35316

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

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

Received
APR 09 1990

November 6, 1984

Mr. Dave Daugherty
Senior Manufacturing Engineer
Westinghouse Electric Corporation
Electronics, Measurement and Controls Division
2728 North Boulevard
P.O. Box 9533
Raleigh, NC 27603

Dear Dave:

Please find enclosed copies of photographs, per your request, taken during our site visit of October 16, 1984.

If you have any questions, please contact me at (919) 733-2178.

Sincerely,

Lenox E. Bramble

Lenox E. Bramble
Environmental Engineer

Solid & Hazardous Waste Management Branch
Environmental Health Section

LB/lw

Enclosures

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NC	D003195963

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one) EST. Saprolite Clays (red)

☐ A. $10^{-6} - 10^{-8}$ cm/sec X☐ 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)

☐ 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	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
_____ (ft)	Est. .5-1 (ft)	_____

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
45" (in)	4" - 6" (in)	2-3 %	South	1 - 2 %

09 FLOOD POTENTIAL

SITE IS IN _____ YEAR FLOODPLAIN

10 ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE: A. _____ (mi)

OTHER: B. _____ (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

_____ (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	AGRICULTURAL LANDS: AG LAND
A. .1 (mi)	B. .5 (mi)	C. _____ (mi)	D. _____ (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

The disposal area is off on the SW corner of the facility. The waste area is overgrown with kudzu. The area around the disposal area is well maintained (grass cut regularly) and a security fence is near (40') the impoundment on the south and east sides. A drainage area, which does receive run-off from the facility, runs along just to the east of the impoundment (50'). The drainage was running at an estimated 1 gal/min. and "dried-up" approximately 400' - 500' down stream from the impoundment, still on Westinghouse property. The area outside of the fence is forested in mixed pines and hardwoods. As before, US #1 and the Beltline boarder the property on the North and West.

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

USGS 7.5' Quad - Raleigh East, N. C. Photo Revised 1973
SI visit 7-20-84
N.C. infor Atlas

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NC	D003195963

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER			
SURFACE WATER	3	N.C. Health Services Lab - Raleigh, N. C.	4-5 weeks
WASTE	3	Bath Bldg.	
AIR		all rec'd by 8-22-84	
RUNOFF			
SPILL			
SOIL	1		
VEGETATION			
OTHER Sediment	3		

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
pH, Cord., Temp.	Surface water measurements - Up-gradient-adjacent-down-gradient.
	of waste area along drainage next to impoundment. The waste was augered
	through to determine the approximate depth - approx. 6 feet.
	Waste area measured and estimated at 2,000 cu yd by Westinghouse.

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☐ GROUND ☐ AERIAL

02 IN CUSTODY OF Camera Problems - No photos on SI (Name of organization or individual)

03 MAPS ☒ YES ☐ NO

04 LOCATION OF MAPS NC 3012 Office-Sketch Maps

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

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

SI visit 7-20-84
Lab results
Westinghouse Letter 8-15-84 Daugherty to Moore

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NC	D003195963

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
Westinghouse Company		US #1 North	3545	Raleigh	NC	27603

PARENT COMPANY (If applicable)

08 NAME	09 D+B NUMBER	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE	12 CITY	13 STATE	14 ZIP CODE
Westinghouse Electric Co.		Gateway Center - Stanwix Street		Pittsburgh	PA	15222

III. PREVIOUS OWNER(S) (List most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE

IV. REALTY OWNER(S) (If applicable; list most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE

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

RCRA Part "A"

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NC	D003195963

II. CURRENT OPERATOR (Provide if different from owner)			OPERATOR'S PARENT COMPANY (If applicable)		
01 NAME SAME		02 D+B NUMBER	10 NAME		11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER				

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)			PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)		
01 NAME		02 D+B NUMBER	10 NAME		11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD				
01 NAME		02 D+B NUMBER	10 NAME		11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD				
01 NAME		02 D+B NUMBER	10 NAME		11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD				

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

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NC	D003195963

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☒ YES ☐ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

In 1975 the State's Solid Waste Program notified Westinghouse that they could not dispose of their plating sludge in the Knightdale landfill. The State then worked with Westinghouse in developing a chem-fixed method with cement.

The chem-fixed sludge was then disposed of in the Rowlands landfill.

This disposal was stopped when RCRA started.

The waste plating sludge was disposed of on site from around 1955 until 1973.

Note: Some waste solvents were also drumed and disposed of off-site (ldfl).

III. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

Branch Solid Waste Files

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NC	D003195963

II PAST RESPONSE ACTIVITIES *(Continued)*

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

III. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

Westinghouse Letters 12-22-75 H Matthews to Strickland
8-15-84 Daugherty to Moore

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NC	D003195963

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ F. WASTE REPACKAGED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 XX G. WASTE DISPOSED ELSEWHERE — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION Mid 1974 to end of 1975 - plating sludge drumed and disposed in Knightdale landfill. May 1978 to 1980 disposed chem-fixed sludge in Rowlands landfill

01 ☐ H. ON SITE BURIAL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ L. ENCAPSULATION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ N. CUTOFF WALLS — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NC	D003195963

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
Westinghouse	

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
N/A			

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)

EPA FORM 2070-13 (7-81)

GENERAL INFORMATION

A sample analyses request form (DHS 3191) must be completed for each type of evaluation requested (e.g., inorganic, organic, microbiology, radiochemistry). For sampling conditions which require more than one (1) container (i.e., ground or surface water from landfills) a sample label must be affixed to one of the containers. The collector must then write the site and sample number on the duplicate.

Do not submit an analysis request sheet with no parameters indicated.

Equivalent measurements:

ppm = μg/ml = mg/l = μg/g = mg/kg
ppb = μg/l = μg/1000g = μg/kg

DEFINITIONS/INSTRUCTIONS

Site Number - A twelve-digit site/location identifier, assigned only by the district field representative.

Field Sample Number - A six-digit sample identifier which is pre-printed on the sample label.

Name of Site - Name of landfill, facility, etc.

Site Location - Address, street number, state road, etc.

Collected By - Name and ID of sample collector.

Date and Time Collected - Self-explanatory.

Environmental - A sample of a naturally occurring substance such as groundwater, surface water or soils which may be contaminated.

Concentrate - A sample of a waste, including but not limited to, sludges, resins, treatment effluents or drummed wastes.

Comments - Lists details regarding sample or sample point, including but limited to, phase separation, and/or odors.

Inorganic Chemistry - Check (✓) the desired parameters to be analyzed. Extractables are only performed on a solid or semi-solid. For routine landfill samples, check all parameters in the second and third columns.

Organic Chemistry - Check (✓) the desired parameter to be analyzed. If not listed, enter the name in the space provided.

Microbiology and Radiochemistry - The Raleigh office should be consulted prior to sampling for either of these.

#8

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

Site Number 92-00000100 X Field Sample Number 001334
Name of Site Westinghouse Site Location US#1 N Rd
Collected By F. Moore ID# 827 Date Collected 7-20-84 Time 10:45 AM

Type of Sample:

Environmental	Concentrate	Comments
___ Groundwater	X Solid	Augered hole 5-6' in pit
___ Surface Water	___ Liquid	
___ Soil	___ Sludge	Ck for solvents halogenated / non-halogenated
___ Other	___ Other	

INORGANIC CHEMISTRY

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

ORGANIC CHEMISTRY

Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
___ Endrin		___ Toxaphene		___ PCB's	
___ Lindane		___ 2,4-D		___ Petroleum	
___ Methoxychlor		___ 2,4,5-TP(Silvex)		___ EDB	
				___ TOX	
		✓ VOA	N.D.*		

MICROBIOLOGY

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

RADIOCHEMISTRY

Parameter	Results PCi/l
___ Gross Alpha	
___ Gross Beta	

Ck for halogenated / non-halogenated solvents

Date Received 7/20/84 Date Reported 8/24/84
Date Extracted ___ Date Analyzed 8/22/84
Reported By ___ Lab Number 4[illegible]396[illegible]

* N.D. = < 0.01 ppm (µg/g)

DHS 3191 (Revised 2/84)
Solid and Hazardous Waste

(0)

C. DEPARTMENT OF HUMAN RESOU S
DIVISION OF HEALTH SERVICES
SOLID AND HAZARDOUS WASTE MANAGEMENT BRANCH

Chain of Custody Record

Hazardous Waste Materials

Location of Sampling: ___Generator ___Transporter ___Treatment Facility
___Storage Facility ___Disposal Facility ___Landfill
X Other: Waste Sludge Pile - 3012 S1

Company's Name Westinghouse Telephone (919) 834-5271

Address US #1 Raleigh, N.C.

Collector's Name Frank E. Moore Telephone (919) 733-2178
signature

Date Sampled 7-20-84 Time Sampled 9:30 - 11:30 A.M.

Type of Process Generating Waste Electroplating

Field Information

Field Sample No. #8 001334

Chain of Possession:

1. Frank E. Moore — Geologist — 7-20-84
signature — title — inclusive dates

2. Anne L. Gobble — Anal. Chem I — 7-20-84
signature — title — inclusive dates

3. ___ — ___ — ___
signature — title — inclusive dates

Results reported

___ — ___ — ___
signature — title — date

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

Westinghouse (919) 834-5271

1953

~~Tom Daley~~ SI 19th

Dave ~~Daley~~ Daugherty w/ return call

6-27-84 - Talked w/ Dave Daugherty about Program & "his side"
Expect call from Corporate - Sherrie Grand?
Schedule visits for July 19th
Send Letter - [illegible]

7-11-84 Called to set-up visit & sampling
Meet [illegible]

7-20-84 SI completed

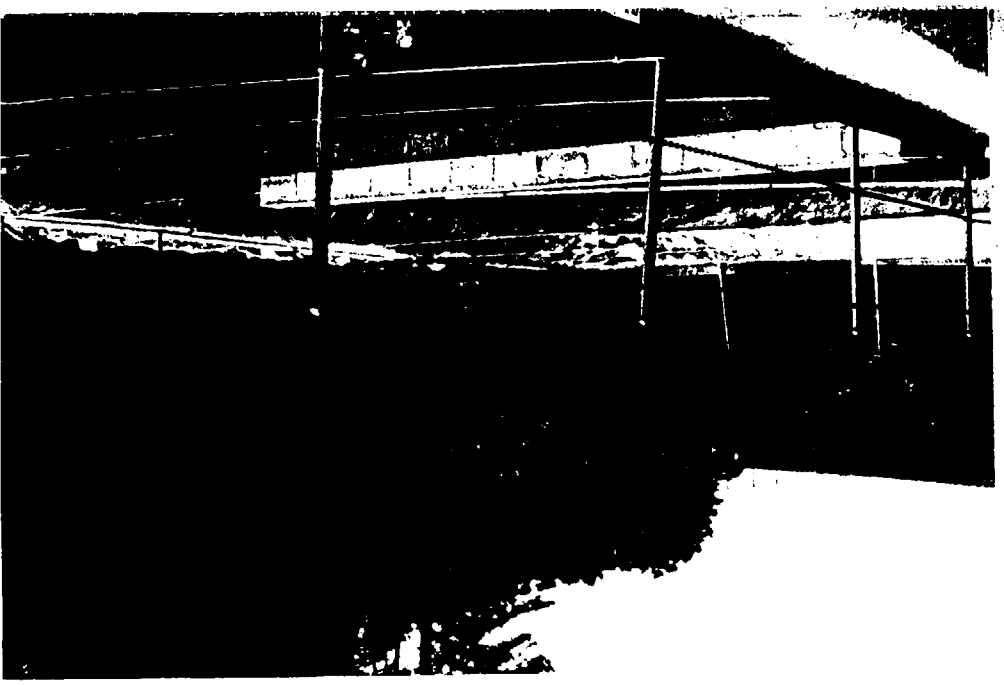
7-23-84 Relayed no picture

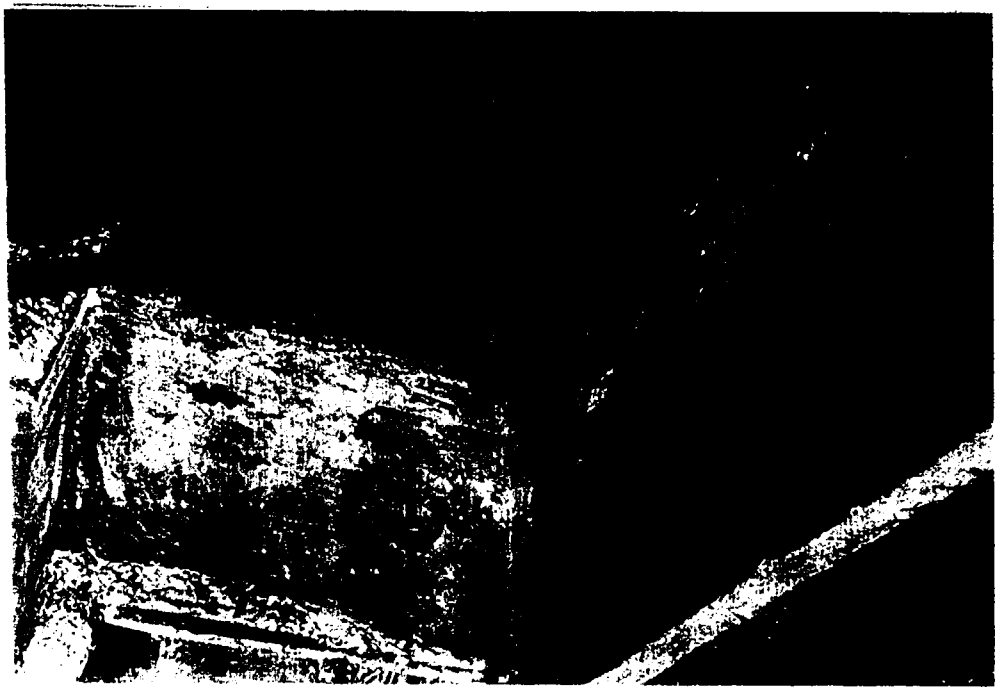
PA Complete - ~~Hold For Letter~~

OK
Rick
8-15-84

POOR LEGIBILITY

PORTIONS OF THIS DOCUMENT MAY BE UNREADABLE, DUE TO THE QUALITY OF THE ORIGINAL





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

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

William L. Meyer
Director

RECEIVED
APR 09 1990

5 April 1990

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

Subject: Copy Request
Westinghouse Electric Meter and Light
NCD 003 195 963

Dear Mr. Morris:

Enclosed please find a copy of the subject file as per your telephone request 4 April 1990. We have no HRS Score information on this site.

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

Sincerely,

Pat DeRosa, Head
CERCLA Branch
Solid Waste Management Division

cc: File

GN/db/pat.doc

CONSERVATION
COUNCIL OF
NORTH
CAROLINA

CCNC

file code 1.1

Reply To: 1024 Washington St.
Raleigh, NC 27605

Dave Daugherty
Westinghouse Electric Meter-Light
U.S. #1 North
Raleigh, N.C. 27603

July 24, 1986

Dear Mr. Daugherty:

The W[redacted] is included on the Department of Human Resources ERRIS list as containing improperly disposed hazardous waste. The record shows the existence of an unlined impoundment containing 2000 cubic yards of metal plating sludge wastes. There is a strong probability that the surrounding soil has been contaminated and that surface run-off has transported some of the material from the impoundment possibly contaminating the groundwater.

The CCNC believes that responsible parties should take steps to monitor and clean-up their own hazardous waste sites and record them on the property deed.

CCNC would like to know the present status of this site. What steps have been taken to monitor the waste and its environmental impact? What clean-up plans have been prepared or actually implemented? Has this site been recorded as containing hazardous waste on the deed?

We would appreciate any information you could provide as to the status of your progress at this site.

Thank you,

Bill Holman

Bill Holman, Director
Hazardous Waste Project
Conservation Council of North Carolina

cc: Jack Ravan, EPA
Bill Meyer, DHR

Westinghouse
Electric Corporation

Electronics. Measurement
and Control Divisions

Box 9533
Raleigh North Carolina
919 834 5[illegible]

August 15, 1984

Mr. Frank E. Moore
Solid & Hazardous Waste Management Branch
Environmental Health Section
Division of Health Services
P. O. Box 2091
Raleigh, NC 27602-2091

Dear Mr. Moore:

Following is our response to your letter of June 29, 1984 requesting information and documentation concerning the management of hazardous wastes and substances at our facility. The information provided below regarding storage, treatment and disposal activities is based upon our review of available documents.

The sole owner and operator of the Westinghouse plant on North Boulevard, Raleigh, North Carolina has been Westinghouse Electric Corporation since its construction in 1954. From its construction until mid-1955, operations at the plant consisted mainly of assembly of watthour meters and should have generated little or no hazardous wastes. In 1955 manufacture of watthour meter components was added to the assembly operations. Since then, manufacturing operations have resulted in the following general categories of hazardous wastes: sludges from treatment of plating wastewaters, degreasing still bottoms, waste solvents, paint and ink sludges, and precipitates, and solutions from plating tanks. Aside from the treatment of plating solutions, wastewater, and wastewater sludges, there has been no on-site treatment. The only disposal on-site has been of sludges from the wastewater treatment facility.

Sludges from the treatment of plating wastewater have been and still are the largest volume hazardous waste from this facility. Prior to 1974, plating wastewaters, after being subjected to cyanide destruction and chrome reduction, were treated with lime to produce a metal hydroxide sludge which settled in a thickener and which was then disposed in an on-site impoundment.

In 1973 modifications were begun to the wastewater treatment plant to improve the wastewater quality. Upon completion of these modifications in early 1974, lime precipitation of metals was replaced by caustic soda precipitation. We estimate 40 to 50 drums per month of sludge was produced after completing the modifications. These drums were shipped off-site to landfill from mid-1974 until the end of 1975. There are no records of where these wastes were disposed; however, a December 1975 letter to O. W. Strickland from H. J. Matthews, Works Engineer, advised that these wastes were being disposed of at the Wake County landfill in Knightdale, NC.

Sludge produced in 1976 was fixed with cement and sodium silicate, first on an experimental basis and later as a full scale operation.

We have records of three shipments of fixed material in 1978 and of several more shipments of fixed material through September 1980 for a total of about 900 cubic yards. This material was shipped to Rowlands Private Landfill, Raleigh, NC during the May 1978 to September 1980 period.

Fixed sludge produced from October 1980 through August 1983 was shipped to SCA Services, Inc., Pinewood, SC. Sludge produced after August 1983 has been filtered in a plate and frame filter press to about 25 weight percent solids and shipped to SCA Services, Inc. in the unfixed condition in drums.

Other wastes generated at the plant are degreasing still bottoms, paint sludges, and precipitates from plating tanks. We believe that all of these wastes were drummed and landfilled off-site prior to 1975. No records were found of which disposers were used other than the December 1975 letter to O. W. Strickland which estimated 10 barrels per month of this type waste had been being disposed of in

the Wake County landfill. We believe none of these wastes were sent to the landfill in 1976 or later.

We have records of the shipment and disposal of 170 drums of waste in 1979 and 1980 via RAD Services (now TRI of Reidsville, NC).

We have records of one shipment of three drums of PCB capacitors to Chemical Waste Management of Emmelle, Alabama on October 31, 1980.

Records exist of one spill of hazardous waste. On September 3, 1981 an equipment malfunction caused a spill of approximately 500 gallons of sludge from the neutralizing plant. The spilled sludge was contained on Westinghouse property by diking and was cleaned up on September 8 and 9, 1981. The sludge was placed in the mixer as cleanup progressed and was subsequently fixed with cement and sodium silicate. The environment or human health were not threatened by this event.

There are no ground water monitoring wells or other such sample monitoring points on the plant site.

Attached is a copy of our original CERCLA site notification to the U.S. EPA. Also to aid in your site evaluation, a topographic map of our inactive disposal area with updated waste volumes is included. The originally reported value of 100,000 cubic feet (3700 cubic yards) is high. Measurements indicate about 950 cubic yards of unfixed sludge are present on-site. Adjacent to the unfixed sludge disposal site is an area of about equal volume which is believed to be soil from grading done on the site in the early 1970s and some fixed material placed on-site before August 1980. The total volume of waste is estimated to be less than 2000 cubic yards.

Sincerely,

David P. Daugherty

David P. Daugherty
Senior Manufacturing Engineer

Enclosure

5248T

EPA Notification of Hazardous Waste Site

EXHIBIT "B"

United States Environmental Protection Agency Washington DC 20460

This initial notification information is required by Section 103(c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and must be mailed by June 9, 1981.

Please type or print in ink. If you need additional space, use separate sheets of paper. Indicate the letter of the item which applies.

Person Required to Notify:

Enter the name and address of the person or organization required to notify.

Name: Westinghouse Electric Corporation

Street: Gateway Center

City: Pittsburgh State: Pa. Zip Code: 15230

Site Location:

Enter the common name (if known) and actual location of the site.

Name of Site: Raleigh Energy Metering, and Control Business Unit

Street: P. O. Box 9533 2728 North Blvd.

City: Raleigh County: Wake State: N. C. Zip Code: 27611

Person to Contact:

Enter the name, title (if applicable), and business telephone number of the person to contact regarding information submitted on this form.

Name (Last, First and Title): Parker, P. T.

Phone: 919-834-5271

Dates of Waste Handling:

Enter the years that you estimate waste treatment, storage, or disposal began and ended at the site.

From (Year): 1955 To (Year): 1973

Waste Type: Choose the option you prefer to complete

Option 1: Select general waste types and source categories. If you do not know the general waste types or sources, you are encouraged to describe the site in Item I—Description of Site.

General Type of Waste: Place an X in the appropriate boxes. The categories listed overlap. Check each applicable category.

1. ☐ Organics
2. ☒ Inorganics
3. ☐ Solvents
4. ☐ Pesticides
5. ☒ Heavy metals
6. ☐ Acids
7. ☐ Bases
8. ☐ PCBs
9. ☐ Mixed Municipal Waste
10. ☐ Unknown
11. ☐ Other (Specify)

Source of Waste: Place an X in the appropriate boxes.

1. ☐ Mining
2. ☐ Construction
3. ☐ Textiles
4. ☐ Fertilizer
5. ☐ Paper Printing
6. ☐ Leather Tanning
7. ☐ Iron/Steel Foundry
8. ☐ Chemical, General
9. ☒ Plating/Polishing
10. ☐ Military/Ammunition
11. ☐ Electrical Conductors
12. ☐ Transformers
13. ☐ Utility Companies
14. ☐ Sanitary/Refuse
15. ☐ Photofinish
16. ☐ Lab/Hospital
17. ☐ Unknown
18. ☐ Other (Specify)

Option 2: This option is available to persons familiar with the Resource Conservation and Recovery Act (RCRA) Section 3001 regulations (40 CFR Part 261).

Specific Type of Waste:
EPA has assigned a four-digit number to each hazardous waste listed in the regulations under Section 3001 of RCRA. Enter the appropriate four-digit number in the boxes provided. A copy of the list of hazardous wastes and codes can be obtained by contacting the EPA Region serving the State in which the site is located.

D-006		
D-007		
D-008		
F-006		

Form Approved
OMB No. 2000-0138

EPA Form 8900-1

F Waste Quantity

Place an X in the appropriate boxes to indicate the facility types found at the site.

In the "total facility waste amount" space give the estimated combined quantity (volume) of hazardous wastes at the site using cubic feet or gallons.

In the "total facility area" space, give the estimated area size which the facilities occupy using square feet or acres.

Facility Type

1. ☐ Piles
2. ☐ Land Treatment
3. ☐ Landfill
4. ☐ Tanks
5. ☒ Impoundment
6. ☐ Underground Injection
7. ☐ Drums, Above Ground
8. ☐ Drums, Below Ground
9. ☐ Other (Specify) _____

Total Facility Waste Amount

cubic feet 100,000

gallons

Total Facility Area

square feet 10,000

acres

G Known, Suspected or Likely Releases to the Environment:

Place an X in the appropriate boxes to indicate any known, suspected or likely releases of wastes to the environment.

☐ Known ☐ Suspected ☐ Likely ☒ None

Note: Items H and I are optional. Completing these items will assist EPA and State and local governments in locating and assessing hazardous waste sites. Although completing the items is not required, you are encouraged to do so.

H Sketch Map of Site Location: (Optional)

Sketch a map showing streets, highways, routes or other prominent landmarks near the site. Place an X on the map to indicate the site location. Draw an arrow showing the direction north. You may substitute a publishing map showing the site location.

See Attachments "A" and "B"

I Description of Site: (Optional)

Describe the history and present conditions of the site. Give directions to the site and describe any nearby wells, springs, lakes, or housing. Include such information as how waste was disposed and where the waste came from. Provide any other information or comments which may help describe the site conditions.

This site is on property owned by Westinghouse Electric Corporation and located at 2728 North Blvd., Raleigh, N. C. It was utilized as a disposal area for sludge from our electro-plating wastewater operation from 1955 to 1973. The site is impounded by means of an earthen dam and at present is overgrown with vegetation.

J Signature and Title:

The person or authorized representative (such as plant managers, superintendents, trustees or attorneys) of persons required to notify must sign the form and provide a mailing address (if different than address in item A). For other persons providing notification, the signature is optional. Check the boxes which best describe the relationship to the site of the person required to notify. If you are not required to notify, check "Other".

Name C. E. Bell, General Manager

Street P. O. Box 9533

City Raleigh State N. C. Zip Code 27611

Signature C. E. Bell Date 5/10/82

☐ Owner, Present
☐ Owner, Past
☐ Transporter
☐ Operator, Present
☐ Operator, Past
☐ Other

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

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

August 10, 1984

Mr. Walton Jones
EPA 3012 Regional Project Officer
Air and Hazardous Materials Division
345 Courtland Street, N.E.
Atlanta, Georgia 30365

RE: Preliminary Assessment Reports/
Transmittal Letter

Dear Mr. Jones:

Submitted under this cover are the Preliminary Assessment Reports for the following ERRIS List Sites in North Carolina:

North State Chemicals, Inc. — NCD991278839
3301 Spring Garden Street — Guilford County
Greensboro, N. C. 27407

The location noted here is where the facility began operations sometime in 1978 as a processor and reclaimer of industrial chemical wastes. The company had problems with the property owner and moved to another location. The State forced a cleanup of the second location when the company went out of business in 1983. Both sites are "clean" and are not CERCLA hazardous waste disposal sites.

