
DATE EXTRACTED: 9/28/89  
DATE ANALYZED: 10/ 3/89

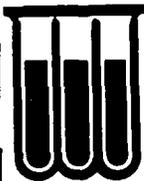
SAMPLE ID: #4 SOUTH SIDE OF PAD 9-20-89 11:36

VOLATILE ORGANICS  
USEPA METHOD 8240 - GC/MS

Acetone	ND**	cis-1,3-Dichloropropene	ND
Benzene	ND	trans-1,3-dichloropropene	ND
Bromodichloromethane	ND	Ethylbenzene	ND
Bromoform	ND	2-Hexanone	ND**
Bromomethane	ND*	Methylene chloride	ND
2-Butanone	ND**	4-Methyl-2-pentanone	ND**
Carbon disulfide	ND	Styrene	ND
Carbon tetrachloride	ND	1,1,2,2-Tetrachloroethane	ND
Chlorobenzene	ND	Tetrachloroethene	ND
Chlorodibromomethane	ND	Toluene	ND
Chloroethane	ND	1,1,1-Trichloroethane	ND
Chloroform	ND	1,1,2-Trichloroethane	ND
Chloromethane	ND*	Trichloroethene	ND
1,1-Dichloroethane	ND	Vinyl chloride	ND*
1,2-Dichloroethane	ND	Xylene(Total)	ND
1,1-Dichloroethene	ND		
1,2-Dichloroethene(Total)	ND		
1,2-Dichloropropane	ND		

NOTE: ND (None Detected, lower detectable limit = 1 mg/kg) as rec'd  
 ND\* (None Detected, lower detectable limit = 2 mg/kg) as rec'd  
 ND\*\* (None Detected, lower detectable limit = 10 mg/kg) as rec'd  
 J (Detected, but below quantitation limit; quantitation suspect)  
 B (Compound detected in method blank associated with this sample)  
 -- (Not Analyzed)

SURROGATE RECOVERY:	%	ACCEPTABLE LIMITS	
		WATER	SOLID
1,2-Dichloroethane-d4	100	(76-114)	(70-121)
Toluene-d8	92	(88-110)	(81-117)
Bromofluorobenzene	99	(86-115)	(74-121)



WADSWORTH/ALERT  
LABORATORIES, INC.

COMPANY : GSX REMEDIAL SERVICES  
LAB # : 2042-32265  
MATRIX : SOLID

DATE RECEIVED: 9/27/89

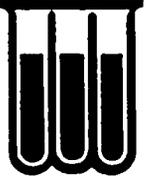
SAMPLE ID : #4 SOUTH SIDE OF PAD 9-20-89 11:36

**ANALYTICAL REPORT**

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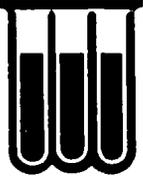
PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT
Tot Recoverable Pet Hydrocarbons	10/ 2-10/ 3/89	220	15 mg/kg

NOTE: ND (None Detected)



WADSWORTH/ALERT  
LABORATORIES, INC.

QUALITY CONTROL SECTION



WADSWORTH/ALERT  
LABORATORIES, INC.

MATRIX SPIKE DATA

LAB ID	PARAMETER	SPIKE PERCENT RECOVERY	SPK/DUP PERCENT RECOVERY	SPIKE MATRIX	QC CONTROL LIMITS
	GC/MS VOLATILE COMPOUNDS				
890928	1,1-Dichloroethene	95	97	SOLID	( 59-172)
	Trichloroethene	108	109		( 62-137)
	Chlorobenzene	106	108		( 60-133)
	Toluene	105	100		( 59-139)
	Benzene	98	109		( 66-142)



WADSWORTH/ALERT  
LABORATORIES, INC.

MATRIX SPIKE DATA

LAB ID	PARAMETER	SPIKE PERCENT RECOVERY	SPK/DUP PERCENT RECOVERY	SPIKE MATRIX	QC CONTROL LIMITS
891002	Tot Recoverable Pet Hydrocarbons	78	85	SOLID	( 32-142)

WADSWORTH/ALERT  
LABORATORIES, INC.

COMPANY: Wadsworth/Alert Laboratories  
LAB #: 9289-92928  
MATRIX: SOLID

DATE RECEIVED: 9/28/89  
DATE EXTRACTED: 9/28/89  
DATE ANALYZED: 10/ 3/89

SAMPLE ID: INTRA-LAB BLANK , 9 /28/89

VOLATILE ORGANICS  
BLANK COMPOUND LIST - GC/MS

Acetone	ND**	1,1-Dichloroethane	ND
Acrolein	ND**	1,2-Dichloroethane	ND
Acrylonitrile	ND**	1,1-Dichloroethene	ND
2-Butanone	ND**	1,2-Dichloroethene (total)	ND
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	ND	cis-1,3-Dichloropropene	ND
Bromoform	ND	trans-1,3-Dichloropropene	ND
Bromomethane	ND*	Ethylbenzene	ND
Carbon disulfide	ND	2-Hexanone	ND**
Carbon tetrachloride	ND	4-Methyl-2-pentanone	ND**
Chlorobenzene	ND	Methylene chloride	ND
Chloroethane	ND*	Styrene	ND
Chloroform	ND	1,1,2,2-Tetrachloroethane	ND
2-Chloroethyl vinyl ether	ND*	Tetrachloroethene	ND
Chloromethane	ND*	Toluene	ND
Chloromethyl methyl ether	ND	1,1,1-Trichloroethane	ND
Dibromochloromethane	ND	1,1,2-Trichloroethane	ND
1,2-Dichlorobenzene	ND	Trichloroethene	ND
1,3-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,4-Dichlorobenzene	ND	Vinyl acetate	ND**
Dichlorodifluoromethane	ND*	Vinyl chloride	ND*
		Total xylenes	ND

NOTE: ND (None Detected, lower detectable limit = 1 mg/kg) as rec'd  
 ND\* (None Detected, lower detectable limit = 2 mg/kg) as rec'd  
 ND\*\* (None Detected, lower detectable limit = 10 mg/kg) as rec'd  
 J (Detected, but below quantitation limit; quantitation suspect)  
 -- (Not Analyzed)

SURROGATE RECOVERY:	%	ACCEPTABLE LIMITS	
		WATER	SOLID
1,2-Dichloroethane-d4	104	(76-114)	(70-121)
Toluene-d8	99	(88-110)	(81-117)
Bromofluorobenzene	104	(86-115)	(74-121)



WADSWORTH/ALERT  
LABORATORIES, INC.

COMPANY: Wadsworth/Alert Laboratories  
LAB ID: 9289-93002  
MATRIX : SOLID

DATE RECEIVED: 10/ 2/89  
DATE EXTRACTED: 10/ 2/89  
DATE ANALYZED: 10/ 2/89

SAMPLE ID: INTRA-LAB BLANK , 10/2 /89

**TOTAL RECOVERABLE PETROLEUM HYDROCARBONS BLANK REPORT**

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	<b>RESULT</b>	<b>UNITS</b>	<b>LOWER DETECTION LIMIT</b>
Total Recoverable Petroleum Hydrocarbons	ND	mg/kg	15

**NOTE:** ND (None Detected)





# NORTH CAROLINA HAZARDOUS WASTE MANIFEST

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039. Expires 9-30-91

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No. NCTMP000164300007		Manifest Document No.		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.		
3. Generator's Name and Mailing Address GTE Products Corp. One Stamford Forum Stamford, CT 06904						A. State Manifest Document Number 891031RVGH-598				
4. Generator's Phone (203) 965-3080						B. State Generator's ID				
5. Transporter 1 Company Name GSX Services Inc			6. US EPA ID Number MID0918055416513			C. State Transporter's ID				
7. Transporter 2 Company Name			8. US EPA ID Number			D. Transporter's Phone 919-342-6106				
9. Designated Facility Name and Site Address GSX Services, Inc Route 11 Box 3 Reidsville, NC 27320						10. US EPA ID Number MCD0000648451			E. State Facility's ID	
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)						12. Containers		13. Total Quantity	14. Unit Wt/Vol	1. Waste No.
a. <del>Non-Regulated Material</del> Hazardous waste solid HOS. ORM-E NA-9189						1. 2 DM		12100	P	F003 F005
b.										
c.										
d.										
J. Additional Descriptions for Materials Listed Above						K. Handling Codes for Wastes Listed Above				
15. Special Handling Instructions and Additional Information										
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described by the proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport according to applicable international and national government regulations.  If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me to minimize the future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize the future threat to human health and the environment and select the best waste management method that is available to me and that I can afford.										
Printed/Typed Name Charles L McCormick (Products Corp.)						Signature <i>Charles McCormick</i>			Year 11/03/89	
17. Transporter 1 Acknowledgement of Receipt of Materials										
Printed/Typed Name MICHAEL MITCHELL MEERS						Signature <i>Michael Mitchell Meers</i>			Month Day Year 11 03 1989	
18. Transporter 2 Acknowledgement of Receipt of Materials										
Printed/Typed Name						Signature			Month Day Year	
19. Discrepancy Indication Space Item 3 - should read GTE Products Corp. Hickory, NC										
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.										
Printed/Typed Name Wendy Houston						Signature <i>Wendy Houston</i>			Month Day Year 11 03 1989	



# South Carolina Department of Health and Environmental Control

Bureau of Solid & Hazardous Waste Mg  
2600 Bull Street, Columbia, SC 29201  
Phone: (803) 734-5200  
Emergency & Holidays: (803)253-6488

PLEASE PRINT or TYPE (Form designed for use on elite [12-pitch] typewriter) Form Approved. OMB No. 2050-0039 Expires 9-

truck # 30

## UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's U.S. EPA ID No. N.C.T.M. 00010116431891015 Manifest Document No. 1 2. Page 1 of 1 Information in the shaded areas is required by Federal law, but is by State

3. Generator's Name and Mailing Address  
GTE Products Corporation  
One Stamford Forum  
Stamford Conn  
4. Generator's Phone 04804 203-965-3080  
A. State Manifest Document Number  
B. State Generator's ID

5. Transporter 1 Company Name Willms Trucking 6. U.S. EPA ID Number 15C1010713710921917 C. State Transporter's ID  
D. Transporter's Phone 803-267-3323  
7. Transporter 2 Company Name 8. U.S. EPA ID Number  
E. State Transporter's ID  
F. Transporter's Phone

9. Designated Facility Name and Site Address GTX Services of South Carolina, Inc 10. U.S. EPA ID Number 15F10107101371591815 G. State Facility's ID  
Route 1 Box 255  
Pinewood, SC 29125 H. Facility's Phone 803-452-5003

11. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	15. Waste Number
a. <u>Non Regulated Material</u>	<u>1</u>	<u>CIM</u>	<u>21</u>	<u>Y</u>	<u>217</u>
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above  
a. pw-103722-141011 c.       
b.      d.       
K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information  
WO # 100499  
Public reporting burden for this collection of information is estimated to average 37 minutes for generators, 15 minutes for transporters, and 30 minutes for treatment, storage, and disposal facilities. This includes reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding this burden estimate, including suggestions for reducing this burden, to Chief, Information Management Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classed, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations the laws of the State of South Carolina.  
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name Charles L. McCormick (Agent for GTE Prod. Corp) Signature Charles L. McCormick Month Day 09/19/95

17. Transporter 1 Acknowledgement of Receipt of Materials  
Printed/Typed Name J. R. Speights (30) Signature J. R. Speights (30) Month Day 09/19/95

18. Transporter 2 Acknowledgement of Receipt of Materials  
Printed/Typed Name \_\_\_\_\_ Signature \_\_\_\_\_ Month Day \_\_\_\_\_

19. Discrepancy Indication Space  
a. \_\_\_\_\_ lbs. c. \_\_\_\_\_  
b. \_\_\_\_\_ lbs. d. \_\_\_\_\_

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.  
Printed/Typed Name \_\_\_\_\_ Signature \_\_\_\_\_ Month Day \_\_\_\_\_

GENERATOR

RECEIVED BY

DATE



# South Carolina Department of Health and Environmental Control

Bureau of Solid & Hazardous Waste / 2600 Bull Street, Columbia, SC 29201 / Phone: (803) 734-5200 / Emergency & Holidays: (803)253-64

PLEASE PRINT or TYPE

(Form designed for use on elite (12-pitch) typewriter)

Form Approved. OMB No. 2050-0039 Expires

truck # 48

## UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's U.S. EPA ID No.

NCITM000011643189004

Manifest Document No.

89004

2. Page 1 of

Information in the shaded areas required by Federal law, but is by St:

3. Generator's Name and Mailing Address  
GTE Products Corporation  
One Stamford Center  
Stamford Conn 06904

4. Generator's Phone (203) 965-2080

5. Transporter 1 Company Name

Willms Trucking

6. U.S. EPA ID Number

SC000713709297

7. Transporter 2 Company Name

8. U.S. EPA ID Number

9. Designated Facility Name and Site Address  
GDX Services of South Carolina Inc  
Route 1 Box 255  
Pinewood SC 29125

10. U.S. EPA ID Number

SC000710371591815

A. State Manifest Document Number

B. State Generator's ID

C. State Transporter's ID

D. Transporter's Phone 1-803-260-33

E. State Transporter's ID

F. Transporter's Phone

G. State Facility's ID

H. Facility's Phone

803-452-5003

11. U.S. DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)

12. Containers No. Type

13. Total Quantity

14. Unit W/Vol

15. Waste Num

a. Non Regulated Material

b.

c.

d.

J. Additional Descriptions for Materials Listed Above

a. P, U - 03, 7, 2, 2 - 4, 0, 0, 1

b. - - - - -

c. - - - - -

d. - - - - -

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

WO # 999197

Public reporting burden for this collection of information is estimated to average 37 minutes for generators, 13 minutes for transporter, and 10 minutes for treatment, storage and disposal facilities. This includes the time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding this burden estimate, suggestions for reducing this burden, to Chief, Information Management Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are clearly packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations under the laws of the State of South Carolina.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management practice that is available to me and that I can afford.

Printed/Typed Name: Charles L. McCormick, Agent for GTE Prod. Corp. Signature: Charles L. McCormick Month Day: 10/9/18

17. Transporter 1 Acknowledgement of Receipt of Materials  
Printed/Typed Name: Charles Fishburne Signature: Charles Fishburne Month Day: 10/9/18

18. Transporter 2 Acknowledgement of Receipt of Materials  
Printed/Typed Name: Signature: Month Day:

19. Discrepancy Indication Space  
a. lbs. c. lbs. d. lbs.

20. Facility Owner or Operator, Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.  
Printed/Typed Name: Signature: Month Day:

GENERATOR

TRANSPORTER

FACILITY





# NORTH CAROLINA HAZARDOUS WASTE MANIFEST

Please print or type. (Form designed for use on 8 1/2 x 11 inch typewriter paper.) Form Approved, OMB No. 2060-0032, Expires 9-30-91

## UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID Number:   
 2. Page No.   
 Information in the shaded areas is not required by Federal Regulations.

3. Generator's Name and Mailing Address: **GTE ENERGY SERVICES**

4. Generator's Phone: **704 271 1111**

5. Transporter 1 Company Name: **Four Seasons** US EPA ID Number: **NC1919191919**

7. Transporter 2 Company Name: **Oldover Corporation** US EPA ID Number: **NC0000000000**

8. Designated Facility Name and Site Address: **Oldover Corporation**  
**PO Box 107**  
**Cassette**

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers		13. Total Quantity	14. Unit. Wt/No
	No.	Type		
a. <b>Waste Flammable Liquid 1195</b> <b>Flammable liquid</b> <b>UN 1993</b>	1	III	4000	G
b.				
c.				
d.				

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: **Charles L. McGinnis** Signature: *[Signature]* Month Day Year: **10 9 1989**

17. Transporter 1 Acknowledgement of Receipt of Materials  
 Printed/Typed Name: **John Wilcox** Signature: *[Signature]* Month Day Year: **10 9 1989**

18. Transporter 2 Acknowledgement of Receipt of Materials  
 Printed/Typed Name: Signature: Month Day Year:

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.  
 Printed/Typed Name: Signature: Month Day Year:

GENERATOR

TRANSPORTER

FACILITY



**NATIONAL FLOOD INSURANCE PROGRAM**
**FIRM  
FLOOD INSURANCE RATE MAP**

**CITY OF  
HICKORY,  
NORTH CAROLINA  
CATAWBA AND BURKE  
COUNTIES**

**PANEL 15 OF 30**

**COMMUNITY-PANEL NUMBER  
370054 0015 B**

**EFFECTIVE DATE:  
AUGUST 3, 1981**



**federal emergency management agency  
federal insurance administration**

**NOTES TO USER**

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

For adjoining map panels, see separately printed Index To Map Panels.

**INITIAL IDENTIFICATION:  
SEPTEMBER 13, 1974**

**FLOOD HAZARD BOUNDARY MAP REVISIONS:  
JANUARY 23, 1978**

**FLOOD INSURANCE RATE MAP EFFECTIVE:  
AUGUST 3, 1981**

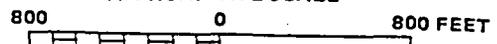
For Description of Elevation Reference Marks, see panel 370054 0030 B

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program at (800) 638-6620.



**APPROXIMATE SCALE**



## KEY TO MAP

500-Year Flood Boundary	—————	
100-Year Flood Boundary	—————	
Zone Designations* With Date of Identification e.g., 12/2/74		
100-Year Flood Boundary	—————	
500-Year Flood Boundary	—————	
Base Flood Elevation Line With Elevation In Feet**	~~~~~513~~~~~	
Base Flood Elevation in Feet Where Uniform Within Zone**		(EL 987)
Elevation Reference Mark		RM7x
River Mile		• M1.5

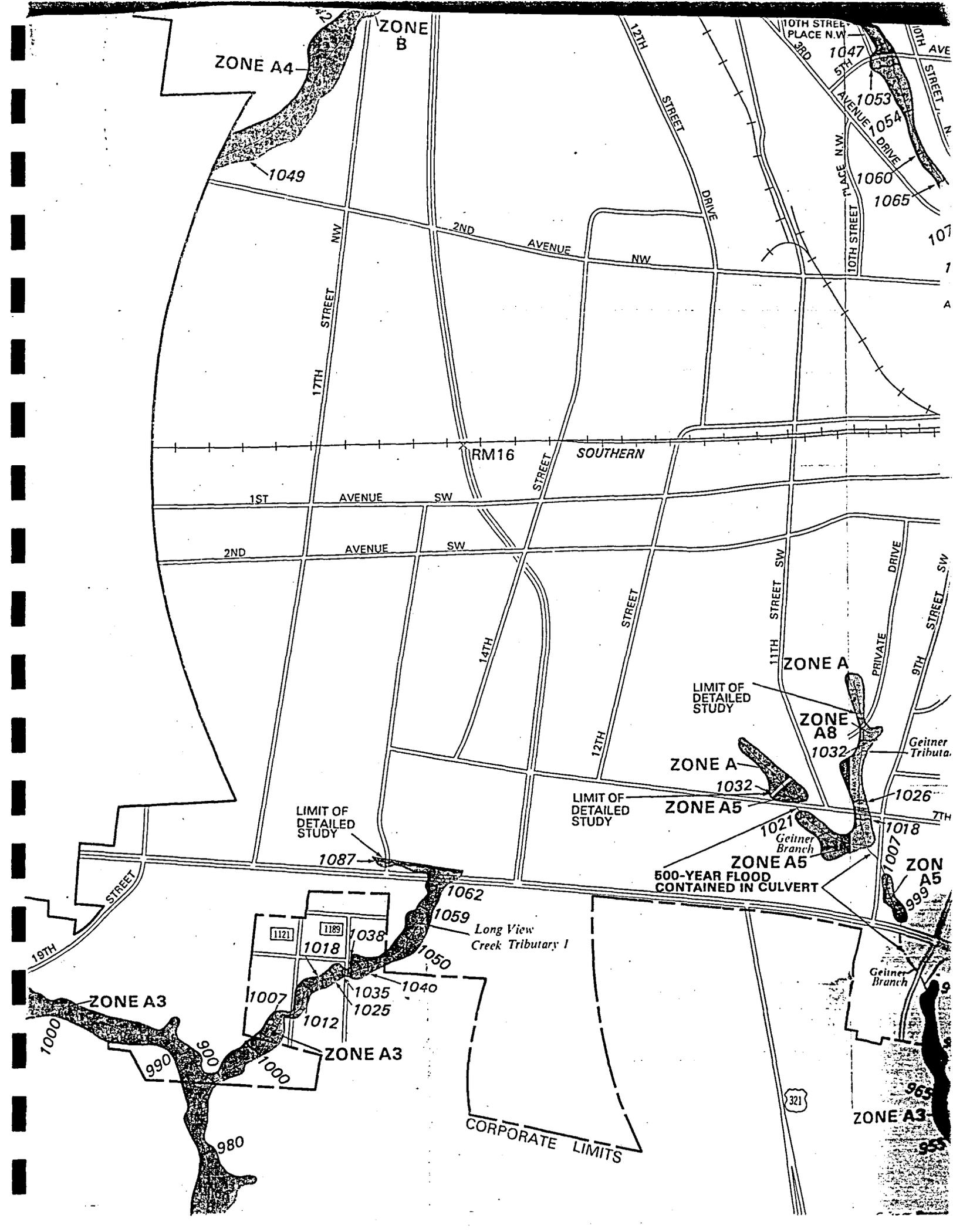
\*\*Referenced to the National Geodetic Vertical Datum of 1929

### \*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

### NOTES TO USER

Continued on the next page, flood hazard areas (zones A and V)



ZONE A4

ZONE B

1049

1047

1053

1054

1060

1065

2ND

AVENUE

NW

17TH STREET NW

RM16

SOUTHERN

1ST

AVENUE

SW

2ND

AVENUE

SW

14TH

STREET

12TH

STREET

11TH

STREET SW

ZONE A

ZONE A8

1032

ZONE A

LIMIT OF DETAILED STUDY

LIMIT OF DETAILED STUDY

ZONE A5

1021

Geitner Branch

500-YEAR FLOOD CONTAINED IN CULVERT

1018

1007

999

999

999

999

999

999

999

999

999

999

LIMIT OF DETAILED STUDY

1087

1062

1059

1050

1040

1035

1025

1012

1007

1000

990

980

ZONE A3

ZONE A3

CORPORATE LIMITS

ZONE A3

965

955

321

Geitner Tributary

Geitner Branch

Geitner Branch

Geitner Branch

Geitner Branch

Geitner Branch

Geitner Branch

RECORD OF COMMUNICATION

PHONE CALL  DISCUSSION  FIELD  OTHER (SPECIFY) Reference 5

TO: Londa Mann  
Doug Holyfield

(Record of item checked above)  
FROM: 1-704 663-1699  
Carry Fox  
Mooreville Regional Office

DATE 10-4-88

TIME

SUBJECT Old Southern Desk Building formerly housing Southern Cabinet, a GTE company, 15th Ave. SW, Hickory, N.C. -> Old Drums

SUMMARY OF COMMUNICATION

On 10-4-88, I visited Old Southern Desk Building located on 15th Ave. SW, Hickory, N.C. which had abandoned drums of chemicals left behind. The last facility which had the chemicals appears to have been Southern Cabinet Co., a GTE Company, which use to make wooden furniture cabinets for TV's. The GTE Company sold the building to a man in Virginia and the man has leased part of the building complex to several small businesses. At the 18th St. SW. & Main Ave SW. corner at the back of the building, there are ~ 147 drums (55 gal. size) which are rusting, leaking (some but not all), damaged. These drums are on a concrete slab but it drains to one side where the concrete ends. Also next to the drums are four (4) ~ 10,000 gallon tanks which may still have materials in them but could not determine but could detect solvent odor near tanks. The tanks had the following markings on front of tank from wall: "Low Sheen Lac - High Sheen Lac - Sealer - Primer".

In the front of the building next to 15th Ave. SW and 18th St. S.W. corner building, a paint shop mixing room is there with abandon drums of chemical, 5 gal buckets and 5 mixing vats with some chemicals in them. The mixing room is a mess with leaking buckets. In mixing room there were about 75 - 5 gal size buckets of materials, 4 drums (55 gal size) of chemicals, and 5 mixing vats with some chemical in them.

INFORMATION COPIES

TO: Gary Babb Over -> See page #2

CERCLA  
EPA Form 1300 6 (7-72)  
southern desk  
1 Form

application

Aug 9 1982

8-8-82 DHS 3048

NC D 081 332 983  
change of status

RECORD OF COMMUNICATION

PHONE CALL   
  DISCUSS   
  FIELD TRIP   
  CONFERENCE  
 OTHER (SPECIFY)

Page 2

(Record of item checked above)

TO:

Doug Holyfield

FROM:

Larry Fox

DATE

10-4-88

TIME

SUBJECT

Old Southern Desk Building Continued

SUMMARY OF COMMUNICATION

Also 2 drums (55 gal size) are located in front of building next to fence on 15th Ave. S.W. but it appears that only one (1) has about 1/2 full of unknown chemical in it.

Also 2 drums (2) (30 gallon size) (East side) are located in old boiler room. Appears to be boiler chemicals but not sure.

The 147 drums are located next to road on 18th St S.W. and are only about 50 feet from 3 houses and 2 houses beside house on Main Ave S.W.

Over → Continued on Page #3 →

CONCLUSIONS, ACTION TAKEN OR REQUIRED

The drum site is a hazardous condition which should be corrected as quickly as possible due to conditions of drums and the close distance to the highway (~15 feet) and to the 5 houses in area.

INFORMATION COPIES

TO:

Gary Babb

RECORD OF COMMUNICATION

PHONE CALL  DISCUSSION  FIELD TRIP  CONFERENCE  
 OTHER (SPECIFY)

Page 3

(Record of item checked above)

TO: Doug Holyfield

FROM: Larry Fox

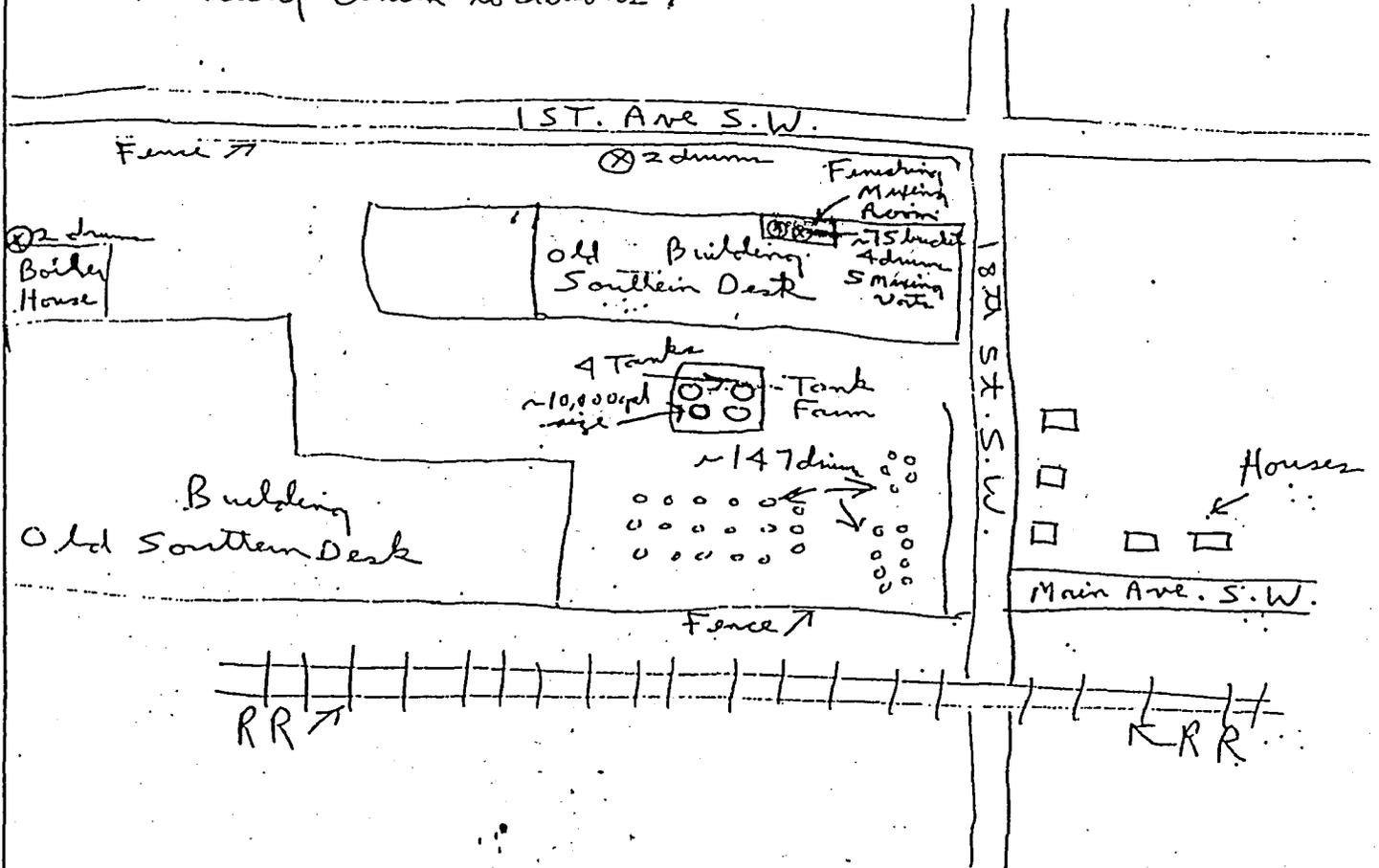
DATE 10-4-88

TIME

SUBJECT Old Southern Desk Building continued.

SUMMARY OF COMMUNICATION

Facility drum locations:



CONCLUSIONS, ACTION TAKEN OR REQUIRED

INFORMATION COPIES

TO:

~ Larry Fox  
Po Box 71  
CONOVER, NC 28613

Hart ~ McCormack Lyto neus  
~~Western~~ ~~Spain~~ De' Lynton <sup>aus</sup> ~~Moore~~ Moore, Atlanta GA  
Ray Weston ~~Moore~~

'9-13-89

From: Mary Ganley, Hydrogeologist

*Mary Ganley*

Date: Sept. 19, 1991

Time: 1020

Subject: Southern Desk NCD 986166353  
RCRA File Review

I checked the RCRA files this morning to see if there was permit information on GTE Services Corporation, Southern Desk Cabinet, NCD986166353, however, there were no file under any of these headings.

Date: Sept. 20, 1991

Time: 0830

Subject: Southern Desk NCD 986166353  
RCRA File Review

*Mary Ganley*

I spoke with Larry Fox, Hazardous Waste Section, who had written a 1988 report on the site. He gave me the number NCD 081 332 983. The RCRA file was under Southern Cabinet and contained the attached forms. He was present during the removal and gave the name and affiliation of the EPA oversite contractor-De'Lyntoneus Moore of Roy Weston out of Atlanta, Georgia.

From: Mary Ganley, Hydrogeologist *Mary Ganley*  
Date: Sept. 19, 1991  
Time: 1600  
Subject: Southern Desk NCD 986166353  
Search for Immediate Removal Documentation

I spoke with Vincent Gallogly, GTE Service Corporation, to find out if a closure report was ever done on the facility. He doesn't think there is such a report. To his knowledge, no post removal sampling was performed. He will pull his file on the site to get the dates of removal, etc. Charles McCormick, Hart Environmental, 703-243-2705, was in charge of the removal.

Date: Sept. 20, 1991  
Time: 09450

Subject: Southern Desk NCD 986166353  
Search for Immediate Removal Documentation

I spoke with Vincent Gallogly again this morning who had checked his files and faxed me two post removal reports, one from Hart and another from GSX.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

APR 11 1989

Mr. Vincent Gallogly  
GTE Service Corporation  
One Stamford Forum  
Stamford Ct. 06904

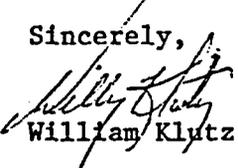
Re: Southern Desk Cabinet  
Hickory, North Carolina

Dear Mr. Gallogly:

This letter is to confirm our telephone conversation of April 11, 1989, where I indicated to you that the work plan which you submitted for the removal action at the Southern Desk Cabinet facility has been approved. In your letter accompanying the work plan, you indicated that upon approval your contractor would be prepared to commence work at the site within one week. I would appreciate you or your consultant, Mr. McCormick of Hart Environmental, notifying me as soon as possible of your removal contractors expected startup date so that I can notify the North Carolina Department of Human Resources of your plans and arrange for my oversight contractor.

Thank you for your consideration. If you have any questions or wish to discuss your removal plans please contact me at 404/347-3931.

Sincerely,

  
William Klutz

cc: C. Baschon  
B. Nicholson





7

Vincent Gallogly  
Assistant General Counsel

GTE Service Corporation  
One Stamford Forum  
Stamford, CT 06904  
(203) 348-4000

October 17, 1989

Ms. Carol F. Baschon  
Assistant Regional Counsel  
U.S. Environmental Protection Agency  
Region IV  
345 Courtland St.  
Atlanta, GA 30365

Re: Docket No. 89-11-C

Dear Ms. Baschon:

Pursuant to the Administrative Order issued to GTE Products Corporation (GTE) in the above mentioned docket, GTE has completed the removal of the materials described in said order to be completed. Enclosed are two reports describing the activities carried out to effect the removal: 1) the October 10, 1989 report by Mr. Charles McCormick, Manager, Washington Operations, Fred C. Hart Associates, Inc., who supervised the activities of GSX Services, Inc., the removal contractor; 2) the October 11, 1989 report by Mr. John D. DiCata, Project Manager, Remedial Services Group, GSX Services, Inc. I believe these reports approximately document the removal activities that took place at the site and the ultimate destination of the materials. As indicated in the reports, an EPA OSC contractor's representative was present for the removal activities.

As the required remedial actions have been taken, I believe the matter to be closed.

Respectfully submitted,

  
Vincent Gallogly

VG:lbc

Encl.

cc: Mr. Bill Klutz  
Waste Management Division  
Superfund Branch  
U.S. Environmental Protection Agency  
Region IV  
345 Courtland St.  
Atlanta, GA 30365

1911 Fort Myer Drive, Suite 906 Arlington, VA 209 703/243-2700 Fax: 703/528-8742

Fred C. Hart Associates, Inc.

RECEIVED

OCT 16 1989

V. GALLOGLY



October 13, 1989

New York, NY  
 Washington, DC  
 Pittsburgh, PA  
 Albany, NY  
 Rocky Hill, CT  
 Cherry Hill, NJ  
 Irvine, CA  
 Southfield, MI  
 Liberty Corner, NJ  
 Jacksonville, FL  
 Sacramento, CA

Vincent Gallogly, Esquire  
 Assistant General Counsel  
 GTE Service Corporation  
 One Stamford Forum  
 Stamford, CT 06904

Re: Completion of Southern Desk and Cabinet CERCLA 106(a) Cleanup

Dear Vincent:

This letter will serve as notification of completion of all requirements under the Southern Desk and Cabinet CERCLA 106(a) Order of Docket No. 89-11-C. GSX Remedial Services Group conducted and Fred C. Hart Associates, Inc. supervised all work at the site. The EPA approved Work Plan and Site Safety Plan were followed to their fullest extent at all times.

All hazardous wastes and associated non-hazardous wastes referenced in the order have been removed from the site. Removal was completed on September 29, 1989. All materials were transported under proper manifests to appropriate, licensed TSDFs. All work on-site was witnessed by EPA contract employee, De'Lyntoneus Moore. Mr. Moore advised me that satisfactory completion of the cleanup effort at Southern Desk & Cabinet had been achieved. Attachment I to this letter restates the EPA Order and indicates the response to each line item of the order.

Please give me a call if I can be of further assistance. It is a pleasure assisting you in this matter and I hope that I may be of service again if the need arises.

Sincerely,

FRED C. HART ASSOCIATES, INC.

  
 Charles McCormick  
 Manager, Washington Operations

CM/ptt

[4608P]  
 [00199-00 00002-01]

## ATTACHMENT I

## SOUTHERN DESK &amp; CABINET

CERCLA 106(a) ORDER

Below is set forth the requirements in the U.S. EPA Order under Section 106(a) of CERCLA for cleanup at the Southern Desk & Cabinet facility. Following each numbered paragraph in the Order are bulleted items which indicate our actions in response to the Order requirements.

1. Secure the drums at the Southern Desk/Cabinet site facility to reduce the threat of direct contact by the public.
  - Site secured in April 1989.
2. Develop a sampling, analysis and disposal plan to determine the real extent of contamination.
  - Sampling plan submitted and approved by EPA in March 1989 and implemented in April 1989.
3. Treat and/or dispose of the following at a federally approved waste facility:
  - Hazardous Liquids - Oldover (energy recovery); Hazardous Solids - Enco (incineration); Empty Drums (crushed) and non-contaminated Debris - GSX (landfill)
  - A. Any contaminated soil.
    - All soil on pad and soil from breeches in pad was removed, drummed, and shipped for incineration in September 1989.
  - B. All drums and containers which contain or have contained hazardous substances; (ignitable or other listed waste).
    - All drums and cans were rendered "RCRA empty," emptied on-site, and shipped as unlisted waste to the GSX group landfill. Drums and cans which could not be emptied were solidified and shipped for incineration in September 1989.
  - C. All vats which contain or have contained hazardous substances, chemicals and/or solutions and their residuals.
    - The mixing room vats were emptied in April of 1989. The liquids were consolidated and shipped to Oldover for energy recovery.
4. All hazardous substances and/or contaminated material is to be treated and/or disposed of at a federally approved hazardous waste facility.
  - See 3 above.

## ATTACHMENT I Page 2



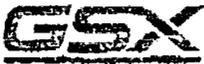
5. Provide adequate verification and documentation that all hazardous substances are removed, treated, and/or disposed of at federally approved facilities.
  - All material shipped under manifest including unlisted wastes to GSX.
6. Comply with all federal, state, and local laws applicable to any action above.
  - All U.S. EPA DOT, and state regulations adhered to in the shipment of wastes off-site.
7. Take actions that are necessary to protect the public health, welfare, and the environment. The Respondent shall report to the On-Site Coordinator prior to taking any such action.
  - Mr. Klutz, OSC, informed prior to start-up of any on-site activities, the work plan was followed explicitly, and all work was observed by a U.S. EPA contract employee.
8. Develop a site safety plan subject to approval by EPA.
  - Site Safety Plan approved in March 1989.
9. Begin on-site activity within twenty (20) days for items 1 and 8 after the effective date of this Order.
  - Contractor selection commenced in January 1989; Work Plan and Safety Plan were developed in February 1989; site cleanup began in late March/early April 1989.
10. Begin on-site removal within ten (10) days after EPA approval of the site safety plan.
  - Site cleanup commenced immediately following EPA approval of the Site Safety Plan.
11. Complete all activity within ninety (90) days of removal startup.
  - Cleanup project completed by September 30, 1989 as per agreement with EPA.
12. Respondent shall use quality assurance, quality control, chain-of-custody and manifest procedures in accordance with the EPA guidance throughout all activities. Respondents shall consult with EPA prior to planning for sampling, analysis, transportation and disposal. Respondent shall provide a quality control report to EPA which certifies that all activities have been performed as approved by EPA.
  - Appropriate QA, QC, chain-of-custody and manifest procedures followed by GTE, GSX, and HART. All laboratory data and QA/QC information submitted to Mr. Klutz, EPA Region IV.

## ATTACHMENT I Page 3



13. Notwithstanding compliance with the terms of this Order, the Respondent may be required to take further actions as necessary to abate an endangerment posed by conditions at the site.
- No action required.
14. In the event that the OSC determines that activities implemented are not in compliance with this Order, or any other circumstances or activities are creating an imminent and substantial endangerment to the public health or welfare or the environment, the Regional Administrator of EPA, Region IV, may order the Respondent to cease actions at the site and EPA will carry out the activities pursuant to this Order.
- No action required.

RECEIVED



GSX Services, Inc.  
Remedial Services Group  
1415 Woodside Drive  
P.O. Box 14064  
Greensboro, NC 27415-1964  
919-272-0185  
919-373-0308 FAX#

OCT 16 1989

V. GALLOGLY

89403-GHN-43

October 11, 1989

Mr. Vincent Gallogly  
Assistant General Counsel  
GTE SERVICE CORPORATION  
One Stamford Court  
Stamford, Connecticut 06904

REFERENCE: FINAL REPORT/HICKORY, NORTH CAROLINA, DRUM AND  
DECONTAMINATION JOB, PHASE I & PHASE II (PROJECT  
#89403)

Dear Mr. Gallogly:

Enclosed is the final report summarizing the work performed by GSX Services Inc., Remedial Services Group at the Franklin Machinery Plant located in Hickory, North Carolina. Phase I, which took place from April 18-27, 1989, consisted of preshipment and site stabilization, Phase II, took place from September 11-20, 1989 and entailed the removal, transportation, and disposal of the material.

SEQUENCE OF EVENTS:Tuesday, April 18, 1989 - Friday, April 21, 1989

Equipment and supplies were mobilized this week. Site preparation and personnel orientation took place prior to work commencing. A staging area was constructed and fenced in. The week's work consisted of drum sampling and drum stabilization. GSX completed the bulking of the unstable five-gallon pails of paint sludge into 55-gallon drums. All drums and five-gallon pails were placed in the fenced-in drum storage area. All unstable 55-gallon drums were overpacked and placed in the staging area as well.

Monday, April 24, 1989 - Thursday, April 27, 1989

GSX began the week by removing debris from the paint storage rooms, and placing it on plastic inside the fenced staging area. The valves from one of the storage rooms were also disconnected and placed in the staging area on plastic. On Tuesday, GSX decontaminated the storage rooms by sandblasting the walls and floors. The crew used a scarifier on Wednesday and Thursday to remove heavy contamination from the floors. On Friday, GSX cleared and secured the work areas. GSX demobilized personnel from the site.

Samples of the waste that GSX had obtained while on site were sent to approved laboratories. After analyses were received completed profile/disposal forms were sent to all the necessary disposal outlets for approvals.

Monday, September 11, 1989 - Friday, September 15, 1989

This phase of the operation (Phase II) began after the necessary approvals and identification numbers for the client/site were obtained. On Monday, GSX mobilized its equipment and personnel and pumped the contents of the drums into a conical tanker. Most of the drums had to be spiked or deheaded for pumping access due to the physical condition of the drums. Drum pumping continued until Wednesday, the 13th. GSX then began crushing the emptied drums and placing them into poly lined roll-off boxes. By Friday afternoon GSX had filled two roll-offs and one tanker with waste. A Change Order to Contract was drafted by GSX and signed by Chuck McCormick, GTE's Representative, for additional waste containers (tanker and roll-off box) to be able to finish the job.

Monday, September 18, 1989 - Wednesday, September 20, 1989

On Monday, September 18th, the last roll-off was picked up and disposed of at GSX's secure landfill located in Pinewood, South Carolina and a second tanker arrived to pick up liquids. A total of approximately 6000-gallons of liquids were transferred into the tankers to be disposed of at Oldover Corporation. On Tuesday, GSX began sandblasting and scarifying the drum storage pad. This activity was finished by Wednesday noon at which time GSX cleared and secured the site.

Final Summary

GSX Remedial Services personnel removed approximately 63-cubic yards of crushed empty drums, and 6000-gallons of liquid waste from the Franklin Machinery plant. All wastes were disposed of at approved disposal sites. GSX also decontaminated two small storage rooms and a drum storage pad at the Hickory, North Carolina site.

On Friday, September 29, the remaining drums of solid waste were picked up and transferred to GSX's facility in Reidsville, North Carolina and await approval and scheduling for disposal at Enso. GSX will then transfer these drums to the Enso facility.

All on site work was done in accordance with GSX Services, Inc., February 6, 1989 work plan.

If you have any questions regarding the sequence of events which occurred, please feel free to contact me at 919/272-0185.

Sincerely,

GSX SERVICES, INC.

*John D. DiCarlo*

John D. DiCarlo  
Project Manager  
Remedial Services Group

cc: Bernard Jones  
Stan Coates  
Randy Garner *[Signature]*  
Chuck McCormick

From: Mary Ganley, Hydrogeologist

Date: Sept. 20, 1991

Time: 0900

Subject: Southern Desk NCD 986166353  
Search for Immediate Removal Documentation

I spoke with Chuck McCormick of Hart Environmental, 703-243-2705, and requested hazardous waste manifests and laboratory analysis from post removal sampling. He will Fed Ex them for Monday morning delivery.