Based on the review of available information we recommend that no further action is required at this site. It is therefore requested that North State Chemicals be placed on the inactive ERRIS List.

Rohm & Haas, Inc. — NCD039047485
Cedar Creek Road — Cumberland County
Fayetteville, N. C. 28302

This listing is an ERRIS List Duplication and therefore request that it be removed from ERRIS. The correct site identification is: Rohm & Haas Co. - Corodel Plant NCD990714479, Cedar Creek Rd, Fayetteville. The correct listing is already on the ERRIS List and a PA is being completed for the site. The RCRA ID number is also NCD990714479.

Hoover Universal, Inc. NCD990715625
1131 Blandwood Circle Guilford County
High Point, N. C. 27261

Hoover notified for some 600 gallons of paint sludges and solvents stored on site since 1972 in steel drums. The wastes were properly disposed of under RCRA. Past hazardous waste disposals were also requested and have been noted. No disposals on-site.

Based on the review of available information we recommend that no further action is required at this site. It is therefore requested that Hoover Universal be placed on the inactive ERRIS List.

Indian Grave Gap Drum Disposal NCD980839757
SR # 1513 Caldewll County
Lenoir, N. C. 28645

In April of 1984 and undetermined quantity of relatively poor condition 55 gallon drums containing sludges and solids were reported to this office. Analyses of samples taken indicate some of the drums may contain hazardous wastes, heavy metals and organic solvents. This remote area, accessable by dirt road, has been used as a garbage dump for many years. Although no public health risks have been associated with this site a medium priority for site inspection is recommended. The SI would determine number and condition of drums, identify hazardous constitutents present and check for wastes migration potential. The use of aerial photographs will probably be requested for the SI. An initial study for responsible parties should also be considered.

Therefore, based on the review of available information we recommend that this site remain on the active ERRIS List for further evaluation as a hazardous waste disposal site.

Photo Chemical Systems, Inc. NCD000831065
11 N. Pine Street Wake County
Wendell, N. C. 27591

The company is no longer at this address, and will not be at its present address after September of this year. This operation sells commercial chemicals to its customers to use for plating and finishing of printed circuit boards. They notified under RCRA as a transporter, so they could dispose of their customers chemical plating wastes as a service to the customer. All hazardous waste is manifested to SCA. No disposals or releases of hazardous waste were reported for either location.

Based on the review of available information we recommend that no further action is required at this site. It is therefore requested that Photo Chemical Systems be placed on the inactive ERRIS List.

Woolfolk Chemical Works Wilson Road Wendell, N. C. 27591	NCD991277807 Wake County

Woolfolk sold commercial brands of pesticides and herbicides in small prepackaged containers. They notified under RCRA as a precaution incase of a ruptured container or fire they would have an I.D. number. No disposals or releases were reported during the time they operated out of this location, 1978 to 1982. Woolfolk no longer operates in Wendell and has closed several such facilities, similar to this one, elsewhere in North Carolina.

Based on the review of available information we recommend that no further action is required at this site. It is also requested that Woolfolk be placed on the inactive ERRIS List.

DuPont Station Road Cedar Mountain, N. C. 28718	NCD003152329 Transylvania County

DuPont notified under CERCLA 103(c) of two (2) disposal sites on plant property. One for acid disposals, 1958-1963 and the other for a gel with 170 ppm cadium chloride, 1973-1980. DuPont later notified 3012 of additional disposal sites on plant property during an information request by this office. These other disposal sites range from nonhazardous garbage to hazardous liquid solvent disposals. As far as potential problem areas, the liquid solvent waste disposals are probably of greater concern than some of the other solid hazardous waste burials. None of these disposals have ever had subsurface monitoring for G-W contamination. No public health risks are associated with these disposals as they are all confined to company property, which in this case is quite extensive.

Based on the review of available information a medium to low priority for site inspection is recommended for this site. Future work at these disposal locations would evaluate them for groundwater contamination and potential for off-site migration and impact. It should also be noted that N. C. Solid Wastes Rules for sanitary landfills were in possible violation and should be investigated for possible monitoring requirements under those rules. This site should remain on the active ERRIS List.

DuPont/Brevard Plant — NCD980557920
Transylvania County

This listing is an ERRIS List duplication and therefore request that it be removed from ERRIS. DuPont was on the list because of a 103(c) notification and a RCRA notification. This is one site and we request that DuPont be listed the same as in RCRA: DuPont NCD003152329. (see above for site priority, already in ERRIS)

Chloride Automotive Batteries — NCD080894645
2539 Timberlake Road — Wake County
Raleigh, N. C. 27604

This site is on the ERRIS List because of a RCRA notification. Our investigation shows that it is not a disposal site and that all wastes generated were taken off-site for disposal or re-use at other company facilities. This is not a CERCLA site. The RCRA program is investigating the site for improper closure under RCRA when the facility stopped manufacturing batteries here in 1981.

Based on the review of available information we recommend that no further action is required at this site. Therefore, it is requested that Chloride be placed on the inactive ERRIS List.

Westinghouse - Meter & Light Division — NCD003195963
US #1 North — Wake County
Raleigh, N. C.

Rec'd 10/3 CERCLA notification 8-15-84

This facility was placed on the ERRIS List due to notification under the RCRA program. However, investigation by this Branch shows that the facility does have an electroplating sludge pile/disposal area on site. According to our records, Westinghouse did not notify under a CERCLA 103(c) as required for hazardous waste disposal sites. It is possible they considered this "pile" to be storage and in that case should be addressed by RCRA. Further clarification of this matter is pending additional work by the RCRA program. If however, the hazardous waste is not addressed by RCRA we recommend a medium priority for site inspection at this time (SI completed 7-20-84). The SI should confirm the presence of the hazardous waste and sample for potential off-site migration. No public health risks noted.

Based on the review of available information we recommend that an investigation be initiated to determine the status of this site under RCRA or CERCLA and that the site remain on the active ERRIS List until the issue is resolved.

Note, past disposal activities of Westinghouse may lead to other disposal locations, off-site.

Southern Wood Piedmont Company
Greenfield Street
Wilmington, N. C. 28401

NCD058517467
New Hanover County

This site was the location of a wood treating facility from 1933 to 1983. They used, spilled and disposed on-site creosote residues, pentachlorophenol residues as well as CCA mixtures. The company is trying to address some of the areas of concern under their closure with RCRA. The other areas will not be cleaned-up. The major CERCLA area reported is where creosote sludges and residues were disposed in a lagoon and later buried. The site is on the edge of the Cape Fear River and G-W is reported to be only 18" below the surface. Significant creosote contamination was visible during a site visit on 7-23-84. (Soil & Water)

Based on the review of available information, we recommend a medium priority for site inspection at this site. Therefore it is requested that Southern Wood Piedmont remain on the active ERRIS List as a hazardous waste disposal site.
Note: Site referred to EPA for FIT evaluation and SI.

Southern Wood Piedmont Company
SR #2139
Gulf, N. C. 27256

NCD053488557
Chatham County

This site was reported by the company under a CERCLA 103(c) notification for disposal of creosote, PCP and CCA wood treating residues and sludges on site. The site was recommended for a medium priority for site inspection and referred to EPA for FIT evaluation. It was later learned that a FIT SI had been done in 1983. (Attached)

Based on the review of available information and the FIT SI a low priority for follow-up is recommended. This is based primarily on the conclusion that the FIT SI detected no off-site impact from past disposals. However, it is requested that this site remain on the active ERRIS List.

Note: The company is reportedly planning to do additional site clean-up in the future.

Please find attached the site summary sheet for the above sites.

If you have any questions or comments regarding the contents of this report, please call me.

Sincerely,

Frank E. Moore

Frank E. Moore, Geologist

Solid & Hazardous Waste Management Branch
Environmental Health Section

FEM:jj

PRELIMINARY ASSESSMENTS SUBMITTED TO EPA

Date August 13, 1984

EPA ID NUMBER	SITE NAME	DISPOSITION			
		PRIORITY-INSPECTION			NO FURTHER ACTION
		HIGH	MEDIUM	LOW	
NCD991278839	N. State Chemicals, Inc.				X
NCD039047485	Rohm & Haas, Inc.		(Duplication)		X
NCD990715625	Hoover Universal, Inc.				X
NCD980839757	Indian Grave Gap Drum Disposal		X		
NCD000831065	Photo Chem Systems, Inc.				X
NCD991277807	Woolfolk Chemical Wks.				X
NCD980557920	DuPont/Brevard		(Duplication)		X
NCD003152329	DuPont		X	to X	
NCD080894645	Chloride Automotive Batt.				X
NCD003195963	Westinghouse		X		
NCD058517467	Southern Wood Piedmont		X		
NCD053488557	Southern Wood Piedmont		X	to X	

#1

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

Site Number 92-00000100-X Field Sample Number 001267
Name of Site Westinghouse Site Location A01
Collected By F. Moore ID# 027 Date Collected ____ Time ____
Type of Sample:

Environmental	Concentrate	Comments
___ Groundwater	___ Solid	(#1) Up-gradient stream sample
X Surface Water	___ Liquid	
___ Soil	___ Sludge	
___ Other	___ Other	

INORGANIC CHEMISTRY

Extractables Parameter	Results mg/l	Total Parameter	Results mg/l	Parameter	Results mg/l
___ Arsenic		✓ Arsenic	<0.01	✓ Chloride	6
___ Barium		✓ Barium	<0.1	✓ Conductivity	107 µmhos
___ Cadmium		✓ Cadmium	<0.005	✓ Copper	<0.05
___ Chromium		✓ Chromium	<0.01	✓ Fluoride	0.62
___ Lead		✓ Lead	<0.03	✓ Iron	0.30
___ Mercury		✓ Mercury	<0.0002	✓ Manganese	0.07
___ Selenium		✓ Selenium	<0.005	✓ Nitrate	<1.0
___ Silver		✓ Silver	<0.05	✓ pH	7.1
		✓ Nickel	<0.05	✓ Sulfates	14
				✓ TDS	104
				✓ Zinc	0.22
				✓ TOC	10

ORGANIC CHEMISTRY

Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
___ Endrin		___ Toxaphene		___ PCB's	
___ Lindane		___ 2,4-D		___ Petroleum	
___ Methoxychlor		___ 2,4,5-TP(Silvex)		___ EDB	
				___ TOX	

MICROBIOLOGY

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

RADIOCHEMISTRY

Parameter	Results PCi/l
___ Gross Alpha	
___ Gross Beta	

Date Received ____ Date Reported 8/2/84
Date Extracted ____ Date Analyzed ____
Reported By ____ Lab Number 38994 JUL 23 84

DHS 3191 (Revised 2/84)
Solid and Hazardous Waste

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NC	D003195963

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Westinghouse Electric Meter-Light Div.	US #1 N

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Raleigh	NC	27603	Wake	092	04

09 COORDINATES LATITUDE	LONGITUDE
35 49 30.0 (CD) 6-3-87	078 36 30.0

10 TYPE OF OWNERSHIP (Check one)
☒ A. PRIVATE ☐ B. FEDERAL ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
7 20 84 (MONTH DAY YEAR)	☒ ACTIVE ☐ INACTIVE	1953 (BEGINNING YEAR) ___ (ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)
☐ A. EPA ☐ B. EPA CONTRACTOR ___ (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR ___ (Name of firm)
☒ E. STATE ☐ F. STATE CONTRACTOR ___ (Name of firm) ☐ G. OTHER 3012 Group (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
Frank E. Moore	Geologist	DHR	(919) 733-2178

09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
Len Bramble	Engineer	DHR	(919) 733-2178
Lee Crosby	Chemist	DHR	(919) 733-2178
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Dave Daugherty	SR. Eng.	Westinghouse US #1 N	(919) 834-5271
Paul Jack	Proj. Eng.	Raleigh, N. C.	(412) 255-3616
W. A. Peebles	Plt. Mgr.		(919) 834-5271
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	0900	Sunny, Clear, Light Breeze

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Dave Daugherty	Sr. Eng. - Westinghouse	(919) 834-5271

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Frank E. Moore	DHR	S & HW	919/733-2178	8 27 84 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NC	D003195963

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- [X] A. SOLID
- [ ] B. POWDER, FINES
- [X] C. SLUDGE
- [ ] D. OTHER _____ (Specify)
- [ ] E. SLURRY
- [ ] F. LIQUID
- [ ] G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS _____
CUBIC YARDS 2,000
NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- [X] A. TOXIC
- [X] B. CORROSIVE
- [ ] C. RADIOACTIVE
- [X] D. PERSISTENT
- [ ] E. SOLUBLE
- [ ] F. INFECTIOUS
- [ ] G. FLAMMABLE
- [ ] H. IGNITABLE
- [ ] I. HIGHLY VOLATILE
- [ ] J. EXPLOSIVE
- [X] K. REACTIVE
- [ ] L. INCOMPATIBLE
- [ ] M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	2,000	Cu Yd	Neutralized Electroplating
OLW	OILY WASTE			Metal ludges (Lime)
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	Included	in above	

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
SLU	Electroplating Sludge				
MES					
	See attached analyses				

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

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

Westinghouse letter Daugherty to Moore 8-15-84
SI sample results 8-8-84 Lab #39011 #7 Sludge Composite

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NC	D003195963

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: Ø — 04 NARRATIVE DESCRIPTION

Based on sample results it would be hard to make any conclusions at this time. However, there doesn't appear to be any major impact on G-W from this disposal.

01 ☒ B. SURFACE WATER CONTAMINATION — 02 ☒ OBSERVED (DATE: 7-20-84) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: Ø — 04 NARRATIVE DESCRIPTION

Pieces of "Chem-fixed" sludge were visible in the drainage (8" - 10" and smaller chunks). However, drainage water samples up-gradient and down-gradient were comparable, O.K.

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

N/A

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

N/A

01 ☒ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Not likely - although the waste is in the "open". Area is fenced and site has security.

01 ☒ F. CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (Acres) — 04 NARRATIVE DESCRIPTION

Just the soil in contact with the sludge pile appears to be susceptible to possible contamination.

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

N/A

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

None reported -

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

N/A

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NC	D003195963

II. HAZARDOUS CONDITIONS AND INCIDENTS *(Continued)*

01 ☒ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None observed

01 ☒ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION *(Include name(s) of species)*

None observed

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES *(Spills/Runoff/Standing liquids, Leaking drums)* — 02 ☒ OBSERVED (DATE: 7-20-84) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: Ø — 04 NARRATIVE DESCRIPTION

Sludge is in open diked area. Appears that run-off of surface water has transported some sludge.

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Done with the knowledge of the State

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

None

III. TOTAL POPULATION POTENTIALLY AFFECTED: Ø

IV. COMMENTS

Past disposals off-site in landfills will create sites in Knightdale landfill and Rowlands landfill - Wake County

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

SI on 7-20-84
Westinghouse Letter Daugherty to Moore 8-15-84
Branch - Solid Waste Files 1975-6

POOR LEGIBILITY

PORTIONS OF THIS DOCUMENT MAY BE UNREADABLE, DUE TO THE QUALITY OF THE ORIGINAL

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NC	D

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
Electroplating [illegible] open pit [illegible]

01 ☒ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
Waste from run-off [illegible] pit area.

01 ☐ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
N/A

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
N/A

01 ☐ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
Not Likely

01 ☐ F. CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (Acres) — 04 NARRATIVE DESCRIPTION
Soil [illegible] contaminated [illegible] sludge.

01 ☐ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
Not Likely

01 ☐ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
Not Likely

01 ☐ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
Not Likely

EPA

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

I. IDENTIFICATION
01 STATE: NC | 02 SITE NUMBER:

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Kudzu growing over waste pile
Not Noted

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)
Not listed

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
N/A

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES (Spills/runoff/standing liquids/leaking drums) — 02 ☒ OBSERVED (DATE: 7-11-89) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION
Waste pile on surface

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
N/A

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
N/A

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
N/A

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

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

Possible that RCRA will release this waste pile or adjacent site?

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

Site visit 7-11-89
File

EPA FORM 2070-12 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NC	D003195963

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☒ C. AIR				NRCO - DEM
☒ D. RCRA				Generator, Treater, Storer
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☐ G. STATE (Specify)				
☐ H. LOCAL (Specify)				
☒ I. OTHER (Specify)				SPCC plan
☐ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☒ A. SURFACE IMPOUNDMENT	2,000	Cu Yd
☒ B. PILES	included in above	
☐ C. DRUMS, ABOVE GROUND		
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
☐ F. LANDFILL		
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)
- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☒ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER (Specify)

05 OTHER
- ☒ A. BUILDINGS ON SITE

06 AREA OF SITE: 1 (Acres)

07 COMMENTS

The volume includes chem-fixed sludge pile (cement) as well as original treated sludge that when into a diked impoundment. Westinghouse owns many acres at this facility but only about one (1) acre is involved in the disposal area. (100 ac.)

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.

The original impoundment and sludge appears to be intact but due to activity around the chem-fix area, surface run-off has transported some of the fixed material into the drainage. The impoundment is unlined.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☐ YES ☒ NO

02 COMMENTS

The area is fenced off and is off to one side of the facility. The area is open with kudzu covering the waste. Only trespassers would be affected.

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

RCRA Branch Files
Westinghouse Letter 8-15-84, Daugherty to Moore
SI visit 7-20-84

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NC	D003195963

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY *(Check as applicable)*

	SURFACE	WELL
COMMUNITY	A. ☒	B. ☐
NON-COMMUNITY	C. ☐	D. ☐

02 STATUS

ENDANGERED	AFFECTED	MONITORED
A. ☐	B. ☐	C. ☐
D. ☐	E. ☐	F. ☐

03 DISTANCE TO SITE

A. _____ (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 Ø

03 DISTANCE TO NEAREST DRINKING WATER WELL _____ (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
_____ (ft)	_____	_____ (ft)	_____ (gpd)	☐ YES ☐ NO

09 DESCRIPTION OF WELLS *(Including useage, depth, and location relative to population and buildings)*

10 RECHARGE AREA		11 DISCHARGE AREA	
☐ YES	COMMENTS	☐ YES	COMMENTS
☐ NO		☐ NO	

IV. SURFACE WATER

01 SURFACE WATER USE *(Check one)*

☒ A. RESERVOIR, RECREATION DRINKING WATER SOURCE ☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES ☐ C. COMMERCIAL, INDUSTRIAL ☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
Unnamed drainage to Crabtree Creek	☐	0.5 - .75 (mi)
	☐	(mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. Hundreds	B. Thousands	C. _____
NO. OF PERSONS	NO. OF PERSONS	NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION On-Site (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE Hundreds

04 DISTANCE TO NEAREST OFF-SITE BUILDING Ø.15 (mi)

05 POPULATION WITHIN VICINITY OF SITE *(Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)*

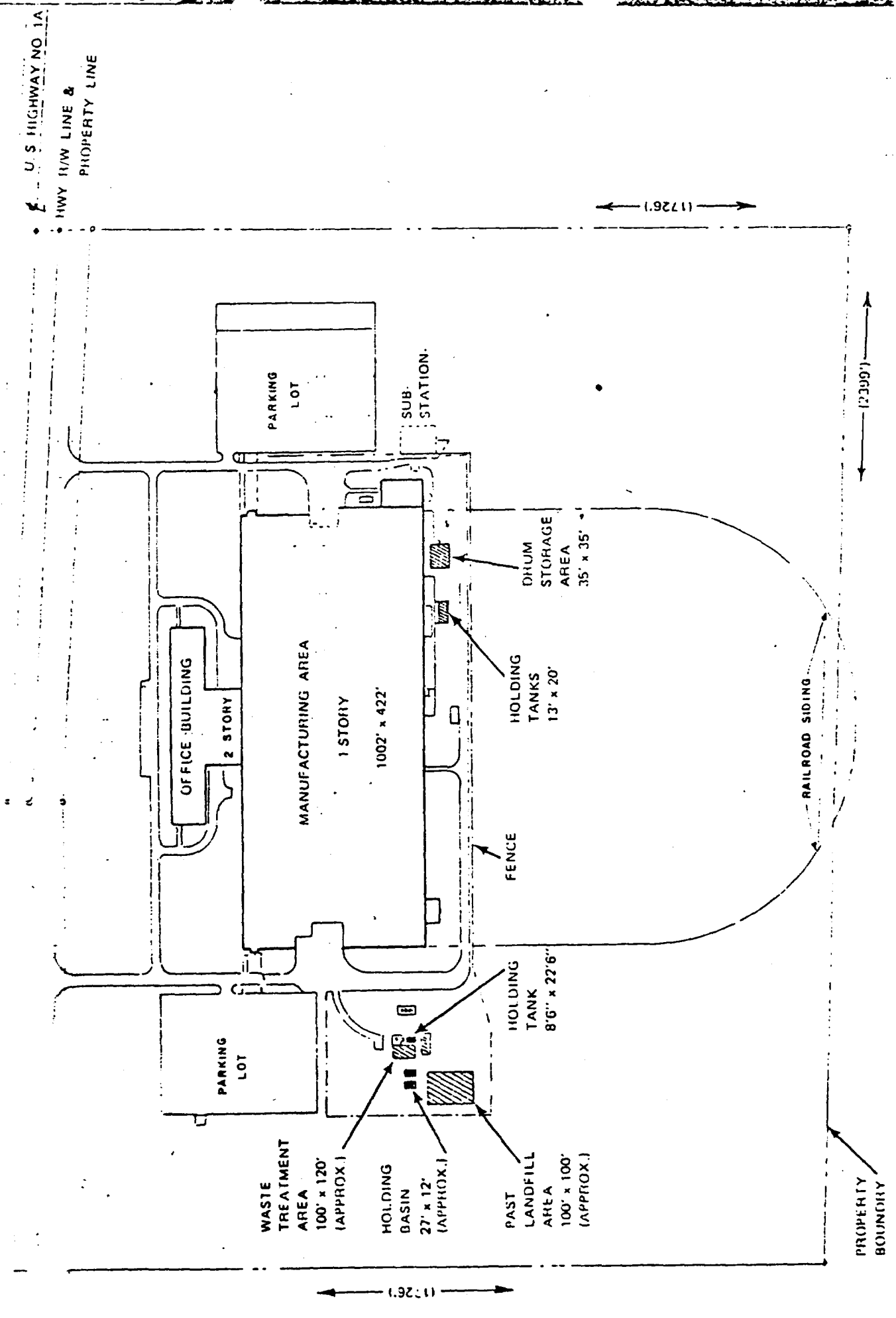
This site is at the intersection on two major roadways in Raleigh, US #1 and the Beltline around downtown Raleigh. Along the highways it is commercialized and several subdivisions are within 1/2 mile of the site. Urban commercial - urban residential.

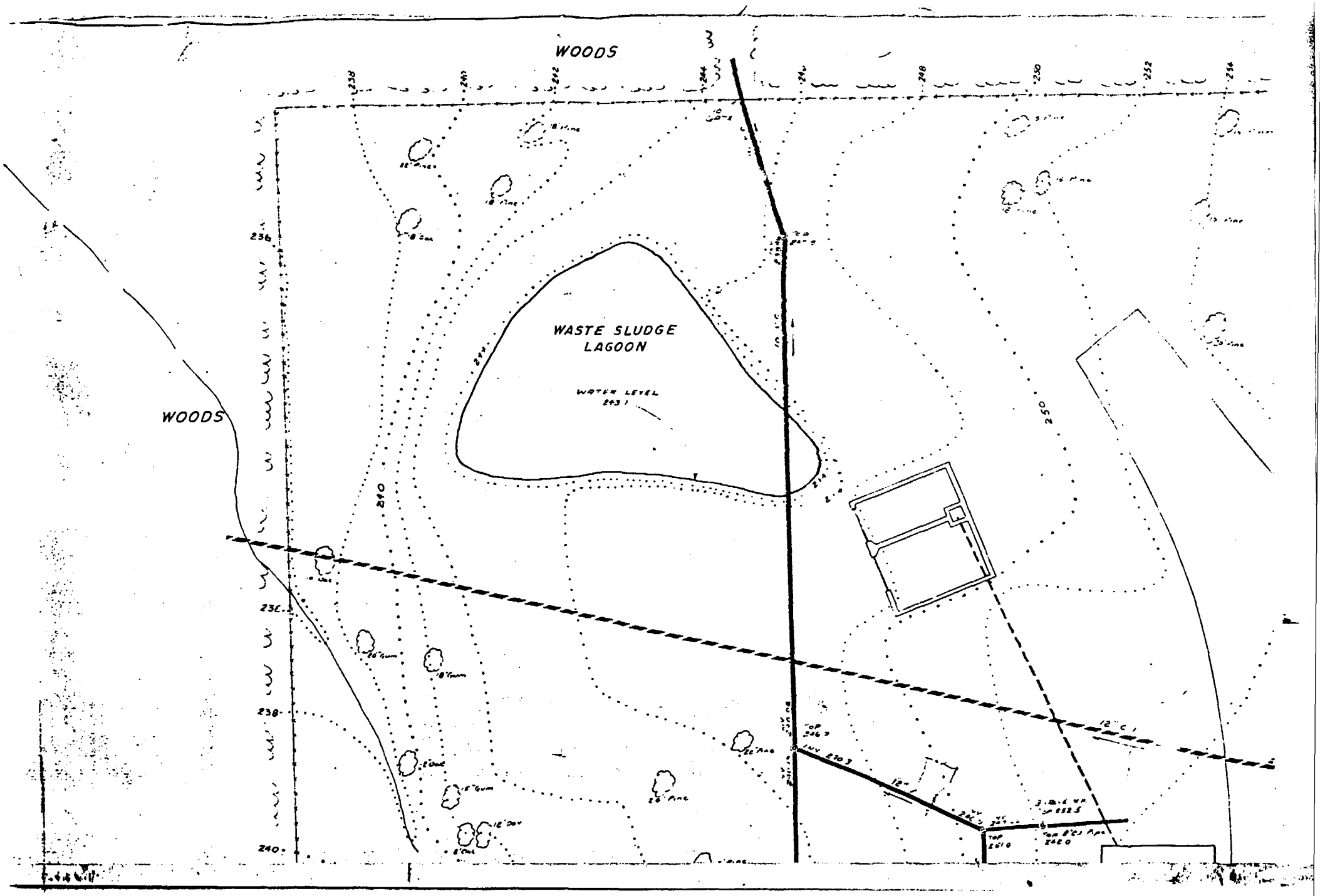
Attachment A

inued from page 4

Form Approved OMB No 158-S8000-J

FACILITY DRAWING (see page 4)




WOODS
WOODS
WASTE SLUDGE
LAGOON
WATER LEVEL
243.1
236
238
240
242
244
246
248
250
252
254
240
250

Frank

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

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

August 29, 1984

Mr. David Daugherty
Westinghouse Electric Corporation
Box 9533
Raleigh, N. C. 27611

RE: Site Inspection Sample Results

Dear Dave:

Please find attached the lab results from the 3012 Program Site Inspection on July 20, 1984. Sorry for the delay, the lab has been very busy this summer.