LATITUDE AND LONGITUDE CALCULATION WORKSHEET #2  
WHEN USING ENGINEERS' SCALE (1:60)

SITE: Southern Desk NUMBER: NCD 986 166 353

AKA: \_\_\_\_\_ SSID: \_\_\_\_\_

ADDRESS: 1720 1st Avenue SW

CITY: Hickory STATE: NC ZIP CODE: 28602

SITE REFERENCE POINT: \_\_\_\_\_

TOPO MAP: Hickory Quad TOWNSHIP:     N/S RANGE:     E/W

SCALE: 1:24,000 MAP DATE: 1970 SECTION:     1/4     1/4     1/4    

MAP DATUM: 1927 1983 HERIDIAN: \_\_\_\_\_

COORDINATES FROM LOWER RIGHT (SOUTHEAST) CORNER OF 7.5' MAP:

LONGITUDE: 81° 15' 00" LATITUDE: 35° 37' 30"

COORDINATES FROM LOWER RIGHT (SOUTHEAST) CORNER OF 2.5' SUB-MAP:

LONGITUDE: 1° 20' 00" LATITUDE: 35° 42' 30"

CALCULATIONS: Reference 8 (7.5 MINUTE QUADRANGLE MAP)

- A) NUMBER OF RULER DIVISIONS FROM BOTTOM LATITUDE LINE TO SITE: 231  
 B) NUMBER OF RULER DIVISIONS EQUAL TO 2.5 MINUTES OF LATITUDE: 452  
 C) DIVIDE DIVISIONS TO SITE (A) BY (B) 452: 0.511  
 D) MULTIPLY BY 150 SECONDS AND CONVERT TO MINUTES/SECONDS: 1' 16.67"  
 E) ADD TO STARTING LATITUDE: 35° 42' 30" + 1' 17" = 35° 43' 16.66"

CALCULATIONS: LONGITUDE (7.5 MINUTE QUADRANGLE MAP)

- A) NUMBER OF RULER DIVISIONS FROM RIGHT LONGITUDE LINE TO SITE: 55  
 B) NUMBER OF RULER DIVISIONS EQUAL TO 2.5 MINUTES OF LONGITUDE: 371  
 C) DIVIDE DISTANCE TO SITE (A) BY (B) 371: 0.148  
 D) MULTIPLY BY 150 SECONDS AND CONVERT TO MINUTES/SECONDS: ' 22.24"  
 E) SUBTRACT FROM LONGITUDE: 81° 22' 30" + 22' 24" = 81° 22' 7.76"

LATITUDE:  $\frac{B}{A} \cdot \text{---} \times 150 = \frac{\text{---}}{\text{---}} = \frac{\text{---}}{\text{---}}$  LONGITUDE:  $\frac{A}{B} \cdot \text{---} \times 150 = \frac{\text{---}}{\text{---}} = \frac{\text{---}}{\text{---}}$   
 $\frac{\text{---}}{\text{---}} = \frac{\text{---}}{\text{---}}$   $\frac{\text{---}}{\text{---}} = \frac{\text{---}}{\text{---}}$   
 $\frac{\text{---}}{\text{---}} = \frac{\text{---}}{\text{---}}$   $\frac{\text{---}}{\text{---}} = \frac{\text{---}}{\text{---}}$

35° 43' 16.66"

81° 22' 7.76"

INVESTIGATOR: Mary Ganley DATE: 9-20-91

LATITUDE AND LONGITUDE CALCULATION WORKSHEET #2  
WHEN USING ENGINEERS' SCALE (1:60)

SITE: Southern Desk NUMBER: NCD 986 166 353

AKA: \_\_\_\_\_ SSID: \_\_\_\_\_

ADDRESS: 1720 15<sup>th</sup> Avenue SW

CITY: Hickory STATE: NC ZIP CODE: 28602

SITE REFERENCE POINT: \_\_\_\_\_

TOPO MAP: Hickory Quad TOWNSHIP: \_\_\_ N/S RANGE: \_\_\_ E/W

SCALE: 1:24,000 MAP DATE: 1970 SECTION: \_\_\_ 1/4 \_\_\_ 1/4 \_\_\_ 1/4 \_\_\_

MAP DATUM: 1927 1983 MERIDIAN: \_\_\_\_\_

COORDINATES FROM LOWER RIGHT (SOUTHEAST) CORNER OF 7.5' MAP:

LONGITUDE: 81° 15' 00" LATITUDE: 35° 37' 30"

COORDINATES FROM LOWER RIGHT (SOUTHEAST) CORNER OF 2.5' SUB-MAP:

LONGITUDE: 81° 20' 00" LATITUDE: 35° 42' 30"

CALCULATIONS: LATITUDE (7.5 MINUTE QUADRANGLE MAP)

- A) NUMBER OF RULER DIVISIONS FROM BOTTOM LATITUDE LINE TO SITE: 23.1
- B) NUMBER OF RULER DIVISIONS EQUAL TO 2.5 MINUTES OF LATITUDE: ~~45~~ 452
- C) DIVIDE DIVISIONS TO SITE (A) BY (B) 452: 0.511
- D) MULTIPLY BY 150 SECONDS AND CONVERT TO MINUTES/SECONDS: 1' 16.67"
- E) ADD TO STARTING LATITUDE: 35° 42' 30" + 1' 17" = 35° 43' 16.66"

CALCULATIONS: LONGITUDE (7.5 MINUTE QUADRANGLE MAP)

- A) NUMBER OF RULER DIVISIONS FROM RIGHT LONGITUDE LINE TO SITE: 55
- B) NUMBER OF RULER DIVISIONS EQUAL TO 2.5 MINUTES OF LONGITUDE: ~~454~~ 371
- C) DIVIDE DISTANCE TO SITE (A) BY (B) ~~454~~ 371: 0.148 longitude
- D) MULTIPLY BY 150 SECONDS AND CONVERT TO MINUTES/SECONDS: 22.24"
- E) ADD TO STARTING LONGITUDE: 81° 22' 30" + 22.24" = 81° 22' 7.76"

LATITUDE:  $\frac{B}{A} \times 150 = \frac{23.1}{452} \times 150 = \frac{-60}{-120} = 1'$

LONGITUDE:  $\frac{A}{B} \times 150 = \frac{55}{371} \times 150 = \frac{-60}{-120} = 1'$

35° 43' 16.66" 81° 22' 7.76"

INVESTIGATOR: \_\_\_\_\_ DATE: \_\_\_\_\_

Date: September 26, 1991

To: File

From: Mary Ganley *Mary Ganley*

Re: Southern Desk NCD 986166353  
Stream Flow

The stream flow for Longview Creek was calculated as follows:

estimated runoff = 17 in/yr  
drainage basin from Longview Creek at mouth = 2.01 sq mi

therefore,

$$17 \times 2.01/13.58 = 25.16 \text{ cfs}$$

The stream flow for Henry Fork was calculated as follows:

estimated runoff = 17 in/yr  
drainage basin from Henry Fork at Brookford = 94.9 sq mi

therefore,

$$17 \times 94.9/13.58 = 116.48 \text{ cfs}$$

The stream flow for the South Fork of the Catawba River was calculated as follows:

estimated runoff = 17 in/yr  
drainage basin from S F Catawba R at 2021 = 225 sq mi

therefore,

$$17 \times 225/13.58 = 281.66 \text{ cfs}$$

From: Mary Ganley, Hydrogeologist

Date: Sept. 24, 1991

Time: 1300

Subject: Southern Desk NCD 986166353  
Population Counts

*Mary Ganley*

Population counts obtained from PCGEMS are as follows:

Radius	Population
0-1/4	0
1/4-1/2	642
1/2-1	4598
1-2	14942
2-3	24769
3-4	38598

The population count given by PCGEMS for the quarter mile radius is inaccurate therefore an adjustment, based on observations in the field, was made as follows:

Radius	Population
0-1/4	200
1/4-1/2	442

DATE: October 5, 1988  
FROM: Bruce Nicholson  
TO: Southern Desk Files  
SUBJECT: Telecon with Robert Glenn, Town Administrator  
Longview, NC, (704) 322-5919

Mr. Glenn confirmed that Longview's water supply is Lake Hickory and that the intake is approximately 400 yards above the Highway 321 Bridge. The water system has 1750 connections, and Longview's population is estimated to be 4,030. Mr. Glenn also indicated that the vast majority of residents in the town were connected, but some were still on wells.

BN/ds/ibm.41



**NORTH CAROLINA**  
**DEPARTMENT OF CONSERVATION AND DEVELOPMENT**  
**BEN E. DOUGLAS, DIRECTOR**

**DIVISION OF MINERAL RESOURCES**  
**JASPER L. STUCKEY, STATE GEOLOGIST**

**BULLETIN NUMBER 68**

**GEOLOGY AND GROUND WATER**  
**IN THE**  
**Statesville Area, North Carolina**

**BY**

**HARRY E. LEGRAND**  
**GEOLOGIST, U. S. GEOLOGICAL SURVEY**

**PREPARED COOPERATIVELY BY THE GEOLOGICAL SURVEY**  
**UNITED STATES DEPARTMENT OF THE INTERIOR**

**1954**

SEP 21 1991

SUPERFUND SECTION

EXPLANATION OF NC NATURAL HERITAGE PROGRAM DATABASE OUTPUT  
FOR ELEMENT OCCURRENCES

Probably the most important database kept by the N.C. Natural Heritage Program is the one that tracks occurrences of elements of natural diversity (rare animals, rare plants, geologic features, special animal habitats). The output (printout) you have received is a subset of this very large database. Each record (an occurrence) is printed out in a particular format, the structure of which is explained below.

Scientific name of the element. We attempt to use the currently accepted scientific name for each species (although some of these names may not match those in existing manuals). Names given in this printout correspond to those listed in three NC Natural Heritage Program publications:

LeGrand, H. 1990. Natural Heritage Program List of the Rare Animal Species of North Carolina.

Weakley, A.S. 1990. Natural Heritage Program List of the Rare Plant Species of North Carolina.

Schafale, M.P., and A.S. Weakley. 1990. Classification of the Natural Communities of North Carolina, Third Approximation.

Copies of these documents and complete current lists of element species are available from the Natural Heritage Program.

FEDSTAT: Federal status of the species, from Endangered & Threatened Wildlife and Plants, April 10, 1987. 50 CFR 17.11 & 17.12. Department of Interior. Established by the Endangered Species Act of 1973, as amended.

LE = Taxa currently listed as Endangered

LT = Taxa currently listed as Threatened

PE = Taxa currently proposed for listing as Endangered

PT = Taxa currently proposed for listing as Threatened

Taxa under review for possible listing ("candidate species"):

C1 = Taxa with sufficient information to support listing

C2 = Taxa without sufficient information to support listing

Taxa no longer under consideration for listing:

3A = Taxa with persuasive evidence of extinction

3B = Taxa that, on the basis of current understanding, are not distinct.

3C = Taxa that have proven more abundant or widespread than previously thought and have been dropped from consideration. They may be reevaluated in the future.

STATESTAT: Status of the species in North Carolina.

For plants:

E = Endangered  
T = Threatened  
SC = Special Concern  
C = Candidate  
SR = Significantly Rare

E, T, and SC species are protected by state law (the Plant Protection and Conservation Act, 1979); the other two categories indicate rarity and the need for population monitoring, as determined by the Plant Conservation and Natural Heritage Programs.

For animals:

E = Endangered  
T = Threatened  
SC = Special Concern  
SR = Significantly Rare  
UNK = Undetermined  
EX = Extirpated

Endangered, Threatened, and Special Concern species of Mammals, Birds, Reptiles, and Amphibians have legally protected status in North Carolina (Wildlife Resources Commission). A list for fishes has been submitted to the Commission but has not yet been officially adopted (3-91).

EONUM: Element occurrence number for North Carolina. This refers to a unique record in the NC Natural Heritage database. Use this number when requesting more information on a particular occurrence.

EORANK: A rating of the significance of the element occurrence based on quality, condition, viability and defensibility of the population or community: A=Excellent, B=Good, C=Fair, D=Poor, E=extant but condition unknown, H=historic (not observed in recent years), X=extirpated.

PRECISION: The precision with which the location can be mapped from the available information: S=seconds (hundreds of feet), M=minutes (up to 1.5 mile radius), G=general (to a place name only, or up to 5 mile radius).

LASTOBS: Year, month, and day the element was last observed.

COUNTY: Acronym for the county. In general, this is "NC" and the first four letters of the county name.

QUAD: USGS 7.5 minute quad map name.

DIRECTIONS: Location of the element, if specified in the original report.

HYBOPSIS ZANEMA EONUM: 005 COUNTY: Lincoln DIRECTIONS:	EORANK:	FEDSTAT: PRECISION: M QUAD: REEPSVILLE	STATESTAT: SR LASTOBS:	✓
THERMOPSIS MOLLIS EONUM: 003 COUNTY: Catawba DIRECTIONS: "PINWOODS ON U.S. 70, 1.25 MI. SW OF HICKORY" (RADFORD & WOOD 1953). THIS AREA HAS PROBABLY BEEN DEVELOPED.	EORANK: H	FEDSTAT: PRECISION: M QUAD: HICKORY	STATESTAT: SR LASTOBS: 1953-05-03	
HYBOPSIS ZANEMA EONUM: 001 COUNTY: Catawba DIRECTIONS:	EORANK:	FEDSTAT: PRECISION: M QUAD: LONGVIEW	STATESTAT: SR LASTOBS: 1974-06	✓
AMORPHA SCHWERINII EONUM: 008 COUNTY: Catawba DIRECTIONS: "SANDY CLAY OF OPEN ROADSIDE BY OAK WOODLAND ON BAKER MOUNTAIN ROAD" (BELL 1957).	EORANK: H	FEDSTAT: PRECISION: M QUAD: LONGVIEW	STATESTAT: C LASTOBS: 1957-06-12	<i>out of area</i>
HELIANTHUS LAEVIGATUS EONUM: 001 COUNTY: Burke DIRECTIONS: RICH DECIDUOUS NORTH SLOPE WOODS AT BRIDGE OVER HENRY FORK CREEK APPROX. 2.5 MILES NE OF BURKE CHAPEL (BELL 1958).	EORANK:	FEDSTAT: PRECISION: M QUAD: LONGVIEW	STATESTAT: SR LASTOBS: 1958-09	<u>1</u>
HEXALECTRIS SPICATA EONUM: 011 COUNTY: Burke DIRECTIONS: "RICH DECIDUOUS NORTH SLOPE WOODS AT BRIDGE OVER HENRY FORK CREEK APPROXIMATELY 2.5 MILES NORTHEAST OF BURKE CHAPEL" (BELL 1958).	EORANK: H	FEDSTAT: PRECISION: M QUAD: LONGVIEW	STATESTAT: SR LASTOBS: 1958-09-09	<i>outside?</i>
HEXASTYLIS LEWISII EONUM: 049 COUNTY: Burke DIRECTIONS: "RICH WOODS. NEAR HENRY RIVER" (SMITH & TAYLOR 1956).	EORANK: H	FEDSTAT: 3C PRECISION: G QUAD: LONGVIEW	STATESTAT: C LASTOBS: 1956-05	<i>outside</i>
MONOTROPSIS ODORATA EONUM: 016 COUNTY: Catawba DIRECTIONS: "NORTH HICKORY NEAR END OF SR 1321; UPLAND PINE WOODS" (DAGGY & MOYE 1969)	EORANK: H	FEDSTAT: PRECISION: M QUAD: BETHLEHAM	STATESTAT: C LASTOBS: 1969-04-22	<i>outside</i>

Nothing on Granite Falls quad

From: Mary Ganley, Hydrogeologist

Date: Sept. 20, 1991

Time: 1140

Subject: Southern Desk NCD 986166353  
Search for Immediate Removal Documentation

I spoke with Harry LeGrand at the National Heritage Program and requested printouts for the Hickory, Reepsville, Granite Falls, Longview, and Bethlehem Quads.

From: Mary Ganley, Hydrogeologist *Mary C Ganley*  
Date: Sept. 18, 1991  
Time: 1336  
Subject: Southern Desk NCD 986166353  
Wetlands Information

I spoke with Steve Leonard regarding wetlands on the site and along the mile surface water pathway. There is not a wetlands inventory of the area. He advised me to review the soils in the area and use the occurrence of hydric soils as an indication of wetlands. Soils involved include the Chewacla, Pacolet, Congaree, Buncombe, Cecil, Madison and Hiwassee. None of these are hydric soils, so, it is assumed wetlands do not occur.



September 20, 1991

RECEIVED  
SEP 21 1991  
SUPERFUND SECTION

Mary Ganley  
N.C. DEHNR  
Superfund Section  
401 Oberlin Road  
Raleigh, NC 27605

Dear Ms. Ganley:

**Re: Former Southern Cabinet Site-Hickory, NC**

As discussed earlier today, I have enclosed, at your request, the following documents pertaining to the former Southern Cabinet site in Hickory, NC.

- October 11, 1989 - GSX Report - project summary
- October 6, 1989 - Wadsworth/Alert report on post removal soil samples
- Waste manifests documenting appropriate disposal.

Let me re-emphasize that this site was completely remediated to the satisfaction of U.S. EPA Region IV the Agency who issued the order. I trust the enclosed will enable you to complete your work and close North Carolina's file on this resolved issue. If further information is needed feel free to call my office, however, you have all pertinent information that I can think of regarding the former site.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Charles McCormick', written over a large, loopy flourish.

Charles McCormick  
Manager, Washington Operations

CM/ptt

cc: V. Gallogly, Esq. - GTE

From: Mary Ganley, Hydrogeologist  
Date: Sept. 23, 1991  
Time: 1320  
Subject: Southern Desk NCD 986166353  
Longview Public Water Supply

I spoke with Bruce Mismore, 704 322-1312, with the Town of Longview. He says residences within the town limits is on the town water limits. Areas outside the town limits are also on town water, and these areas are marked on the map.

**NIOSH**

POCKET GUIDE TO  
**CHEMICAL  
HAZARDS**



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Public Health Service  
Centers for Disease Control  
National Institute for Occupational Safety and Health

**CDC**  
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**U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Public Health Service  
Centers for Disease Control  
National Institute for Occupational Safety and Health**

June 1990

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For Sale by the Superintendent of Documents, U.S. Government  
Printing Office, Washington, D.C. 20402

Date: March 20, 1991  
To: Superfund Staff  
From: Mary Ganley  
Subject: Well Head Protection Areas in North Carolina  
Sole Source Aquifers

I spoke with Perry Nelson, 733-3221, Groundwater Section Chief, regarding well head protection areas in the state. There is currently a pilot study in progress in Gaston County. In addition, there are no sole source aquifers designated in the state.

DATE: September 30, 1988  
TO: Lee Crosby  
FROM: Bruce Nicholson  
SUBJECT: Southern Desk Site Visit

On September 29, 1988, Mr. Jack Butler, Mr. Ed Wallingford, Mr. David Lilley, and myself visited the Southern Desk Facility in Hickory. Mr. Bill Yoder, Hickory Fire Marshall, and Mr. Joe Lynn, Sanitarian for Catawba County Health Department, were also present. There are 2 major drum storage areas.

1. The concrete pad outside the main building contains 141 55-gallon drums. Most of these drums appear to contain wood stain or finishes. Some drums have leaked their contents but the majority are intact. A sample of product that appeared to be wood stain was taken from a full drum. Four large above-ground tanks (8' diameter, 11' tall) are adjacent to these drums. The tank drains had minor spills of dried varnish or lacquer in evidence. The tanks were intact and sounded empty when tapped. Railroad tracks ran by the site approximately 50 feet from the drums and a residential area was adjacent with the nearest house approximately 75 feet away.
2. Stain mixing and storage rooms are located inside a second building near a loading dock. A total of 44 55-gallon and 253 5-gallon drums were stored in these rooms. A chemical residue crust from leaking drums had coated the floor in both rooms. Specific labels noted included stains, lacquers, naphtha, and flammable liquid warnings. The leaking chemicals had run into the floor drains in both rooms (these drains are connected to the sewer).

Because of extreme fire hazard, imminent public health risk may exist at this site, and a request for an immediate removal considered. The preliminary HRS score for fire and explosion hazard is 20.8.

BN/ds/ibm.31



North Carolina Department of Human Resources  
Division of Health Services  
P.O. Box 2091 • Raleigh, North Carolina 27602-2091

James G. Martin, Governor  
David T. Flaherty, Secretary

Ronald H. Levine, M.D., M.P.H.  
State Health Director

October 5, 1988

Ms. Susan Deihl  
EPA NC CERCLA Project Officer  
EPA Region IV Waste Division  
345 Courtland Street, N.E.  
Atlanta, GA 30365

SUBJECT: Site Visit to Southern Desk, Hickory, NC

Dear Ms. Deihl:

The Southern Desk site is a former furniture manufacturing plant in Hickory, NC. Drums, suspected to contain old wood stain, lacquers, and finishes, remain on site both inside and outside of facility buildings. These drums present a fire hazard and should be removed as soon as possible.

The facility is located at 17th St. and 1st Avenue S.W. in central Hickory (population approximately 21,000). The plant consists of two large 3 story buildings surrounded by a fence with 5 different entrance gates (4 of which were open during our visit). The plant was reportedly built in the 1930's by the Southern Desk Company which used it as a hardwood office furniture production plant until about 3 or 4 years ago when it was purchased by GTE Services Corporation to produce television cabinets. GTE Services Corporation recently sold the facility to the current owner, Mr. Wayne Franklin. Mr. Franklin rents portions of the facility to various tenants who use it for storage, as a machine shop for woodcarving, or other purposes.

The site was discovered by Bill Yoder, the Hickory Fire Marshall, during a building inspection in November, 1987. On November 10, 1987, Mr. Yoder drafted letters to the current owner, Mr. Wayne Franklin, and the previous owner, GTE Services Corporation, in an attempt to have the drums removed. He got no response and wrote follow-up correspondence in February, 1988.

Ms. Susan Deihl  
10-3-88  
Page 2

At that time, GTE Services Corporation notified him that they had contracted Hart Environmental Management to perform an audit on the substances at the plant and that they would inform Mr. Yoder of the results. Mr. Yoder has yet to receive the Hart report or its results from GTE. Mr. Franklin also has a copy of this report and has stated he will send us one as well.

On September 29, 1988, Mr. Jack Butler, Mr. Ed Wallingford, Mr. David Lilley, and myself visited the Southern Desk Facility in Hickory. Mr. Bill Yoder, Hickory Fire Marshall, and Mr. Joe Lynn, Sanitarian for Catawba County Health Department, were also present. There are 2 major drum storage areas.

1. The concrete pad outside the main building in the northwest corner of the site contains 141 55-gallon drums. Most of these drums appear to contain wood stain or finishes. Some drums have leaked their contents but the majority are intact. A sample of product that appeared to be wood stain was taken from a full drum. Four large above-ground tanks (approximately 8 feet in diameter and 11 feet tall) are adjacent to these drums. The tank drains had minor spills of dried varnish or lacquer in evidence. The tanks were intact and sounded empty when tapped. Railroad tracks run by the site approximately 50 feet from the drums, and a residential area is adjacent, with the nearest house approximately 50 feet away. Between the railroad tracks and the drums is an area of uniformly dead vegetation.
2. Stain mixing and storage rooms are located inside a second building near a loading dock. A total of 44 55-gallon and 253 5-gallon drums were stored in these rooms. A chemical residue crust from leaking drums had coated the floor in both rooms. Specific labels noted included stains, lacquers, naptha, and flammable liquid warnings. The leaking chemicals had run into the floor drains in both rooms (these drains are connected to the sewer).

The following samples were taken:

- Chemical residue from the storage and mixing room floors.
- VOA samples from what appeared to be rainwater in the drums on the concrete pad.
- A red gel material oozing from one drum on the concrete pad.

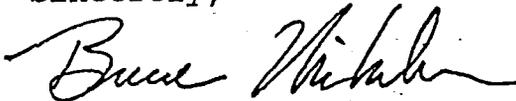
Ms. Susan Deihl  
10-3-88  
Page 3

- Composite soil/residue from the base of many drums on the concrete pad.
- Liquid product from one drum on the concrete pad that appeared to be wood stain.
- Soil sample from 1 to 4 inches from a depression in the corner of the concrete pad approximately 10 feet from the nearest drums.
- A composite soil sample from an area devoid of vegetation between the concrete pad and the fence line.
- A background soil sample across the street from the facility.

Organic analysis results are pending on all samples. In addition, tests of the liquid product in one drum (probably wood stain) indicate that the flash point is < 76 F. Because most of the drums are intact and appear to be filled with a similar liquid product, the site is a considerable fire hazard. The Hickory Fire Marshall concurs with this assessment. The possibility of sparks from the passing trains igniting the dead vegetation near the drums adds to the risk. Because of the fire hazard and the site's proximity to a residential area, the drums should be removed as soon as possible.

If you have any questions please call me at (919) 733-2801.

Sincerely,



Bruce Nicholson, Environmental Engineer  
Superfund Branch  
Solid Waste Management Section

BN/ds/ibm.33



North Carolina Department of Human Resources  
 Division of Health Services  
 P.O. Box 2091 • Raleigh, North Carolina 27602-2091

James G. Martin, Governor  
 David T. Flaherty, Secretary

7 October 1988

Ronald H. Levine, M.D., M.P.H.  
 State Health Director

Mr. Robert Jourdan, Chief  
 Emergency Response and Control Section  
 U.S. Environmental Protection Agency  
 345 Courtland Street, N.E.  
 Atlanta, GA 30365

SUBJECT: Immediate Removal Request for the Southern Desk Site  
 Hickory, Catawba County, NC

Dear Mr. Jourdan:

We are requesting an immediate removal action for the Southern Desk site in Hickory, NC. The Southern Desk site is a former furniture manufacturing plant located at 1720 First Avenue, S.W. in Hickory. Drums are located inside and outside the facility buildings. Suspected contents of the drums are old wood stain, lacquer and finishes. Tests on a sample of the liquid product in one drum have shown that the flash point is  $\leq 76$  F. Laboratory analyses of the sample from this drum show the following:

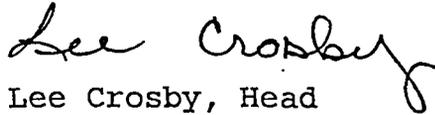
Methylene chloride	571 ppm
1,2-Dichloroethane	205 ppm
Toluene	54,359 ppm
Methyl ethyl ketone	72,923 ppm
Methyl isobutyl ketone	6,264 ppm
Total xylenes	4,661 ppm
Benzene	100 ppm
Ethyl benzene	1,395 ppm

The concrete pad outside the main building contains 141 55-gallon drums. Most of these drums appear to contain wood stain or finishes. Some drums have leaked contents but the majority are intact. Another 44 55-gallon and 253 5-gallon drums are located in former stain mixing and storage rooms. A chemical residue crust from leaking drums had coated the floor in both rooms. Specific labels noted include stains, lacquers, naptha, and flammable liquid warnings. The leaking chemicals had run into the floor drains in both rooms (these drains are connected to the sewer). Railroad tracks run by the site approximately 50 feet from the drums on the concrete pad, and a residential area is adjacent with the nearest house approximately 50 feet away.

Mr. Jourdan  
10-5-88  
Page 2

These drums present fire hazard and should be removed as soon as possible. The Hickory Fire Marshall concurs with the assessment. A preliminary assessment, trip report and laboratory results have been forwarded to Jan Rogers. If you have any questions, please call me at (919) 733-2801.

Sincerely,



Lee Crosby, Head  
Superfund Branch  
Solid Waste Management Section

LC/ds/ibm.36



North Carolina Department of Human Resources  
Division of Health Services  
P.O. Box 2091 • Raleigh, North Carolina 27602-2091

James G. Martin, Governor  
David T. Flaherty, Secretary

Ronald H. Levine, M.D., M.P.H.  
State Health Director

11 October 1988

Mr. Scott Gardner  
EPA NC CERCLA Project Officer  
EPA Region IV Waste Division  
345 Courtland Street, N.E.  
Atlanta, GA 30365

RE: Preliminary Assessment  
Southern Desk Site  
1720 1st Avenue, S.W.  
Hickory, NC

Dear Mr. Gardner:

This letter contains the findings of the Preliminary Assessment for the Southern Desk site in Hickory, N.C.

#### Site Description

The Southern Desk site is a former furniture manufacturing plant located at 1720 1st Avenue S.W. in Hickory, NC. Site coordinates are 81 22' 15" W longitude and 35 43' 48" N latitude (1). The site is located at the western edge of Hickory near the town border between Hickory and Longview, NC. The plant covers an entire city block and is surrounded by a fence. However, there are 5 gates most of which are open and unguarded during business hours. Drums, containing mostly wood stains and finishes are stored on-site inside and outside of plant buildings (2).

#### Site History

The plant was reportedly built in the 1930's by the Southern Desk Company. In the last twenty years it has been owned by various companies (Drexel Furniture, Champion International, and another unidentified company)(3). However, the most recent owner to use it for furniture manufacturing was GTE Services Corporation, which bought the plant from Champion International in 1976 (4). GTE Services Corporation produced television cabinets on site until 1981. The plant was then closed and remained idle until it was sold to Franklin Machinery Company in 1983 (3,4). The Franklin Machinery Hickory operation sells new and used woodworking machinery, and leases surplus space to other businesses. The owner is Mr. Wayne Franklin who lives in Hampton, Virginia where he operates Franklin Machinery's other plant.

Mr. Gardner  
10-11-88  
Page 2

The site was discovered by the Hickory Fire Marshall during a building inspection on November 10, 1987. The Fire Marshall has asked Mr. Franklin to remove the drums but Mr. Franklin claims that they are leftover from GTE Services operation and are not his property. Both GTE Services Corporation and Mr. Franklin had an environmental audit performed at the site but neither has released the audit report (2). The names and addresses of the pertinent parties are below (5):

Mr. Wayne Franklin (current owner)  
c/o Franklin Machinery  
2506 58th Street  
Hampton, Virginia 23661  
(804) 826-7300

Mr. Lewis Palmer (Mr. Franklin's on-site employee)  
Franklin Machinery  
1720 1st Avenue S.W.  
Hickory, NC 28602  
(704) 324-0884

Mr. Vincent Gallogly, Assistant General Counsel  
GTE Services Corporation  
1 Stamford Forum  
Stamford, CT 06904  
(203) 965-2000

#### Nature of the Hazard

There are two separate areas of the plant where drums are stored:

1. The concrete pad outside the main building in the northwest corner of the site contains 141 55-gallon drums. Most of these drums appear to contain wood stain or finishes. Some drums have leaked their contents but the majority are intact. A sample of product that appeared to be wood stain was taken from a full drum. Four large above-ground tanks (approximately 8 feet in diameter and 11 feet tall) are adjacent to these drums. The tank drains had minor spills of dried varnish or lacquer in evidence. The tanks are intact and are reportedly empty. Railroad tracks run by the site approximately 50 feet from the drums, and a residential area is adjacent, with the nearest house approximately 50 feet away. Between the railroad tracks and the drums is an area of uniformly dead vegetation (see Figure 1) (2).

2. Stain mixing and storage rooms are located inside a second building near a loading dock. A total of 44 55-gallon and 253 5-gallon drums were stored in these rooms. A chemical residue crust from leaking drums had coated the floor in both rooms. Specific labels noted included stains, lacquers, naptha, and flammable liquid warnings. The leaking chemicals had run into the floor drains in both rooms (these drains are connected to the sewer) (2).

In addition, tests of the liquid product in one drum (probably wood stain) indicate that the flash point is < 76 F. Because most of the drums are intact and appear to be filled with a similar liquid product, the site is a considerable fire hazard. The Hickory Fire Marshall concurs with this assessment. The possibility of sparks from the passing trains igniting the dead vegetation near the drums adds to the risk (2).

#### Groundwater Pathway

Any hazardous material that has leaked from drums on the concrete pad area could run off (or through) the concrete pad, into the soil, and contaminate the groundwater. However, both Hickory and Longview obtain water from Lake Hickory (the Catawba River) and supply residents both inside and outside the city limits (6,7). Even though the site is within the city limits it is likely that a well is located within 1 mile from the site because not all city residents are required to connect to city water. Reportedly, there are some Longview and Hickory residents still using well water (7,8). [Note: Further data on the groundwater targets is being sought from both Hickory and Longview. This information will be added to the file when received, but this report was expedited because of the extreme fire hazard].

The crystalline rock in the entire northwestern section of Catawba County, including the Hickory area, is composite gneiss consisting mainly of the quartz-biotite type. The rocks in most areas of Catawba County are strongly foliated and fractured. Yields from wells in the area range from 5 to 70 gallons per minute (gpm) and are typically 30 gpm. The level of water below ground surface ranges from 10 to 45 feet for wells in the Hickory area (9).

The annual precipitation in the Hickory area averages 44 to 48 inches and the annual lake evaporation is 38 to 40 inches (10). The 24-hour rainfall is approximately 2.9 inches (11). Also, because the storage and mixing room drains are connected to the city sewer system, here is potential for hazardous waste to be discharged to Hickory's sewer system and either of the city's 2 treatment plants (2).

Mr. Gardner  
10-11-88  
Page 4

### Surface Water Pathway

The site sits in a relatively flat area with an elevation of 1,115 feet (1). Local surface waters include Frye Creek 2,200 feet to the northwest at an elevation of 1,075 feet. This creek flows 1.5 miles to Horseford Creek which flows 1.7 miles to Lake Hickory (the Catawba River above the Oxford Dam). However, the point at which Horseford Creek enters the Catawba River is below the intakes for Hickory and Longview water systems and there are no other intakes on the Catawba within 15 stream miles (12). Horseford Creek is assigned as a class "C" surface water, suitable for secondary recreation and fish propagation. Lake Hickory is designated as WS-III and "B", and is suitable for water supply, swimming, and other recreation (13).

To the south there is an unnamed intermittent creek 1,300 feet from the site. This flows 0.4 miles to Longview Creek, which flows 1.4 miles to Henry Fork. Henry Fork flows 7.0 miles and enters the South Fork Catawba River. All of these streams are Class "C" waters and do not serve as water supplies (13).

Because the site is in a city location, most of the runoff will be drained to these surface waters via storm sewers.

### Recommendation

Because of the extreme fire hazard and the sites proximity to a populated area, the NC Superfund Branch recommends a high priority be assigned for a site investigation. If you have any questions concerning this site please call me at (919) 733-2801.

Sincerely,



Bruce Nicholson, Environmental Engineer  
Superfund Branch  
Solid Waste Management Section

BN/ds/ibm.42

### References

1. United States Geological Survey Topographical Map (7.5 minute series). Hickory, NC. 1970.
2. Site Visit Report. Southern Desk, Hickory, NC. Bruce Nicholson, NC Superfund Branch, to Susan Diehl, U.S. Environmental Protection Agency. October 5, 1988.
3. Telecon. Bruce Nicholson, NC Superfund Branch, with Bill Yoder, Hickory Fire Marshall. October 4, 1988. History of the Southern Desk Site.
4. Telecon. Bruce Nicholson, NC Superfund Branch, with Nancy Nicosia, GTE Services Corporation, October 11, 1988. History of GTE Services operations at the Southern Desk Site.
5. Telecon. Bruce Nicholson, NC Superfund Branch, with Bill Yoder, Hickory Fire Marshall. September 26, 1988. General information concerning the Southern Desk Site.
6. Telecon. Bruce Nicholson, NC Superfund Branch, with Keith Buff, Plant Supervisor, City of Hickory, NC. October 5, 1988. Information concerning Hickory's water system.
7. Telecon. Bruce Nicholson, NC Superfund Branch, with Robert Glenn, Town Administrator, Longview, NC. October 5, 1988. Information concerning Longview's water system.
8. Telecon. Bruce Nicholson, NC Superfund Branch, with Peggy Huffman, Huffman Well and Piping Company. October 10, 1988.
9. Geology and Ground Water in the Statesville Area, North Carolina (Bulletin No. 68). NC Department of Conservation and Development. February 15, 1954.
10. North Carolina Atlas, Portrait of a Changing State. The University of North Carolina Press, 1975. pp. 144-148.
11. Climatic Atlas of the United States. U.S. Department of Commerce, National Climatic Center, Ashville, NC. 1979.
12. Telecon. Bruce Nicholson, NC Superfund Branch, with Tom Spurling, Catawba County Environmental Health Supervisor, October 6, 1988. Water supply of Catawba County communities.
13. Classifications and Water Quality Standards Assigned to the Waters of the Catawba River Basin. NC Department of Natural Resources and Community Development, 1981.

Railroad Tracks

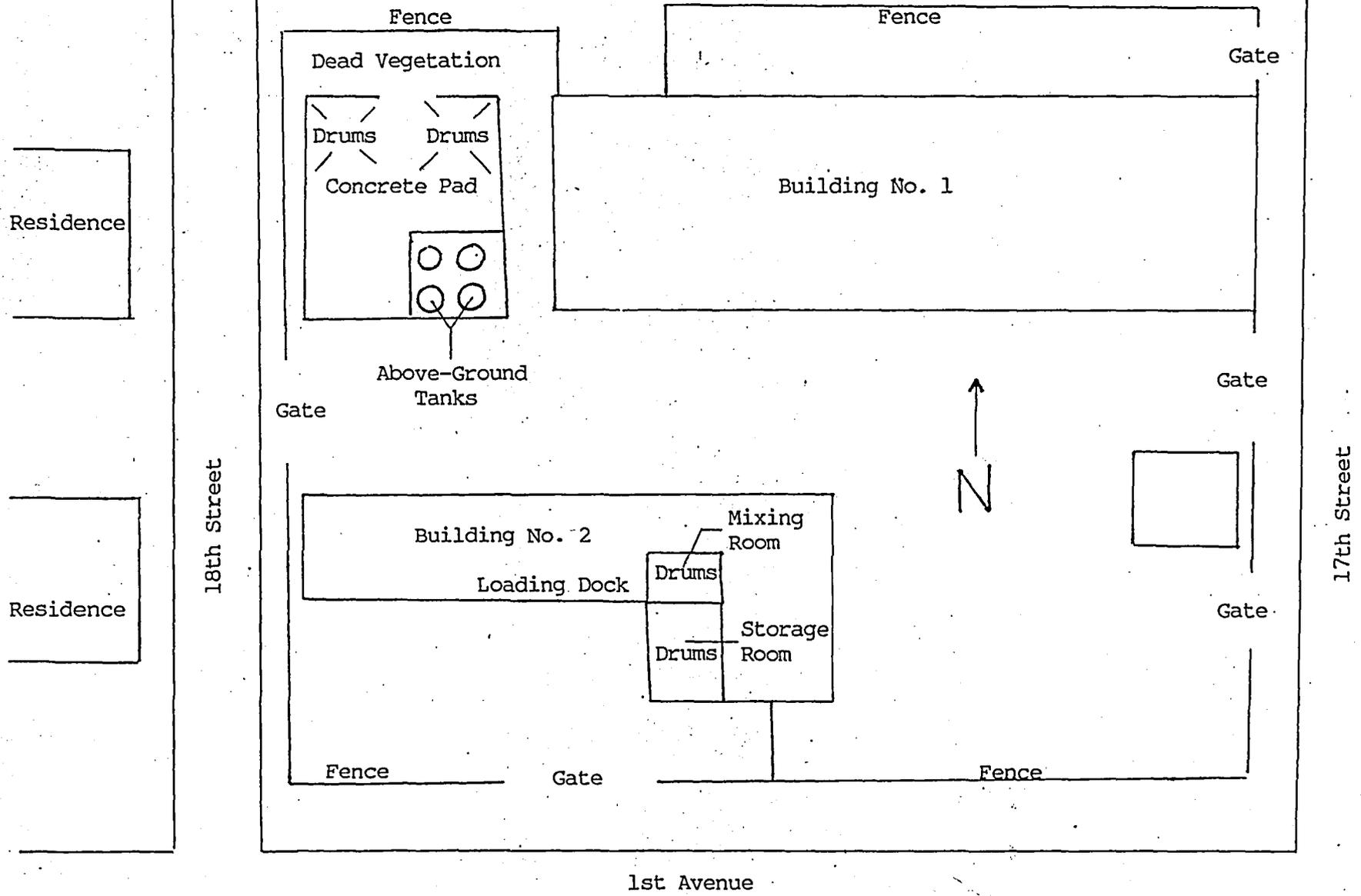


FIGURE 1. SOUTHERN DESK SITE LAYOUT



POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT  
PART 1 - SITE INFORMATION AND ASSESSMENT.

I. IDENTIFICATION  
01 STATE 02 SITE NUMBER  
NC TBA

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) Southern Desk		02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER 1720 1st Avenue S.W.			
03 CITY Hickory	04 STATE NC	05 ZIP CODE 28602	06 COUNTY Catawba	07 COUNTY CODE 18	08 CONG DIST 10
09 COORDINATES LATITUDE 35 43 48		LONGITUDE 081 22 15			

10 DIRECTIONS TO SITE (Starting from nearest public road)  
From Highway 70W turn right on 17th street and proceed 1/2 mile to intersection of 1st Avenue SW. Site is on NW corner

III. RESPONSIBLE PARTIES

01 OWNER (If known) Mr. Wayne Franklin		02 STREET (Business, making, residential) 2506 58th Street			
03 CITY Hampton	04 STATE VA	05 ZIP CODE 23661	06 TELEPHONE NUMBER (804) 826-7300		
07 OPERATOR (If known and different from owner) Mr. Lewis Palmer		08 STREET (Business, making, residential) 1720 1st Avenue S.W.			
09 CITY Hickory	10 STATE NC	11 ZIP CODE 28602	12 TELEPHONE NUMBER (704) 324-0884		

13 TYPE OF OWNERSHIP (Check one)  
 A. PRIVATE     B. FEDERAL: \_\_\_\_\_ (Agency name)     C. STATE     D. COUNTY     E. MUNICIPAL  
 F. OTHER: \_\_\_\_\_ (Specify)     G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)  
 A. RCRA 3001 DATE RECEIVED: \_\_\_\_/\_\_\_\_/\_\_\_\_ MONTH DAY YEAR     B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: \_\_\_\_/\_\_\_\_/\_\_\_\_ MONTH DAY YEAR     C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION    BY (Check all that apply)  
 YES    DATE 09 28 88     A. EPA     B. EPA CONTRACTOR     C. STATE     D. OTHER CONTRACTOR  
 NO    MONTH DAY YEAR     E. LOCAL HEALTH OFFICIAL     F. OTHER: \_\_\_\_\_ (Specify)  
 CONTRACTOR NAME(S): \_\_\_\_\_

02 SITE STATUS (Check one)    03 YEARS OF OPERATION  
 A. ACTIVE     B. INACTIVE     C. UNKNOWN    1930 to 1983     UNKNOWN  
 BEGINNING YEAR    ENDING YEAR

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED  
Over 200 drums of stains, laquers, and finishes from former furniture manufacturing operations on site

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION  
Fire and/or explosion hazard. Flash point of material in drum  $\leq 76^{\circ}$  F. Fire Marshll certifies extreme fire hazard.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)  
 A. HIGH (inspection required promptly)     B. MEDIUM (inspection required)     C. LOW (inspect on time available basis)     D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT Bruce Nicholson	02 OF (Agency/Organization) NC DHR/DHS Superfund Branch		03 TELEPHONE NUMBER (919) 733-2801	
04 PERSON RESPONSIBLE FOR ASSESSMENT Bruce Nicholson	05 AGENCY NC DHR/DHS	06 ORGANIZATION Superfund Branch	07 TELEPHONE NUMBER (919) 733-2801	08 DATE 10 11 88 MONTH DAY YEAR





POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE NC	02 SITE NUMBER TBA
----------------	-----------------------

II. HAZARDOUS CONDITIONS AND INCIDENTS

01  A. GROUNDWATER CONTAMINATION 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
 03 POPULATION POTENTIALLY AFFECTED: 1000 04 NARRATIVE DESCRIPTION  
 Population affected is limited by the number of people in Hickory and Longview, NC, that are using private wells. These cities use an unaffected surface water supply but residents are not required to connect to the municipal water system.

01  B. SURFACE WATER CONTAMINATION 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
 03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION  
 Recreational users of Frye Creek, the Catawba River, or Henry Fork are potentially affected.

01  C. CONTAMINATION OF AIR 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
 03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

01  D. FIRE/EXPLOSIVE CONDITIONS Approximately 02  OBSERVED (DATE: 9-29-88)  POTENTIAL  ALLEGED  
 03 POPULATION POTENTIALLY AFFECTED: 15,000 04 NARRATIVE DESCRIPTION  
within 2 miles

01  E. DIRECT CONTACT 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
 03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

01  F. CONTAMINATION OF SOIL 1 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
 03 AREA POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION  
 (Acres)  
 Potential for leaking drums to contaminate soil on site

01  G. DRINKING WATER CONTAMINATION 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
 03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION  
 see groundwater contamination above

01  H. WORKER EXPOSURE/INJURY 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
 03 WORKERS POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION  
 Fire and explosion hazard

01  I. POPULATION EXPOSURE/INJURY 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
 03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION  
 Fire and explosion hazard



POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT  
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE NC	02 SITE NUMBER TBA
----------------	-----------------------

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01  J. DAMAGE TO FLORA  
04 NARRATIVE DESCRIPTION  
02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
Area of dead vegetation adjacent to concrete pad where drums rest.

01  K. DAMAGE TO FAUNA  
04 NARRATIVE DESCRIPTION (Include name(s) of species)  
02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED

01  L. CONTAMINATION OF FOOD CHAIN  
04 NARRATIVE DESCRIPTION  
02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED

01  M. UNSTABLE CONTAINMENT OF WASTES  
(Spills/runoff/standing liquids/leaking drums)  
03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION  
02  OBSERVED (DATE: 9-29-88)  POTENTIAL  ALLEGED  
Drums exposed to elements, some are leaking, all are corroded to some degree.

01  N. DAMAGE TO OFFSITE PROPERTY  
04 NARRATIVE DESCRIPTION  
02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
Fire and explosion hazard.

01  O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs  
04 NARRATIVE DESCRIPTION  
02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
Floor drains in storage and mixing rooms where drums are located are connected to to city sewer system.

01  P. ILLEGAL/UNAUTHORIZED DUMPING  
04 NARRATIVE DESCRIPTION  
02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

IV. COMMENTS

The generator of the waste is probably GTE Services Corporation. They were the last site owner to use the facility as a furniture manufacturing plant. GTE Services Corp. sold the plant to Mr. Wayne Franklin in 1983.

GTE Services Corp.  
1 Stamford Forum  
Stamford, CT 06904

V. SOURCES OF INFORMATION (Cite specific references, e. g., State files, sample analysis, reports)

NC DHR/DHS Superfund Branch Files

DATE: October 11, 1988  
FROM: Bruce Nicholson  
TO: Southern Desk File  
SUBJECT: Telecon with Nancy Nicosia, Legal Assistant, GTE Services Corporation, (203) 965-2448, concerning history of the GTE Services Plant in Hickory, NC.

Ms. Nicosia provided the following information concerning the GTE Service Corporation's ownership of the Southern Desk site:

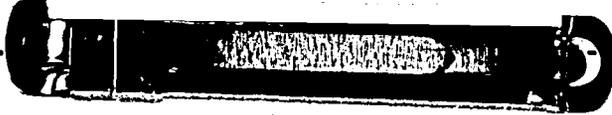
October, 1976 - GTE Services Corporation purchased the site from Champion International

August 5, 1983 - Purchase Agreement is signed by Mr. Wayne Franklin

June 29, 1984 - The property was deeded to Mr. Wayne Franklin

Concerning the request for the Hart Environmental Audit of the site, Ms. Nicosia said that Mr. Bennett Stein (Mr. Franklin's Attorney) had released that report to an environmental agency already, and the GTE Attorney had no problem with him releasing us a copy.

BN/ds/ibm.43



*Keith*

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

Date: August 9, 1982

(D)

Mr. Joe D. Stewart  
Southern Cabinet Company  
1720 First Avenue, S.W.  
Hickory, NC 28601

Re: Facility ID No. NCD081332983

Dear Mr. Stewart:

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 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

OWS

cc: John Herrmann  
EPA Region IV  
Emil Breckling  
Bob Apple

DHS Form 3048 3/82  
Solid & Haz. Waste Mgt. Branch



Division of Health Services  
Solid & Hazardous Waste Management Branch

APPLICATION FOR CHANGE IN CLASSIFICATION UNDER RCRA

Date: 8/2/82  
Company Name: Southern Cabinet Co.  
Company Address: 1720 1st Ave. SW, Hickory, N.C.  
EPA ID No: NC D061332943



①

Mr. O. W. Strickland, Head  
Solid & Hazardous Waste Management Branch  
Division of Health Services  
P. O. Box 2091  
Raleigh, N. C. 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 type="checkbox"/> | <input type="checkbox"/>            | small generator |

Our reason for this request is:

Company closed as of Aug. 15, 1981. Company generates no hazardous waste.