If you have any questions concerning these results or the site inspection, please contact me at (919) 733-2178.

Sincerely,

Frank E. Moore

Frank E. Moore, Geologist
Solid & Hazardous Waste Management Branch
Environmental Health Section

FEM:jj
attachments

(2)

C 51

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

Site Number [redacted]-X Field Sample Number [redacted]68

Name of Site [redacted] Westinghouse Site Location [redacted] US #1 N

Collected By [redacted] ID# 027 Date Collected 7-20 Time 9:35 [redacted] A.M.

Type of Sample:

	Concentrate	Comments
(Environmental)		
___ Groundwater	___ Solid	UPGRADIENT SEDIMENTS (2)
___ Surface Water	___ Liquid	
___ Soil	___ Sludge	
X Other, SEDIMENTS	___ Other	

INORGANIC CHEMISTRY

Extractables Parameter	Results mg/l	Total Parameter	Results mg/l	Parameter	Results mg/l
Arsenic	<0.01	Arsenic	0.49	Chloride	
Barium	0.1	Barium	15	Conductivity	
Cadmium	<0.05	Cadmium	<2.4	✓ Copper	~~<0.05~~
Chromium	<0.05	Chromium	37	Fluoride	
Lead	<0.1	Lead	54	✓ Iron	~~0.13~~
Mercury	<0.02	Mercury	<0.10	✓ Manganese	~~0.15~~
Selenium	<0.10	Selenium	<4.9	Nitrate	
Silver	<0.05	Silver	<2.4	✓ pH	7.3
Nickel	<0.05	Nickel	11	Sulfates	
Copper	<0.05	Copper	88	TDS	
Iron	0.13	Iron	12,500	✓ Zinc	~~0.78~~
Manganese	0.15	Manganese	87	TOC	
Zinc	0.78	Zinc	240		

ORGANIC CHEMISTRY

Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
Endrin		Toxaphene		PCB's	
Lindane		2,4-D		Petroleum	
Methoxychlor		2,4,5-TP(Silvex)		EDB	
				TOX	

MICROBIOLOGY

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

RADIOCHEMISTRY

Parameter	Results PCi/l
Gross Alpha	
Gross Beta	

Date Received ___ Date Reported 8 Aug 84

Date Extracted ___ Date Analyzed ___

Reported By ___ Lab Number 39006 JUL 23 84

DHS 3191 (Revised 2/84)
Solid and Hazardous Waste

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

Site Number 92-00000100-X Field Sample Number 001269
Name of Site Westinghouse Site Location Rd
Collected By F. Moore ID# 027 Date Collected 7-20-84 Time 9:45 AM
Type of Sample:

~~Environmental~~	Concentrate	Comments
___ Groundwater	___ Solid	Stream Sample Adjacent to waste
X Surface Water	___ Liquid	pile #3
___ Soil	___ Sludge	
___ Other	___ Other	

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
Arsenic		Arsenic	<0.01	Chloride	8
Barium		Barium	<0.1	Conductivity	110 µmhos
Cadmium		Cadmium	<0.005	Copper	<0.05
Chromium		Chromium	<0.01	Fluoride	0.79
Lead		Lead	<0.03 ~~<0.03~~	Iron	0.12
Mercury		Mercury	<0.0002	Manganese	0.04
Selenium		Selenium	<0.005	Nitrate	<1.0
Silver		Silver	<0.05	pH	7.4
		Nickel	<0.05	Sulfates	15
				TDS	108
				Zinc	0.18
				TOC	8

ORGANIC CHEMISTRY

Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
Endrin		Toxaphene		PCB's	
Lindane		2,4-D		Petroleum	
Methoxychlor		2,4,5-TP(Silvex)		EDB	
				TOX	

MICROBIOLOGY

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

RADIOCHEMISTRY

Parameter	Results PCi/l
Gross Alpha	
Gross Beta	

Date Received ___ Date Reported 8/2/84
Date Extracted ___ Date Analyzed ___
Reported By ___ Lab Number 38995 JUL 23 84

DHS 3191 (Revised 2/84)
Solid and Hazardous Waste

#4

CST

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

Site Number 92-0000 -X Field Sample Number [illegible]/270

Name of Site Westinghouse Site Location [illegible]: US #1 N

Collected By F. Moore ID# 027 Date Collected 7-20-84 Time [illegible] A.M.

Type of Sample:

Environmental	Concentrate	Comments
___ Groundwater	___ Solid	Sediment to Waste File #4
___ Surface Water	___ Liquid	
___ Soil	___ Sludge	
X Other Sediment	___ Other	

INORGANIC CHEMISTRY

Extractables Parameter	Results mg/l	Total Parameter	Results mg/l	Parameter	Results mg/l
Arsenic	<0.01	Arsenic	<0.5	Chloride	
Barium	0.1	Barium	10	Conductivity	
Cadmium	<0.05	Cadmium	<2.5	✓ Copper	
Chromium	<0.05	Chromium	19	Fluoride	
Lead	<0.1	Lead	20	✓ Iron	
Mercury	<0.02	Mercury	<0.10	✓ Manganese	
Selenium	<0.10	Selenium	<5.0	Nitrate	
Silver	<0.05	Silver	<2.5	✓ pH	8.3
Nickel	<0.05	Nickel	10	Sulfates	
Copper	0.11	Copper	69	TDS	
Iron	0.07	Iron	7550	✓ Zinc	
Manganese	0.23	Manganese	80	TOC	
Zinc	0.82	Zinc	250		

ORGANIC CHEMISTRY

Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
Endrin		Toxaphene		PCB's	
Lindane		2,4-D		Petroleum	
Methoxychlor		2,4,5-TP(Silvex)		EDB	
				TOX	

MICROBIOLOGY

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

RADIOCHEMISTRY

Parameter	Results PCi/l
Gross Alpha	
Gross Beta	

Date Received _____ Date Reported 8 Aug 84

Date Extracted _____ Date Analyzed _____

Reported By _____ Lab Number 39007 JUL 23 84

DHS 3191 (Revised 2/84)
Solid and Hazardous Waste

POTENTIAL HAZARDOUS WASTE SITE
ASSESSMENT
ION AND ASSESSMENT

NCD003195963 WAKE
WESTINGHOUSE ELEC METER & LVIT DIV
US 1 N
RALEIGH NC 27603

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NC	D003195963

02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER

04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
		Wake	092	04

09 COORDINATES LATITUDE 35 49 30.0 LONGITUDE 078 36 30.0

10 DIRECTIONS TO SITE (Starting from nearest public road)

Map attached

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)
Westinghouse Electric Corporation	Gateway Center - Stanwix Street

03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
Pittsburgh	PA	15222	(412) 255-3616

07 OPERATOR (If known and different from owner)	08 STREET (Business, mailing, residential)
Same	

09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER
			( )

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
☒ YES DATE 7 / 11 / 84 (MONTH DAY YEAR)
☐ NO

BY (Check all that apply)
☐ A. EPA ☐ B. EPA CONTRACTOR ☒ C. STATE ☐ D. OTHER CONTRACTOR
☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify)
CONTRACTOR NAME(S): _____

02 SITE STATUS (Check one)
☒ A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN

03 YEARS OF OPERATION
1953 (BEGINNING YEAR) | (ENDING YEAR) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

Westinghouse has on site a hazardous waste pile 100' x 100' x 6' of electroplating sludge from their neutralizing/treatment facility. Mainly heavy metals, chrome & zinc hydroxides with others. Plus some sludge that has been chem-fixed also in on site. The waste heavy

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

metals appear to be contained but site runoff and G-W need to be addressed. No G-W users in the area. Other possible disposal locations noted.

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	02 OF (Agency/Organization)	03 TELEPHONE NUMBER
Dave Daugherty	Sr. Engineer - Westinghouse	(919) 834-5271

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
O. W. Strickland	DHR	Solid & Haz. Waste Mgt. Br.	(919) 733-2178	7 / 24 / 84 (MONTH DAY YEAR)

EPA FORM 2070-12 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE S
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NC	D003195963

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- X A. SOLID
- X B. POWDER, FINES
- X C. SLUDGE
- ☐ D OTHER _____ (Specify)
- ☐ E. SLURRY
- ☐ F. LIQUID
- ☐ G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS _____
Est CUBIC YARDS 1,000
NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- ☐ A. TOXIC
- ☐ B. CORROSIVE
- ☐ C. RADIOACTIVE
- ☐ D. PERSISTENT
- ☐ E. SOLUBLE
- ☐ F. INFECTIOUS
- ☐ G. FLAMMABLE
- ☐ H. IGNITABLE
- ☐ I. HIGHLY VOLATILE
- ☐ J. EXPLOSIVE
- ☐ K. REACTIVE
- ☐ L. INCOMPATIBLE
- ☐ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	1000	Cu Yd	Est. of sludge pile
OLW	OILY WASTE			electroplating waste
SOL	SOLVENTS			
PSD	PESTICIDES			
CCC	OTHER ORGANIC CHEMICALS			
ICC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	see above		same

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

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

Branch Files - Solid Waste
RCRA Files
Site visit 7-11-84

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NC	D003195963

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Electroplating sludge placed in open pit on-site

01 ☒ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Waste from run-off of pile area

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

N/A

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

N/A

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

Not likely -

01 ☐ F. CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (Acres) — 04 NARRATIVE DESCRIPTION

Soil that would be in direct contact with the sludge.

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

Not likely

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

Not likely

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

Not likely

EPA

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

I. IDENTIFICATION
01 STATE: NC
02 SITE NUMBER: D003195963

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Kudze growing over waste pile - not noted

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)
Not noted

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
N/A

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES (Spills/runoff/standing liquids/leaking drums) — 02 ☒ OBSERVED (DATE: 7-11-84) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION
Waste pile on surface

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
N/A

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
N/A

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
N/A

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

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

Possible that RCRA will address this waste pile or disposal site?

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

Site visit 7-11-84
Files

Westinghouse - Wake NCD 003195963
Raleigh East, N.C USGS 7.5' QUAD
1968 photo Revised 1973

3012 SI of Westinghouse - US #1 - Raleigh

By: F. Moore, L. Crosby, L. Bramble

Date: 20 July 1984

Time: 9 am - 11:30 am

Place: Westinghouse U.S. #1 N. Raleigh, N.C.

Weather: hot, humid overcast

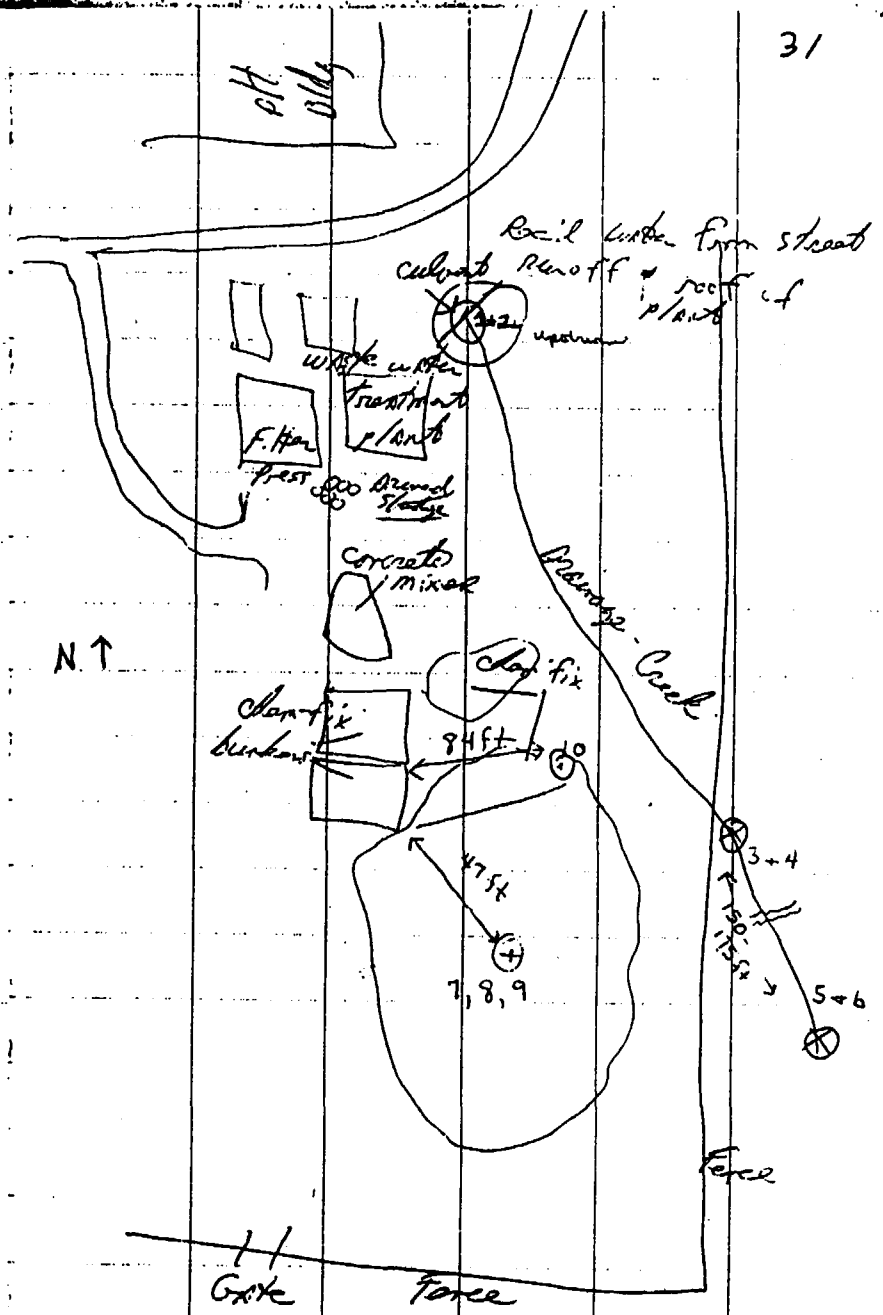
Site Contacts:

Dave Dougherty

Paul Jack

W. A. Peables

Eng. Hydro-geologist present at S.I. 7-20-84



Westinghouse US #1 N. - Ral., N.C.

Paul P Jack

Project Engineer
Environmental Control
Environmental Affairs

Westinghouse Electric Corporation
Westinghouse Building
Gateway Center
Pittsburgh Pennsylvania 15222
(412) 642-3192
WIN 272-3192

B.

D. Water Sample # 1

T. pH 5.9

P. Temp 24C

M. Cond 9.5

WATER Sample # 3

pH : 6.3

T 24°C

COND : 10.3

WATER Sample # 5

pH : 6.4

T : 22°C

COND: 109

Samples (locations are marked on map on preceding page)

1 Upstream water sample 9:30 A.M.

2 Upstream sediment sample 9:35 A.M.

3 Stream sample adj to pile

4 Sediment sample adj to pile

5 Down stream water sample

6 Down strea sediment sample

7 Sludge composite (heavy metals)

8 Sludge at 6 ft down (volatile organics)

sludge is covered by 4 to 6 inch of soil + organic matter (humus)

soil structure of cover is excellent

aborted insects are prevalent

9 Soil sample 6½ - 7 ft below surface

Red Clay - below sludge pile

10 Chem fixed sludge

Signature

#	Lab #	Description
9	~~001333~~	~~Red loamy, clayey soil - assumed to be bottom of pit 6½'-7'~~

Long Boards were laid down to provide access on the waste pile.
- Covered w/ kudzu - 4"-6" organic humus layer on top.
- Several small centipede like critters in humus layer.

Tape measure was pulled to SE corner of concrete bunker 47'.

Samples were cored w/ 3" soil auger - soft & moist - no odor

Composite was cored & cored - Split & sampled

# 8	001334	Organic Sample 11:00 A.M. Sampled = 5-6' in Sludge pile/pit - ok for solvent
		Inorganic Samples
#1	01267	Up-gradient water - grass from some run-off & spring ≈ 1 gal per min flow 9:30 A.M.
#2	01268	Up-gradient sediment - 9:35 A.M.
#3	01269	stream sample adjacent to waste pile 9:45
#4	01270	stream sediment sample adjacent to pile 9:50

250' from 3 & 4.

#5 Downstream water [Slightly]
001475 10:15 A.M.

#6 Downstream Sediment
001476 10:20 A.M.

#7 Sludge composite 1'-6'
001477 10:30

#8 see Organic Sample
01334 10:45

#9 Soil sample 6½'-7'
01478 (Assumed bottom of Pit) 11:00 A.M.

#10 Chem. Fixed Sludge
01479 11:10 A.M.

Frank

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

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

June 29, 1984

Mr. David Daugherty
Westinghouse Electric Corporation
Box 9533
Raleigh, N. C. 27611

RE: Hazardous Substance Disposal/
Releases

Dear Mr. Daugherty:

As a follow-up to our telephone conversation on June 27, 1984, I would like to request information and documentation concerning the management of hazardous substances/wastes at the Westinghouse facility in Raleigh.

This information is needed to complete evaluations required by a U.S. EPA mandated inventory of potential hazardous substance sites in North Carolina as authorized by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The purpose of this inventory is to identify potential areas of concern resulting from past hazardous substances or hazardous wastes handling.

Please provide any documentation or explanations that would describe the following activities since the start-up of operations at the plant site, with applicable dates:

- Waste storage, treatment and disposal practices of RCRA hazardous wastes generated prior to November 19, 1980. Include types, amounts, transporters and disposal locations and dates for each waste.

- Waste storage, treatment and disposal practices for other toxic or hazardous substances not regulated by RCRA but designated as a hazardous substance under CERCLA (eg. PCBs).

- Information concerning releases of CERCLA hazardous substances at your plant site such as spills of feed-stocks, waste waters, materials at transfer areas, leaking storage tanks and other waste handling and/or recovery areas with descriptions of any remedial actions undertaken.

- Identify locations of any groundwater monitoring wells or other sampling points used to monitor areas of potential concern with current chemical analyses for each (locate on site map).

- Include copies of any notifications or correspondence made to the United States EPA or the State of North Carolina in reference to possible CERCLA site activities/releases.

- Provide a chronological history of site owners and or operators where applicable. (Records indicate this facility established 1953.)

This information will be used to assess and process this site through the 3012 system. The information will be on file at the North Carolina Solid and Hazardous Waste Management Branch 3012 Office and copies will be forwarded to U.S. EPA, Region IV, Atlanta, Georgia, in the near future.

Your assistance in compiling this information is very much appreciated. Please contact me (919) 733-2178 if you are not able to complete this information request within the next four weeks. I am also enclosing information on the 3012/CERCLA program for your use.

If you have questions or if I can be of any assistance, please contact me.

Sincerely,

Frank E. Moore

Frank E. Moore, Geologist

Solid & Hazardous Waste Management Branch
Environmental Health Section

FEM:jj

Copy 1 w/Jerry

Westinghouse
Electric Corporation

Electronics, Measurement
and Control Divisions

Box 9533
Raleigh North Carolina 27611
919 834 5271

NCD003195963

May 24, 1984

RECEIVED
MAY 25 1984
HAZARDOUS WASTE MANAGEMENT BRANCH

Mr. J. Rhodes
Solid and Hazardous Waste Management Branch
Environmental Health Section
Department of Human Resources
P.O. Box 2091
Raleigh, NC 27602

Dear Mr. Rhodes:

The Westinghouse Electric Corporation meter plant located in Raleigh, North Carolina, would like to withdraw its Part A application and terminate its interim status and therefore does not intend to submit a Part B application. The plant will no longer be a treatment, storage, or disposal facility for the following reasons:

Not a part of formal closure

1. Westinghouse intends to close the drum storage area as a storage facility. The drum storage process indicated on Form 3 by the process code S01 will no longer extend beyond 90 days once closure is complete. We have arranged for drums of hazardous waste to be shipped off-site within the 90-day period allowed after generation. A closure plan is attached for the closure of this drum storage area.

2. The tank storage facility as indicated by the process code T01 (line 4) is no longer used to store hazardous waste. The facility was used to store wastewater treatment sludge which had been solidified. The plant is no longer using this solidification method and therefore will no longer need the tanks. A closure plan is attached for the closure of these tanks and mixer used in the solidification process.

3. The tank treatment process indicated on Form 3 by the process code T01 (line 3) and S02 comprise an industrial wastewater treatment facility as defined in

This covers all requested activities for Part B. However an adjacent surface impoundment is not closed + [illegible] activi

40 CFR 260.10 and incorporated in 10 NCAC 10 F.0002 is not subject to the standards of 40 CFR 265, 40 CFR 264, or to the permit requirements of 40 CFR 122 or the corresponding North Carolina regulations.

Once the above facilities described in Item 1 and Item 2 are closed, the Raleigh plant will be only a generator of hazardous waste. The facility will comply with the generator's requirements as indicated in 40 CFR 262 and 10 NCAC 10 F.0030.

As required by 10 NCAC 10 F.0033(g), the Raleigh plant is submitting its closure plan for the drum storage area and the storage tanks for approval by the State of North Carolina. Please give us your comments and/or approval by June 8, 1984, so we may begin closure at the facilities.

News-Notice

Upon completion of closure, we will submit an Application for Change in Classification under RCRA.

If you have any questions, please contact David Daugherty on 919-834-5271.

Sincerely,

John S. Robinson

John S. Robinson
Manager, Meter Department and Raleigh Plant

cc: Mr. O. W. Strickland
Solid and Hazardous Waste Management Branch
Environmental Health Section
Department of Human Resources
P.O. Box 2091
Raleigh, NC 27602

00560

Date: May 16, 1984

STORAGE AREAS

CLOSURE PLAN

WESTINGHOUSE ELECTRIC CORPORATION

RALEIGH, NORTH CAROLINA

00560

Section		Page
1.0	General Information	1
2.0	Closure Performance Standard	1
3.0	Maximum Waste Inventory	2
4.0	Closure Activities	
4.1	Containers	3
4.2	Tanks	3
4.3	Mixer	5
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6.0	Notification of Closure	7
7.0	Schedule	7

INTRODUCTION TO CLOSURE

1.0 General Information

This Section is submitted in accordance with the requirements of 10 NCAC 10 F.0032(f) and 40 CFR 265.112. This plan identifies all steps that will be necessary to completely close the storage facility. A post-closure plan is not required because this is not a disposal facility.

2.0 Closure Performance Standard [40 CFR 265.111]

This closure plan is designed to satisfy closure performance standards and ensure that the facility will not require further maintenance and controls after closure. It attempts to minimize or eliminate threats to human health and the environment and to avoid escapes of hazardous waste, hazardous waste constituents, leachate, contaminated rainfall, or waste decomposition products into the ground or surface waters or into the atmosphere from the drum and tank storage areas.

3.0 Maximum Waste Inventory to be Removed

Container Storage Area — 8800 gallons = 160,500 gal

Wastes consist of:

relative amounts ?

- wastewater treatment sludges (F006) — sep. area
- plating bath sludges (F008)
- stripping and cleaning bath solutions (F009)
- paint wastes
- halogenated solvent still bottoms (F001)
- xylene (F003)
- acetone (F003)
- methyl ethyl ketone (F005)
- zinc phosphate sludge (D002, D006, D007)
- nickel plating sludge (D002)

? are sludges from separate systems yes

Tanks

1

? size

Two concrete tanks — Out of service and empty

Mixer — Out of service and empty

? surface impoundment

? superfund

GRAINGER LABORATORIES
INCORPORATED
ANALYTICAL AND CONSULTING CHEMISTS

709 West Johnson Street • Raleigh, North Carolina 27603

(919) 828-3360

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Process Development
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Methods Development
Special Investigation
Pesticides

June 15, 1981
81-964

Westinghouse Electric Co.
P. O. Box 9533
Route 1,
Raleigh, N. C. 27603

Attn: B. K. Pierce

Subject: Analysis of sample received 6/1/81

Sample Identification: P. O. #48-21172

1. Untreated slurry from meter plant
1A. Duplicate of #1
2. Treated slurry from meter plant (with concrete)
2A. Duplicate of #2

RESULTS

after acid

	1 (pH 5.0)	1A	2 (pH ~ 10.5)	2A
Cyanide, total as CN, ppm	297	-	-	-
Cyanide, amenable as CN, ppm	117	-	-	-
Cyanide, total extractable as CN, ppm	0.94	0.89	18.6	17.5
Chromium, total extractable as Cr, ppm	0.15	0.15	10.7	10.5
Cadmium, total extractable as Cd, ppm	5.0	5.0	0.03	0.03
Nickel, total extractable as Ni, ppm	17.2	17.4	1.51	1.75

Results on samples 2 & 2A are based on a dried sample passing a 100 mesh sieve.