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.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5/28/91

GRID--0354015/035471c-0811745/0812023

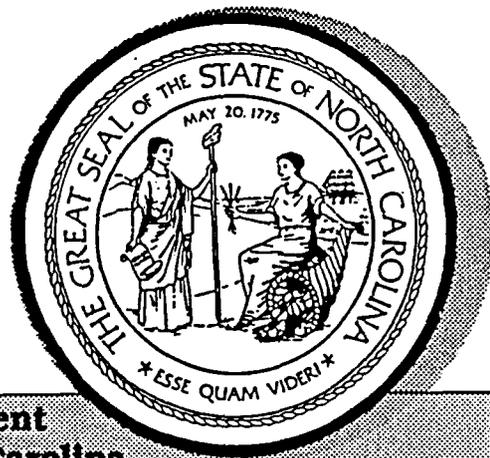
PAGE 0602

P	PWMAARCO								
P	PWMAARCO								
0118471	704	3976052	G	00000045	N	A	0354040	0812240	
0118472	704	3975616	G	00000100	N	A	0354040	0812515	
0118473		00000000	G	00000050	N	A	0354040	0812535	
0118474	704	2941710	G	00000025	P	A	0354025	0812310	
0118475	704	3279715	G	00000150	N	A	0354030	0812330	
0118476	704	4648528	G	00000025	N	A	0354045	0812030	
0118477		00000000	G	00000050	N	A	0354140	0812105	
0118478		00000000	G	00000029	P	A	0354630	0811900	
0118479	704	2565461	G	00000025	P	A	0354325	0811900	
0118480	704	2944444	G	00000025	N	A	0354055	0812252	
0118481		00000000	G	00000050	N	A	0354100	0812240	
0118482	704	2942512	G	00000025	N	A	0354152	0812125	
0118483	704	3273000	G	00000300	N	A	0354215	0811937	
0118484	704	3228620	G	00000035	P	A	0354235	0811931	
0118485	704	3227239	G	00000200	N	A	0354235	0811920	
0118486	704	3226987	G	00000035	P	A	0354230	0811900	
0118487	704	3222365	G	00000025	N	A	0354210	0811920	
0118488	704	3227911	G	00000040	N	A	0354230	0811800	
0118489	704	3284196	G	00000025	N	A	0354225	0811800	
0118490	704	3246904	G	00000070	P	A	0354130	0812130	
0118501		00000000	G	00000040	N	A	0354300	0812000	
0118507		00000000	G	00000025	N	A	0354150	0812100	
0118508		00000000	G	00000030	N	A	0354325	0811905	
0118540	704	3279883	G	00000050	N	A	0354400	0812100	
0118550	704	3229532	G	00000025	N	A	0354205	0811800	
0118551	704	3276291	G	00000040	N	A	0354205	0811800	
0118553	704	3282081	G	00000060	N	A	0354205	0811800	
0118554	704	3228446	G	00000025	N	A	0354212	0811805	
0118561		00000000	G	00000025	N	A	0354300	0812005	
0118562	704	3272695	G	00000700	N	A	0354225	0811804	
0118641	704	3248117	G	00000100	N	A	0354230	0812355	
0118643	704	3221308	G	00000425	N	A	0354610	0811830	
0118644	704	2943933	G	00000025	N	A	0354040	0811820	
0118645	704	3221238	G	00000035	P	A	0354220	0811847	
0118648		00000000	G	00000075	N	A	0354200	0811745	
0118659	704	3274006	G	00000030	N	A	0354205	0811750	
0118660	704	3274745	G	00000050	N	A	0354205	0811750	
0118661	704	3286706	G	00000220	N	A	0354230	0811845	
0118678	919	7337270	G	00000120	P	A	0354515	0812018	

PWID	PWNAME	PWMAARCO	PWMAAPNUM	PWPLSOC1	PWPLPOPL	PWPLTYPE	PWPLACTV	PWPLLAT1	PWPLLUN1
A 0112112	HOLLAR MHP	704	3272854	G	00000130	C	A	0354400	0612500
B 0112118	RIVERSIDE MHP		0000000	G	00000124	C	A	0354410	0612600
C 0112121	WESTVIEW ACRES	704	4782785	G	00000090	C	A	0354500	0612400
0112123	WHITE PINES MHP		0000000	G	00000102	N	A	0354516	0612440
0112129	B & E MHP	704	3973196	G	00000090	C	A	0354515	0612616 out
0112469	SHGUPS GROVE CH		0000000	G	000000310	N	A	0354220	0612610
0112490	RAMA INN	704	3975068	G	000000200	N	A	0354300	0612510
0112497	DIETZ MOTOR LINES	704	3975527	G	000000030	N	A	0354200	0612540
0112521	JOS SANDWICH SHOP	704	3977147	G	000000150	N	A	0354250	0612540
0112522	HILDEBRAN AMERICAN	704	3976867	G	000000150	N	A	0354250	0612540
0112524	MIDWAY BAPT CH		0000000	G	000000050	N	A	0354310	0612530
0112526	RANSOM BAPT CH		0000000	G	000000050	N	A	0354340	0612430
0112527	MUSTANG OIL	704	3976606	G	000000150	N	A	0354250	0612430
0112528	FAITH BAPT CH		0000000	G	000000125	N	A	0354240	0612600
0112529	INTERSTATE SER ST		0000000	G	000000100	N	A	0354220	0612500
0112530	I 40 SHELL		0000000	G	000000150	N	A	0354240	0612440
0112531	FREDRICKSON MOTOR EX	704	3975511	G	000000060	N	A	0354220	0612450
0112532	WINKLERS GROVE BAPT	704	3247267	G	000000600	N	A	0354450	0612340
0112533	LIBERTY BAPTIST CH		0000000	G	000000075	N	A	0354500	0612500
0112534	MACEDONIA MISS BAPT		0000000	G	000000050	N	A	0354530	0612510
0112540	SETTLEMAYERS GROCERY		0000000	G	000000150	N	A	0354520	0612510
0112560	DROWNING CREEK BAPT		0000000	G	000000050	N	A	0354440	0612500
0114035	RHOHISS, TOWN OF		0000000	P	000000600	C	A	0354630	0612545 out
D 0114116	LAKEVIEW PARK WATER SYSTEM	704	4782785	G	00000120	C	A	0354600	0612245
0114463	CAMP GINGER CASCADES	704	7585321	G	000000080	N	A	0354658	0612315
0114472	STARNE'S TEXACO	704	3969289	G	000000025	N	A	0354620	0612330
0114526	HUFFMAN HOIERY CO INC.	704	3961741	G	000000300	P	A	0354615	0612330
0116010	HICKORY WTP	704	3246231	G	000040000	C	A	0354528	0612233
0118025	LONGVIEW WTP	704	3228021	G	000003850	C	A	0354522	0612242
0118050	BROOKFORD, TOWN OF	704	3224903	G	000000550	C	A	0354155	0612110
E 0118113	EASTVIEW HTS WTR SYST	704	4782785	G	000000105	C	A	0354520	0611930
0118125	HIDDEN VALLEY WTR SYST	704	4782785	G	000000122	C	A	0354630	0611845 out
F 0118133	MEADOWBROOK VILLAGE WTR SYSTEM	704	3245660	G	000000350	C	A	0354030	0612230
G 0118145	ROLLING HILLS SUBD WATER SYST	704	4782785	G	000000050	C	A	0354245	0612200
out 0118151	SHAMROCK PARK S/D		0000000	G	000000244	C	A	0354140	0611800 out
H 0118152	SHERKILL WELL DEV	704	5852223	G	000000042	C	A	0354615	0612020
I 0118156	ST-STEPHENS MOBL HOME PARK		0000000	G	000000148	C	A	0354300	0611820
J 0118158	SUNSET HILLS SUBD WTR SYST	704	4782785	G	000000350	C	A	0354640	0611945
out 0118160	TRANQUIL VILLAGE S/D	704	5852223	G	000000072	C	A	0354610	0611830 out
out 0118163	WILLOW OAKS WTR SYST	704	4782785	G	000000160	C	A	0354530	0611820 out
K 0118169	HUFFMAN (BUFCRD) MHP	704	3273361	G	000000186	C	A	0354510	0611920
L 0118183	TWIN VALLEY S/D		0000000	G	000000092	C	A	0354330	0612000
0118203	TEAGUE APARTMENTS		0000000	G	000000025	N	A	0354125	0612045
0118210	W E BURTON	704	4646562	G	000000032	N	A	0354045	0612450
0118221	MTN VIEW MOBILE HM PK		0000000	G	000000032	N	A	0354035	0612300
0118233	HARLEY HOLLAR MOB HM		0000000	G	000000025	N	A	0354140	0612200
M 0118241	HOMESTEAD SUBD. WATER SYSTEM	704	5852223	G	000000405	C	A	0354040	0612255
0118242	JAMESTOWNE S/D WATER SYSTEM	919	6650617	G	000000400	C	A	0354028	0612042
N 0118248	WOODRIDGE S/D WATER SYSTEM	704	5852223	G	000000360	C	A	0354055	0612215
P 0118269	FOREST RIDGE WTR SYSTEM	704	5852223	G	000000350	C	A	0354055	0612115
Q 0118276	KEL MOBILE HM PARK	704	3268962	G	000000147	C	A	0354510	0611810
out 0118279	PONDEROSA S/D WATER SYSTEM	919	6650617	G	000000056	C	A	0354040	0611950 out
0118411	MARKLON FURN	704	3975578	G	000000052	P	A	0354140	0612429
0118412	BIBLE BAPTIST CH		0000000	G	000000075	N	A	0354140	0612427

**STATE OF NORTH CAROLINA  
DEPARTMENT OF  
NATURAL RESOURCES AND  
COMMUNITY DEVELOPMENT**

**Classifications and  
Water Quality Standards  
Assigned to  
The Waters of  
The Catawba River Basin**



**Division of Environmental Management  
Raleigh, North Carolina**

Reprint from North Carolina Administrative Code: 15 NCAC 2B .0308  
Current through: June 30, 1989

PRELIMINARY EXPLANATORY TEXT FOR THE  
1985 GEOLOGIC MAP OF NORTH CAROLINA

Contractual Report 88-1

by

The North Carolina Geological Survey

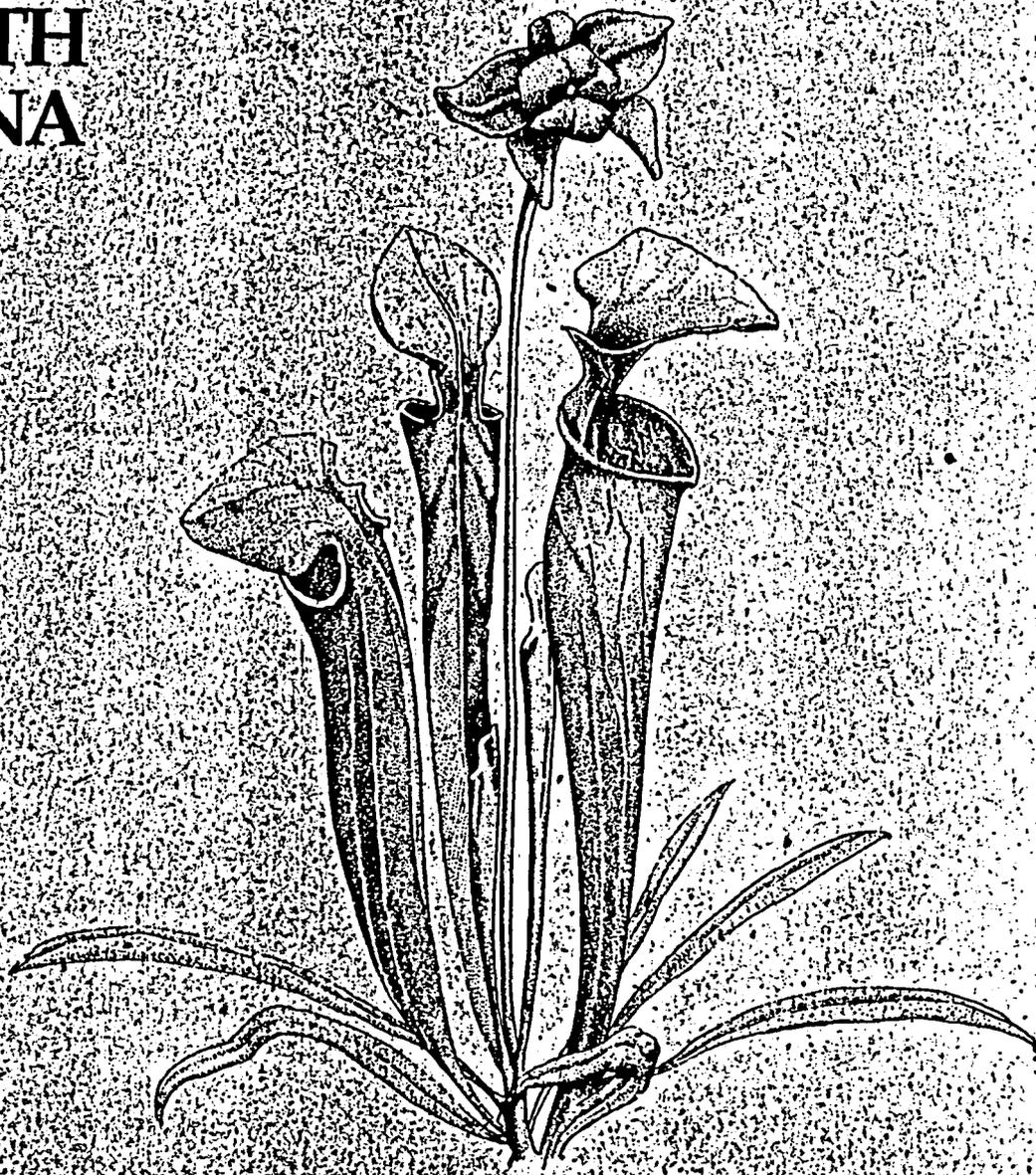
November 4, 1988

1952



7701

# NATURAL HERITAGE PROGRAM LIST OF THE RARE PLANT SPECIES OF NORTH CAROLINA



Compiled By  
Alan S. Weakley,  
Botanist

North Carolina Natural Heritage Program  
Division of Parks and Recreation  
N.C. Department of Environment, Health, and Natural Resources 1990

**NATURAL HERITAGE PROGRAM LIST OF THE RARE PLANTS OF NORTH CAROLINA  
AND  
NORTH CAROLINA PLANT WATCH LIST**

**MARCH, 1990**

**NORTH CAROLINA NATURAL HERITAGE PROGRAM  
DIVISION OF PARKS AND RECREATION  
NORTH CAROLINA DEPARTMENT OF ENVIRONMENT, HEALTH,  
AND NATURAL RESOURCES**

**James G. Martin  
Governor**

**William W. Cobey, Jr.  
Secretary, DEHNR**

**List compiled by Alan S. Weakley  
Cover illustration by Derek Collins**

**THE N.C. NATURAL HERITAGE FOUNDATION, INC., REPRINTS AND  
SELLS THIS DOCUMENT AT COST, AS A SERVICE TO THE NATURAL  
HERITAGE PROGRAM, N.C. DEPARTMENT OF ENVIRONMENT, HEALTH  
& NATURAL RESOURCES.**

C:\PCGEMS\DM>TYPE BGED028.ASC

LATITUDE 35:43:15 LONGITUDE 81:22: 6 1980 POPULATION

KM	0.00- 0.4	SECTOR TOTALS
S 1	0	0
RING	0	0
TOTALS		

C:\PCGEMS\DM>

C:\PCGEMS\DM>TYPE BGED029.ASC

LATITUDE 35:43:15 LONGITUDE 81:22: 6 1980 POPULATION

KM	0.00- 0.8	SECTOR TOTALS
S 1	642	642
RING	642	642
TOTALS		

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C:\PCGEMS\DM>BGED030.ASC  
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C:\PCGEMS\DM>TUPE BGED030.ASC  
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C:\PCGEMS\DM>TYPE BGED030.ASC

LATITUDE 35:43:15 LONGITUDE 81:22: 6 1980 POPULATION

		SECTOR
KM	0.00- 1.6	TOTALS
S 1	4598	4598
RING	4598	4598
TOTALS		

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LATITUDE 35:43:15 LONGITUDE 81:22: 6 1980 POPULATION

		SECTOR
KM	0.00- 3.2	TOTALS
S 1	14942	14942
RING	14942	14942
TOTALS		

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C:\PCGEMS\DM>TYPE BGED032.ASC

LATITUDE 35:43:15 LONGITUDE 81:22: 6 1980 POPULATION

KM	0.00- 4.8	SECTOR TOTALS
S 1	24769	24769
RING	24769	24769
TOTALS		

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LATITUDE 35:43:15 LONGITUDE 81:22: 6 1980 POPULATION

KM	0.00- 6.5	SECTOR TOTALS
S 1	38598	38598
RING	38598	38598
TOTALS		

C:\PCGEMS\DM>

Reference 34

PUBLIC HEALTH LIBRARY  
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RALEIGH, NORTH CAROLINA 27602

# Dangerous Properties of Industrial Materials

Seventh Edition

Volume II

N. IRVING SAX

and

RICHARD J. LEWIS, SR.

*Dani / Len*

*8/30/81 375.15-30M*

*18-5341*

*WVA  
440  
527  
1989  
VII  
C.3*



VAN NOSTRAND REINHOLD  
NEW YORK

Date: September 26, 1991  
To: File  
From: Mary Ganley  
Re: Southern Desk NCD 986166353  
Surface Water Intakes and Fishing on the 15  
mile surface water pathway

I spoke with Tom Spurling, Catawba County Environmental Health Supervisor, 704 465 8200, this morning. There are no surface water intakes on the Longview Creek, the Henry Fork or the South Fork of the Catawba River, however the locals do fish the water pathway, particularly the spot where HWY 10 crosses the South Fork of the Catawba River. Hickory, Longview and Brookford water systems get there water from the Catawba River, north of the site, not on the 15 mile surface water pathway.

DATE: October 6, 1988  
FROM: Bruce Nicholson  
TO: Southern Desk File  
SUBJECT: Telecon with Tom Spurling, Environmental Health Supervisor  
Catawba County, (704) 464-7880

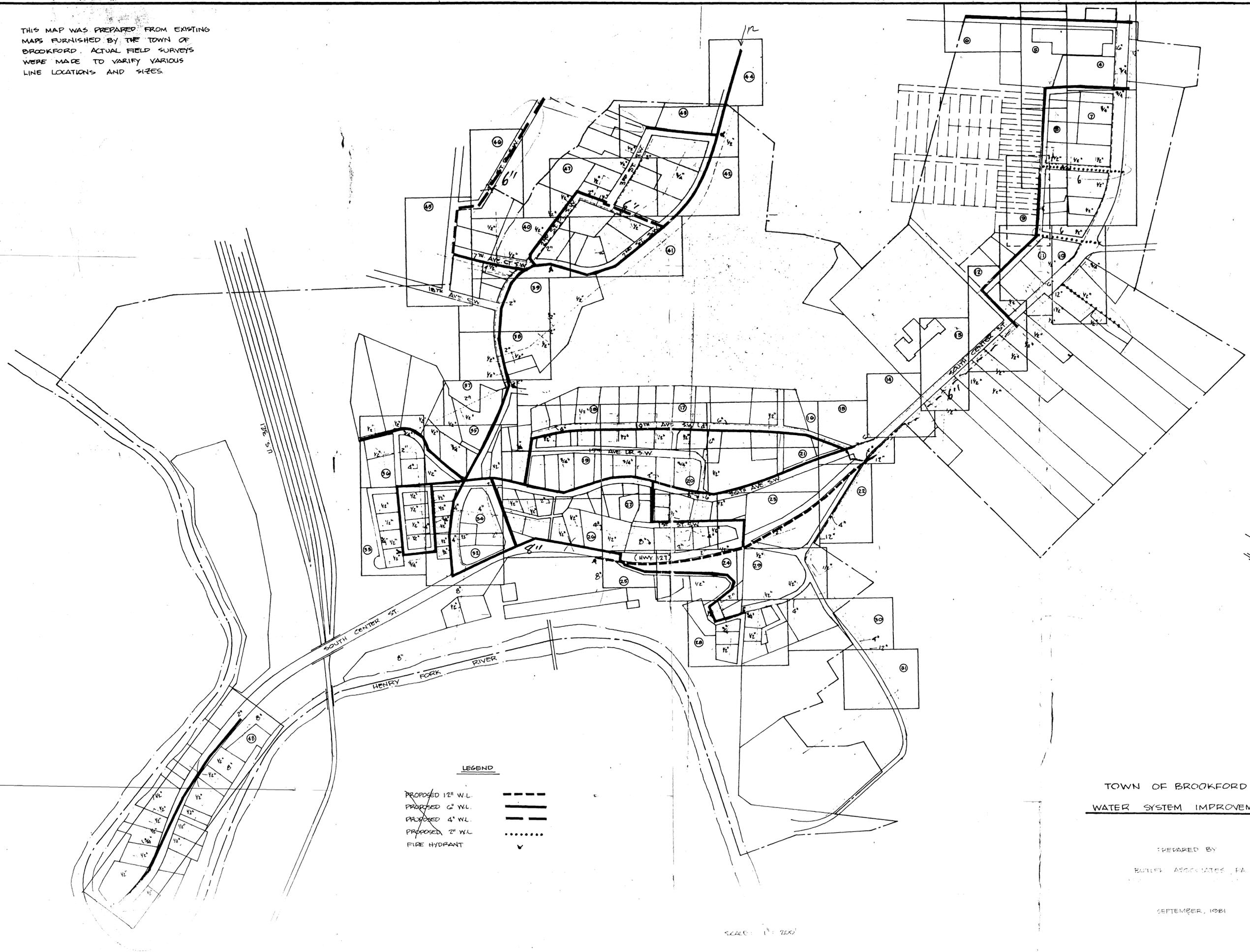
I told Mr. Spurling I was aware that Hickory and Longview obtain water from Lake Hickory (Catawba River). Mr. Spurling provided the following information concerning the water supplies of other towns in Catawba County.

Conover - Purchases water from Hickory.  
Claremont - Has wells which are supplemented by purchasing water from Hickory.  
Catawba - Obtains water from wells only.

He knows of no other towns in Catawba, Alexander, or Iredell counties that draw water from the Catawba River.

BN/ds/ibm.42

THIS MAP WAS PREPARED FROM EXISTING MAPS FURNISHED BY THE TOWN OF BROOKFORD. ACTUAL FIELD SURVEYS WERE MADE TO VERIFY VARIOUS LINE LOCATIONS AND SIZES.



**LEGEND**

- PROPOSED 12" W.L. ————
- PROPOSED 6" W.L. - - - - -
- PROPOSED 4" W.L. ······
- PROPOSED 2" W.L. ————
- FIRE HYDRANT ▲

**TOWN OF BROOKFORD  
WATER SYSTEM IMPROVEMENTS**

PREPARED BY  
BUTLER ASSOCIATES, P.A.

SEPTEMBER, 1981



**BUTLER ASSOCIATES, P.A.**  
CONSULTING ENGINEERS  
ASHEVILLE AND MORGANTON, N.C.

INDEX SHEET

DRAWING NO. 80089  
DATE: SEPT. 1981  
SCALE: 1" = 200'  
REVISION

TOWN OF BROOKFORD  
WATER

# SOIL SURVEY OF Catawba County, North Carolina



United States Department of Agriculture  
Soil Conservation Service  
In cooperation with  
North Carolina Agricultural Experiment Station



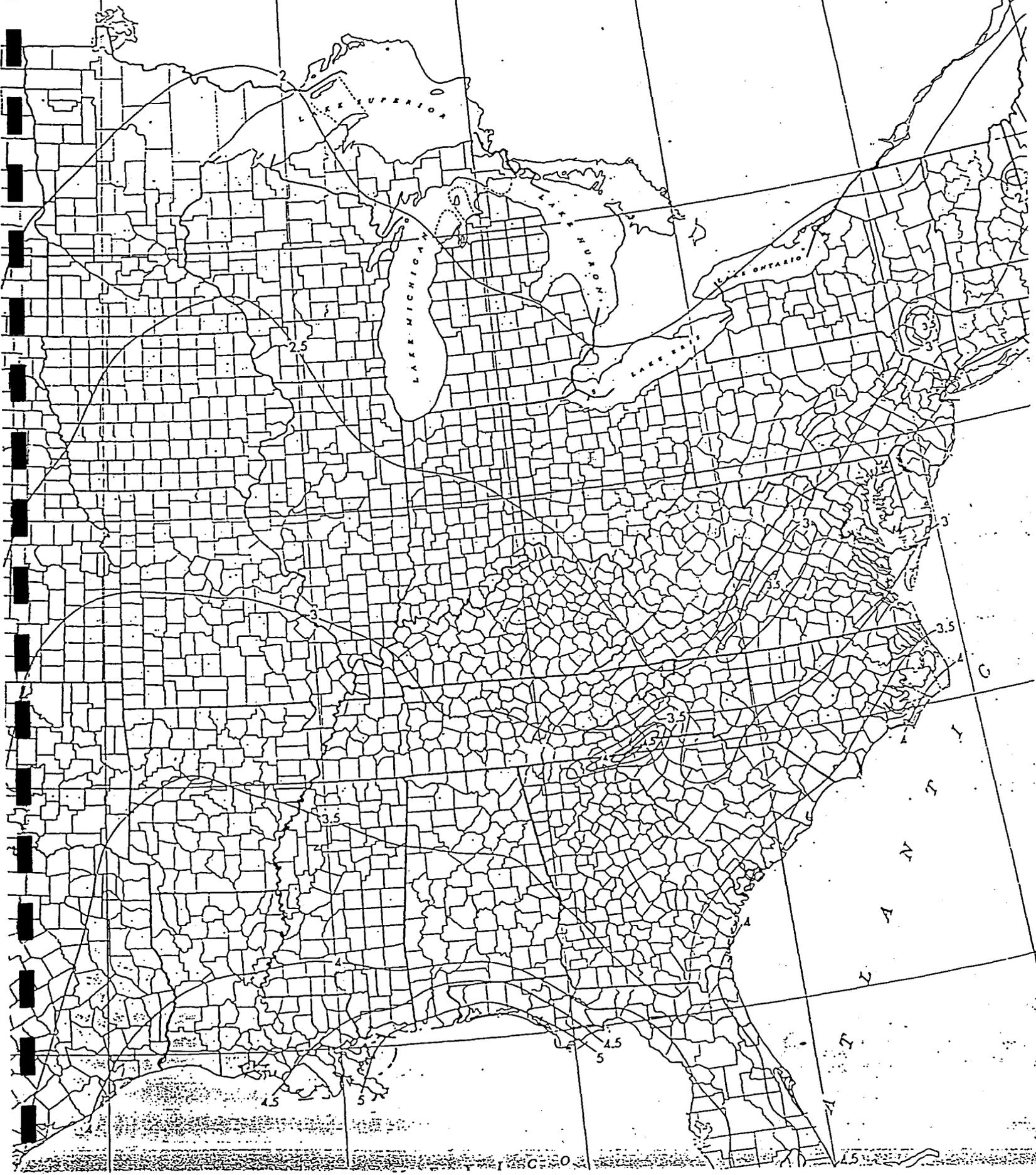
# **Hydric Soils of North Carolina**

**United States Department of Agriculture  
Soil Conservation Service  
Raleigh, North Carolina**

**October, 1989**

# IR RAINFALL (INCHES)

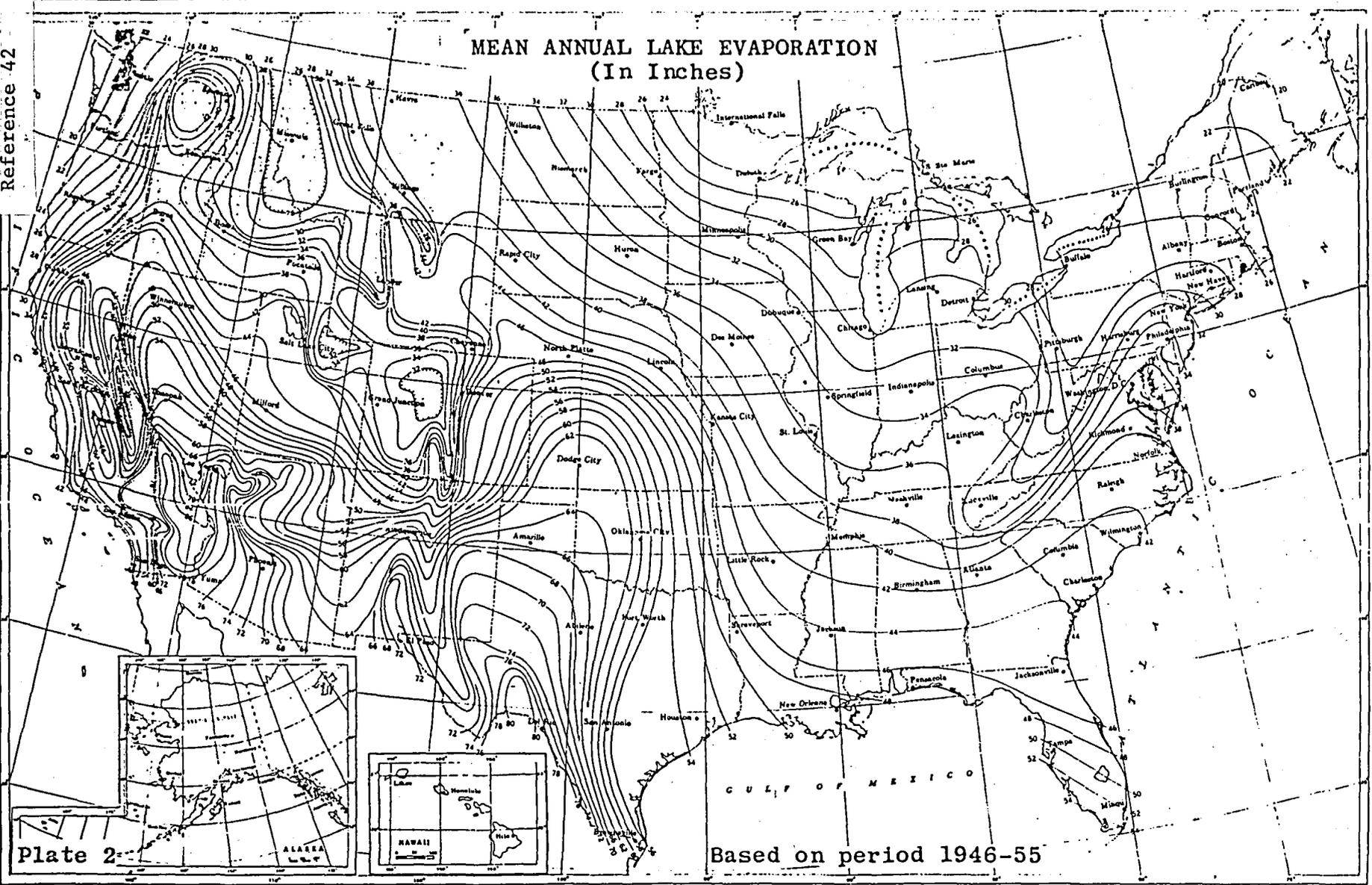
Reference 41



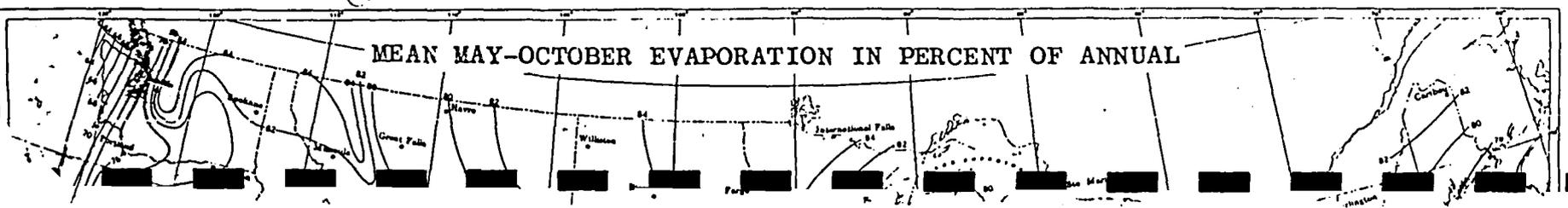
# LAKE EVAPORATION

Reference 42

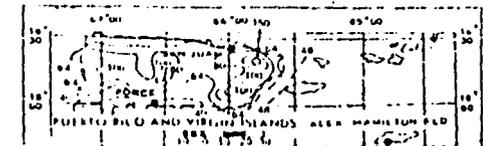
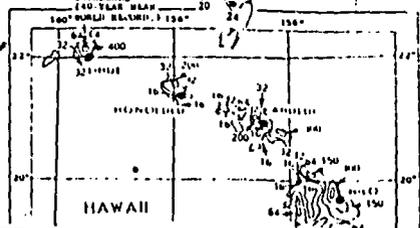
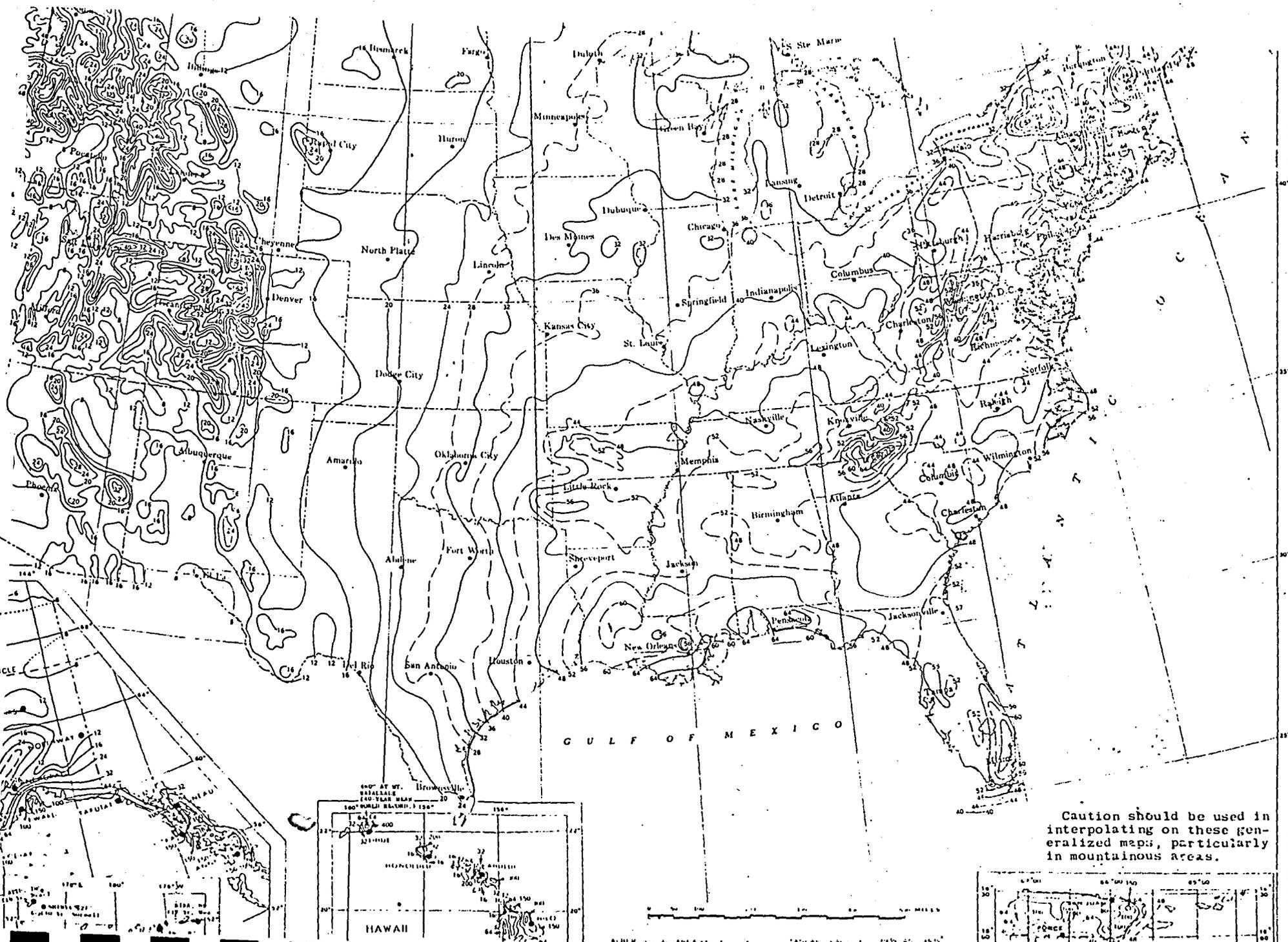
## MEAN ANNUAL LAKE EVAPORATION (In Inches)



## MEAN MAY-OCTOBER EVAPORATION IN PERCENT OF ANNUAL



# NORMAL ANNUAL TOTAL PRECIPITATION (INCHES)



September 16, 1991

TO: Technical Staff

FROM: Pat DeRosa 

RE: US Census Bureau 1990 Population Data  
Persons Per Household by County  
Persons Per Household by Town  
Total Population by County  
Total Population by Town

Please find attached the subject population data which I recently received from the US Census Bureau. Please note that the Persons Per Household by County data which I distributed in June has not been revised and is still accurate as included here. I have also included the remainder of Table 6 which lists information on Persons Per Household by Town, and Table 5 which lists Total Population Values for each County or Town. Please let me know if you have any questions about using this data or if you require additional census data.

Attachments

Table 6. Household, Family, and Group Quarters Characteristics: 1990

[For definitions of terms and meanings of symbols, see text]

State County Place and [In Selected States] County Subdivision	Family households			Nonfamily households				Persons per—		Persons in group quarters				
	Persons in households	All house- holds	Total	Married- couple famh	Female house- holder, no husband present	Total	Householder living alone		Household	Family	Total	Insti- tutionalized persons	Other persons in group quarters	
							Total	65 years and over						
						Total	Female							
The State	6 404 187	2 517 028	1 812 053	1 424 208	308 878	704 973	596 950	228 384	182 329	2.54	3.03	224 470	83 450	141 070
<b>COUNTY</b>														
Alamance County	105 327	42 652	30 745	24 295	5 130	11 907	10 467	4 598	3 748	2.47	2.94	2 886	1 173	1 713
Alexander County	27 245	10 331	8 049	6 715	952	2 222	2 022	839	651	2.64	3.02	239	299	-
Alhambra County	9 321	3 894	2 829	2 421	303	1 065	990	539	433	2.41	2.88	209	193	16
Anson County	23 117	8 531	6 359	4 552	1 475	2 172	2 042	1 075	860	2.71	3.23	357	344	13
Ashe County	21 965	8 848	6 748	5 643	816	2 100	1 935	1 014	809	2.48	2.89	244	220	24
Avery County	13 918	5 520	4 162	3 500	480	1 358	1 229	549	420	2.52	2.95	949	320	629
Beaufort County	41 704	16 157	11 840	9 140	2 186	4 317	3 915	1 974	1 605	2.58	3.07	579	441	138
Beck's County	23 321	7 412	5 501	3 831	1 419	1 911	1 797	957	755	2.74	3.28	67	67	-
Bladen County	28 150	10 760	8 017	5 854	1 762	2 743	2 579	1 243	1 000	3.11	3.11	513	509	4
Brunswick County	50 497	20 069	15 291	12 636	2 031	4 778	4 227	1 640	1 194	2.52	2.91	488	307	181
Buncombe County	166 713	70 802	40 335	36 637	7 684	21 467	18 868	8 174	6 642	2.40	2.90	5 108	2 966	2 142
Burke County	73 281	29 184	21 711	17 462	3 148	7 473	6 589	2 706	2 228	2.51	2.93	2 463	2 410	53
Cabarrus County	67 255	37 515	25 367	23 279	3 972	9 148	8 038	3 509	2 971	2.50	3.02	1 680	1 223	457
Calderon County	69 917	27 172	20 656	16 653	2 944	6 516	5 660	2 287	1 846	2.57	2.97	792	735	57
Camden County	5 875	2 180	1 692	1 365	225	488	437	234	169	2.60	3.11	29	29	-
Carteret County	51 554	21 238	15 276	12 681	2 021	5 962	5 081	1 901	1 431	2.43	2.88	1 002	750	252
Caswell County	23 053	7 468	5 781	4 454	1 024	1 667	1 563	727	573	2.60	3.13	640	624	16
Catawba County	116 367	45 700	33 773	27 418	4 841	11 827	10 270	3 844	3 115	2.55	2.96	2 025	1 134	891
Chatham County	26 315	15 293	11 227	9 115	1 605	4 066	3 445	1 412	1 141	2.51	2.95	444	377	67
Cherokee County	15 899	7 966	6 080	5 065	765	1 867	1 764	975	759	2.50	2.91	271	196	75
Chowan County	13 233	5 113	3 775	2 842	767	1 338	1 238	641	499	2.50	3.07	273	273	-
Clay County	7 150	2 928	2 177	1 854	203	751	699	418	314	2.44	2.90	5	4	1
Cleveland County	83 012	32 037	24 282	19 011	4 168	7 755	7 011	3 232	2 624	2.50	3.02	1 702	915	787
Columbus County	48 953	18 456	13 754	10 361	2 757	4 705	4 351	2 152	1 865	2.65	3.15	634	624	10
Crawley County	78 014	29 542	22 481	18 189	3 511	7 061	6 121	2 436	1 930	2.64	3.17	3 596	811	2 785
Cumberland County	253 362	91 500	60 966	54 433	12 883	21 534	17 718	4 724	3 752	2.77	3.19	21 204	1 456	19 705
Currituck County	13 486	5 038	3 854	3 272	407	1 184	964	419	312	3.03	2.68	250	217	33
Dare County	22 542	9 349	6 425	5 498	682	2 824	2 264	714	522	2.41	2.86	204	140	64
Davidson County	125 358	48 944	37 176	30 410	5 120	11 788	10 262	4 189	3 319	2.56	2.96	1 319	1 277	42
DeWitt County	27 541	10 785	8 270	6 999	953	2 515	2 246	1 025	817	2.55	2.95	318	258	30
Duplin County	36 368	14 925	11 036	8 378	2 099	3 889	3 553	1 779	1 439	2.84	3.12	627	560	67
Durham County	173 310	72 297	45 965	33 614	10 321	28 312	25 929	5 553	4 471	2.40	2.95	8 525	2 175	6 350
Edgecombe County	55 856	20 319	15 085	10 000	4 293	5 234	4 703	2 124	1 717	2.75	3.25	702	657	45
Forsyth County	257 466	107 419	72 621	55 715	14 052	34 798	29 470	9 779	7 975	2.50	2.92	8 412	3 493	4 919
Franklin County	35 237	13 500	10 047	7 640	1 865	3 456	3 120	1 384	1 126	2.61	3.07	1 177	566	611
Gaston County	172 791	65 347	48 754	36 905	6 439	15 563	13 580	5 720	4 720	2.64	3.07	2 302	1 458	844
Gates County	9 232	3 352	2 593	2 040	404	759	705	364	288	2.75	3.19	103	102	1
Graham County	7 176	2 772	2 166	1 839	246	606	562	294	225	2.98	3.18	20	18	2
Granville County	35 191	13 134	9 883	7 501	1 875	3 251	2 889	1 236	978	2.68	3.13	3 154	3 079	75
Greene County	14 665	5 365	4 066	3 000	813	1 829	1 680	574	481	2.72	3.18	719	704	15
Gulford County	335 348	137 706	82 891	71 195	17 570	44 815	36 578	12 180	9 951	2.44	2.97	12 072	3 084	8 988
Halifax County	54 122	20 335	14 674	10 092	4 018	5 461	5 005	2 398	1 877	2.66	3.18	1 354	1 356	36
Harnett County	65 340	25 150	18 529	14 489	3 154	6 621	5 773	2 438	1 962	2.60	3.06	2 482	1 240	1 242
Haywood County	46 152	19 211	14 120	11 831	1 774	5 061	4 601	2 337	1 886	2.40	2.83	790	751	39
Henderson County	68 206	28 709	21 169	18 113	2 344	7 540	6 838	3 531	2 850	2.38	2.80	1 079	967	112
Hertford County	21 612	8 150	5 921	4 164	1 473	2 229	2 063	677	766	2.63	3.19	911	279	632
Hoke County	21 612	7 405	5 794	3 847	1 605	1 811	1 419	523	420	2.92	3.34	1 244	1 244	-
Hyde County	5 383	2 094	1 533	1 151	432	561	516	269	191	2.57	3.07	28	19	9
Iredell County	92 082	35 573	26 869	21 728	4 023	8 704	7 646	3 271	2 692	2.50	3.02	849	814	36
Jackson County	23 834	9 683	6 970	5 746	981	2 713	2 242	966	745	2.46	2.91	3 012	280	2 732
Johnston County	80 341	31 566	23 217	18 566	3 624	8 349	7 441	3 360	2 750	2.55	3.01	965	893	72
Jones County	9 412	3 492	2 630	2 034	462	853	774	406	311	2.70	3.17	2	2	-
Lee County	40 651	15 669	11 739	9 067	2 135	3 950	3 482	1 369	1 077	2.50	3.03	723	672	51
Lenoir County	55 652	21 832	15 611	11 131	3 724	6 327	5 706	2 580	2 073	2.54	3.06	1 622	1 556	63
Lincoln County	45 802	18 764	14 661	12 207	1 677	4 103	3 580	1 467	1 173	2.63	3.03	517	517	-
McDowell County	35 064	13 660	10 366	8 578	1 363	3 314	2 996	1 399	1 135	2.56	2.99	617	416	201
Macon County	22 992	9 834	7 335	6 236	773	2 399	2 368	1 307	1 021	2.54	2.76	507	233	274
Macon County	16 104	6 488	4 836	4 058	516	1 662	1 510	789	581	2.48	2.92	849	104	745
Martin County	24 813	9 317	6 900	5 067	1 518	2 417	2 213	1 100	806	2.66	3.17	255	257	8
Mecklenburg County	496 886	200 219	134 361	103 211	25 013	65 858	52 037	12 900	10 616	2.50	3.05	11 547	3 578	7 969
Mitchell County	14 288	5 779	4 420	3 777	479	1 359	1 265	669	539	2.47	2.88	145	130	15
Montgomery County	22 079	8 220	6 274	4 823	1 116	2 016	1 838	876	695	2.60	3.14	1 067	967	70
Moore County	56 210	23 827	17 483	14 312	2 473	6 344	5 622	2 744	2 201	2.43	2.87	1 003	970	33
Nash County	75 450	29 041	21 224	16 322	3 962	7 817	6 828	2 880	2 312	2.60	3.06	1 227	807	420
New Hanover County	118 996	48 139	32 400	24 723	6 363	15 736	12 434	4 372	3 510	2.43	2.95	3 285	1 321	1 964
Northampton County	29 055	7 501	5 644	3 958	1 436	1 647	1 616	968	704	2.64	3.12	743	742	1
Onslow County	115 274	40 652	32 071	22 037	3 843	7 667	6 271	1 752	1 384	2.84	3.16	34 564	954	33 610
Orange County	84 627	36 104	21 123	16 854	3 580	14 981	10 110	2 257	1 836	2.34	2.93	9 224	770	8 454
Pamlico County	11 247	4 523	3 382	2 717	547	1 141	1 055	529	410	2.49	2.93	125	112	13
Pasquotank County	29 884	11 364	8 325	6 352	1 661	3 058	2 725	1 342	1 065	2.63	3.13	1 414	363	1 051
Pender County	28 457	11 112	8 492	6 707	1 371	2 892	2 368	1 055	792	2.56	2.90	356		

# **National Water Summary 1984**

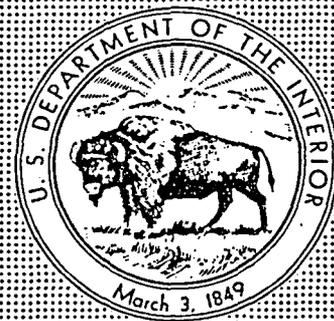
**Hydrologic Events,  
Selected Water-Quality Trends,  
and Ground-Water Resources**