Douglas P. Hall

Douglas P. Hall
Laboratory Supervisor

DPH/ab

GRAINGER LABORATORIES
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ANALYTICAL AND CONSULTING CHEMISTS

709 West Johnson Street • Raleigh, North Carolina 27603

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- Metallurgical Services
- Pollution Abatement
- Process Development
- Quality Control
- Methods Development
- Special Investigation
- Pesticides

April 29, 1981
81-705

Westinghouse Electric Co.
P. O. Box 9533
Rt. 1 Raleigh, NC 27603

Attn. B. K. Pierce

Subject:
Analysis of sample received 4-23-81

Sample Identification: #48-24838

1 Sludge Sample 4-23-81

Results:

Cyanide, total as CN, ppm	758
Chromium, total as Cr, ppm	1240
Cadmium, total as Cd, ppm	261
Nickel, total as Ni, ppm	607

Douglas P. Hall
Douglas P. Hall
Laboratory Supervisor

Vance C Allen
Vance C. Allen
Laboartory Manager

DPH/rz

4.1 Closure of Container Storage Area

All the drum containers which have been stored over 90 days in this facility's container storage area will be removed off-site to the SCA Services, Inc. landfill in Pinewood, SC. The drums will be inspected for proper packaging and labeling. The drums will be moved utilizing a forklift. If a container is damaged, starts leaking, or for any reason appears suspicious during closure activities, the drum will be placed in an over-pack or the contents of the drum transferred to new drums.

? check

Any residue in the container storage area will be removed into 55-gallon drums. The material will be sent for disposal at SCA Services, Inc. or Chemical Waste Management via Ashland Chemical Company.

Less than 100 gallons residue are anticipated to result from the container storage area cleanup.

4.2 Closure of Hazardous Waste Tanks

Check this

Wastewaters and solutions from electroplating operations are treated in an on-site wastewater treatment system. Previously, the sludge from this treatment was deposited in a mixing tank for solidification and then the solidified material was collected in two tanks for further solidification. This solidification system is no longer used. Therefore, this closure

plan is being submitted to address the closure of a mixer and the two holding tanks.

Tanks

All liquid in the tanks has been pumped from the tanks to the Westinghouse on-site wastewater treatment facility for treatment. The remaining sludge was shoveled into one 55-gallon drum, along with absorbent material for solidification. Associated piping will be decontaminated and removed. The drums of collected sludge will be sent to SCA Services, Inc. for disposal.

Following waste removal, the tanks will be thoroughly rinsed with a water wash. The contaminated wash waters will be collected for treatment in the Westinghouse wastewater treatment system. Approximately 300 gallons of contaminated wash waters are anticipated to be generated during the cleaning of the tanks.

One floor sample will be taken from each concrete tank and two soil samples from the flat area in front of the northern tank will be taken. These samples will be tested for EP toxicity. If the samples are not EP toxic, no further cleanup will be required. If the tank samples are EP toxic, the tanks will be

removed. If the soil samples are EP ~~toxic~~ extractable, plans for further action will be made.

4.3 Mixer

The only remaining waste in the mixer is a hardened residue. As much residue as possible will be removed from the mixer and placed into 55-gallon drums. If sampling indicates that the mixer residue is not EP ~~toxic~~ extractable, the mixer will be cut up and sold as scrap.

If sampling indicates EP toxicity and further decontamination is not possible, the equipment will be classified as hazardous and disposed of in accordance with the hazardous waste regulations.

check for present condition

Any visible spills or leakage surrounding the mixer will be shoveled into 55-gallon drums and sent to SCA Services, Inc.

5.0 Closure Cost Estimate

The closure cost information presented is submitted in accordance with the requirements of 40 CFR 265.142 and 10 NCAC 10 F.0033(g).

An estimated $14,690.00 will be needed to close the hazardous waste portions described in this closure plan. The closure costs are presented by activity. Activities include removal of waste inventory, decontamination, disposal of waste residue, and sampling.

The closure activities and costs are as follows:

1. Removal of final waste inventory

a.	Disposal costs: 160 drums at $40.00/drum	$ 6400.00
b.	Plant labor (8 hours at $13.00/hour)	$ 104.00
c.	Hauling	$ 1600.00
	Subtotal	$ 8104.00

2. Decontamination of tanks

a.	Removal of accumulated wastes	
	- One drum at $33/drum	$ 33.00
	- Hauling and drum cost	$ 32.00
b.	Labor (20 hours at $13.00/hour)	$ 260.00
c.	Sampling for EP toxicity	$ 1000.00
d.	Grading	$ 500.00
	Subtotal	$ 1825.00
e.	Additional disposal if tanks are hazardous	$10000.00

3. Decontamination of mixer

a.	Sampling for EP toxicity	$ 500.00
b.	Disposal cost: 5 drums at $33.00/drum	$ 165.00
c.	Hauling and drum cost	$ 160.00
d.	Labor (40 hours at $13.00/hour)	$ 520.00
	Subtotal	$ 1345.00
e.	Additional disposal if mixer is hazardous	$10000.00

Total Closure Costs if samples are not EP toxic	$11274.00
Total Closure Costs if samples are EP toxic	$31274.00

6.0 Notification of Closure

Upon completion of the procedure described in Sections 4.1, 4.2, and 4.3, Westinghouse Electric Corporation will notify the North Carolina Department of Human Resources Solids and Hazardous Waste Management Branch and obtain any required certifications. by independent PE (add to cost estimate)

7.0 Schedule

The closure schedule for the container storage areas will be as follows:

5/25/84	-	Notify the North Carolina Division of Health Services of intent to close.
6/11/84*	-	Receive plan approval from North Carolina Division of Health Services and begin closure.
7/6/84	-	Take samples for EP toxicity test.
7/13/84	-	Complete removal of containers from drum storage area.
7/20/84	-	Drum storage area decontamination.
8/10/84	-	Completion of decontamination of mixer and tanks.
8/31/84	-	Complete removal of containers from mixer and tank decontami- nation.
9/7/84	-	Disposal of mixer.
9/14/84	-	Back fill or removal of tanks.
9/21/84	-	Final grading of site.
9/28/84	-	Notification of completion of closure to North Carolina Division of Health Services.

* Dates after 6/11/84 are contingent upon receiving plan approval by 6/11/84.

Newspaper notice required

Drum I.D.#	Waste Description	Hazard Class	Type of Container	EPA #
A-1	Alkaline Zinc Plating Sludge	Corrosive	Non-lined Drum	D002
A-2	Alk. Tin Plating Sludge	Corrosive	Non-lined Drum	D002
A-3	Acidic Nickel Plating Sludge	Corrosive Toxic	Lined Drum	F006, D002
B-1	Cold Action Cleaner Sludge	Corrosive, Toxic	Non-lined Drum	F009, D002
B-2	Floor Drain Sludge (of Plating Room)	Corrosive, Toxic	Non-lined Drum	F007, F009 D007, D008
B-3	Alkaline Cleaner Sludge	Corrosive, Toxic	Non-lined Drum	F009, D002
B-4	Bright Alloy Sludge	Corrosive, Toxic	NOn-lined Drum	F008, D002
B-5	Tunnel Sludge (from Exhaust System)	Corrosive, Toxic	Non-lined Drum	F007, F009 D006, D007 D008
B-6	Endox Sludge (from Metal Cleaning Operation)	Corrosive, Toxic	Non-lined Drum	F009, D002
C-1	Chlorinated Vapor Degreasing Sludge	Toxic	Non-lined Drum	F001
C-2	Freon degreasing Sludge	Toxic	Non-lined Drum	F001
D-1	Aluminum Deoxidizer Residue (Acidic)	Corrosive, Toxic	Lined Drum	D006, D007 D008, D002
E-1	Halogenated Paint Stripper Sludge (Acidic)	Corrosive, Toxic	Lined Drum	F002 D006, D007 D008
F-1	Alkaline Paint Stripper Waste	Corrosive, Toxic	Non-Lined Drum	D002, D006 D007, D008
G-1	Waste Paints, Inks, Solvents	Flammable Toxic	Non-lined Drum	F003, F005

Drum I.D.#	Waste Description	Hazard Class	Type of Container	EPA #
H-1	Photo-Array Process Waste	Toxic	Non-lined Drum	D006, D010
I-1	Phosphate Conversion Coating Waste (Bonderite Process)	Corrosive, (Acidic) Toxic	Lined Drum	D002, D006 D007
J-1	Metal Etching Process Sludge (Bright Dip, Acidic)	Corrosive, Toxic	Lined Drum	D002, D006 D007
K-1	Scapped Nickel-Cadmium Batteries(Alkaline Electro-lytes)	Toxic	Non-lined Drum	D006
L-1	Waste from Chromate Coating Process (Acidic)	Corrosive, Toxic	Lined Drum	D002, D007
M-1	Cement-Fixed Wastewater Treatment Sludge	Toxic	In-Ground Basin	F006, D006 D007
M-2	Unfixed Wastewater Treatment Filtercake	Toxic	55-gal Drum	F006
N-1	Water-based Acrylic Paint Wast	None		
N-2	Lubricating Oil	None		
N-3	Floor Drain Sludge (Tumbling Room)	None		

TABLE # 1

DRUM I. D. CODE	WASTE DESCRIPTION	HAZARD CLASS	EPA #
A-1	Alkaline Zinc Plating Sludge (caustic)	Corrosive	F-008
A-2	Alkaline Tin (Su) Plating Sludge (caustic)	Corrosive	F-008
A-3	Nickel Plating Sludge (acidic)	Corrosive	F-008
B-1	Cold Action Cleaner Sludge (caustic)	Corrosive, Toxic	F-009
B-2	Floor Drain (of Plating Room) Residue (caustic)	Corrosive, Toxic	F-008, F-009, D-007, D-008
B-3	Alkaline Cleaner Sludge (caustic)	Corrosive, Toxic	F-009
B-4	Bright Alloy Sludge (caustic)	Corrosive, Toxic	F-008
B-5	Tunnel Sludge (from exhaust system) (caustic)	Corrosive, Toxic	F-008, F-009, D-006, D-007, D-008
B-6	Endox Sludge (cleaning operation) caustic)	Corrosive, Toxic	F-009
C-1	Chlorinated Vapor Degreasing Sludge	Toxic	F-001
C-2	Freon Degreasing Sludge	Toxic	F-001
D-1	Aluminum Deoxidizer Residue (acidic)	Corrosive, Toxic	D-006, D-007, D-008
E-1	Halogenated Paint Stripper Sludge (acidic)	Corrosive, Toxic	F-017
F-1	Alkaline Paint Stripper Sludge	Corrosive	F-017
G-1	Waste Paints, Inks, Solvents	Flammable	F-003, F-005
H-1	Photo Array Process Waste (contains Cd-Se salt complexes)	Toxic	D-006, D-010
I-1	Phosphating Conversion Coating Sludge (bondenite) (acidic)	Corrosive	D-002
	Metal Etching Process Sludge (acidic) (Bright Dip)	Corrosive	D-002
N-1	Acrylic Water Based Paint Waste	Non-hazardous	
N-2	Lubricating Oil/Water Emulsion	Non-hazardous	
N-3	Tumpling Room Residue	Non-hazardous	

Note: All "A" thru "J" codes require that drums be dated where waste material is first placed in drum. "N" code is for non-hazardous [illegible].

W. P. 10/21/83

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

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

October 19, 1983

MEMORANDUM

TO: O. W. Strickland, Head
Solid & Hazardous Waste Management Branch

FROM: LDP ct Larry D. Perry, Waste Management Specialist
Solid & Hazardous Waste Management Branch

SUBJECT: RCRA Deficiency Correction Inspection
Westinghouse Electric Meter & Lvit. Division
U.S. 1 North
Raleigh, N. C. 27603
NCD003195963
Contact: Charlie Yates, Materials Manager

On September 26, 1983, an inspection was made at the Westinghouse facility for deficiency compliance as per your letter of August 14, 1983. On this date, all deficiencies had been corrected. Thus, the Westinghouse facility appears to be in compliance with applicable RCRA regulations.

LDP:ct

RCRA INSPECTION REPORT

1. Westinghouse Electric Meter & Lvit. Division
   U.S. 1 North
   Raleigh, N. C. 27603
   NCD003195963

2. Charlie Yates, Materials Manager

3. W. A. Peoples, Manuf. Engineer
   Tommy Parker, Personnel Administrator
   Larry D. Perry, N. C. Solid & Hazardous Waste Management Branch

4. August 8, 1983

5. No Change

6. No Change

7. The plating waste treatment sludge (F007) produced by Westinghouse is now being treated as a hazardous waste by the facility. The Westinghouse facility has been trying for two years to petition EPA to delist this material since it was being chem-fixed. EPA recently notified Westinghouse that the cyanide levels are still too high (9 ppm found in test vs. 2 ppm allowable cyanide residue). Thus, Westinghouse has withdrawn the petition and will now ship the sludge to SCA in South Carolina for disposal. Waste sludge stored at present in tank and after chem-fixing in waste pile.

   No change in the other facets of the operation.

8. 265.192 - Uncovered tank with little freeboard and no containment devices.
   265.194 - Need evidence that tank is being inspected and level of waste is being monitored.
   265.197 - No closure plan available concerning tank.
   265.253 - Waste pile containment inadequate--no impermeable base, no run-off containment, no protection from precipitation.

9. The reason these discrepancies have been reported for the first time now is that material is in reference to a plating waste sludge that Westinghouse has previously been trying to delist, but with no success; thus, material is now in system and must be treated as a hazardous waste. The facility is planning to install filter presses, etc., to comply.

   The facility was given a compliance date of six weeks or September 9, 1983, to put into effect temporary measures to alleviate problem. This would include covering material piles and tank with plastic, dyking, and disposal of accumulated sludge material. Within six months, the facility will have installed permanent measures including filter presses, proper containers with covers, dykes, etc.

   Westinghouse will keep me informed of progress of deficiency correction.

2600 Bull Street, Columbia
Phone: (803) 758-5681

Name	I.D. Code	Address	Phone Number (area code & number)	Date Shipped or Accepted
(1) Generator Westinghouse Elec Corp	NCD003195963	P O Box 9533 Raleigh N C 27611	(919) 834-5271	1982 November 18 year month day
(2) Transporter No. 1 Willms Trucking (15)	SCD073709297	P O Box 70427 Charleston Hgts S C 29405	(803) 747-0974	1982 November 18 year month day
Transporter No. 2				/ / year month day
(3) TSDF SCA Chemical Svc Inc	SCD070375985	Route 1 Box 255 Pinewood S C 28125	(803) 452-5003	1982 November 18 year month day

(1) Generator Item Count		(2) DOT Proper Shipping Name/Hazard Class/ DOT Identification Number	(3) Total Quantity	(4) Weight (pounds)	(5) Waste Code	(6) TSDF Item Check		(7) Quantity by Weight (pounds)
Number	Container Type					Number	Container Type	
1	Dump Trailer	Hazard Waste, Solid, N.O.S., ORME NA9189	24 Yards	73000 Gross 44000 Net	NCD003195963-F006 SCA# 156-1102	1	dump	43,510
					Total F006	=		325,840 #

C. Emergency Response Information:
In event of an emergency, phone the Generator at:
(919)834-5271 Westinghouse Elec Corp
Raleigh N C 27604
In event of a spill in South Carolina call the Department at (803) 758-5531

D. Special Handling Instructions: In case of emergency call: SCA Chemical Svc Inc (803)452-5003
Chemtrie (800)424-9300
Coast Guard Response (800)424-8802

E. Comments:
SCA Code# 156-1102
Work Order # 19313

F. This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to all applicable regulations of the U.S. DOT, U.S. EPA, the S.C. PSC and the S.C. DHEC.

Henry V. Skinner Jr. — Signature
Henry V. Skinner, Jr., Manager, Traffic and Shipping — Name and Title
November 18, 1982 — Date

G. I hereby certify that I am an authorized representative of the transporter and that the waste(s) and quantity described in this Manifest have been accepted by us for ultimate delivery to the TSDF identified abov

Transporter No. 1: John Sefars — Signature; Willms Trucking — Name; 11-18-82 — Date

Transporter No. 2: Signature; Name; Date

H. I hereby certify that I am an authorized representative of the TSDF identified above and that the waste(s) and quantity in this Manifest have been accepted by me for treatment, storage, and/or disposal.

Hope Barwick — Signature
SCA Services, Technician — Name and Title
11-18-82 — Date

DHEC 1988 (3/80)

Instructions for completing this Form on reverse side.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460
OFFICE OF SOLID WASTE

Sludge "Delisting" Summary

SEP 17 1982

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Mr. W. Peoples
Superintendent, Plant Services
Westinghouse Electric Corporation
Raleigh, North Carolina 27603

Dear Mr. Peoples:

The purpose of this letter is to outline the reasons why the we cannot proceed with the review of the delisting petition submitted by Westinghouse Electric Company, as indicated in our previous telephone conversations. Clarification of the data submitted on February 10, 1982 is of primary importance. The leachable cyanide levels reported under 2(a) of that submission were unacceptable for each of the four runs reported. The acceptable leachate level for cyanide is generally 2 ppm using the EP toxicity test with distilled water only, without adjustment with acetic acid. According to Douglas P. Hall of Grainger Laboratories, the cyanide leachate tests performed were adjusted with acetic acid. Under these conditions, it is probable that additional leachable cyanide which would have shown up in the extract could have been oxidized to hydrogen cyanide gas by the acetic acid. Therefore, leachable cyanide levels in excess of those reported in your petition probably would occur if only distilled water was used. Under normal circumstances, we would recomend to to the Assistant Administrator for Solid Waste and Emergency Response that your petition be denied due to these cyanide levels. However, since Westinghouse incorporates a cyanide destruction step in its treatment system we believe that the efficiency of the system could be adjusted, possibly alleviating this cyanide leachate problem. If this assumption is correct then Westinghouse would have to submit additional cyanide leachate data to verify any adjustment.

A confounding point which also needs clarification is how the levels of free cyanide in the treatment residue can be lower than the levels of free cyanide found in the extracts (i.e., levels of 2.00 ppm were identified in the treatment residue where as levels as high as 9.25 ppm were found in the extract). In order to properly address this problem it is suggested that additional representative samples of the treatment residue should be collected and analyzed for total and amenable cyanide using method 8.55 of Test Methods for Evaluating Solid Waste (SW-846); and leachable cyanide using the EP toxicity test with no adjustment of the distilled water with acetic acid. A minimum of four samples is normally required, however, due to the previous data descrepancies it

might be prudent to run additional samples. I have included an additional cyanide test, (Test Method for the Determination of Reactive Cyanide), which should also be performed on these same samples for the purpose of comparison and to aid in resolving the previous data descrepancies reported.

Also included in the February 10, 1982 submission from Westinghouse, was an explanation describing why both cyanide and chromium EP toxicity extract concentrations were higher for the treated waste than for the untreated waste. These results were said to be caused by the higher pH of the treated waste, (exhibiting a pH of 10 to 11 after the addition of the maximum amount of acetic acid), than that of the untreated waste (exhibiting a pH of 5 after addition of the maximum amount of acetic acid). This explanation is unsatisfactory since the solubility curve for chromium indicates that its solubility would increase at least equivalently at pH levels above and below a pH range of 8 to 9. It would not be expected that either of these two waste residues would leach increased levels of chromium due primarily to their pH at the levels indicated.

In addition to the problems described above, we will need the method of standard additions performed on at least one of the previous EP toxicity test analyses for each of the listed constituents in your waste. This is a quality assurance test (described in SW-846) which would indicate the presence of any interferences in the waste extract. This procedure may have already been performed by Grainger Laboratory, in which case verification including spiked levels used for each parameter tested and percent recoveries should be submitted.

One final point that Westinghouse should be aware of is that since the samples tested for all previous analyses were of the cured treatment residue, any exclusion that may be granted, would apply only to the cured treatment residue. The uncured slurry entering the drying bed would still be considered a listed hazardous waste and would have to be managed as such under 40 CFR 264 and 265 of the regulations. If you wish to exclude the uncured material, additional test data would be necessary.

If you have any problems or questions about any of the requests described above, please call either myself or Mr. Matthew Straus at (202)755-9187.

Sincerely

Myles E. Morse

Myles E. Morse
Hazardous and Industrial Waste Division

cc: W. Gallagher
EPA Region IV

Michelle Gutman
Westinghouse

October 27, 1981

United States Environmental Protection Agency
Region IV
345 Courtland Street
Atlanta, Georgia 30365

John M. Harvanek III

Hazardous Waste Permit Application, EPA Form 3510-3, for the Meter and LVIT Division of Westinghouse Electric Corporation has been revised to rectify misuse of unit-of-measure codes in Sections III and IV. In accordance with instructions from your office, these changes have been made on the originally submitted forms which are herewith returned to you.

T. J. Daley, Manager
Technical Services
TJD/rsk

Attachments (3)

CONSENT FOR ACCESS TO PROPERTY

PROPERTY
ADDRESS: Westinghouse Elect Motor & Light Div.
US #1 N. Raleigh, N.C.

I, DAVID P. DAUGHERTY, am the ~~owner~~/authorized representative of the owner of real property located at the above address. I hereby consent to the inspection of said property by officers, employees, and authorized representatives of the North Carolina Solid and Hazardous Waste Management Branch. My consent gives the above named parties a right of entry to, upon or through said property, and the right to take photographs and make visual observations of the property as necessary for the inspection. My consent also gives the above named parties a right to bore holes into the subsurface, to survey the elevation of the bore holes, and to sample the surface water and/or ground water on or underlying the property.

Frank C. Mora 7/20/89 David P. Daugherty 7/20/89

Witness Date Signature Date

N. C. DEPARTMENT OF HUMAN RESOURCES
DIVISION OF HEALTH SERVICES
SOLID AND HAZARDOUS WASTE MANAGEMENT BRANCH

Chain of Custody Record

Hazardous Waste Materials

Location of Sampling: ____Generator ____Transporter ____Treatment Facility
____Storage Facility ____Disposal Facility ____Landfill
____Other: Waste Pile + Stream

Company's Name Westinghouse Telephone (919) 834-5271

Address US #1 North, Raleigh, N.C.

Collector's Name Frank E. Moore Telephone (919) 733-2178
signature

Date Sampled _____ Time Sampled _____

Type of Process Generating Waste Metal Electroplating

Field Information

_____

_____

Field Sample No. _____ _____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____ _____

Chain of Possession:

1. _____ _____ _____
signature title inclusive dates

2. _____ _____ _____
signature title inclusive dates

3. _____ _____ _____
signature title inclusive dates

Results reported

_____ _____ _____
signature title date

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

N. C. DEPARTMENT OF HUMAN RESOURCES
DIVISION OF HEALTH SERVIC
SO..D AND HAZARDOUS WASTE MANAGEME..T 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

(X) 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.

FRANK E. MOORE — Inspector's Name
Raleigh - N.C. 733-2178 — Inspector's Address

Westinghouse — Name of Firm
US 71 N. Raleigh NC — Firm Address

DAVID P DAUGHERTY — ~~Firm Owner, Operator,~~ or Agent
SR. ENGINEER — Title

SAMPLE NUMBER	COLLECTED DATE	COLLECTED TIME	SAMPLE TYPE WATER	SAMPLE TYPE SOIL	SAMPLE TYPE OTHER	DUPLICATE SAMPLES OFFERED	DUPLICATE SAMPLES ACCEPTED	DUPLICATE SAMPLES REJECTED	SAMPLE LOCATION ON-SITE	SAMPLE LOCATION OFF-SITE
1	20 July 84 9 am		✓			✓	✓		✓	
2				✓		✓	✓		✓	
3			✓			✓	✓		✓	
4				✓		✓	✓		✓	
5			✓			✓	✓		✓	
6				✓		✓	✓		✓	
7					sludge	✓	✓		✓	
8					sludge	✓	✓		✓	
9				✓	[redacted]	✓	✓		✓	
10	11:30 am				sludge	✓	✓			

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

Frank E. Moore
Signature of Inspector

Geologist
Title

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

David P. Daugherty
Signature of Firm Owner, Operator, or Agent

SR ENGINEER
Title

COMMENTS

Please print or type in the unshaded areas or (fill—in areas are spaced for elite type, i.e., 1 [illegible] characters/inch).

Form Approved OMB No. 158-R0175

FORM 1 GENERAL

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER: F N C D 0 0 3 1 9 5 9 6 3 - D

LABEL ITEMS

I. EPA I.D. NUMBER

III. FACILITY NAME

V. FACILITY MAILING ADDRESS

VI. FACILITY LOCATION

PLEASE PLACE LABEL IN THIS SPACE

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill—in area below. Also, if any of the preprinted data is absent *(the area to the left of the label space lists the information that should appear)*, please provide it in the proper fill—in area*(s)* below. If the label is complete and correct, you need not complete Items I, III, V, and VI *(except VI-B which must be completed regardless)*. Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

II. POLLUTANT CHARACTERISTICS

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

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

III. NAME OF FACILITY

1 SKIP Westinghouse Electric Corporation - Meter & LVIT Division

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*	B. PHONE *(area code & no.)*
2 Daley, Thomas - Manager of Technical Services	919 834 5271

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX: 3 P. O. Box 9533

B. CITY OR TOWN	C. STATE	D. ZIP CODE
4 Raleigh	NC	27611

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER: 5 2728 North Boulevard

B. COUNTY NAME: Wake

C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE *(if known)*
6 Raleigh	NC	27604	

CONTINUED FROM THE FRONT

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

A. FIRST	B. SECOND
3825 (specify) Instrument for Measuring & Testing of Electricity & Electrical Signals	(specify)
C. THIRD	**D. FOURTH**
(specify)	(specify)

VIII. OPERATOR INFORMATION

A. NAME: Westinghouse Electric Corporation

B. Is the name listed in Item VIII-A also the owner? [X] YES [ ] NO

C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other", specify.)
F = FEDERAL, S = STATE, P = PRIVATE, M = PUBLIC (other than federal or state), O = OTHER (specify)
: P (specify)

D. PHONE (area code & no.): A 919 834 5271

E. STREET OR P.O. BOX: P. O. Box 9533

F. CITY OR TOWN: Raleigh

G. STATE: NC

H. ZIP CODE: 27611

IX. INDIAN LAND

Is the facility located on Indian lands? [ ] YES [X] NO

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water): N/A	**D. PSD** (Air Emissions from Proposed Sources): N/A
B. UIC (Underground Injection of Fluids): N/A	**E. OTHER** (specify): 3637 (specify) N.C. Permit-Air Pollution Abatement Facilities and/or Emission Sources
C. RCRA (Hazardous Wastes): N/A	**E. OTHER** (specify): (specify)

XI. MAP

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

XII. NATURE OF BUSINESS (provide a brief description)

Manufacturer of electric metering equipment

XIII. CERTIFICATION (see instructions)

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

A. NAME & OFFICIAL TITLE (type or print)	B. SIGNATURE	C. DATE SIGNED
A. L. Bethel, Executive Vice President Transmission & Distribution	X	

COMMENTS FOR OFFICIAL USE ONLY

C

Please print or type in the unshaded areas only (fill-in areas are spaced for elite type, i.e., aracters/inch).