*By United States Geological Survey*

**United States Geological Survey  
Water-Supply Paper 2275**

U.S. GEOLOGICAL SURVEY

OPEN-FILE REPORT 83-211



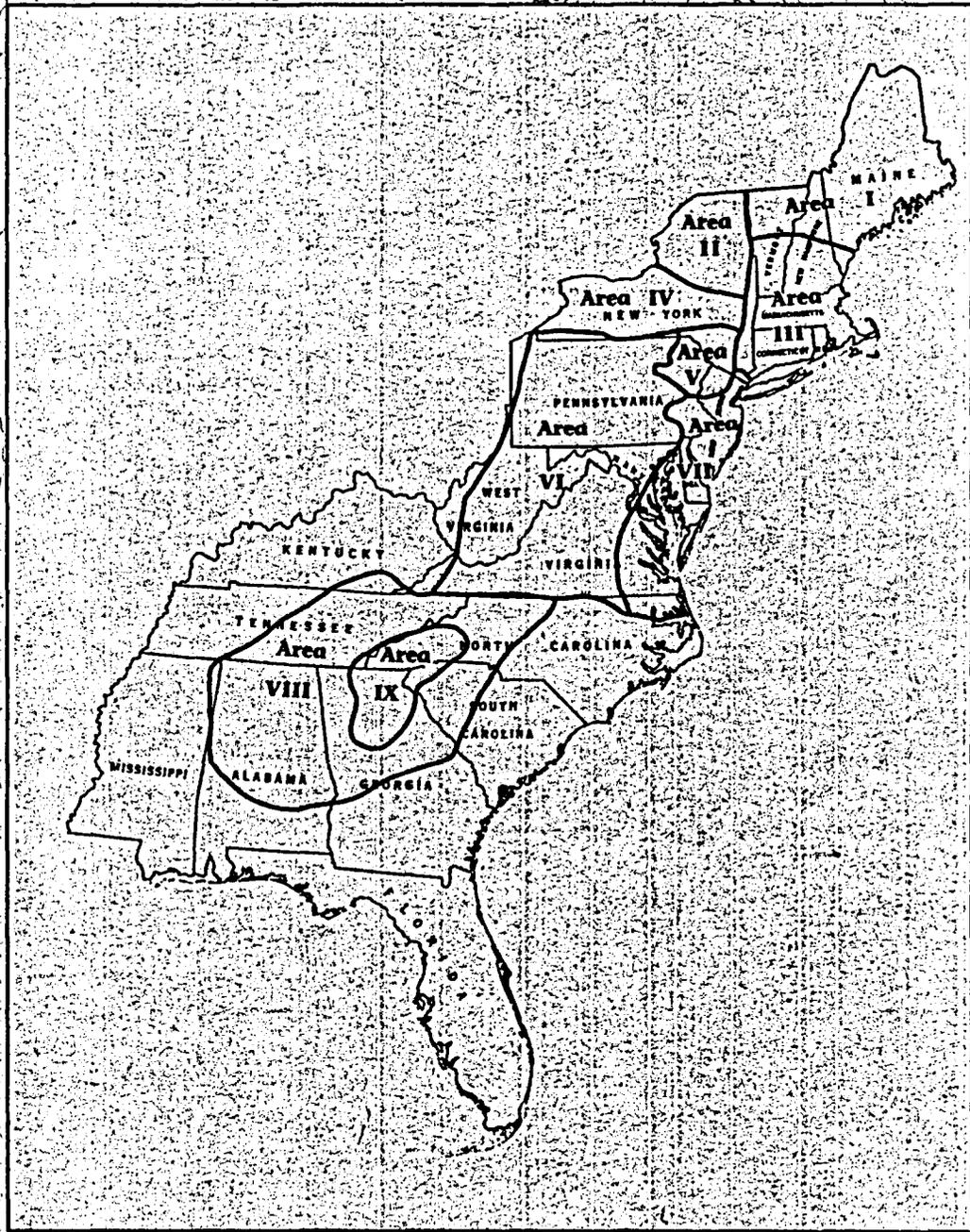
**DRAINAGE AREAS OF  
SELECTED SITES ON STREAMS  
IN NORTH CAROLINA**

Prepared in cooperation with the  
North Carolina Department of Natural  
Resources and Community Development

U.S. Geological Survey

Water-Resources Investigations Report 88-4094

# MAP OF MEAN ANNUAL RUNOFF FOR THE NORTHEASTERN, SOUTHEASTERN, AND MID-ATLANTIC UNITED STATES, WATER YEARS 1951-80



Prepared in cooperation with the U.S. Environmental Protection Agency



DATE: September 26, 1988  
FROM: Bruce Nicholson  
TO: Southern Desk Files  
SUBJECT: Telecon with Bill Yoder, Fire Marshall,  
Hickory, NC, (919) 324-6479

I informed Mr. Yoder that 4 members of the NC Superfund Branch would meet with him at 11:00 to 11:30 am on Thursday, September 29, and then visit the Southern Desk site. Mr. Yoder said the best place to meet would be the Fire Station Headquarters. From I-40 take Exit 125 (Lenoir Rhyne Boulevard), from the exit ramp turn right and go the the third light, turn left following the sign to downtown, turn right at the first light onto Hwy. 127 North, get in the left land and the Headquarters is on the left after passing under the Railroad tracks (see attached map).

Concerning the Southern Desk Site Mr. Yoder identified 4 areas of concern:

- 1). Concrete Pad - More than 100 55-gallon drums containing residues of stains, finishes, and spray booth filters are stored outside, open to the weather, on a concrete pad. These drums are rusting and in generally poor condition without labels of any kind. Someone has apparently tarred the tops of many of the drums in an effort to keep them from rusting.
- 2). Above-Ground Tanks - Also outside the main building there are 4 large above-ground storage tanks each of which has an estimated 10,000 gallon capacity. There is no sign of any leakage from these tanks, but there remains an unknown amount of finish or stain residues in them.
- 3). Mixing Room - Inside one of the buildings tere are more than 50 55-gallon and 5-gallon drums stored in this room used for mixing the stains and finishes for the spray booth.
- 4). Storage Room - This room is locked with a padlock, and Mr. Yoder has not been in it. However, looking over the top of the door he saw the room is filled with 55-gallon and 5-gallon drums similar to those in the mixing room. The roof is leaking over this room and has corroded the drums. He said the building owner, Wayne Franklin, gave him permission to break the lock and enter the room, but he was reluctant to do so because the lock is a barrier to direct contact. Although the drums are not "standing" in chemicals, there is some chemical residue on the floor probably from the leaking drums. Some residents and businesses in the area have complained of a solvent smell in the sewer system. Mr. Yoder theorizes it could come from the drums leaking into the drain during a heavy rain.

Mr. Yoder said the site was discovered during a building inspection in November, 1987. On November 10, Mr. Yoder drafted letters to the current owner, Mr. Wayne Franklin, and the previous owner who last used the plant for furniture manufacturing, GTE Services Corporation. He got no response and wrote follow up correspondence in February, 1988. GTE Services Corporation notified him that they had contracted Hart Environmental Management to perform an audit on the substances at the plant and that they would inform Mr. Yoder of the results. Mr. Yoder has yet to receive the Hart report or its results from GTE.

Mr. Yoder provided me with the following addresses:

Mr. Wayne Franklin  
C/O Franklin Machinery  
2506 58th Street  
Hampton, VA 23661

Mr. Bennett L. Stein (Mr. Franklin's Attorney)  
West, Stein, West, & Smith Attorneys  
740 F. Thimble Shoals Blvd.  
Newport News, VA 23606  
(804) 873-1738

Mr. Vincent Gallogly  
Assistant General Counsel  
GTE Services Corporation  
1 Stamford Forum  
Stamford, CT 06904  
(203) 965-2000

Mr. Yoder said that some businesses rent out space from Mr. Franklin but they are not operating near any of the areas of concern (the site is very large). These businesses have been operating without a certificate of occupancy, and have been notified this is illegal. Some have applied for a certificate of occupancy, but because of the fire hazard, his office is not even considering any applications until the hazardous material is removed.

BN/ds/ibm.28

DATE: October 04, 1988  
 FROM: Bruce Nicholson  
 TO: Southern Desk File  
 SUBJECT: Telecon with Bill Yoder, Hickory Fire Marshall,  
 (704) 324-6479, concerning the history of the site

Mr. Yoder had researched the buildings history through a former Southern Desk employee and discovered the following:

The plant was built by Southern Desk in the 1930's and was owned and operated by them until about 20 years ago when Drexel Furniture took over. After an unspecified time, Champion International bought and operated the plant. Then a company called Dominic or something similar (the employee could not recall the exact name) operated on site. GTE Services Corporation then took over until Mr. Franklin bought the plant from them. X

What Mr. Yoder recalls personally is that GTE<sup>Services</sup> was operating it when he came to Hickory in 1980 (he does not know how long they had it before that). They were making television cabinets on site and he responded to frequent dust fires there. About 1981, the plant was closed and it sat idle until about 1983 (he was not sure of the exact date) when Mr. Franklin purchased it. X

BN/ds/ibm.44

From: Mary Ganley, Hydrogeologist

*Mary Ganley*

Date: Sept. 24, 1991

Time: 1300

Subject: Southern Desk NCD 986166353  
Estimated number of workers

I spoke with Mr. Franklin, owner, (804) 826-7300, who has 11 different tenants on the facility and estimates that approximately 20 people work in the facility.

Date: September 30, 1991  
To: File  
From: Mary Ganley  
Re: Southern Desk NCD 986166353  
Surface Water Intakes

I spoke with David Workman, 704 879-2127, Manager of the Icard Township Water System, who told me that the system gets its water from the Catawba River near Castle Bridge. The location is not on the 15 mile surface pathway from the site.

12. Heath, Ralph, 1980, Basic Elements of Groundwater Hydrology with Reference to Conditions in North Carolina, USGS Water Resource Investigation Open File Report 80-44. 86 pp.
13. Icard Township Water Corporation, 1989, Hildebran Area Water Line Information. 1:24000.
14. LeGrand, Harry, 1954, Geology and Groundwater of the Statesville Area, North Carolina (Bulletin No. 68). North Carolina Department of Conservation and Development. 68pp.
15. LeGrand, Harry, 1991, North Carolina Natural Heritage Program Database Printout of Rare Plant and Animal Species of North Carolina., NCDEHNR, Division of Parks and Recreation.
16. Leonard, Steve, 1991, United States Department of the Interior, National Wetlands Inventory, Fish and Wildlife Service, September 18 Telecommunication.
17. McCormick, Charles, 1989, Notification letter regarding Completion of Southern Desk and Cabinet CERCLA 106(a) Cleanup., October 13., Fred C. Hart Associates.
18. Merck & Co., 1989, The Merck Index: An encyclopedia of Chemicals, Drugs, and Biologicals, Merck & CO., Rahway, N.J., 10100 pp.
19. Misemore, Bruce, 1991, Town of Longview, September 23 Telecommunication.
20. National Institute for Occupational Safety and Health, 1990, NIOSH Pocket Guide to Chemical Hazards, United States Department of Health and Human Services, US Government Printing Office, Washington DC, 245 pp.
21. Nelson, Perry, 1991, North Carolina Division of Environmental Management, Groundwater Section Chief, March 20 Telecommunication
22. Nicholson, Bruce, 1988a, Site Visit Report to Susan Diehl, USEPA. October 5. North Carolina Department of Environment Health and Natural Resources, Division of Solid Waste Management, Superfund Section.
23. Nicholson, Bruce, 1988b, Immediate Removal Request Letter to Robert Jourdan, USEPA, Emergency Response and Control Section. October 7. North Carolina Department of Environment Health and Natural Resources, Division of Solid Waste Management, Superfund Section.

APPENDIX D  
SITE INSPECTION FORM



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NC	D 986 166 353

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) Southern Desk		02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER 1720 1st Avenue SW			
03 CITY Hickory		04 STATE NC	05 ZIP CODE 28602	06 COUNTY Catawba	07 COUNTY CODE
09 COORDINATES LATITUDE 35° 43' 16.7"		LONGITUDE 081° 22' 07.8"		10 TYPE OF OWNERSHIP (Check one) <input checked="" type="checkbox"/> A. PRIVATE <input type="checkbox"/> B. FEDERAL <input type="checkbox"/> C. STATE <input type="checkbox"/> D. COUNTY <input type="checkbox"/> E. MUNICIPAL <input type="checkbox"/> F. OTHER <input type="checkbox"/> G. UNKNOWN	

III. INSPECTION INFORMATION

01 DATE OF INSPECTION ____/____/____ MONTH, DAY YEAR	02 SITE STATUS <input type="checkbox"/> ACTIVE <input type="checkbox"/> INACTIVE	03 YEARS OF OPERATION 1976   1981   _____ UNKNOWN BEGINNING YEAR   ENDING YEAR	
04 AGENCY PERFORMING INSPECTION (Check all that apply) <input type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA CONTRACTOR _____ (Name of firm) <input type="checkbox"/> C. MUNICIPAL <input type="checkbox"/> D. MUNICIPAL CONTRACTOR _____ (Name of firm) <input checked="" type="checkbox"/> E. STATE <input type="checkbox"/> F. STATE CONTRACTOR _____ (Name of firm) <input type="checkbox"/> G. OTHER _____ (Specify)			

05 CHIEF INSPECTOR Mary Ganley	06 TITLE Hydrogeologist	07 ORGANIZATION NCDEHNR	08 TELEPHONE NO. (919) 733-2801
09 OTHER INSPECTORS Mark Durway	10 TITLE Hydrogeologist	11 ORGANIZATION NCDEHNR	12 TELEPHONE NO. (919) 733-2801
			( )
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO.
			( )
			( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one) <input checked="" type="checkbox"/> PERMISSION <input type="checkbox"/> WARRANT	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
---	-----------------------	-----------------------

IV. INFORMATION AVAILABLE FROM

01 CONTACT Mary Ganley	02 OF (Agency/Organization) NCDEHNR Superfund Section		03 TELEPHONE NO. (919) 733-2801
04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM Mary Ganley	05 AGENCY NCDEHNR	06 ORGANIZATION Superfund Section	07 TELEPHONE NO. 919-733-2801
			08 DATE 9 / 30 / 91 MONTH DAY YEAR





POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION  
01 STATE 02 SITE NUMBER  
NC ID 986 166 353

II. HAZARDOUS CONDITIONS AND INCIDENTS

01  A. GROUNDWATER CONTAMINATION 2452 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION  
(within 3 miles)

Not Suspected

01  B. SURFACE WATER CONTAMINATION 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

Not indicated by analyses of surface water sample taken during SSI.

01  C. CONTAMINATION OF AIR 02  OBSERVED (DATE: 9/88)  POTENTIAL  ALLEGED  
03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

Problem remediated by 10/89 drum removal.

01  D. FIRE/EXPLOSIVE CONDITIONS 02  OBSERVED (DATE: 9/88)  POTENTIAL  ALLEGED  
03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

Problem remediated by 10/89 drum removal.

01  E. DIRECT CONTACT 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

01  F. CONTAMINATION OF SOIL 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
03 AREA POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION  
(Acres)

Post removal and SSI sampling does not indicate soil contamination.

01  G. DRINKING WATER CONTAMINATION 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

Not Suspected

01  H. WORKER EXPOSURE/INJURY 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
03 WORKERS POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

01  I. POPULATION EXPOSURE/INJURY 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NC	D 986 166 353

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01  J. DAMAGE TO FLORA 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
04 NARRATIVE DESCRIPTION

Helianthus Laevigatus is located approximately one mile southeast of the site. It is designated by the State of NC to be significantly rare, however it is not suspected to be impacted by the site.

01  K. DAMAGE TO FAUNA 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
04 NARRATIVE DESCRIPTION (include name(s) of species)

None

01  L. CONTAMINATION OF FOOD CHAIN 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
04 NARRATIVE DESCRIPTION

01  M. UNSTABLE CONTAINMENT OF WASTES 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
(Spills/Runoff/Standing liquids, Leaking drums)  
03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

01  N. DAMAGE TO OFFSITE PROPERTY 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
04 NARRATIVE DESCRIPTION

01  O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
04 NARRATIVE DESCRIPTION

01  P. ILLEGAL/UNAUTHORIZED DUMPING 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
04 NARRATIVE DESCRIPTION

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: 38,598 (within 4 miles)

IV. COMMENTS

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis reports)

(33: PCGEMS, 1988) (45: USGS, 1970) (28: NCDHR, 1991) (32: NCNHP, 1990)  
(3: D. Carlo, 1989) (May 21st site sampling) (15: Legrand, 1991)



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION  
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION  
01 STATE NC 02 SITE NUMBER D 986 166 353

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED <i>(Check all that apply)</i>	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
<input type="checkbox"/> A. NPDES				
<input type="checkbox"/> B. UIC				
<input type="checkbox"/> C. AIR				
<input checked="" type="checkbox"/> D. RCRA	NA			Change of Status Form
<input type="checkbox"/> E. RCRA INTERIM STATUS				
<input type="checkbox"/> F. SPCC PLAN				
<input type="checkbox"/> G. STATE <i>(Specify)</i>				
<input type="checkbox"/> H. LOCAL <i>(Specify)</i>				
<input type="checkbox"/> I. OTHER <i>(Specify)</i>				
<input type="checkbox"/> J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL <i>(Check all that apply)</i>	02 AMOUNT	03 UNIT OF MEASURE	04 TREATMENT <i>(Check all that apply)</i>	05 OTHER
<input type="checkbox"/> A. SURFACE IMPOUNDMENT			<input type="checkbox"/> A. INCENERATION	<input checked="" type="checkbox"/> A. BUILDINGS ON SITE
<input type="checkbox"/> B. PILES			<input type="checkbox"/> B. UNDERGROUND INJECTION	
<input checked="" type="checkbox"/> C. DRUMS, ABOVE GROUND	11,440	gallons	<input type="checkbox"/> C. CHEMICAL/PHYSICAL	2.75
<input type="checkbox"/> D. TANK, ABOVE GROUND			<input type="checkbox"/> D. BIOLOGICAL	06 AREA OF SITE
<input type="checkbox"/> E. TANK, BELOW GROUND			<input type="checkbox"/> E. WASTE OIL PROCESSING	_____ (Acres)
<input type="checkbox"/> F. LANDFILL			<input checked="" type="checkbox"/> F. SOLVENT RECOVERY	
<input type="checkbox"/> G. LANDFARM			<input type="checkbox"/> G. OTHER RECYCLING/RECOVERY	
<input type="checkbox"/> H. OPEN DUMP			<input type="checkbox"/> H. OTHER <i>(Specify)</i>	
<input type="checkbox"/> I. OTHER <i>(Specify)</i>				

07 COMMENTS

IV. CONTAINMENT

01 CONTAINMENT OF WASTES *(Check one)*

A. ADEQUATE, SECURE       B. MODERATE       C. INADEQUATE, POOR       D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

Drums now removed were contained on a concrete pad or in building with concrete floor.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE:  YES  NO

02 COMMENTS

Waste has been removed from site.

VI. SOURCES OF INFORMATION *(Cite specific references, e.g. state files, sample analysis, reports)*

(5:Fox,1988) (6:Fox,1991) (3:D.Carlo,1989) (45:USGS,1970)



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION  
01 STATE | 02 SITE NUMBER  
NC | D 986 166 353

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY <i>(Check as applicable)</i>		02 STATUS			03 DISTANCE TO SITE
	SURFACE	WELL	ENDANGERED	AFFECTED	MONITORED
COMMUNITY	A. <input type="checkbox"/>	B. <input checked="" type="checkbox"/>	A. <input type="checkbox"/>	B. <input type="checkbox"/>	C. <input type="checkbox"/>
NON-COMMUNITY	C. <input type="checkbox"/>	D. <input type="checkbox"/>	D. <input type="checkbox"/>	E. <input type="checkbox"/>	F. <input type="checkbox"/>
					A. <u>.9</u> (mi)
					B. _____ (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY *(Check one)*

A. ONLY SOURCE FOR DRINKING     B. DRINKING *(Other sources available)*  
COMMERCIAL, INDUSTRIAL, IRRIGATION *(No other water sources available)*

C. COMMERCIAL, INDUSTRIAL, IRRIGATION *(Limited other sources available)*     D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER 4976 (4 miles)    03 DISTANCE TO NEAREST DRINKING WATER WELL .9 (mi)

04 DEPTH TO GROUNDWATER <u>10 - 45'</u> (ft)	05 DIRECTION OF GROUNDWATER FLOW <u>unknown</u>	06 DEPTH TO AQUIFER OF CONCERN <u>10 - 45</u> (ft)	07 POTENTIAL YIELD OF AQUIFER _____ (gpd)	08 SOLE SOURCE AQUIFER <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
---	--	---	--	---

09 DESCRIPTION OF WELLS *(including usage, depth, and location relative to population and buildings)*

Individual residential wells were not located within a mile. The nearest community well is .9 miles from the site.

10 RECHARGE AREA <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO - COMMENTS <u>unknown</u>	11 DISCHARGE AREA <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO    COMMENTS <u>unknown</u>
--	--

IV. SURFACE WATER

01 SURFACE WATER USE *(Check one)*

A. RESERVOIR, RECREATION DRINKING WATER SOURCE  
fishing

B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES     C. COMMERCIAL, INDUSTRIAL     D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
<u>Longview Creek</u>	<input type="checkbox"/>	<u>.23</u> (mi)
<u>Henry Fork</u>	<input type="checkbox"/>	<u>1.73</u> (mi)
<u>South Fork Catawba River</u>	<input type="checkbox"/>	<u>10.73</u> (mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN	04 DISTANCE TO NEAREST POPULATION
ONE (1) MILE OF SITE A. <u>5222</u> NO. OF PERSONS	<u>.0095</u> (mi) <b>(nearest resident approx 50')</b>
TWO (2) MILES OF SITE B. <u>20164</u> NO. OF PERSONS	
THREE (3) MILES OF SITE C. <u>44933</u> NO. OF PERSONS	

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE <u>unknown</u>	04 DISTANCE TO NEAREST SITE BUILDING <u>.0095</u> (mi)
---	---

05 POPULATION WITHIN VICINITY OF SITE *(Provide narrative description of nature of population within vicinity of site, e.g., rural, village, unincorporated urban area)*

Residential, Business and Industrial



POTENTIAL HAZARDOUS WASTE SITE  
 SITE INSPECTION REPORT  
 PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NC	D 986 166 353

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

A.  $10^{-6} - 10^{-8}$  cm/sec assume clays  
 B.  $10^{-4} - 10^{-6}$  cm/sec  
 C.  $10^{-4} - 10^{-3}$  cm/sec  
 D. GREATER THAN  $10^{-3}$  cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

gnuss

A. IMPERMEABLE (Less than  $10^{-6}$  cm/sec)  
 B. RELATIVELY IMPERMEABLE ( $10^{-4} - 10^{-6}$  cm/sec)  
 C. RELATIVELY PERMEABLE ( $10^{-2} - 10^{-4}$  cm/sec)  
 D. VERY PERMEABLE (Greater than  $10^{-2}$  cm/sec)

03 DEPTH TO BEDROCK

unknown (ft)

04 DEPTH OF CONTAMINATED SOIL ZONE

NA (ft)

05 SOIL pH

unknown

06 NET PRECIPITATION

6 - 8 (in)

07 ONE YEAR 24 HOUR RAINFALL

2.9 (in)

08 SLOPE

SITE SLOPE  
 .001 %

DIRECTION OF SITE SLOPE  
 South

TERRAIN AVERAGE SLOPE  
 .03 %

09 FLOOD POTENTIAL

SITE IS IN > 500 YEAR FLOODPLAIN

10

SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

to head of inter-  
 mittent stream

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE

> 15 miles

OTHER

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

> 15 (mi)

A. \_\_\_\_\_ (mi)

B. \_\_\_\_\_ (mi)

ENDANGERED SPECIES: \_\_\_\_\_

13 LAND USE IN VICINITY.

DISTANCE TO:

COMMERCIAL/INDUSTRIAL

RESIDENTIAL AREAS; NATIONAL/STATE PARKS,  
 FORESTS, OR WILDLIFE RESERVES

AGRICULTURAL LANDS  
 PRIME AG LAND AG LAND

A. 0 (mi)

B. .0095 (mi)

C. \_\_\_\_\_ (mi)

D. > 1 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

The site slopes gently to the south. The intervening terrain between the site and the head of the intermittent creek slopes .03 percent.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis reports)

(45:USGS,1970) (28:NCDHR,1991) (Section 1.7 of SSI Report) (41:USDC,1963) (42:USDA,1973)



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION  
01 STATE: NC 02 SITE NUMBER: D 986 166 353

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER		Groundwater not accessible by hand auger.	
SURFACE WATER	1	NC Laboratory of Public Health	8/91
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL	2	NC Laboratory of Public Health	8/91
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
OVA	0 PPM

IV. PHOTOGRAPHS AND MAPS

01 TYPE <input checked="" type="checkbox"/> GROUND <input type="checkbox"/> AERIAL	02 IN CUSTODY OF <u>NC Superfund Section</u> <small>(Name of organization or individual)</small>
03 MAPS <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	04 LOCATION OF MAPS <u>NC Superfund Section</u>

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Site Sampling Trip May 22, 1991, (45:USGS,1970)



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 7 - OWNER INFORMATION

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
NC D 986 166 353

II. CURRENT OWNER(S) PARENT COMPANY (if applicable)

01 NAME Wayne Franklin			02 D+B NUMBER		08 NAME			09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.) 2506 58th Street			04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD #, etc.)			11 SIC CODE	
05 CITY Hampton		06 STATE VA	07 ZIP CODE 23661		12 CITY		13 STATE	14 ZIP CODE	
01 NAME			02 D+B NUMBER		08 NAME			09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD #, etc.)			11 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE		12 CITY		13 STATE	14 ZIP CODE	
01 NAME			02 D+B NUMBER		08 NAME			09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD #, etc.)			11 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE		12 CITY		13 STATE	14 ZIP CODE	
01 NAME			02 D+B NUMBER		08 NAME			09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD #, etc.)			11 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE		12 CITY		13 STATE	14 ZIP CODE	

III. PREVIOUS OWNER(S) (List most recent first) IV. REALTY OWNER(S) (if applicable; list most recent first)

01 NAME GTE Services Corp.			02 D+B NUMBER		01 NAME			02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.) One Stamford Forum			04 SIC CODE		03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE	
05 CITY Stamford		06 STATE CT	07 ZIP CODE 06904		05 CITY		06 STATE	07 ZIP CODE	
01 NAME			02 D+B NUMBER		01 NAME			02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE		03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE		05 CITY		06 STATE	07 ZIP CODE	
01 NAME			02 D+B NUMBER		01 NAME			02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE		03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE		05 CITY		06 STATE	07 ZIP CODE	

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

(23:Nicholson, 1988)





POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
NC D 986 166 353

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		
05 CITY	06 STATE	07 ZIP CODE	

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis reports)

Blank area for sources of information.