Form Approved OMB No. 158-S80004

FORM 3 RCRA

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE PERMIT APPLICATION

Consolidated Permits Program

(This information is required under Section 3005 of RCRA.)

I. EPA I.D. NUMBER

S													T/A	C
F	N	C	D	0	0	3	1	9	5	9	6	3		1

FOR OFFICIAL USE ONLY

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

II. FIRST OR REVISED APPLICATION

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

A. FIRST APPLICATION *(place an "X" below and provide the appropriate date)*

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

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

C	YR.	MO.	DAY
8	5 3	1 2	1 4

[ ] 2. NEW FACILITY *(Complete item below.)*

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

YR.	MO.	DAY

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

[ ] 1. FACILITY HAS INTERIM STATUS

[ ] 2. FACILITY HAS A RCRA PERMIT

III. PROCESSES – CODES AND DESIGN CAPACITIES

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

B. PROCESS DESIGN CAPACITY – For each code entered in column A enter the capacity of the process.
1. AMOUNT – Enter the amount.
2. UNIT OF MEASURE – For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:		
CONTAINER *(barrel, drum, etc.)*	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
Disposal:		
INJECTION WELL	D79	GALLONS OR LITERS
LANDFILL	D80	ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER
LAND APPLICATION	D81	ACRES OR HECTARES
OCEAN DISPOSAL	D82	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	D83	GALLONS OR LITERS

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Treatment:		
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR OR GALLONS PER HOUR OR LITERS PER HOUR
OTHER *(Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)*	T04	GALLONS PER DAY OR LITERS PER DAY

UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G	LITERS PER DAY	V	ACRE-FEET	A
LITERS	L	TONS PER HOUR	D	HECTARE-METER	F
CUBIC YARDS	Y	METRIC TONS PER HOUR	W	ACRES	B
CUBIC METERS	C	GALLONS PER HOUR	E	HECTARES	Q
GALLONS PER DAY	U	LITERS PER HOUR	H		

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

S		T/A	C
C	DUP		1

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT	B. 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
X-1	S 0 2	600	G		5				
X-2	T 0 3	20	E		6				
1	S 0 1	16,500	G		7				
2	S 0 2	31,600	G		8				
3	T 0 1	121,000	U		9				
4	T 0 1	550	U		10				

Continued from the front.

III. PROCESSES *(continued)*

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES *(code "T04")*. FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

IV. DESCRIPTION OF HAZARDOUS WASTES

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

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

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

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

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

D. **PROCESSES**

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

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

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

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

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

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

 CONTINUE ON PAGE 3

Continued from page 2.

NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

Form Approved OMB No. 158-S80004

EPA I.D. NUMBER (enter from page 1)	FOR OFFICIAL USE ONLY
W N C D 0 0 3 1 9 5 9 6 3 T/A C 1	W DUP T/A C 2 DUP

IV. DESCRIPTION OF HAZARDOUS WASTES (continued)

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	F007	90-160	T ✓	S 02 T 01	CN- bath solutions
2	F006	225-300	T ✓	S 02 T 01	electro plating wastewater treatment sludge
3	F008	5400-8700	P ✓	S 01	plating bath sludge
4	F009	8500-11000	P ✓	S 01	spent stripping/plating solution
5	F017	1800-2300	P ✓	S 01	paint
6	F001	13000-20000	P ✓	S 01	1,1,1 trichloroethane
7	D006	6500-11000	P ✓	S 01	Cd
8	D007	Included w/ above		S 01	Cr
9	D008	Included w/ above		S 01	Pb
10	F003	2700-4600	P ✓	S 01	non-halogenated solvents x, acetone
11	F005	Included W/ above		S 01	" " " toluene
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					

Continued from the front.

IV. DESCRIPTION OF HAZARDOUS WASTES *(continued)*

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 3.

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

F N C D 0 0 3 1 9 5 9 6 3 T/A 2 C 6

V. FACILITY DRAWING

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

VI. PHOTOGRAPHS

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

VII. FACILITY GEOGRAPHIC LOCATION

LATITUDE *(degrees, minutes, & seconds)*	LONGITUDE *(degrees, minutes, & seconds)*
35 49 30	78 36 30

VIII. FACILITY OWNER

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

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

1. NAME OF FACILITY'S LEGAL OWNER	2. PHONE NO. *(area code & no.)*
E Westinghouse Electric Corporation	412-255-3616

3. STREET OR P.O. BOX	4. CITY OR TOWN	5. ST.	6. ZIP CODE
F Gateway Center - Stanwix Street	G Pittsburgh	PA	15222

IX. OWNER CERTIFICATION

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

A. NAME *(print or type)*	B. SIGNATURE	C. DATE SIGNED
A. L. Bethel, Executive Vice President Transmission & Distribution	x A L Bethel	11/26/80

X. OPERATOR CERTIFICATION

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

A. NAME *(print or type)*	B. SIGNATURE	C. DATE SIGNED
C. E. Bell	C E Bell	11/7/80

CONTINUE ON PAGE 5

POOR LEGIBILITY

PORTIONS OF THIS DOCUMENT MAY BE UNREADABLE, DUE TO THE QUALITY OF THE ORIGINAL

Waste Water Treatment

(File Photos)

Storage

INTERIM STATUS INSPECTION

1. Facility Information

Westinghouse Electric Meter & Lvit. Division
U.S. 1 North
Raleigh, NC 27603 (Wake County)
EPA I.D. #NCD003195963

2. Facility Contact

Charlie Yates, Manager of Materials

3. Survey Participants

W. A. Peoples, Manufacturing Engineer
Paul Parker, Personnel Administrator
Larry D. Perry, Field Representative, N.C. Solid & Hazardous Waste Mgmt. Branch
Keith Lawson, Chemist, N.C. Solid & Hazardous Waste Mgmt. Branch

4. Date of Inspection

August 5, 1981

5. Applicable Regulations

40 CFR Parts 262 and 265, FR May 19, 1981 and amendments

6. Purpose of Survey

RCRA compliance inspection was conducted at the Westinghouse facility by the N. C. Solid and Hazardous Waste Management Branch. The scope of the inspection was comprehensive including a record review and site survey. Regulatory requirements covered those contained in 40 CFR Parts 262 and 265 under generator standards, general facility standards, storage facilities, treatment standards (recycling, recovery, solvent recovery, etc.), and tanks and containers.

7. Facility Description

The Westinghouse facility in Raleigh, N.C., is located on a 100-acre site off U.S. 1 North just north of the 'belt-line'. The company manufactures all types of electrical metering devices.

Prior to RCRA, Westinghouse had two existing environmental permits. Included were an SPCC plan and an N. C. Department of Natural and Economic Resources air permit.

The Part A application filed by Westinghouse listed the company as a generator of electroplating waste (F007, F006, F008, F009), paint residues (F017), halogenated solvents (F001) and non-halogenated solvents (F003, F005), Cadmium (D006), Chromium (D007), and lead (D008) were listed as constituents of the plating waste. Also waste oil is generated.

The plating waste is treated by an on-site treatment plant and the treatment water is released to Raleigh City sewer (NPDES permitted). The resulting sludge from this treatment process is "chem-fixed" by addition of cement, is allowed to "set-up" and then disposed of. No disposal of this chem-fixed material has been performed since November 19, 1980. Westinghouse is in the process of trying to delist this technique in order that the material can be disposed of via local sanitary landfills.

The solvents are reclaimed by the Westinghouse facility. The waste oils are stored in 55-gallon drums and at some point will be disposed of. No shipment of any waste has been done since RCRA became effective.

8. Documentation of Site Deficiencies/Recommendations

Westinghouse was deficient in the areas cited below:

1. (265.16) - Personnel Training Records: written description of hazardous waste handling personnels' records deficient.

2. (265.17(a)) - Waste container leaking: a 55-gallon drum of waste oil observed leaking - to be corrected immediately.

3. (265.32(c)) - Required Equipment: oil storage area to be made spill-proof by erection of berm around storage area.

4. (265.53) - Copies of contingency plan needs to be sent to appropriate agencies (fire station, police, etc.)

5. (265.171) - same as above (265.17(a)).

9. Compliance Schedule

A compliance schedule was agreed upon in that deficiencies must be corrected within 90 days of date of notification letter. Mr. Larry Perry will revisit the Westinghouse site to review the corrections at this deadline or sooner if notified by letter.

IC #1

CST

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

Site Number 92-00000100-X Field Sample Number 001477

Name of Site WESTINGHOUSE Site Location RAL

Collected By F. Moore ID [illegible] Date Collected 4-20-84 Time 10:32

Type of Sample:

Environmental	Concentrate	Comments
___ Groundwater	X Solid	SLUDGE COMPOSITE FROM
___ Surface Water	___ Liquid	ONE TO SIX FEET #7
___ Soil	___ Sludge	
___ Other	___ Other	

INORGANIC CHEMISTRY

Extractables Parameter	Results mg/l	Total Parameter	Results mg/l	Parameter	Results mg/l
Arsenic	<0.01	Arsenic	<0.49	Chloride	
Barium	0.7	Barium	212	Conductivity	
Cadmium	0.17	Cadmium	665	Copper	
Chromium	0.97	Chromium	936	Fluoride	
Lead	0.2	Lead	34	Iron	
Mercury	<0.02	Mercury	<0.10	Manganese	
Selenium	<0.10	Selenium	<4.9	Nitrate	
Silver	<0.05	Silver	<2.5	pH	10.0
Nickel	0.19	Nickel	148	Sulfates	
Cu	0.27	Cu	1010	TDS	
Zn	<0.05	CN-	200	Zinc	
Fe	<0.05	Zn	2270	TOC	
Mn	0.04	Fe	3720		
		Mn	103		

ORGANIC CHEMISTRY

Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
Endrin		Toxaphene		PCB's	
Lindane		2,4-D		Petroleum	
Methoxychlor		2,4,5-TP(Silvex)		EDB	
				TOX	

MICROBIOLOGY

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

RADIOCHEMISTRY

Parameter	Results PCi/l
Gross Alpha	
Gross Beta	

Date Received _____ Date Reported 8 Aug 84

Date Extracted _____ Date Analyzed _____

Reported By _____ Lab Number 39011 JUL 23 84

DHS 3191 (Revised 2/84)
Solid and Hazardous Waste

IO #9

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

Site Number 92-00000100-X Field Sample Number 001478
Name of Site WESTINGHOUSE Site Location RAL
Collected By [illegible] ID# 027 Date Collected 7-20-84 Time 11:00
Type of Sample: F. Moore

(✓) Environmental	Concentrate	Comments
___ Groundwater	___ Solid	SOIL MAT ASSUMED BOTTOM
___ Surface Water	___ Liquid	OF PIT (6.5 TO 7 FEET) #9
✓ Soil	___ Sludge	
___ Other	___ Other	

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
✓ Arsenic	<0.01	✓ Arsenic	<0.5	___ Chloride	
✓ Barium	0.2	✓ Barium	45	___ Conductivity	
✓ Cadmium	<0.05	✓ Cadmium	<2.5	✓ Copper	
✓ Chromium	<0.05	✓ Chromium	225	___ Fluoride	
✓ Lead	<0.1	✓ Lead	10	✓ Iron	
✓ Mercury	<0.02	✓ Mercury	<0.10	✓ Manganese	
✓ Selenium	<0.10	✓ Selenium	<5.0	___ Nitrate	
✓ Silver	<0.05	✓ Silver	<2.5	✓ pH	7.8
✓ Nickel	<0.05	✓ Nickel	24.5	___ Sulfates	
___ Copper	0.21	___ Copper	288	___ TDS	
___ Iron	<0.05	___ Iron	38,100	✓ Zinc	
___ Manganese	0.08	___ Manganese	610	___ TOC	
___ Zinc	0.14	___ Zinc	5.0	___	

ORGANIC CHEMISTRY

Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
___ Endrin		___ Toxaphene		___ PCB's	
___ Lindane		___ 2,4-D		___ Petroleum	
___ Methoxychlor		___ 2,4,5-TP(Silvex)		___ EDB	
				___ TOX	

MICROBIOLOGY

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

RADIOCHEMISTRY

Parameter	Results PCi/l
___ Gross Alpha	
___ Gross Beta	

Date Received ___ Date Reported 8 Aug 84
Date Extracted ___ Date Analyzed ___
Reported By ___ Lab Number 39009 JUL 23 84

DHS 3191 (Revised 2/84)
Solid and Hazardous Waste

IO #10

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

Site Number 92-00000100-X Field Sample Number 001479
Name of Site WESTINGHOUSE Site Location [redacted]
Collected By F. [redacted] ID# 027 Date Collected 7-[redacted]84 Time 11:10
Type of Sample:

Environmental	Concentrate	Comments
___ Groundwater	X Solid	Cyan-Fixed [redacted]PLE from Pile
___ Surface Water	___ Liquid	
___ Soil	___ Sludge	
___ Other	___ Other	

INORGANIC CHEMISTRY

Extractables Parameter	Results mg/l	Total Parameter	Results mg/l	Parameter	Results mg/l
✓ Arsenic	<0.01	✓ Arsenic	0.49	___ Chloride	
✓ Barium	interference	✓ Barium	interference	___ Conductivity	
✓ Cadmium	0.71	✓ Cadmium	243	___ Copper	
✓ Chromium	1.30	✓ Chromium	767	___ Fluoride	
✓ Lead	0.3	✓ Lead	54	___ Iron	
✓ Mercury	<0.02	✓ Mercury	<0.10	___ Manganese	
✓ Selenium	<0.10	✓ Selenium	<5.0	___ Nitrate	
✓ Silver	0.05	✓ Silver	<2.5	___ pH ✓ yes	12.1
✓ NICKEL	0.42	✓ NICKEL	495	___ Sulfates	
		✓ CN-	260	___ TDS	
✓ CU	0.73	✓ CU	3248	___ Zinc	
✓ ZN	7.20	✓ ZN	5150	___ TOC	
✓ FE	0.05	✓ FE	7425	___	
✓ MN	0.42	✓ MN	146		

ORGANIC CHEMISTRY

Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
___ Endrin		___ Toxaphene		___ PCB's	
___ Lindane		___ 2,4-D		___ Petroleum	
___ Methoxychlor		___ 2,4,5-TP(Silvex)		___ EDB	
				___ TOX	

MICROBIOLOGY

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

RADIOCHEMISTRY

Parameter	Results PCi/l
___ Gross Alpha	
___ Gross Beta	

Date Received ___ Date Reported 8 Aug 84
Date Extracted ___ Date Analyzed ___
Reported By ___ Lab Number 39010 JUL 23 84

DHS 3191 (Revised 2/84)
Solid and Hazardous Waste

Paige

Vestinghouse Electric Corporation Power Systems

Meter Division
Box 9533
Raleigh North Carolina 27603
(919) 834 5271

RECEIVED
APR 27 1981
SOLID & HAZARDOUS WASTE MANAGEMENT BRANCH

April 23, 1981

Ms Jacque Sales
Office of Solid Waste
Mail Code WH-565
US EPA
401 M Street South West
Washington, D. C. 20460

Subject: Petition to de-list treated final waste from a non-specific source
(261.31-F.006)
(Reference: EPA I. D. #NCD003195963)
Petition to Solid and Hazardous Waste Management Division, Raleigh, N.C.

Dear Ms Sales:

This will confirm our telephone conversation on April 22, 1981 regarding the above subject.

1. I am B. K. Pierce, Manager Plant Services, with the responsibility of the operation of the waste water treatment facilities and handling and disposal of sludge generated by this facility.

2. The samples taken were from six different mixes of sludge, generated on different days. They were then blended into a representative composite for EP toxicity test.

3. These were typical samples as our cleaning and plating processes are consistent.

4. There are no solids in the waste water that is treated and generate this sludge.

5. A Flow Chart is attached of the waste water treatment plant.

   It is my understanding that upon your receipt of this flow chart, Westinghouse will be issued a temporary de-listing.

6. A constituent analysis for cadmium, chromium, nickel, and cyanide will be performed as soon as possible on samples taken as before.

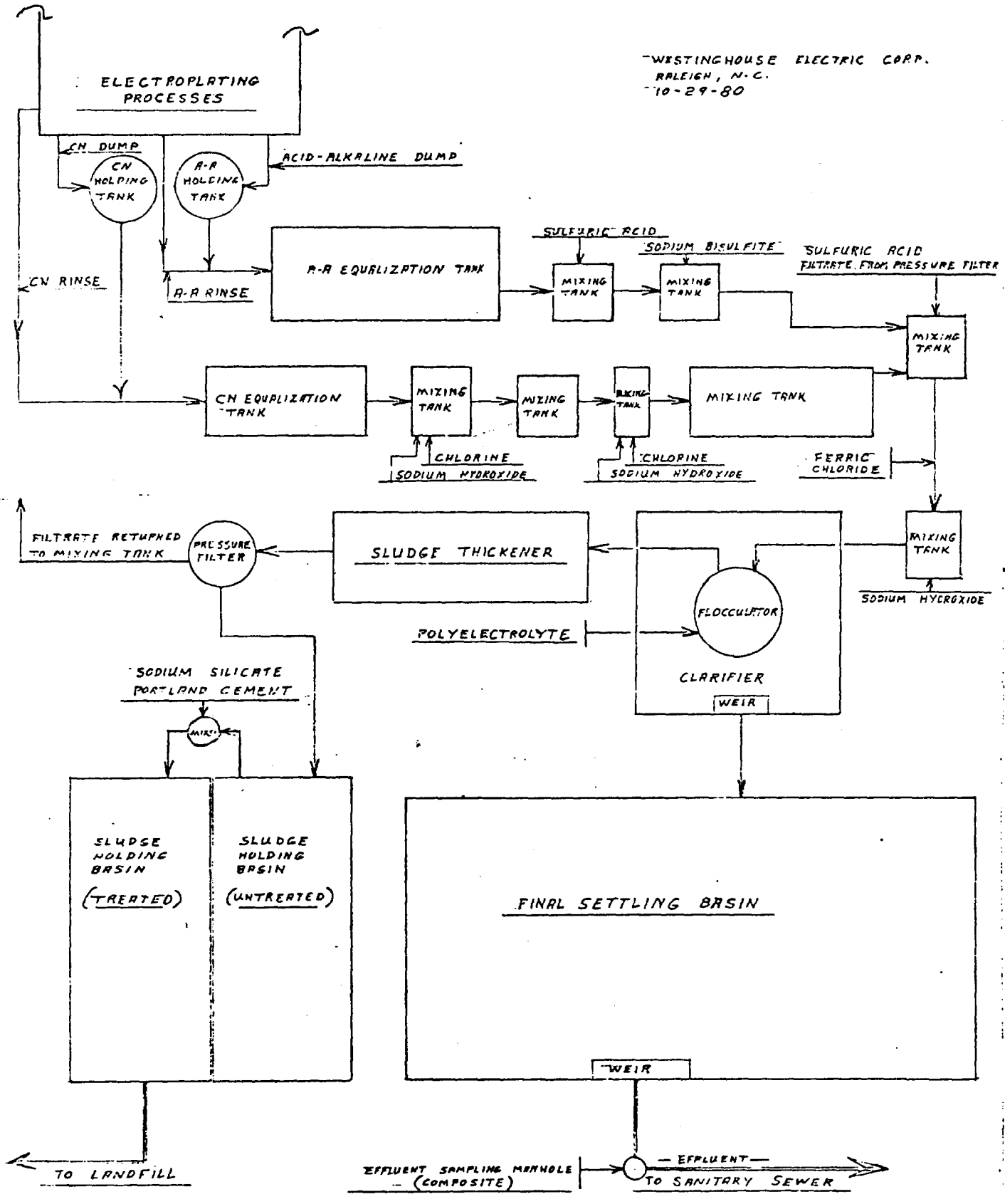
This analysis will have to be forwarded to you before a permanent de-listing can be issued.

Your expediting of a temporary de-listing is greatly appreciated, and should you need additional information, please give me a call at 919-834-5271, extension 302.

B. K. Pierce, Jr.
Manager, Plant Services

Attachment

lcc: Mr. William Paige
Solid and Hazardous Waste Management Division, Raleigh, North Carolina


WESTINGHOUSE ELECTRIC CORP.
RALEIGH, N.C.
10-29-80
ELECTROPLATING PROCESSES
CN DUMP
ACID-ALKALINE DUMP
CN HOLDING TANK
A-A HOLDING TANK
CN RINSE
A-A RINSE
A-A EQUALIZATION TANK
SULFURIC ACID
SODIUM BISULFITE
MIXING TANK
MIXING TANK
SULFURIC ACID
FILTRATE FROM PRESSURE FILTER
MIXING TANK
CN EQUALIZATION TANK
MIXING TANK
MIXING TANK
MIXING TANK
MIXING TANK
CHLORINE
SODIUM HYDROXIDE
CHLORINE
SODIUM HYDROXIDE
FERRIC CHLORIDE
FILTRATE RETURNED TO MIXING TANK
PRESSURE FILTER
SLUDGE THICKENER
MIXING TANK
SODIUM HYDROXIDE
FLOCCULATOR
POLYELECTROLYTE
CLARIFIER
WEIR
SODIUM SILICATE
PORTLAND CEMENT
MIXER
SLUDGE HOLDING BASIN (TREATED)
SLUDGE HOLDING BASIN (UNTREATED)
FINAL SETTLING BASIN
WEIR
TO LANDFILL
EFFLUENT SAMPLING MANHOLE (COMPOSITE)
EFFLUENT
TO SANITARY SEWER

Westinghouse Electric Corporation Power Systems

Meter Division

Box 9533
Raleigh North Carolina 27603
(919) 834 5271

March 17, 1981

Mr. William Paige
N. C. Environmental Chemist
Solid & Hazardous Waste Management Division
Bath Building
306 N. Wilmington Street
P. O. Box 2091
Raleigh, North Carolina 27602

Subject: Petition to de-list treated final waste from a non-specific source (261.31-F.006)
(Reference: EPA I. D. #NCD003195963)

Dear Mr. Paige:

This letter is a written petition to your office for the de-listing of our waste as shown in the hazardous waste from non-specific sources and listed in the May 19, 1980 Federal Register (261.31) under subpart "D" of Part 261.

We generate this waste with a cleaning and plating process for ferrous and non-ferrous metals using tin, nickel, zinc, copper, zinc phosphate, iron phosphate and chromate solutions. The wastewater from these processes flow to our wastewater treatment facilities through separate acid-alkalai and cyanide lines. The cyanide wastewater has its pH adjusted, chlorine is then added with sufficient retention time allowed to destruct the cyanide. The acid-alkalai wastewater has its pH adjusted and sodium bisulfite added for the destruction of hexavalant chrome. The two wastewaters are then combined with further pH adjustment and ferric chloride is added to aid in the precipitation of the sludge. Again the pH is adjusted and a polymer is added to complete the separation of the sludge from the wastewater. This sludge collects in the bottom of the flocculator-clarifier where it is drawn off into a thickening basin. The sludge is later passed through a pressure filter for de-watering and then to a holding basin. In this untreated aqueous form it is 12% to 14% solids and contains metal hydroxides. Our present average sludge generated is 4300 gallons per month with an average annual total of approximately 51,000 gallons. Our maximum generated in any one day is approximately 200 gallons.

Prior to the November 19, 1980 implementation of the Federal Hazardous Waste Regulation, this sludge had been mixed with sodium silicate and portland cement in proportions that the reaction with each other converted the sludge into a consolidated chemically and physically stable solid product

that was substantially insoluble in water with its metal hydroxides or pollutants entrapped in the solidified silicate. Extraction from representative samples were analyzed by your laboratories and permission was granted by Mr. O. W. Strickland of the Solid Waste Management Unit, Division of Health Services, State of North Carolina, for its disposal in the private landfill. Copies of the letter dated January 17, 1978, granting permission and your analysis are enclosed for information.

The procedure used to prepare sludge for disposal in a landfill is to mix 100 Cu. Ft. of sludge with 940 lbs. of portland cement and 22-1/2 gallons of sodium silicate. This equates to a ratio by volume of 0.10 cement and 0.03 silicate. These ingredients are mixed in a permanently installed cement mixer a minimum of ten minutes and then discharged into the sludge holding bed for setting. Holding time is a minimum of two weeks before it is taken to a privately owned landfill. The material is separated at the landfill from other routine solid waste by a minimum of one foot of earth as specified by Mr. O. W. Strickland's letter of January 17, 1978.

For the purpose of this request for de-listing, six representative samples of sludge were taken on March 2, 1981. Samples were taken by Mr. Don Richards, Westinghouse Technician, and W. A. Peoples, Maintenance Engineer, at the Raleigh Meter Plant and were delivered by Mr. Peoples, in a plastic container, to Grainger Laboratories for EP Toxicity Test. Attached is a copy of the sketch used to show location and depth of samples taken from the holding bed. These samples were taken using a core sampler which extracts 2" diameter by 4" long samples. The Grid pattern used for location and depth of sampling gives us the best representation of various batches of treated waste.

The EP Toxicity Test were performed in the Grainger Laboratories, a laboratory certified in primary drinking water standards, and located at 709 West Johnson Street in Raleigh, North Carolina. The Chemist performing the test was Mr. Vance C. Allen, Laboratory Manager for Grainger Laboratories, and test were performed in accordance with "test methods for evaluating solid waste" (Reference SW-846). Mr. Allen's qualifications include a B. S. Degree in Chemistry and six years practical laboratory experience.

The extraction procedure was accomplished through the use of a Millipore Pressure and Filtration Extraction Apparatus. pH was tested with an Orion model 601 pH Meter and metals were analyzed through the use of a Perkin-Elmer model 2380 Atomic Absorption Spectrophotometer.

A copy of the results of this latest EP Toxicity Test is attached and shows the waste to be well within the safe limits as required by table 1 of part 261.24 "Maximum Concentration of Contaminants for Characteristic of EP Toxicity".

Westinghouse request that the sludge generated by electroplating operations and rendered non-polluting by the above process be de-listed from the present F.006 listing, that we may continue the disposal as per Mr. Strickland's letter. This treated waste does not meet the criteria as set forth in Appendix VII, "Basis For Listing Hazardous Waste", nor does it contain hazardous constituents as listed in Appendix VIII, "Hazardous Constituents".

Your attention will be greatly appreciated and should you need additional information, please give me a call at 919-834-5271, extension 302.

B. K. Pierce, Jr.
Manager, Plant Services

Enclosure

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

B. K. Pierce, Jr.
Manager, Plant Services

GRAINGER LABORATORIES
INCORPORATED
ANALYTICAL AND CONSULTING CHEMISTS

709 West Johnson Street • Raleigh, North Carolina 27603

(919) 828-3360

ANALYTICAL LABORATORY

Pollution Analysis
Construction Materials
Identification of Unknowns
Agriculture
Fuels
Textiles
Chemicals

CONSULTATION

Metallurgical Services
Pollution Abatement
Process Development
Quality Control
Methods Development
Special Investigation
Pesticides

March 16, 1981

#81-377

Westinghouse Electric Corporation
Meter Division
2728 North Blvd.
P.O. Box 9533
Raleigh, N. C.27603

Attn: B. K. Pierce

Subject: Analysis of sample received 3-2-81

Sample Identification: P.O. #48-S84333

Sludge for E. P. Toxicity

Results:

Chromium, total extractable as Cr, ppm	0.24
Cadmium, total extractable as Cd, ppm	0.03
Silver, total extractable as Ag, ppm	0.05
Lead, total extractable as Pb, ppm	0.3
Nickel, total extractable as Ni, ppm	0.16
Barium, total extractable as Ba, ppm	< 0.3
Arsenic, total extractable as As, ppb	< 2.0
Selenium, total extractable as Se, ppb	< 2.0
Mercury, total extractable as Hg, ppb	< 2.0
Cyanide, total as CN^-, ppm	1.50

Douglas P. Hall

Douglas P. Hall
Laboratory Supervisor

DPH/lmb

GRAINGER LABORATORIES
INCORPORATED
ANALYTICAL AND CONSULTING CHEMISTS

709 West Johnson Street • Raleigh, North Carolina 27603

(919) 828-3360

ANALYTICAL LABORATORY
Pollution Analysis
Construction Materials
Identification of Unknowns
Agriculture
Fuels
Textiles
Chemicals

CONSULTATION
Metallurgical Services
Pollution Abatement
Process Development
Quality Control
Methods Development
Special Investigation
Pesticides

November 10, 1980

#80-1399

Westinghouse Meter Plant
US 1 North
Raleigh, N.C.

Attn: Don Richardson

Subject: Analysis of sludge sample received 11-5-80

Sample Identification: Elect. Plate Sludge for E.P. Toxicity

Results

Chromium, total as Cr, ppm	0.13
Cadmium, total as Cd, ppm	0.02
Silver, total as Ag, ppm	0.05
Lead, total as Pb, ppm	0.5
Barium, total as Ba, ppm	< 0.1
Arsenic, total as As, ppb	< 2.0
Selenium, total as Se, ppb	< 2.0
Mercury, total as Hg, ppb	< 2.0

V. C. Allen

V. C. Allen

VCA/hcm

POOR LEGIBILITY

PORTIONS OF THIS DOCUMENT MAY BE UNREADABLE, DUE TO THE QUALITY OF THE ORIGINAL

Proposed

Original [illegible] - ① / IO metal (composite)
② / O solvent [illegible]
bottom of [illegible]
③ / IO composite [illegible] metal

④ / [illegible] water
⑤ / [illegible] Sediment

⑥ / IO Water
⑦ / IO Sediment

⑧ / IO Water
⑨ / IO Sediment

Metals

Fe iron
Cu copper
Mn manganese
Cr chromium
Zn zinc
Ni nickel
Cd cadium
Sn tin
Al aluminum

Halogenated solvent
non-halogenated solvents
Freon

Al Pans
Plastic Bags (Garbage)
Gloves
[illegible]
3 cubes
5 IO Jars
1 O Jar

Splits

pH meter
[illegible] meter

(2) Soil Augers

Spoons

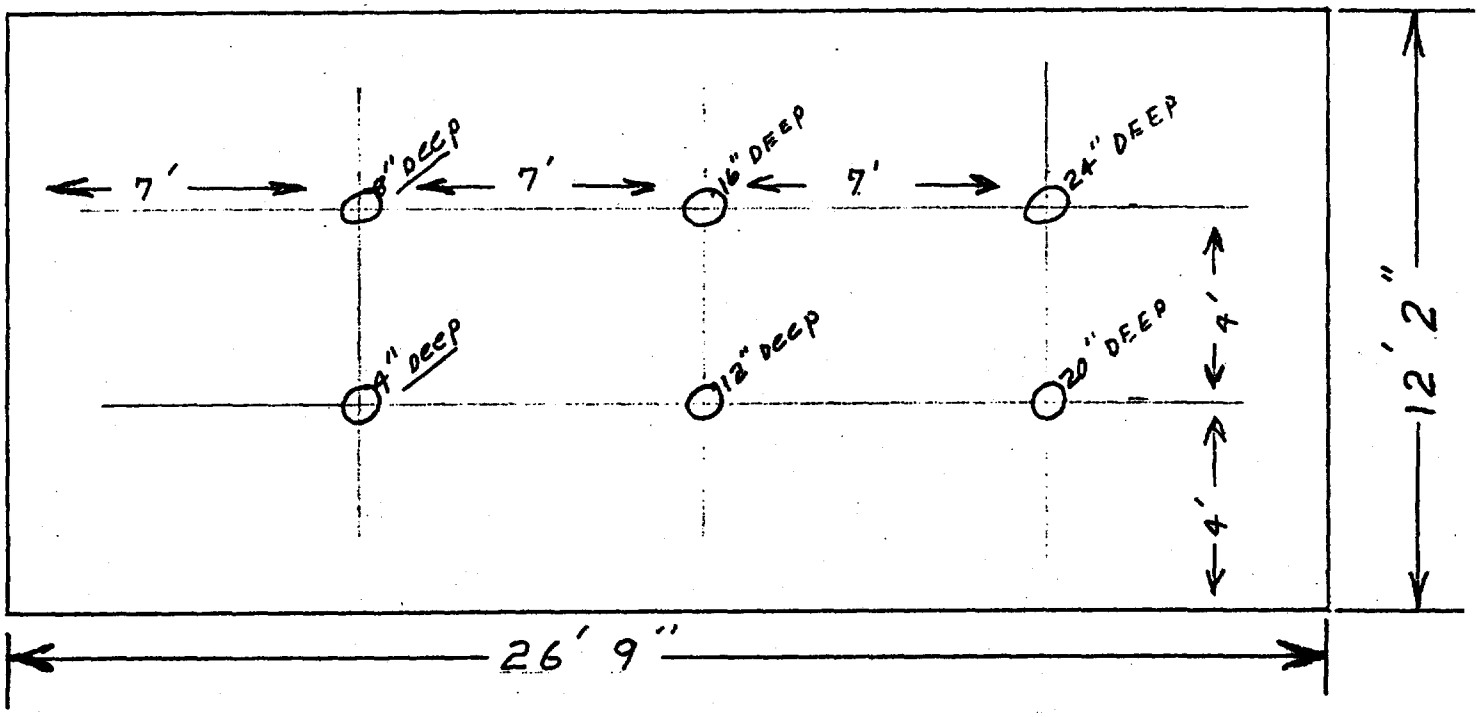
Water Jug
Wooden Spoons

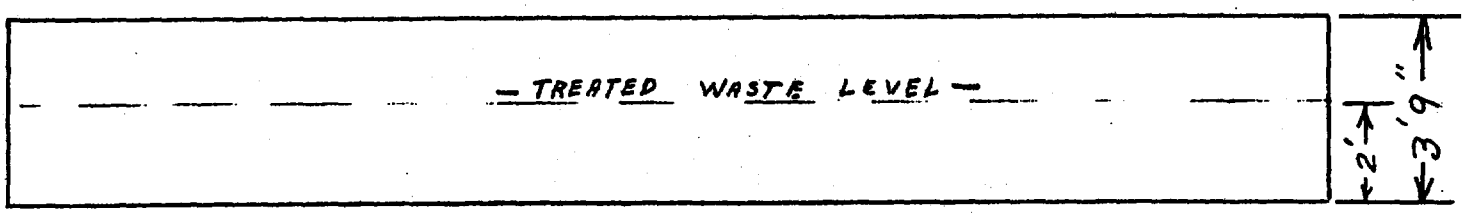
S. Glasses

[illegible]
Al Foil
[illegible]
Paper Towels
[illegible]
Hard Hats

HOLDING BED FOR TREATED WASTE
WESTINGHOUSE METER PLANT

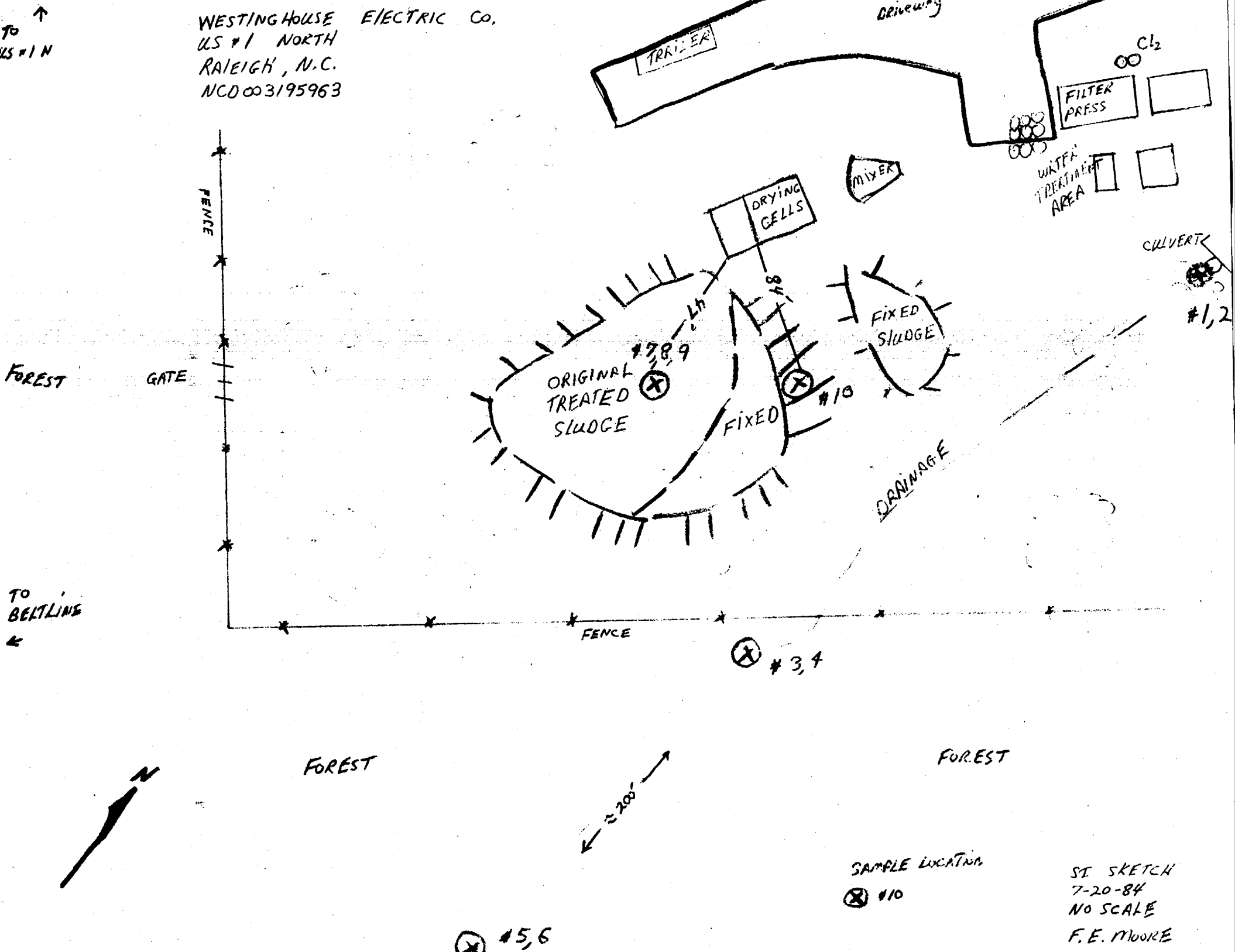
GRID PATTERN FOR SAMPLING TREATED WASTE FOR EP TOXICITY TEST.



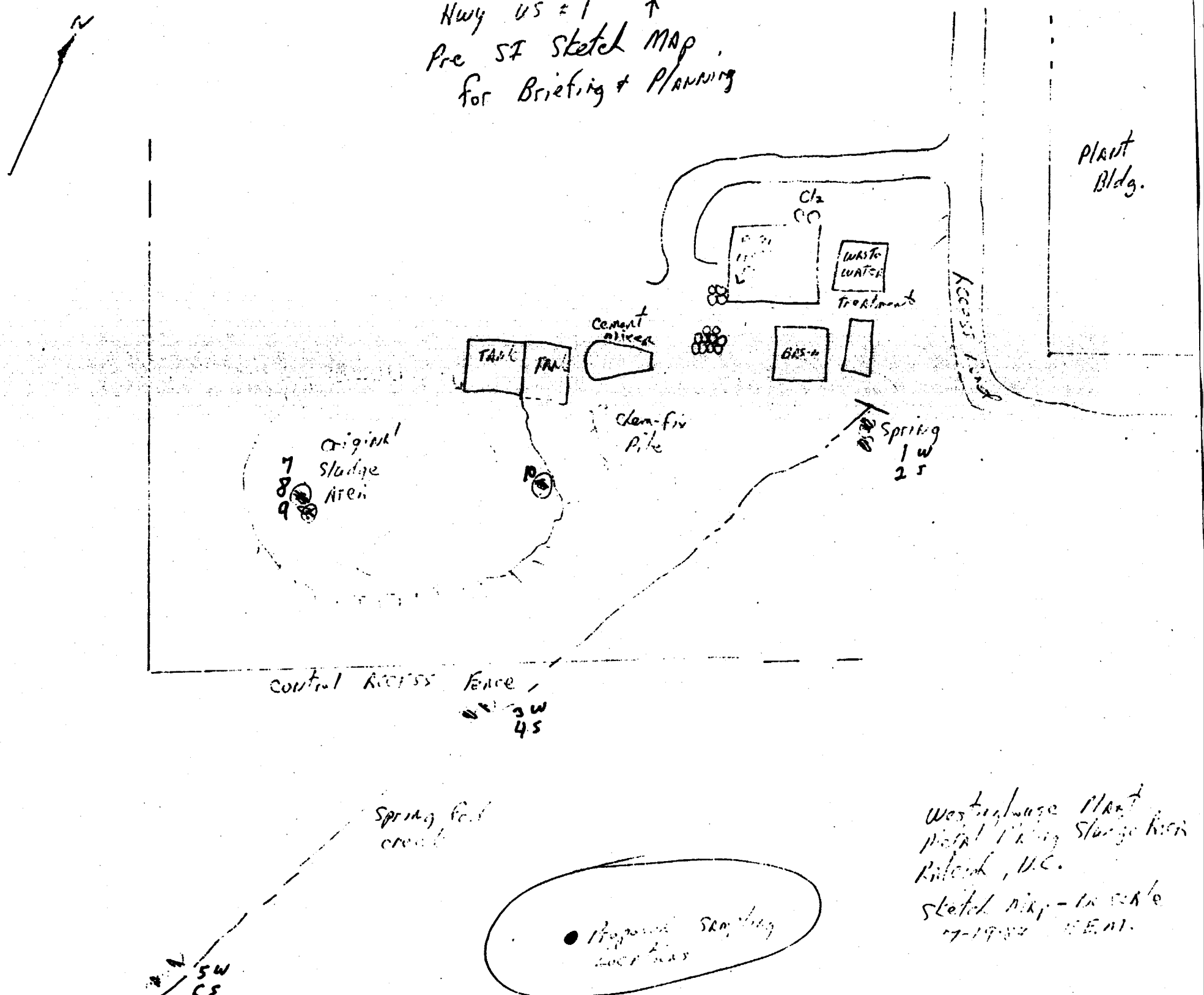


W. A. Peoples

WESTINGHOUSE ELECTRIC Co.
US #1 NORTH
RALEIGH, N.C.
NCD003195963



ST SKETCH
7-20-84
NO SCALE
F.E. MOORE


Hwy US #1
Pre SI Sketch Map
for Briefing & Planning
N
Plant Bldg.
Cl2
Waste Water
Treatment
Cement mixer
Tank
Tank
Chem-fix Pile
Original Sludge Area
7
8
9
10
Spring
1 W
2 S
Control Access Fence
3 W
4 S
Spring fed creek
5 W
6 S
Proposed Sampling Locations
Westinghouse Plant
Metal Plating Sludge Area
Raleigh, N.C.
Sketch Map - No scale
7-19-84 EEM.

STATE OF NORTH CAROLINA

DEPARTMENT OF HUMAN RESOURCES

Division of Health Services

P. O. Box 2091 Raleigh 27602

JAMES B. HUNT, JR.
GOVERNOR

SARAH T. MORROW, M.D., M.P.H.
SECRETARY

JACOB KOOMEN, M.D., M.P.H.
DIRECTOR

1877
One Hundred Years
of Public Health
in North Carolina
1977

January 17, 1978

Mr. B. K. Pierce
Westinghouse Electric Corporation
Raleigh, North Carolina 27609

Dear Mr. Pierce:

This office has completed the testing on the fixed sludge that came from your plant. A copy of the results is enclosed.

I have discussed the test results with Dr. R. J. Drye, Head, Environmental Sciences, Laboratory Section, Division of Health Services, and we recommend the use of a ratio by volume - Cement 0.10 - Silicate 0.03 as this gives the best results.

This office has no objection to the placing of the fixed waste in a sanitary landfill provided it is landfilled with at least one foot of earth separating it from routine solid waste.

Please keep us informed if there are any changes in your process.

Sincerely,

O. W. Strickland, Supervisor
Solid Waste Management Unit
Solid Waste & Vector Control Branch
Sanitary Engineering Section

OWS/wss

cc: Mr. Terry F. Dover

Enclosure

SAMPLING METHODS

Heavy Metals:

"Methods for Analysis of Water and Wastes," EPA-600/4-79-020, March 1979 (Atomic Adsorption and Digestion).

Cyanide (Free and Total):

Standard Methods, 14th Edition, Pg. 360 for Total and Pg. 376 for Free or Amenable to Chlorination

Waste Solvents and Residues:

Gas Chromatography Method 601, December 3, 1979 Federal Register

Flash Point:

Pensky-Martens Closed Cup Tester and ASTM Std. D-93-79; or Setaflash Closed Cup Tester and ASTM Std. D-3278-78

pH:

"Methods for Analysis of Water and Wastes," EPA 600/4-79-020, March, 1979

EP Toxicity:

Appendix II of Part 261, May 19, 1980 Federal Register.

Notes: Analyses performed by off-site analytical laboratory (Grainger Laboratories, Raleigh, NC).

- SAMPLING METHODS

Containerized liquid wastes - "Samplers and Sampling Procedures for Hazardous Waste Streams, EPA 600/2-80-018, January 1980

- FREQUENCY OF ANALYTICAL REVIEW

See table. Frequency is required by off-site waste disposal facility.

TENTIAL HAZARDOUS WASTE SI
SITE INSPECTION REPORT

General Information

The Potential Hazardous Waste Site, Site Inspection Report form is used to record information collected during, or associated with, an inspection of the site and other information about responsible parties and past response activities.

The Site Inspection Report form contains eleven parts:

Part 1 — Site Location and Inspection Information

Part 2 — Waste Information

Part 3 — Description of Hazardous Conditions and Incidents

Part 4 — Permit and Descriptive Information

Part 5 — Water, Demographic, and Environmental Data

Part 6 — Sample and Field Information

Part 7 — Owner Information

Part 8 — Operator Information

Part 9 — Generator/Transporter Information

Part 10— Past Response Activities

Part 11— Enforcement Information

Part 1 — Site Location and Inspection Information contains all of the data elements also contained on the Site Identification and Preliminary Assessment forms required to add a site to the automated Site Tracking System (STS). It is therefore possible to add a site to STS at the Site Inspection stage. Instructions are given below.

Part 2 — Waste Information and Part 3 — Description of Hazardous Conditions and Incidents are used to record specific information about substances, amounts, hazards, and targets, e.g., population potentially affected. Parts 2 and 3 are also contained in the Potential Hazardous Waste Site, Preliminary Assessment form. Information recorded on Part 2 and Part 3 during a preliminary assessment may be updated, added, deleted, or corrected on the Site Inspection Report form.

An Appendix with feedstock names and CAS Numbers and the most frequently cited hazardous substances and CAS Numbers is located behind the instructions for the Site Inspection Report.

A number of the data items collected throughout the Site Inspection Report support the Site Ranking Model. The majority of these data items are found in Part 5 — Water, Demographic, and Environmental Data.

General Instructions

1. Complete the Site Inspection Report form as completely as possible.

2. Starred items (*) are required before inspection information can be added to STS. The system will not accept incomplete inspection information.

3. To add a site to STS at the Site Inspection stage, write "New" across the top of the form and complete items II-01, 02, 03, 04, and 06, Site Name and Location, II-09 Coordinates, and II-10, Type of Ownership.

4. Data items carried in STS, which are identical to those on the Site Identification and Preliminary Assessment forms and which can be added, deleted, or changed using the Site Inspection Report form, are indicated with a pound sign (#). To ensure that the proper action is taken, outline the item(s) to be added, deleted, or changed with a bright color and indicate the proper action with "A" (add), "D" (delete) or "C" (change).

5. There are two options available for adding, deleting, or changing information supplied on the Site Inspection Report form. The first is to use a new Site Inspection Report form, completing only those items to be added, deleted, or changed. Mark the form clearly, using "A", "D", or "C", to indicate the action to be taken. If only data in STS are to be altered, the Site Source Data Report may be used. Using the report, mark clearly the items to be changed and the action to be taken.

Detailed Instructions

Part 1 Site Location and Inspection Information

I. **Identification:** Identification (State and Site Number) is the site record key, or primary identifier, for the site. Site records in the STS are updated based on Identification. It is essential that State and Site Number are correctly entered on each form.

*I-01 State: Enter the two character alpha FIPS code for the state in which the site is located. It must be identical to State on the Site Identification form.

*I-02 Site Number: Enter the ten character alphanumeric code for sites which have a Dun and Bradstreet or EPA "user" Dun and Bradstreet number or the ten character numeric GSA identification code for federal sites. The Site Number must be identical to the Site Number on the Site Identification and Preliminary Assessment forms.

II. **Site Name and Location:** If Site Name and Location information require no additions or changes, these items are not required on the Site Inspection Report form. However, completing these items will facilitate use of the completed form and records management procedures.

#II-01 Site Name: Enter the legal, common, or descriptive name of the site.

#II-02 Site Street: Enter the street address and number (if appropriate) where the site is located. If the precise street address is unavailable for this site, enter brief direction identifier, e.g., NW Jct I-295 & US 99; Post Rd, 5 mi W of Rt. 5.

#II-03 Site City: Enter the city, town, village, or other municipality in which the site is located. If the site is not located in a municipality, enter the name of the municipality (or place) which is nearest the site or which most easily locates the site.

#II-04 Site State: Enter the two character alpha FIPS code for the state in which the site is located. The code must be the same as in item I-01.

#II-05 Site Zip Code: Enter the five character numeric zip code for the postal zone in which the site is located.

#II-06 Site County: Enter the name of the county, parish (Louisiana), or borough (Alaska) in which the site is located.

#II-07 County Code: Enter the three character numeric FIPS county code for the county, parish, or borough in which the site is located. (The regional data analyst can furnish this data item.)

#II-08 Site Congressional District: Enter the two character number for the congressional district in which the site is located.

*#II-09 Coordinates: Enter the Coordinates, Latitude and Longitude, of the site in degrees, minutes, seconds, and tenths of seconds. If a tenth of a second is insignificant at this site, enter "0" in the tenths position.

#II-10 Type of Ownership: Check the appropriate box to indicate the type of site ownership. If the site is under the jurisdiction of an activity of the federal government, enter the name of the department, agency, or activity. If Other is indicated, specify the type of ownership and name.

III. **Inspection Information**

*III-01 Date of Inspection: Enter the date the inspection occurred, or began for multiple day inspections.

*III-02 Site Status: Check the appropriate box(es) to indicate the current status of the site. Active sites are those which treat, store, or dispose of wastes. Check Active for those active sites with an inactive storage or disposal area. Inactive sites are those at which treatment, storage, or disposal activities no longer occur.

#III-03 Years of Operation: Enter the beginning and ending years (or beginning only if operations at the site are on-going), e.g., 1878/1932, of site operation. Check Unknown if years of operation are not known.

*III-04 Agency Performing Inspection: Check the appropriate box(es) to indicate parties participating in the inspection. If contractors participate, provide the name of the firm(s).

III-05 Chief Inspector: Enter the name of the chief, or lead inspector.

III-06 Title: Enter the Chief Inspector's title, e.g., Team Leader, FIT team.

III-07 Organization: Enter the name of the organization where the Chief Inspector is employed, e.g., EPA — Region 4, VA State Health Dept., Environmental Research Co.

III-08 Telephone Number: Enter the Chief Inspector's area code and local commercial telephone number.

III-09 Other Inspectors: Enter the names of other parties participating in the inspection.

III-10 Title: Enter the titles of other parties participating in the inspection.

III-11 Organization: Enter the names of the organizations where other parties participating in the inspection are employed.