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
NC D 986 166 353

II. PAST RESPONSE ACTIVITIES

01 <input type="checkbox"/> A. WATER SUPPLY CLOSED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> B. TEMPORARY WATER SUPPLY PROVIDED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> C. PERMANENT WATER SUPPLY PROVIDED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> D. SPILLED MATERIAL REMOVED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> E. CONTAMINATED SOIL REMOVED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> F. WASTE REPACKAGED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> G. WASTE DISPOSED ELSEWHERE 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> H. ON SITE BURIAL 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> I. IN SITU CHEMICAL TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> J. IN SITU BIOLOGICAL TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> K. IN SITU PHYSICAL TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> L. ENCAPSULATION 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> M. EMERGENCY WASTE TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> N. CUTOFF WALLS 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> O. EMERGENCY DIKING/SURFACE WATER DIVERSION 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> P. CUTOFF TRENCHES/SUMP 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> Q. SUBSURFACE CUTOFF WALL 04 DESCRIPTION	02 DATE _____	03 AGENCY _____



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE | 02 SITE NUMBER  
NC | D 986 166 353

II PAST RESPONSE ACTIVITIES *(Continued)*

01  R. BARRIER WALLS CONSTRUCTED  
04 DESCRIPTION  
02 DATE \_\_\_\_\_ 03 AGENCY \_\_\_\_\_

01  S. CAPPING/COVERING  
04 DESCRIPTION  
02 DATE \_\_\_\_\_ 03 AGENCY \_\_\_\_\_

01  T. BULK TANKAGE REPAIRED  
04 DESCRIPTION  
02 DATE \_\_\_\_\_ 03 AGENCY \_\_\_\_\_

01  U. GROUT CURTAIN CONSTRUCTED  
04 DESCRIPTION  
02 DATE \_\_\_\_\_ 03 AGENCY \_\_\_\_\_

01  V. BOTTOM SEALED  
04 DESCRIPTION  
02 DATE \_\_\_\_\_ 03 AGENCY \_\_\_\_\_

01  W. GAS CONTROL  
04 DESCRIPTION  
02 DATE \_\_\_\_\_ 03 AGENCY \_\_\_\_\_

01  X. FIRE CONTROL  
04 DESCRIPTION  
02 DATE \_\_\_\_\_ 03 AGENCY \_\_\_\_\_

01  Y. LEACHATE TREATMENT  
04 DESCRIPTION  
02 DATE \_\_\_\_\_ 03 AGENCY \_\_\_\_\_

01  Z. AREA EVACUATED  
04 DESCRIPTION  
02 DATE \_\_\_\_\_ 03 AGENCY \_\_\_\_\_

01  1. ACCESS TO SITE RESTRICTED  
04 DESCRIPTION  
02 DATE \_\_\_\_\_ 03 AGENCY \_\_\_\_\_

01  2. POPULATION RELOCATED  
04 DESCRIPTION  
02 DATE \_\_\_\_\_ 03 AGENCY \_\_\_\_\_

01  3. OTHER REMEDIAL ACTIVITIES  
04 DESCRIPTION  
02 DATE 9/89 03 AGENCY USEPA  
GTE  
HART ENVIRON.  
Drum removal and building decon.

III. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis reports)*

(3:D.Carlo,1989)



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NC	D 986 166 353

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION  YES  NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

The USEPA oversite contractor, Roy F. Weston oversaw the drum removal and facility decon performed by Hart Environmental. The project was funded by GTE Services Corp., and occurred in April 1989 and September 1989.

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis reports)

(3:D.Carlo,1989)

APPENDIX E  
SITE SAFETY PLAN

SITE HEALTH AND SAFETY PLAN

A. General Information

Site Name Southern Desk ID # NCD 986 166 353  
Location Corner of 17th Street and 1st Ave. SW Date May 13, 1991  
Hickory, NC

Proposed Date of Investigation May 15, 1991  
Date of Briefing May 14, 1991  
Date of Debriefing May 17, 1991

Nature of Visit (check one): On-Site Reconnaissance (PA) \_\_\_\_\_  
On-Site Reconnaissance (SI) \_\_\_\_\_  
Site Investigation X

Health Department Official Contacted Tina Propst for Tom Spurling  
Date of Contact April 29, 1991

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>Mary Ganley</u>	<u>team leader, sampling</u>	<u>Mary Ganley</u>
Team 1 <u>John McConney</u>	<u>sampling</u>	<u>J.P. McConney</u>
Team 2 <u>Hanna Assefa</u>	<u>sampling</u>	<u>Hanna Assefa</u>
Team 2 <u>David Lilley</u>	<u>air sampling</u>	<u>David B. Lilley</u>

Plan Preparation:

Prepared By: David Lilley, Industrial Hygienist  
Reviewed By: Jack Butler, Environmental Engineer

David B. Lilley  
Jack Butler



Facility Description: Size about 1 acre Buildings 2

Disposal Methods Being Investigated Spillage and residue around drum and tank areas.

Unusual Features on Site (dike integrity, power lines, terrain, etc.):  
Storage room ceiling leaked, causing drums inside to corrode.

History of the Site: The plant was built in the 1930s, and for the last 20 years it has been owned by various companies involved with furniture manufacturing. The current owner sells new and used woodworking machinery and leases space to other businesses. An immediate removal of drums containing lacquers and varnishes was completed in 1989 or 1990.

#### C. HAZARD EVALUATION

The site can be toured and sampled in level D protection. PE or PVC gloves will be worn while collecting water and soil samples, nitrile gloves under PE or PVC gloves will be worn if discolored soil or sludge is encountered. The OVA will be used to monitor breathing zone air while auguring. If OVA readings exceed background in the breathing zone, fill in that hole and evacuate that area. Tyvek suits (saranex in wet conditions) will be used by all persons on the field crew while auguring, installing, sampling, and removing the well points. Steel toed work boots will be worn while conducting tour and sampling, auguring, placing, or removing well points.

#### 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, face shield, and PVC gloves while preparing acid preserved samples, goggles and PVC gloves while 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>  X  </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, surface water, sediment, and  
soil 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 986 166 353

Location of Nearest Phone: on-site: this is an operational facility

Hospital (Address and Phone Number)

Frye Regional Medical Center, 420 North Center Street, Hickory, NC 28601

(704) 322-6070

Emergency Transportation Systems (Phone Numbers)

Fire 911

Ambulance 911

Rescue Squad 911

Emergency Route to Hospital Travel east on 1st Avenue about 14 blocks, turn left onto North Center Street and travel about 4 blocks, the hospital will be on the left.

PREVAILING WEATHER CONDITIONS AND FORECAST Partly cloudy with a chance of rain, highs in the 80s.

**EQUIPMENT CHECKLIST**

<input type="checkbox"/>	Air purifying respirator	<input checked="" type="checkbox"/>	First Aid Kit
<input type="checkbox"/>	Cartridges for respirator	<input checked="" type="checkbox"/>	3 gal. Deionized H2O
<input checked="" type="checkbox"/>	Eye Wash Unit	<input checked="" type="checkbox"/>	Rainsuit
<input type="checkbox"/>	HNU	<input checked="" type="checkbox"/>	Gloves (PE/PVC/nitrile/cloth)
<input checked="" type="checkbox"/>	OVA	<input checked="" type="checkbox"/>	Boots/Boot Covers
<input type="checkbox"/>	Explosimeter	<input checked="" type="checkbox"/>	Coveralls (tyvek/saranex)
<input type="checkbox"/>	Radiation Monitor	<input checked="" type="checkbox"/>	Eye Protection
<input checked="" type="checkbox"/>	Decontamination Materials	<input checked="" type="checkbox"/>	Hard Hat

Poison Control Center - State Coordinator

Duke University Medical Center

Telephone: 1-800-672-1697

Box 3024

Durham, NC 27710

ASHEVILLE	Western NC Poison	HENDERSONVILLE	Margaret R. Pardee
704-255-4490	Control Center	704-693-6522	Memorial Hospital
	Memorial Mission Hosp.	Ext. 555,556	Fleming St., 28739
	509 Biltmore Ave. 28801		

CHARLOTTE	Mercy Hospital	HICKORY	Catawba Mem. Hosp.
704-379-5827	2001 Vail Ave, 28207	704-322-6649	Fairgrove Chur. Rd 28601

DURHAM	Duke Univ. Med. Center	JACKSONVILLE	Onslow Mem. Hospital
1-800-672-1697	Box 3007, 27710	919-577-2555	Western Blvd. 28540

GREENSBORO	Moses Cone Hospital	WILMINGTON	New Hanover Mem. Hospital
919-379-4105	1200 N. Elm St. 27420	919-343-7046	2131 S. 17th St. 28401

safeform.126

TO BE COMPLETED BY PROJECT MANAGER

PROJECT MANAGER: Mary Ganley PROJECT: Southern Desk  
INVESTIGATION DATE: May 15 and 16, 1991  
RECONNAISSANCE \_\_\_\_\_ SAMPLING VISIT X

Materials Used (Please insert a number in the blank)

_____ Air Purifying respirator cartridges	_____ Gloves (nitrile)
_____ Eye Wash Units	_____ Gloves (cloth)
_____ First Aid Kit	_____ Boot covers
<u>X</u> _____ Gloves (polyethylene)	<u>X</u> _____ Coveralls (tyvek)
<u>X</u> _____ Gloves (PVC)	_____ Coveralls (saranex)

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

Air Monitoring Data (Include Calibration Reading)

HNU: NA

OVA: Ambient air and down hole readings - 0 ppm

Explosimeter: NA

Radiation Meter: NA

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

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Visitors Present  
Lewis Palmer  
\_\_\_\_\_  
\_\_\_\_\_

Organization Represented  
Southern Desk  
\_\_\_\_\_  
\_\_\_\_\_

Mary Ganley  
Signature



HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Methylene Chloride

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula <u>CH<sub>2</sub>Cl<sub>2</sub></u>	<u>1</u>
Natural Physical State at 25°C <u>liquid</u>	<u>2</u>
Vapor Pressure <u>350</u> mm Hg at 20°C	<u>2</u>
Melting Point <u>-141</u> °F/°C Boiling Point <u>104</u> °F/°C	<u>2</u>
Flash Point (open or closed cup) <u>?</u> °C/°F	<u>2</u>
Solubility - H <sub>2</sub> O <u>soluble in 50 parts water</u>	<u>1</u>
Other <u>miscible with alcohols, ether,</u>	<u>1</u>
<u>DMF</u>	

Physical Features: (odor, color, etc.) Colorless liquid with a chloroform-like odor (2) IP = 11.35 eV. Relative response on HNU = 9.4. OVA Relative Response = 100%

II. TOXICOLOGICAL DATA

suspect human  
carcinogen

Standards: 50 ppm(3) TLV 500 ppm(4) PEL           IDLH 3

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

Acute/Chronic Symptoms: Fatigue, weakness, sleepiness, light headedness, numb and tingling limbs, nausea, eye and skin irritation, vertigo, choking (2)

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

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: 1,2-dichloroethane

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula <u>C<sub>2</sub>H<sub>4</sub>Cl<sub>2</sub></u>	<u>1</u>
Natural Physical State at 25°C <u>liquid</u>	<u>2</u>
Vapor Pressure <u>62</u> mm Hg at 20°C	<u>2</u>
Melting Point <u>-32</u> °F/°C Boiling Point <u>183</u> °F/°C	<u>2</u>
Flash Point (open or closed cup) <u>55</u> °C/°F	<u>2</u>
Solubility - H <sub>2</sub> O <u>0.8%</u>	<u>2</u>
Other <u>alcohol, chlorform, ether</u>	<u>1</u>

Physical Features: (odor, color, etc.) clear liquid with a sweet odor like chloroform(2) 1P=11.12 eV, HNU sensitivity=12.9 with 11.7 eV probe.

II. TOXICOLOGICAL DATA REL = 1 ppm for 10 hour TWA (2)  
suspect

Standards: 10 ppm(3) TLV 1 ppm(4) PEL carcinogen IDLH 2

Routes of Exposure: Inhalation, Ingestion, Skin absorption, eye contact

Acute/Chronic Symptoms: Central nervous system depression, nausea, vomiting, dermatitis, eye irritation, corneal opacity, suspect carcinogen(2).

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



HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Toluene (Methyl benzene, toluol)

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula <u>C7H8</u>	<u>1,2,3,4</u>
Natural Physical State at 25°C <u>liquid</u>	<u>1,2,3,4</u>
Vapor Pressure <u>2</u> mm Hg at 20°C	<u>4</u>
Melting Point <u>-95</u> °F/°C Boiling Point <u>110.6</u> °F/°C	<u>1,3,4</u>
Flash Point (open or closed cup) <u>40</u> °C/°F	<u>1,2,3,4</u>
Solubility - H <sub>2</sub> O <u>slightly soluble</u>	<u>1,3,4</u>
Other <u>miscible with alcohol, chloroform,</u>	<u>1,3,4</u>
<u>ether, acetone, glacial acetic acid, carbon disulfide</u>	

Physical Features: (odor, color, etc.) colorless liquid with an aromatic odor, IP 8.82 eV, derived from coal tar oil or petroleum  
 Relative response on HNU = 10

II. TOXICOLOGICAL DATA

Standards: 100 ppm (5) TLV 100 ppm (6) PEL 2000 ppm IDLH 4

Routes of Exposure: inhalation; ingestion, skin contact, eye contact

Acute/Chronic Symptoms: Narcotic in high concentrations, headache, lassitude, and nausea. Chronic: anemia and dermatitis.

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

Chemical Name: Toluene

III. HAZARDOUS CHARACTERISTICS

Reference

A. Combustibility Yes X No      4  
Toxic by-products                       
  

B. Flammability LEL 1.0% UEL 7.0% 4

C. Reactivity Hazard strong oxidizers 3

D. Corrosivity Hazard yes/no pH:           

Neutralizing agent:   

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

IV. REFERENCES

(1) The Merck Index, 11th Edition, 1989  
(2) Documentation of the TLV, 4th Edition, 1980  
(3) NIOSH Pocket Guide for Chemical Hazards, 1987  
(4) NEPA, Protection Guide on Hazardous Materials, 8th  
    Edition, 1984  
(5) Threshold Limit Values and Biological Exposure Indices  
    for 1990-1991.  
(6) 1910.1000, 1989.

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Methyl Ethyl Ketone (2 Butanone)

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula <u>C4 H8 O</u>	<u>1,2,3</u>
Natural Physical State at 25°C <u>liquid</u>	<u>1,2,3</u>
Vapor Pressure <u>70.6</u> mm Hg at 20°C	<u>2,3</u>
Melting Point <u>-123</u> °F/°C Boiling Point <u>175</u> °F/°C	<u>2</u>
Flash Point (open or closed cup) <u>35</u> °C/°F	<u>1,2</u>
Solubility - H <sub>2</sub> O <u>27%</u>	<u>1,3</u>
Other <u>common organic solvents</u>	<u>2</u>

Physical Features: (odor, color, etc.) clear, colorless liquid with acetone-like odor, odor detection 10 ppm IP - 9.48 eV  
Hnu sensitivity with 10.2 eV probe = 5.7

II. TOXICOLOGICAL DATA

Standards: 200 ppm (4) TLV 200 ppm (5) PEL 3000 ppm IDLH 3

Routes of Exposure: Inhalation, Ingestion, Skin Contact, Eye Contact

Acute/Chronic Symptoms: irritation of eyes and nose, headache, dizziness, vomiting (3).

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



HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Methyl Isobutyl Ketone

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula <u>C<sub>6</sub>H<sub>12</sub>O</u>	<u>1</u>
Natural Physical State at 25°C <u>liquid</u>	<u>2</u>
Vapor Pressure <u>15</u> mm Hg at 20°C	<u>3</u>
Melting Point <u>-119</u> °F/°C Boiling Point <u>244</u> °F/°C	<u>3</u>
Flash Point (open or closed cup) <u>73</u> °C/°F	<u>3</u>
Solubility - H <sub>2</sub> O <u>1.9%</u>	<u>3</u>
Other <u>micible with alcohol, chloroform, ether</u>	<u>1</u>

Physical Features: (odor, color, etc.) Colorless liquid with a pleasant odor (3) IP = 9.30 eV, HNU sensitivity with 10.2 eV probe = 5.7  
Relative Response on OVA = 80%

II. TOXICOLOGICAL DATA

Standards: 50ppm (4) TLV      50ppm (5) PEL      3,000ppm (3) IDLH

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

Acute/Chronic Symptoms: Irritation of the eyes and mucous membranes, headache, drowsiness, skin problems (4)

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

Chemical Name: Methyl Isobutyl Ketone

III. HAZARDOUS CHARACTERISTICS

Reference

A. Combustibility Yes X No      4  
Toxic by-products "Irritating vapors are generated  
when heated" 6

B. Flammability LEL 1.4% UEL 7.5% 3

C. Reactivity Hazard Incompatible with strong oxidizers 3

D. Corrosivity Hazard yes/no pH:          

Neutralizing agent:          

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

IV. REFERENCES

1. The Merck Index, 11th Edition, 1989.
2. Condensed Chemical Dictionary, Sax, 11th Edition.
3. NIOSH Pocket Guide to Chemical Hazards, 1987.
4. ACGIH Threshold Limit Values and Biological Exposure Indices for 1990-1991.
5. 29 CFR 1910.1000.
6. Chemical Hazard Response Information System, US Department of Transportation, 1985.

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Xylene, O, M, & P (Dimethyl benzene)

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula <u>C8 H10</u>	<u>1</u>
Natural Physical State at 25°C <u>liquid</u>	<u>1</u>
Vapor Pressure <u>7-9</u> mm Hg at 20°C	<u>1</u>
Melting Point <u>13-14</u> °F/°C Boiling Point <u>137-140</u> °F/°C	<u>1</u>
Flash Point (open or closed cup) <u>90/84/81</u> °C/°F	<u>1</u>
Solubility - H <sub>2</sub> O <u>insoluble</u>	<u>1</u>
Other <u>soluble in alcohol, ether and most</u>	<u>1</u>
<u>other organic solvents.</u>	

Physical Features: (odor, color, etc.) colorless liquid with aromatic/ benzene odor. Common solvent for paints and coatings. IP = 8.5 eV.  
HNU relative response with 10.2 eV probe = 11.3, OVA relative response = 111 - 116%

II. TOXICOLOGICAL DATA

Standards: 100 ppm (2) TLV 100 ppm (3) PEL 1,000 ppm (4) IDLH 4

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

Acute/Chronic Symptoms: headache, fatigue, dizziness, lassitude, narcotic effects in high concentrations (5,6). Chronic effects not well defined (1).

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



HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Benzene

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula <u>C6 H6</u>	<u>1,2</u>
Natural Physical State at 25°C <u>liquid</u>	<u>1,2</u>
Vapor Pressure <u>75</u> mm Hg at 20°C	<u>1,2</u>
Melting Point <u>42</u> °F/°C Boiling Point <u>80</u> °F/°C	<u>1,2</u>
Flash Point (open or closed cup) <u>12</u> °C/°F	<u>1,2</u>
Solubility - H <sub>2</sub> O <u>0.18%</u>	<u>2</u>
Other <u>in alcohol, Acetone Ether</u>	<u>1</u>

Physical Features: (odor, color, etc.) colorless liquid with odor of aromatic hydrocarbons IP = 9.24 eV. Relative response on HNU = 10  
Relative Response on OVA = 150%

II. TOXICOLOGICAL DATA

Standards: 10 ppm (3) TLV 10 ppm (4) PEL potential human carcinogen IDLH 2

Routes of Exposure: inhalation, ingestion, skin contact, eye contact

Acute/Chronic Symptoms: Upper respiratory irritation, muscle spasms, slow pulse, irritated eyes and skin burns, suspect human carcinogen. (1)

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

Chemical Name: Benzene

III. HAZARDOUS CHARACTERISTICS

Reference

A. Combustibility Yes X No      2  
Toxic by-products not pertinent 5

B. Flammability LEL 1.3% UEL 7.1% 2

C. Reactivity Hazard Strong oxidizer, chlorine 2

D. Corrosivity Hazard yes/no pH:     

Neutralizing agent:     

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

IV. REFERENCES

- (1) Documentation of the TLV's, 4th Edition, 1980
- (2) Pocket Guide to Chemical Hazards, NIOSH, 1987
- (3) Threshold Limit Values and Biological Indices for  
1990-1991, ACGIH.
- (4) CFR 1910.1000.
- (5) Chemical Hazard Response Information System, US Coast  
Guard, 1985.

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Ethyl Benzene

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula <u>C8 H10</u>	<u>1,2</u>
Natural Physical State at 25°C <u>liquid</u>	<u>1,2</u>
Vapor Pressure <u>7.1</u> mm Hg at 20°C	<u>2</u>
Melting Point <u>-95</u> °F/°C Boiling Point <u>136</u> °F/°C	<u>1</u>
Flash Point (open or <u>closed cup</u> ) <u>59-64</u> °C/°F	<u>1,2</u>
Solubility - H <sub>2</sub> O <u>0.015%</u>	<u>2</u>
Other <u>miscible with usual organic solvents</u>	<u>1</u>

Physical Features: (odor, color, etc.) colorless, flammable liquid  
with an aromatic odor. IP = 8.76 eV Relative Response OVA = 100%

II. TOXICOLOGICAL DATA

Standards: 100 ppm (3) TLV 100 ppm (4) PEL 2000 ppm IDLH 2

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

Acute/Chronic Symptoms: Irritation of the eyes and mucus membranes, headache,  
skin problems, sleepiness, coma (2)

First Aid: Eyes: irrigate immediately; Skin; water flush promptly; Inhalation;  
fresh air, artificial respiration; Ingestion: medical attention immediately.

Chemical Name: Ethyl Benzene

III. HAZARDOUS CHARACTERISTICS

Reference

A. Combustibility Yes X No      2  
Toxic by-products none known       
         

B. Flammability LEL 1.0% UEL 6.7% 2

C. Reactivity Hazard Strong oxidizers 2

D. Corrosivity Hazard yes/no pH:          

Neutralizing agent:          

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

IV. REFERENCES

- (1) The Merck Index, 11th Edition, 1989
- (2) Pocket Guide to Chemical Hazards, NIOSH 1987
- (3) Threshold Limit Values and Biological Exposure Indices  
for 1990-91, ACGIH.
- (4) 29 CFR 1910.1000.