III-12 Telephone Number: Enter the area code and local commercial telephone numbers of other parties participating in the inspection.

III-13 Site Representatives Interviewed: Enter the names of individuals representing responsible parties interviewed in connection with the inspection. Interviews do not necessarily occur during the inspection.

III-14 Title: Enter the titles of the individuals interviewed.

III-15 Address: Enter the business, mailing, or residential addresses of the individuals interviewed.

III-16 Telephone Number: Enter the area code and local commercial telephone numbers of the individuals interviewed.

III-17 Access Gained By: Check the appropriate box to indicate whether access to the site was gained through permission or warrant.

III-18 Time of Inspection: Using a 24-hour clock, enter the time the inspection began, e.g., for 3:24 p.m. enter 1524.

III-19 Weather Conditions: Describe the weather conditions during the site inspection, especially any unusual conditions which might affect results or observations taken.

IV. **Information Available From**

IV-01 Contact: Enter the name of the individual who can provide information about the site.

IV-02 Of: If appropriate, enter the name of the public or private agency, firm, or company and the organization within the agency, firm, or company of the individual named as Contact.

IV-03 Telephone Number: Enter the area code and local telephone number of the individual named as contact.

IV-04 Person Responsible for Site Inspection Report Form: Enter the name of the individual who was responsible for the information entered on the Site Inspection Report form. The person responsible for the Site Inspection Report form may be different from the individual who prepared the form.

IV-05 Agency: Enter the name of the Agency where the individual who is responsible for the Site Inspection Report form is employed.

IV-06 Organization: Enter the name of the organization within the Agency.

IV-07 Telephone Number: Enter the area code and local telephone number of the individual who is responsible for the Site Inspection Report form.

IV-08 Date: Enter the date the Site Inspection Report form was prepared.

Part 2 Waste Information

*I. **Identification**: Refer to Part 1—I.

II. **Waste States, Quantities, and Characteristics**: Waste States, Quantities, and Characteristics provide information about the physical structure and form of the waste, measures of gross amounts at the site, and the hazards posed by the waste, considering acute and chronic health effects and mobility along a pathway.

*II-01 Physical States: Check the appropriate box(es) to indicate the state(s) of waste present at the site. If Other is indicated, specify the physical state of the waste.

*II-02 Waste Quantity at Site: Enter estimates of amounts of waste at the site. Estimates may be in weight (Tons) or volume (Cubic Yards or Number of Drums). Use as many entries as are appropriate; however, measurements must be independent. For example, do not measure the same amounts of waste as both tons and cubic yards.

*II-03 Waste Characteristics: Check all appropriate entries to indicate the hazards posed by waste at the site. If waste at the site poses no hazard, check Not Applicable.

III. **Waste Category**: General categories of waste typically found are listed here. Enter the estimated gross amount of each category of waste and the appropriate unit of measure.

*III-01 Gross Amount: Gross Amount is the estimate of the amount of the waste category found at the site. Estimates should be furnished in metric tons (MT), tons (TN), cubic meters (CM), cubic yards (CY), drums (DR), acres (AC), acre feet (AF), liters (LT), or gallons (GA). Enter the estimated amount next to the appropriate waste category.

*III-02 Unit of Measure: Enter the appropriate unit of measure, MT (metric tons), TN (tons), CM (cubic meters), CY (cubic yards), DR (number of drums), AC (acres), AF (acre feet), LT (liters), or GA (gallons) next to the estimate of gross amount.

III-03 Comments: Comments may be used to further explain, or provide additional information, about particular waste categories.

IV. **Hazardous Substances**: Specific hazardous, or potentially hazardous, chemicals, mixtures, and substances found at the site are listed here. For each substance listed those data items marked with an "at" sign (@) must be included.

@IV-01 Category: Enter in front of the substance name the three character waste category from Section III which best describes the substance, e.g., OLW (Oily Waste).

@IV-02 Substance Name: Enter one of the following: the name of the substance registered with the Chemical Abstract Service, the common or accepted abbreviation of the substance, the generic name of the substance, or commercial name of the substance.

@IV-03 CAS Number: Enter the number assigned to the substance when it was registered with the Chemical Abstract Service. Refer to the Appendix for most frequently cited CAS Numbers. CAS Numbers must be furnished for each substance listed. If a CAS Number for this substance has not been assigned, enter "999".

@IV-04 Storage/Disposal Method: Enter the type of storage or disposal facility in which the substance was found: SI (surface impoundment, including pits, ponds, and lagoons), PL (pile), DR (drum), TK (tank), LF (landfill), LM (landfarm), OD (open dump).

IV-05 Concentration: Enter the concentration of the substance found in samples taken at the site.

IV-06 Measure of Concentration: Enter the appropriate unit of measure for the measured concentration of the substance found in the sample, e.g., MG/L, UG/L.

V. Feedstocks

V-01 Feedstock Name: If feedstocks, or substances derived from one or more feedstocks, are present at the site, enter the name of each feedstock found. See the Appendix for the feedstock list.

V-02 CAS Number: Enter the CAS Number for each feedstock named. See the Appendix for feedstock CAS Numbers.

VI. **Sources of Information**: List the sources used to obtain information for this form. Sources cited may include: sample analysis, reports, inspections, official records, or other documentation. Sources cited provide the basis for information entered on the form and may be used to obtain further information about the site.

Part 3 Description of Hazardous Conditions and Incidents

*I. **Identification**: Refer to Part 1—I.

II. **Hazardous Conditions and Incidents:**

II-01 Hazards: Indicate each hazardous, or potentially hazardous, condition known, or claimed, to exist at the site.

II-02 Observed, Potential, or Alleged: Check Observed and enter the date, or approximate date, of occurrence if a release of contaminants to the environment, or some other hazardous incident, is known to have occurred. In cases of a continuing release, e.g., groundwater contamination, enter the date, or approximate date, the condition first became apparent. If conditions exist for a potential release, check potential. Check Alleged for hazardous, or potentially hazardous, conditions claimed to exist at the site.

II-03 Population Potentially Affected: For each hazardous condition at the site, enter the number of people potentially affected. For Soil enter the number of acres potentially affected.

II-04 Narrative Description: Provide a narrative description, or explanation, of each condition. Include any additional information which further explains the condition.

II-05 Description of Any Other Known, Potential, or Alleged Hazards: Provide a narrative description of any other hazardous, or potentially hazardous, conditions at the site not covered above.

III. **Total Population Potentially Affected**: Enter the total number of people potentially affected by the existence of hazardous, or potentially hazardous, conditions at the site. Do not sum the numbers shown for each condition.

IV. **Comments**: Other information relevant to observed, potential, or alleged hazards may be entered here.

V. **Sources of Information:** List the sources used to obtain information for this form. Sources cited may include: sample analysis, reports, inspections, official records, or other documentation. Sources cited provide the basis for information entered on the form and may be used to obtain further information about the site.

Part 4 Permit and Descriptive Information

*I. **Identification:** Refer to Part 1—I.

II. **Permit Information**

II-01 Type of Permit Issued: Check the appropriate box(es) to indicate the types of permits issued to the site. If state, local, or other types of environmental permits have been issued, specify the type.

II-02 Permit Number: Enter the permit number for each issued permit.

II-03 Date Issued: Enter the date each permit was issued.

II-04 Expiration Date: Enter the date each permit expires or expired.

II-05 Comments: Enter any information which further explains the types of permits issued or status of the permits.

III. **Site Description**

*III-01 Storage/Disposal: Check the appropriate box(es) to indicate the types of storage/disposal facilities found at the site. If Other is checked, specify the type of facility.

*III-02 Amount: Enter the gross amount of waste associated with each type of storage/disposal facility. Amounts may be measured in: metric tons, tons, cubic meters, cubic yards, drums, acres, acre feet, liters, or gallons.

*III-03 Unit of Measure: Enter the appropriate unit of measure for each entry. Units of measure are MT (metric tons), TN (tons), CM (cubic meters), CY (cubic yards), DR (drums), AC (acres), AF (acre feet), LT (liters), or GA (gallons).

*III-04 Treatment: If waste is treated at the site, check the appropriated box(es) to indicate treatment methods used. If Other is checked, specify treatment method.

III-05 Other: If there are buildings on site, check this box.

*III-06 Area of Site: Enter total area of site in acres.

III-07 Comments: Enter any other pertinent information.

IV. **Containment:** Containment is a measure of the natural or artificial means taken to minimize or preclude health hazards and to minimize or prevent contamination of the environment from waste at the site.

*IV-01 Containment of Wastes: Check the appropriate box to indicate the condition of containment measures at the site. When choosing the appropriate box, consider the potential for environmental contamination, i.e., the worst case for containment in conjunction with the most hazardous substances.

IV-02 Description of Drums, Diking, Liners, Barriers: Provide a narrative description of the condition of containment measures at the site, e.g., waste adequately contained, drums rusting and leaking, diking collapsing, liners leaking and contaminants leaching into soil and groundwater.

V. **Accessibility:** Accessibility is an indicator of the potential for direct contact with hazardous substances.

*V-01 Waste Easily Accessible: If there are no real barriers preventing human access to hazardous waste, check Yes, otherwise check No.

V-02 Comments: Additional information about accessibility to hazardous waste may be provided.

VI. **Sources of Information:** List the sources used to obtain information for this form. Sources cited may include: sample analysis, reports, inspections, official records, or other documentation. Sources cited provide the basis for information entered on the form and may be used to obtain further information about the site.

Part 5 Water, Demographic, and Environmental Data

*I. **Identification:** Refer to Part 1—I.

II. **Drinking Water Supply**

II-01 Type of Drinking Water Supply: Check the appropriate box(es) to indicate the types and sources of drinking water within the vicinity of the site. Community refers to municipal sources. Non-community refers to private sources, e.g., private wells.

II-02 Status: Check the appropriate box(es) to indicate whether the water supply is endangered or affected by contaminants from the site. Check the appropriate box to indicate if the water supply is being monitored for possible contamination.

II-03 Distance to Site: Enter the distance in miles to the nearest tenth, hundredth, or thousandth (as needed to indicate the precision required) from the site to nearest drinking water source.

III. **Groundwater**

III-01 Groundwater Use in Vicinity: Check the appropriate box to indicate groundwater use in the vicinity of the site. The concern is to indicate the seriousness of groundwater contamination from waste at the site. Only Source for Drinking indicates that current water sources are limited to wells in the vicinity of the site. Drinking; Commercial, Industrial, Irrigation indicates that groundwater is used for drinking, but that other limited drinking sources are available and that no other sources for these additional uses are available. Commercial, Industrial, Irrigation indicates that groundwater is used for these purposes, but that limited other sources of water are available. Not used, Unuseable indicates that groundwater use in the area is not critical.

III-02 Population Served by Groundwater: Enter the number of people served by groundwater in the vicinity of the site. Population for the purposes of the Site Inspection Report includes residents and daytime workers and students but excludes transients in the neighborhood or on local highways and roads. When estimating population from aerial photographs or other sources, the conversion factor is 3.8 persons for each dwelling unit or 3 persons per acre in rural areas.

III-03 Distance to Nearest Drinking Water Well: Enter the distance in miles to the nearest tenth, hundredth, or thousandth (as needed to indicate the precision required) from the site to the nearest drinking water well.

III-04 Depth to Groundwater: Enter the depth in feet to groundwater.

III-05 Depth of Groundwater Flow: Enter the cardinal direction of groundwater flow, e.g., NNW.

III-06 Depth to Aquifer of Concern: Enter the depth in feet to the aquifer of concern.

III-07 Potential Yield of Aquifer: Enter the potential yield of the aquifer in gallons per day.

III-08 Sole Source Aquifer: Check the appropriate box to indicate the aquifer of concern is, or is not, a sole source aquifer.

III-09 Description of Wells: Provide a narrative description of wells in the vicinity of the site, including useage, depth, and location relative to population and buildings.

III-10 Recharge Area: Check the appropriate box to indicate the site is located in a recharge area. Comments provide additional information on the recharge area.

III-11 Discharge Area: Check the appropriate box to indicate the site is located in a discharge area. Comments provide additional information on the discharge area.

IV. Surface Water

IV-01 Surface Water Use: Check the appropriate box to indicate surface water use in the vicinity of the site. The order of precedence is Reservoir, Recreation, Drinking Water Source; Irrigation, Economically Important Reserves; Commercial/Industrial; Not Currently Used.

IV-02 Affected/Potentially Affected Bodies of Water: Enter the names of bodies of surface water affected, or potentially affected, by contaminants from the site. List the body of surface water nearest the site first. For each body of water check Affected if contaminants have been identified in samples of the water. Enter the shortest distance from the body of water to the site in miles to the nearest tenth, hundredth, or thousandth (as needed to indicate the precision required).

V. Demographic and Property Information

V-01 Total Population Within: Enter the total population within one (1) mile, two (2) miles, and three (3) miles of the site. Distances are measured from site boundaries. Population for the purposes of the Site Inspection Report includes residents and daytime workers and students but excludes transients in the neighborhood or on local highways and roads. When estimating population from aerial photographs or other sources, the conversion factor is 3.8 persons for each dwelling unit or 3 persons per acre in rural areas.

V-02 Distance to Nearest Population: Enter in miles to the nearest tenth, hundredth, or thousandth (as needed to indicate the precision required) the distance from the site boundary to the nearest population (one person minimum).

V-03 Number of Buildings Within Two (2) Miles of Site: Enter the number of buildings within two miles from the boundaries of the site.

V-04 Distance to Nearest Off-Site Building: Enter the distance in miles to the nearest tenth, hundredth, or thousandth (as needed to indicate the precision required) from the site boundary to the nearest off-site building.

V-05 Population in Vicinity of Site: Provide a narrative description of the nature of the population within the vicinity of the site. Examples include rural area, small truck farms, urban industrial area, densely populated urban residential area.

VI. Environmental Information

VI-01 Permeability of Unsaturated Zone: Check the appropriate box to indicate the permeability of the earth material above the water table in the vicinity of the site.

VI-02 Permeability of Bedrock: Check the appropriate box to indicate the permeability of the bedrock in the vicinity of the site.

VI-03 Depth to Bedrock: Enter the depth to bedrock in feet.

VI-04 Depth of Contaminated Soil Zone: Enter the depth of the contaminated soil zone in feet.

VI-05 Soil pH: Enter the pH of the soil in the vicinity of the site.

VI-06 Net Precipitation: Enter net precipitation in inches. If net precipitation is not known, subtract the average evaporation figure on the U.S. National Weather Service map showing average annual evaporation in inches from the U.S. Environmental Data Service map showing mean annual precipitation.

VI-07 One Year 24 Hour Rainfall: Enter in inches the figure for one year 24 hour rainfall.

VI-08 Slope: Enter the percentage of site slope, the direction of site slope, and the percentage of the surrounding terrain average slope.

VI-09 Flood Potential: Enter the boundary year for the floodplain in which the site is located. Sites flooded annually are in a 1 (one) year floodplain. Other examples include 10, 20, 50, 100, 500, etc., indicating the probability of flooding within that time period.

VI-10 Site is on Barrier Island, Coastal High Hazard Area, Riverine Floodway: If site is located in one of these areas, check this box.

VI-11 Distance to Wetlands: If applicable, enter the distance in miles to the nearest tenth, hundredth, or thousandth (as needed to indicate the precision required) from the site to the closest wetlands (five acre minimum) for Estuarine and Other types of wetlands.

VI-12 Distance to Critical Habitat: If applicable, enter the distance in miles to the nearest tenth, hundredth, or thousandth (as needed to indicate the precision required) from the site to the nearest critical habitat

of an endangered species. Enter the name(s) of the endangered species.

VI-13 Land Use in Vicinity: Enter the distance in miles to the nearest tenth, hundredth, or thousandth (as needed to indicate the precision required) to the nearest Commercial/Industrial area; Residential Area, National/State Parks, Forests, or Wildlife Reserves; or Agricultural Lands, Prime Ag Land and Ag Land. Prime Ag Land is that crop, pasture, range, or forest land which produces the highest yield in relation to inputs. Ag Land is the remaining agricultural land, frequently considered marginal.

VI-14 Description of Site in Relation to Surrounding Topography: Provide a narrative description of significant or unusual aspects of the surrounding topography in relation to the site. Examples might include: site is in a valley surrounded on all sides by mountains, site is at edge of a river or stream which floods frequently, etc.

VII. **Sources of Information:** List the sources used to obtain information for this form. Sources cited may include: sample analysis, reports, inspections, official records, or other documentation. Sources cited provide the basis for information entered on the form and may be used to obtain further information about the site.

Part 6 Sample and Field Information

*I. **Identification:** Refer to Part 1—I.

II. **Samples Taken**

II-01 Number of Samples Taken: Next to each sample type enter the number of samples of that type taken.

II-02 Samples Sent To: Enter the name of the laboratory or other facility where the samples were sent for analysis.

II-03 Estimated Date Results Available: Enter the estimated date the results are expected to be available.

III. **Field Measurements Taken**

III-01 Type: Enter the type, e.g., radioactivity, explosivity, organic vapor or gas detection and analysis, reagent type gas detection, of each field measurement taken.

III-02 Comments: Describe results of field measurements, whether they were taken on or off site, and if applicable, the type of disposal facility tested, e.g., drum, surface impoundment, landfill.

IV. **Photographs and Maps**

IV-01 Type: If photographs of the site have been taken, check the appropriate box(es) to indicate the type.

IV-02 In Custody Of: Enter the name of the organization or person who has custody of the photographs.

IV-03 Maps: Check the appropriate box to indicate that maps of the site area have been prepared or obtained.

IV-04 Location of Maps: If site maps are available, indicate their location, e.g., Region 1 Air and Hazardous Materials Division.

V. **Other Field Data Collected:** Provide a narrative de-

VI. **Sources of Information:** List the sources used to obtain information for this form. Sources cited may include: sample analysis, reports, inspections, official records, or other documentation. Sources cited provide the basis for information entered on the form and may be used to obtain further information about the site.

Part 7 Owner Information

*I. **Identification:** Refer to Part 1—I.

II. **Current Owner(s) — Parent Company:** Current owner(s) and parent companies, for those owners which are companies partly or wholly owned by another company, provide locator information about responsible parties. Each Part 7 provides space for four (4) current owners and their respective parent companies. If additional space is required, complete another Part 7.

II-01 Name: Enter the legal name of the owner of the site. The owner may be a firm, government agency, association, individual, etc.

II-02 D&B Number: Where available, enter the owner's D&B (Dun and Bradstreet) number. If the current owner is a federal agency, enter the GSA identification code.

II-03 Street Address: Enter the business, mailing, or residential street address of the owner.

II-04 SIC Code: If applicable, enter the owner's primary SIC Code.

II-05 City: Enter the city of the owner's business, mailing, or residential address.

II-06 State: Enter the two character alpha FIPS code for the state of the owner's business, mailing, or residential address.

II-07 Zip Code: Enter the five digit zip code for the owner's business, mailing, or residential address.

II-08 Name: If the owner is a partly or wholly owned subsidiary of another company, enter the legal name of the owner's parent company.

II-09 D&B Number: Enter the parent company's Dun and Bradstreet number.

II-10 Street Address: Enter the business or mailing street address of the parent company.

II-11 SIC Code: If applicable, enter the parent company's primary SIC code.

II-12 City: Enter the city of the parent company's business or mailing address.

II-13 State: Enter the two character alpha FIPS code for the state of the parent company's business or mailing address.

II-14 Zip Code: Enter the five digit zip code for the parent company's business or mailing address.

III. **Previous Owner(s):** List previous owners in reverse chronological order, i.e., most recent first. If additional space is required, complete another Part 7.

III-01 Name: Enter the legal name of the previous owner. The previous owner may have been a firm, government agency, association, individual, etc.

III-02 D&B Number: Enter the previous owner's Dun and Bradstreet number if available. If the previous owner was a federal agency, enter the GSA identification code if available.

III-03 Street Address: Enter the business, mailing, or residential street address of the previous owner.

III-04 SIC Code: If applicable, enter the primary SIC Code of the previous owner.

III-05 City: Enter the city of the previous owner's business, mailing, or residential address.

III-06 State: Enter the two character alpha FIPS code for the state of the previous owner's business, mailing, or residential address.

III-07 Zip Code: Enter the zip code of the previous owner's business, mailing, or residential address.

IV. **Realty Owner(s):** Realty owner applies when the owner leased to another entity property which was used for the storage or disposal of hazardous waste. List current or most recent first.

IV-01 Name: Enter the legal name of the realty owner. The realty owner may be a firm, government agency, association, individual, etc.

IV-02 D&B Number: Enter the previous owner's Dun and Bradstreet number if available. If the previous owner was a federal agency, enter the GSA identification code if available.

IV-03 Street Address: Enter the realty owner's business, mailing, or residential street address.

IV-04 SIC Code: If applicable, enter the realty owner's primary SIC Code.

IV-05 City: Enter the city of the realty owner's business, mailing, or residential address.

IV-06 State: Enter the two character alpha FIPS code for the state of the realty owner's business, mailing, or residential address.

IV-07 Zip Code: Enter the zip code of the realty owner's business, mailing, or residential address.

V. **Sources of Information:** List the sources used to obtain information for this form. Sources cited may include: sample analysis, reports, inspections, official records, or other documentation. Sources cited provide the basis for information entered on the form and may be used to obtain further information about the site.

Part 8 Operator Information

I. **Identification:** Refer to Part 1—I.

II. **Current Operator—Operator's Parent Company:** Information on operators is applicable when the operator is not the owner.

II-01 Name: Enter the legal name of the operator. The operator may be a firm, government agency, association, individual, etc.

II-02 D&B Number: Enter the operator's Dun and Bradstreet number if available. If the operator is a federal agency, enter the GSA identification code if

II-03 Street Address: Enter the operator's business, mailing, or residential street address.

II-04 SIC Code: If applicable, enter the operator's primary SIC Code.

II-05 City: Enter the city of the operator's business, mailing, or residential address.

II-06 State: Enter the two character alpha FIPS code for the state of the operator's business, mailing, or residential address.

II-07 Zip Code: Enter the zip code of the operator's business, mailing, or residential address.

II-08 Years of Operation: Enter the beginning and ending years (or beginning only if operations are on-going), e.g., 1932/1948, of operation at the site.

II-09 Name of Owner: Enter the name of the owner for the period cited for this operator.

II-10 Name: If applicable, enter the legal name of the operator's parent company.

II-11 D&B Number: Enter the operator's parent company Dun and Bradstreet number if available.

II-12 Street Address: Enter the operator's parent company business, mailing, or residential street address.

II-13 SIC Code: If applicable, enter the operator's parent company primary SIC Code.

II-14 City: Enter the city of the operator's parent company business, mailing, or residential address.

II-15 State: Enter the two character alpha FIPS code for the state of the operator's parent company business, mailing, or residential address.

II-16 Zip Code: Enter the zip code of the operator's parent company business, mailing, or residential address.

III. **Previous Operator(s)—Previous Operators' Parent Companies**

III-01 Name: Enter the legal name of the previous operator. The previous operator may be a firm, government agency, association, individual, etc.

III-02 D&B Number: Enter the previous operator's Dun and Bradstreet number if available. If the previous operator was a federal agency, enter the GSA identification code if available.

III-03 Street Address: Enter the previous operator's business, mailing, or residential street address.

III-04 SIC Code: If applicable, enter the previous operator's primary SIC Code.

III-05 City: Enter the city of the previous operator's business, mailing, or residential address.

III-06 State: Enter the two character alpha FIPS code for the state of the previous operator's business, mailing, or residential address.

III-07 Zip Code: Enter the zip code of the previous operator's business, mailing, or residential address.

III-08 Years of Operation: Enter the beginning and ending years of operation for this operator at the site.

III-09 Name of Owner: Enter the name of the owner for

III-10 Name: If applicable, enter the legal name of the previous operator's parent company.

III-11 D&B Number: Enter the previous operator's parent company Dun and Bradstreet number if available.

III-12 Street Address: Enter the previous operator's parent company business, mailing, or residential street address.

III-13 SIC Code: If applicable, enter the previous operator's parent company primary SIC Code.

III-14 City: Enter the city of the previous operator's parent company business, mailing, or residential address.

III-15 State: Enter the two character alpha FIPS code for the state of the previous operator's parent company business, mailing, or residential address.

III-16 Zip Code: Enter the zip code of the previous operator's parent company business, mailing, or residential address.

IV. **Sources of Information:** List the sources used to obtain information for this form. Sources cited may include: sample analysis, reports, inspections, official records, or other documentation. Sources cited provide the basis for information entered on the form and may be used to obtain further information about the site.

Part 9 Generator/Transporter Information

*I. **Identification:** Refer to Part 1—I.

II. **On-Site Generator:** A company or agency, located within the contiguous area of the site and generating waste disposed on the site, is entered here.

II-01 Name: If there is an on-site generator, enter the legal name of the on-site generator. The on-site generator may be a firm or government agency.

II-02 D&B Number: Where available, enter the on-site generator's D&B (Dun and Bradstreet) number. If the on-site generator is a federal agency, enter the GSA identification code.

II-03 Street Address: Enter the business or mailing street address of the on-site generator.

II-04 SIC Code: If applicable, enter the on-site generator's primary SIC Code.

II-05 City: Enter the city of the on-site generator's business or mailing address.

II-06 State: Enter the two character alpha FIPS code for the state of the on-site generator's business or mailing address.

II-07 Zip Code: Enter the five digit zip code for the on-site generator's business or mailing address.

III. **Off-Site Generator(s):** Those companies or agencies off-site who have generated waste which has been disposed at the site are listed here.

III-01 Name: Enter the legal name of the off-site generator. The off-site generator may be a firm or government agency.

III-02 D&B Number: Where available, enter the off-site

III-03 Street Address: Enter the business or mailing street address of the off-site generator.

III-04 SIC Code: If applicable, enter the off-site generator's primary SIC Code.

III-05 City: Enter the city of the off-site generator's business or mailing address.

III-06 State: Enter the two character alpha FIPS code for the state of the off-site generator's business or mailing address.

III-07 Zip Code: Enter the five digit zip code for the off-site generator's business or mailing address.

IV. **Transporter(s):** Those carriers who are known to have transported waste to the site are listed here.

IV-01 Name: Enter the legal name of the transporter. The transporter may be a firm, government agency, association, individual, etc.

IV-02 D&B Number: Where available, enter the transporter's D&B (Dun and Bradstreet) number. If the transporter is a federal agency, enter the GSA identification code.

IV-03 Street Address: Enter the business, mailing, or residential street address of the transporter.

IV-04 SIC Code: If applicable, enter the transporter's primary SIC Code.

IV-05 City: Enter the city of the transporter's business, mailing, or residential address.

IV-06 State: Enter the two character alpha FIPS code for the state of the transporter's business, mailing, or residential address.

IV-07 Zip Code: Enter the five digit zip code for the transporter's business, mailing, or residential address.

V. **Sources of Information:** List the sources used to obtain information for this form. Sources cited may include: sample analysis, reports, inspections, official records, or other documentation. Sources cited provide the basis for information entered on the form and may be used to obtain further information about the site.

Part 10 Past Response Activities

*I. **Identification:** Refer to Part 1—I.

II. **Past Response Activities**

II-01 Past Response Activities: Check the appropriate box(es) to indicate response activities initiated prior to the passage of CERCLA, December, 1980.

II-02 Date: Enter the start date (or approximate date) of the activity.

II-03 Agency: Enter the name of the Agency responsible for the activity.

II-04 Description: Provide a brief narrative description of the activity.

III. **Sources of Information:** List the sources used to obtain information for this form. Sources cited may include: sample analysis, reports, inspections, official records, or other documentation. Sources cited provide the basis for information entered on the

Part 11 Enforcement Information

***I. Identification:** Refer to Part 1—I.

II. Enforcement Information

II-01 Past Regulatory/Enforcement Action: Check the appropriate box to indicate past regulatory or enforcement action at the federal, state, or local level related to this site.

II-02 Description of Federal, State, Local Regulatory or Enforcement Action: Provide a narrative description of regulatory or enforcement action to date. Do not include any enforcement action contemplated in the process of development.

III. Sources of Information: List the sources used to obtain information for this form. Sources cited may include: sample analysis, reports, inspections, official records, or other documentation. Sources cited provide the basis for information entered on the form and may be used to obtain further information about the site.

✓ Wake
JVR

February 2, 1976

Mr. Howard J. Matthews
Works Engineer
Westinghouse Electric Corporation
Meter Division
Box 9533
Raleigh, N. C. 27603

Dear Mr. Matthews:

Your letter of December 22, 1975, with reference to industrial waste was received on February 2, 1976.

The information presented is much too incomplete for this office to evaluate the suitability of the material for landfilling.

We will need a complete chemical analysis of the two types of waste that you listed in your letter.

We are also very much concerned with how long you have been generating this amount and type of waste as well as where it has been placed.

Sincerely,

O. W. Strickland, Supervisor
Solid Waste Management Unit
Solid Waste & Vector Control Branch
Sanitary Engineering Section

OWS/ct

cc: Mr. Terry F. Dover
Wake County Health Department

Westinghouse Electric Corporation Power Systems

Meter Division

Box 9533
Raleigh North Carolina 27603
(919) 834 5271

December 22, 1975

Subject: Industrial Waste

RECEIVED
FEB 2 1976
SOLID WASTE-VECTOR CONTROL

N. C. Dept. of Health
Division of Health Services
P. O. Box 2091
Raleigh, N. C.

Attention: Mr. O. W. Strickland

You recently requested some information on the type of waste that we are placing in the Knightdale, N. C. landfill. I believe I can best identify this waste by dividing it up into two general categories.

Quantities of approximately ten barrels (55 gallons per barrel) per month:

Some of this material is metal chips and residues from vapor degreasing operations. There are also precipitated pigments from painting operations. There are precipitates from plating tanks such as tin plating, phosphatizing and Endox cleaners. Last, there is also a small quantity of polymerized resins.

Quantities of approximately sixty barrels (55 gallons per barrel) per month:

This material is the sludge from our neutralizing plant. I am enclosing a letter from our architects which indicates that these metals will remain insoluble.

If you have any further questions, please advise.

Yours truly,

Howard J. Matthews

Howard J. Matthews
Works Engineer

HJM:rns

A-JZW-535

AQUATECHNICS
From : Oak Brook, IL
WIN : 537-4022
Date : December 16, 1975
Subject: Meter Division
Waste Treatment Facilities
Our File No. MDR03

RECEIVED
FEB 2 1976
SOLID WASTE-VECTOR CONTROL

To : Mr. H. J. Matthews
Westinghouse Electric Corporation
Meter Division
Box 9533
Raleigh, NC 27600

Dear Howard:

As we discussed, the sludge produced in the waste treatment plant is comprised mainly of hydroxides of chrome and zinc, together with small amounts of nickel and miscellaneous heavy metals. As you are operating the treatment process at a pH of approximately 8.5, we feel that these heavy metals will remain insoluble in the slugde.

Additionally, we feel that dewatering the sludge to 40% solids by weight, as you indicated you are achieving, is extremely good for this type of sludge.

If you require any further information, please contact us.

Very truly yours,

Westinghouse Electric Corporation
AQUATECHNICS

Joel

Joel Z. Wolfe
Project Manager

JZW/naj
cc: Mr. B. A. Kerns

Wake
s/R

Westinghouse Electric Corporation **Power Systems**

Meter Division

Box 9533
Raleigh North Carolina 27603
(919) 834 5271

March 1, 1976

RECEIVED
MAR 2 1976
SOLID WASTE VECTOR CONTROL

State of North Carolina
Department of Human Resources
P. O. Box 2091
Raleigh, NC 27602

Attention: Mr. O. W. Strickland, Supervisor
Solid Waste Management Unit
Solid Waste and Vector Control Branch
Sanitary Engineering Section

Dear Mr. Strickland:

I am enclosing Mr. Grainger's analysis of our Neutralizing Plant sludge. This is the quantity I referred to in my letter of December 22, 1975 as approximating sixty (60) barrels a month.

We have determined that our sludge is about 13% solids. Accordingly, we are investigating the possibility of using some method to increase our solids percentage thus decreasing our volume. The remainder of the sludge is water. In the meantime, we could allow these barrels to settle while stacked on our property and syphon off the water before removing them to the landfill if you would approve this procedure.

We are still trying to arrive at an analysis of the remaining barrels of miscellaneous materials referred to in my letter of December 22, 1975 as approximating ten (10) barrels a month.

Sincerely,

Howard J. Matthews

Howard J. Matthews
Works Engineer

hg

Enclosure

GRAINGER LABORATORIES
INCORPORATED
ANALYTICAL AND CONSULTING CHEMISTS

709 West Johnson Street • Raleigh, North Carolina 27605

ANALYTICAL LABORATORY

Pollution Analysis
Construction Materials
Identification of Unknowns
Agriculture
Fuels
Textiles
Chemicals

C. F. GRAINGER
(919) 828-3360

CONSULTATION

Chemical [redacted]
Pollution Abatement
Process Development
Quality Control
Methods Development
Special Investigation

RECEIVED
MAR 2 1976
SOLID WASTE-VECTOR CONTROL

February 26, 1976

Mr. Howard Mathews
Westinghouse Electric Corp.
Meter Division
P.O. Box 9533
Raleigh, N. C. 27603

Subj3ct: Analysis of waste treatment plant sludge sample submitted 2/17/76. P.O. #48-S68799

Results

Iron as Fe_2O_3, %	1.59
Copper as CuO, %	0.17
Manganese as MNO_2	0.010
Chromium as Cr_2O_3	1.00
Zinc as ZnO, %	0.0096
Nickel as NiO, %	0.0071
Cadnium as CdO, %	0.0193
Tin as SnO_2,%	0.560
Aluminum as Al_2O_3, %	0.095
Water @ 1050°C	92.25
Organic (Loss on ignition @ 750°C) %	3.14

Metals are reported as oxides but are probably present as hydroxides at 105°C.

C. F. Grainger

C. F. Grainger

CFG:fg

ROBERTSON STAMP & SEAL WORKS
P O Box 11128
718 N Person St
Raleigh 27604
E V Coon Owner
Coastal Region
Phone: (919)833-1858 Emp. A
3953 Rubber stamps
3679 Embossing seals
3979 Engraved signs & plates

ROCKWELL INTERNATIONAL CORP IE
P O Box 1961
2900 S Saunders St
Raleigh 27602
James Grasso, Gen Mgr
S E Hildreth (Export)
5400 North Lexington Ave
Pittsburgh PA
Coastal Region Established 1965
Phone: (919)832-0525 Emp. G
3494 Valves globe, angle, gate, ball
*33 Castings
*38 Valve operators
*33 Forgings

S E MACHINE & TOOL
Raleigh NC
Southeastern Screen Print
Box 115 Q Rt 8
Glenwood Ind Park
Raleigh 27612
James C Bradley Gen Mgr
Coastal Region Established 1970
Phone: (919)781-5040 Emp. A
2751 Screen printing-all materials

SANDERFORD SAUSAGE CO
Box 3003
170 Jones Sausage Rd
Raleigh 27602
Ben Thompson, Owner
Coastal Region Established 1910
Phone: (919)772-0133 Emp. A
2013 Fresh sausage
2013 Chitterling loaf
2013 Liver pudding loaf

SCOTCH PLASTICS INC
Box 14066
312 Kennedy St
Raleigh 27610
Norman D Olson Pres
Coastal Region Established 1966
Phone: (919)834-1241 Emp. A
3079 Custom plastic extrusions
3079 Jump ropes
3584 Air filter systems
*28 Plastic resins
*26 Cartons corrugated
*30 Pe rope
*34 Wire mesh
*28 Polyester filter media

SIEMENS A G
W Germany OC
Siemens-Allis Switchgear Div IE
P O Box 29503
Pt Loc Hwy 64 E Wendell
Raleigh 27626
W A Hincks Div Gen Mgr
R W Wilson (Export)
1223 Perimeter Center Park
Atlanta GA
Coastal Region Established 1981
Phone: (919)365-6660 Emp. H
3613 Switchgear for elec utilities
*38 Electrical equipment
*33 Copper
*33 Steel
*34 Hardware

SIRCHIE FINGER PRINT LABORATORIES
Raleigh NC
Premier Crown Corporation E
P O Box 30576
115 Triangle Dr Umstead Ind Pk
Raleigh 27622
Tom Pomer Pres
Grace Freeman (Export)
Coastal Region Established 1979
Phone: (919)781-3174 Emp. D
3842 Police protective helmets
3079 Motorcycle helmets
3842 Fire helmets
3842 Riot shields
*30 Plastic injection molded parts
*33 Straps
*30 Foam
*22 Fabric
*34 Hardware

SIRCHIE FINGER PRINT LABORATORIES IE
P O Box
115 Triangle Dr Umstead Ind Pk
Raleigh 27622
John H Carrington
Grace Freeman (Export)
Coastal Region Established 1975
Phone: (919)781-3120 Emp. F
3999 Finger printing equip
3662 Crime detection equip
3662 Metal detectors & elec sensors
3861 Identification cameras
*36 Electronic components
*33 Metal
*28 Chemical
*28 Photographic

SOUTH STATE IND INC
3220 Northside Dr
Raleigh 27609
Howard E Mosier Mgr
Coastal Region Established 1967
Phone: (919)876-3222 Emp. C
3599 Machine shop
*33 Metals
*34 Hardware

SOUTHEASTERN MACHINE & TOOL CO INC
P O Box 31087
Hwy 70 West Baker Rd
Raleigh 27612
J F Richmond Pres
Coastal Region Established 1969
Phone: (919)782-4804 Emp. F
3599 Gen mach shop & metal fabrication
*33 Steel sheet bar tubing
*33 Alum sheet bar-tubing
*35 Cutting tools & machines

SOUTHERN CASE INC
P O Box 28147
2315 Laurelbrook St
Raleigh 27611
Andrew E Dembicks Pres
A E Dembicks (Export)
Coastal Region Established 1974
Phone: (919)821-0877 Emp. F
3079 Plastic carry cases
*28 High density polyethylene
*26 Corrugated cartons
*28 Plastic pigments dry
*30 Plastic molded parts

SPARKS PRESS E
900 W Morgan Street
Raleigh 27603
Edgar H Sparks Owner
Edgar H Sparks (Export)
Coastal Region Established 1954
Phone: (919)834-8283 Emp. B
275 Printing
2741 Publishing
*26 Paper

‡ SQUARE D COMPANY
Palatine
Square D Co E
P O Box 27446
Hwy 64 East Knightdale
Raleigh 27611
Don J Beck Plt Mgr
Frank Amodeo (Export)
§ Executive Plaza
Palatine
Coastal Region Established 1972
Phone: (919)266-3671 Emp. H
3622 Electric controls
3629 Magnetic components
*22 Material

‡ STACKPOLE CORP, THE
St Marys PA
Stackpole Components Co E
P O Box 14466
3400 Yonkers Road
Raleigh 27610
R A Schieber, Pres
Reinhart E Rist (Export)
Coastal Region Established 1969
Phone: (919)828-6201 Emp. H
3676 Variable resistors volume control
3643 Slide and rocker switches
3643 Rotary switches
3643 Line switches
3643 Key sws keyboards
*30 Fabricated laminates
*34 Copper rivets & contacts
*26 Shipping containers
*30 Plastic molding compounds
*33 Insulated copper wire

STAINED GLASS ASSOCIATES
P O Box 1531
Main St, Knightdale
Raleigh 27602
R J Wysocki Owner
Robert J Wysocki (Export)
§ P O Box 1531
Raleigh NC
Coastal Region Established 1958
Phone: (919)266-2493 Emp. B
3231 Church windows & decorative glass
*32 Hand blown glass
*33 Lead canes
*28 Putty glazing quality
*32 Rolled glass
*32 Sheet glass for protective sheet

STAY-RIGHT TANK CO INC
P O Box 33097
3109 Gresham Lake Rd
Raleigh 27606
H P Walker Pres
Coastal Region Established 1937
Phone: (919)876-8600 Emp. D
3272 Precast concrete septic tanks
3272 Precast utility vaults & manholes
*32 Sand
*32 Cement
*32 Stone
*33 Wire reinforcing

SUPREME COUNTER TOP CO INC
2865 Club Plaza Rd
Raleigh 27603
W C Spivey Owner
Coastal Region
Phone: (919)772-4753 Emp. B
2431 Counter top
*30 Lamenited plastics
*24 Novaply
*28 Glue
*33 Nails

SURTRONICS
Box 33458
4001 Beryl Rd
Raleigh 27606
Terry Smith
Coastal Region Established 1966
Phone: (919)834-8027 Emp. D
3471 Precious metal plating
3471 Industrial plating
*33 Gold
*33 Silver
*28 Chemicals

‡ TEER, NELLO CO
Durham NC
Teer, Nello Co-Crabtree Quarry
5001 Duraleigh Rd
Raleigh 27612
J R Dean Supt
§ P O Box 1131
Durham NC
Coastal Region Established 1965
Phone: (919)787-0613 Emp. D
3295 Construction crushed stone
*32 Crushed stone

‡ TELEX CORP, THE
Tulsa OK
Telex Terminal Communications E
3301 Terminal Dr
Raleigh 27604
H L Eberly Pres
Bill Bayles (Export)
§ 6422 E 41st St
Tulsa OK
Coastal Region Established 1969
Phone: (919)834-5251 Emp. H
3573 Data terminals
3573 Data communications equipment
*33 Steel aluminum
*30 Plastics
*36 Electronic components

THIS END UP E
P O Box 30153
Westgate Rd
Raleigh 27622
S Robertson & R Ward Owners
Coastal Region Established 1975
Phone: (919)782-5520 Emp. E
2511 Pine handcrafted furniture

THOMPSON CABINET SHOP INC
4712 Fayetteville Rd
Raleigh 27603
James T Thompson Owner
Coastal Region Established 1961
Phone: (919)772-3030 Emp. D
2434 Kitchen cab - bookcases - mantels
2434 Bathroom vanities
*24 Lumber materials
*28 Stains

TRIANGLE FABRICATORS
2407-C Paula Street
Raleigh 27608
Bobby Severn Pres
Coastal Region Established 1980
Phone: (919)821-0123 Emp. B
3444 Sheet metal fabricators
*33 Sheet metal

U S FLOOR SYSTEMS INC E
P O Box 18425
Hwy 70 W At Ebenezer Chur
Raleigh 27609
Robert Weil Pres
Michael M Fells (Export)
Coastal Region Established 1975
Phone: (919)782-0101 Emp. E
3589 Carpet cleaning equip
2841 Carpet cleaning chemicals
3589 Carpet cleaning accessories
*25 Fiberglass cabinets
*35 Vacuum blowers
*35 Pumps and motors
*33 Castings aluminum

‡ VISHAY INTERTECHNOLOGY INC
Malvern PA
Measurement Group Inc
P O Box 27777
Hwy 64 Wendell Nc Plt Loc
Raleigh 27601
Coastal Region Established 1979
Phone: (919)365-3800 Emp. F
3829 Stress analysis equipment

WARD TRANSFORMER CO E
P O Box 30009
Mt Hermon Church Rd
Raleigh 27612
R E Ward III Pres
Don Moore (Export)
Coastal Region Established 1965
Phone: (919)787-3553 Emp. F
3612 Transformers electrical
3613 Switchgear electrical
3499 Lifting magnets
*33 Magnet wire copper
*33 Steel strip

‡ WARNER LAMBERT CO
Morris Plains NJ
American Optical Co
Box 1470
Raleigh Durham Hwy
Raleigh 27602
M A Shearin Mgr
§ 14 Mechanic St
Southbridge MA
Coastal Region
Phone: (919)787-0151 Emp. B
3851 Ophthalmic goods

‡ WATSON SEAFOOD & POULTRY CO INC
Raleigh NC
Feather Processors Inc I
P O Box 14032
Raleigh 27610
Ebern T Watson Jr
Coastal Region Established 1963
Phone: (919)828-9349 Emp. C
3962 Washed & dried feathers
*39 Raw feathers

WESTINGHOUSE ELECTRIC CORP E
P O Box 9533
2728 North Blvd
Raleigh 27611
C E Bell Gen Mgr
A R Jenny (Export)
§ Gateway Center
Pittsburgh PA
Coastal Region Established 1954
Phone: (919)834-5271 Emp. I
3545 Elec measuring & timing devices
*33 Copper and copper base alloys
*36 Electronics
*34 Fabricated parts
*36 Equipment and tooling

M.2 - SITE MAINTENANCE FORM

* ACTION: _ *

EPA ID : NCD003195963

SITE NAME: WESTINGHOUSE ELEC METER & LIGHT DIV SOURCE: H

STREET : US 1 N CONG DIST: 04

CITY : RALEIGH ZIP: 27603

CNTY NAME: WAKE CNTY CODE : 083

LATITUDE : 35/49/30.0 LONGITUDE : 078/36/30.0

LL-SOURCE: R LL-ACCURACY:

SMSA : 6640 HYDRO UNIT: 03020201

INVENTORY IND: Y REMEDIAL IND: Y REMOVAL IND: N FED FAC IND: N

NPL IND: N NPL LISTING DATE: NPL DELISTING DATE:

SITE/SPILL IDS:

RPM NAME: RPM PHONE: - -

SITE CLASSIFICATION: SITE APPROACH:

DIOXIN TIER: REG FLD1: REG FLD2:

RESP TERM: PENDING ( ) NO FURTHER ACTION ( ) * PENDING (_) NO FURTHER ACTION (_) *

ENF DISP: NO VIABLE RESP PARTY ( ) VOLUNTARY RESPONSE ( )
ENFORCED RESPONSE ( ) COST RECOVERY ( )

SITE DESCRIPTION:

M.2 - PROGRAM MAINTENANCE FORM

ACTION: _

SITE: WESTINGHOUSE ELEC METER & LIGHT DIV

EPA ID: NCD003195963 PROGRAM CODE: H01 PROGRAM TYPE: _

PROGRAM QUALIFIER: ALIAS LINK :

PROGRAM NAME: SITE EVALUATION

DESCRIPTION:

M.2 - EVENT MAINTENANCE FORM

* ACTION: _ *

SITE: WESTINGHOUSE ELEC METER & LIGHT DIV
PROGRAM: SITE EVALUATION

EPA ID: NCD003195963 PROGRAM CODE: H01 EVENT TYPE: DS1

FMS CODE: EVENT QUALIFIER : EVENT LEAD: E * _ ___ _ *

EVENT NAME: DISCOVERY STATUS: * _____ _ *

DESCRIPTION:

* _____ *
* _____ *
* _____ *
* _____ *

ORIGINAL	CURRENT	ACTUAL			
START:	START:	START:	__/__/__	__/__/__	__/__/__
COMP :	COMP :	COMP : 08/01/80	__/__/__	__/__/__	__/__/__

HQ COMMENT:

* _____ *

RG COMMENT:

* _____ *

COOP AGR #	AMENDMENT #	STATUS	STATE %
			0

M.2 - EVENT MAINTENANCE FORM

* ACTION: _ *

SITE: WESTINGHOUSE ELEC METER & LIGHT DIV
PROGRAM: SITE EVALUATION

EPA ID: NCD003195963 PROGRAM CODE: H01 EVENT TYPE: PA1

FMS CODE: EVENT QUALIFIER : EVENT LEAD: S * _ ___ _ *

EVENT NAME: PRELIMINARY ASSESSMENT STATUS: * _____ _ *

DESCRIPTION:

* _____ *
* _____ *
* _____ *
* _____ *

ORIGINAL	CURRENT	ACTUAL			
START:	START:	START: 07/01/84	__/__/__	__/__/__	__/__/__
COMP :	COMP :	COMP : 08/01/84	__/__/__	__/__/__	__/__/__

HQ COMMENT:

* _____ *

RG COMMENT:

* _____ *

COOP AGR #	AMENDMENT #	STATUS	STATE %				
			0	_____	_____	__	___

M.2 - EVENT MAINTENANCE FORM

* ACTION: _ *

SITE: WESTINGHOUSE ELEC METER & LIGHT DIV
PROGRAM: SITE EVALUATION

EPA ID: NCD003195963 PROGRAM CODE: H01 EVENT TYPE: SI1

FMS CODE: EVENT QUALIFIER : EVENT LEAD: S * _ ___ _ *

EVENT NAME: SITE INSPECTION STATUS: * _____ _ *

DESCRIPTION:

* _____ *
* _____ *
* _____ *
* _____ *

ORIGINAL	CURRENT	ACTUAL			
START:	START:	START: 11/01/84	__/__/__	__/__/__	__/__/__
COMP :	COMP :	COMP : 12/01/84	__/__/__	__/__/__	__/__/__

HQ COMMENT:

* _____ *

RG COMMENT:

* _____ *

COOP AGR #	AMENDMENT #	STATUS	STATE %				
			0	_____	_____	__	___

M.2 - COMMENT MAINTENANCE FORM

SITE: WESTINGHOUSE ELEC METER & LIGHT DIV

EPA ID: NCD003195963

COM NO	COMMENT		ACTION		
001	PART A- ON FILE	*	_	_____	*
		*		_____	*

M.2 - PROGRAM MAINTENANCE FORM

* ACTION: - *

SITE: WESTINGHOUSE ELEC METER & LIGHT DIV

EPA ID: NCD003195963 PROGRAM CODE: H01 PROGRAM TYPE: *

PROGRAM QUALIFIER: ALIAS LINK : *

PROGRAM NAME: SITE EVALUATION *

DESCRIPTION:

REGION: 04
STATE : PC

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE
C E R C L A

RUN DATE: 85/05/04
RUN TIME: 15:59:41

.2 - EVENT MAINTENANCE FORM

* ACTION: *

SITE: WESTINGHOUSE ELEC METER & LIGHT DIV
PROGRAM: SITE EVALUATION

EPA ID: NCD003195963 PROGRAM CODE: H01 EVENT TYPE: DS1

CRS CODE: EVENT QUALIFIER: EVENT LEAD: E *

EVENT NAME: DISCOVERY STATUS: *

DESCRIPTION:

*

*

*

*

ORIGINAL	CURRENT	ACTUAL			
START:	START:	START:	__/__/__	__/__/__	__/__/__
COMP :	COMP :	COMP : 80/08/01	__/__/__	__/__/__	__/__/__

EW COMMENT:

*

LV COMMENT:

*

COOP AGR #	AMENDMENT #	STATUS	STATE %			

REGION: 04
STATE: FC

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE
C E R C L A

M.2 - EVENT MAINTENANCE FORM

PAGE: [illegible]
RUN DATE: [illegible]
RUN TIME: 15:59:4[illegible]

* ACTION: _ *

SITE: WESTINGHOUSE ELEC METER & LIGHT DIV
PROGRAM: SITE EVALUATION

EPA ID: MCD003195963 PROGRAM CODE: R01 EVENT TYPE: PA1

EMS CODE: EVENT QUALIFIER: EVENT LEAD: S

EVENT NAME: PRELIMINARY ASSESSMENT STATUS:

DESCRIPTION:

ORIGINAL	CURRENT	ACTUAL			
START:	START:	START: 84/07/01	__/__/__	__/__/__	__/__/__
COMP :	COMP :	COMP : 84/08/01	__/__/__	__/__/__	__/__/__

MW COMMENT:

EW COMMENT:

COOP AGR #	AMENDMENT #	STATUS	STATE %

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE
C E R C L A

PAGE: 1147
RUN DATE: 85/06/04
RUN TIME: 15:59:41

REGION: 04
STATE : NC

-.2 - EVENT MAINTENANCE FORM

* ACTION: _ *

SITE: WESTINGHOUSE ELEC METER & LIGHT DIV
PROGRAM: SITE EVALUATION

EPA ID: NCD003195963 PROGRAM CODE: H01 EVENT TYPE: SI1

EMS CODE: EVENT QUALIFIER: EVENT LEAD: S

EVENT NAME: SITE INSPECTION STATUS:

DESCRIPTION:

ORIGINAL	CURRENT	ACTUAL			
START:	START:	START: 84/11/01	__/__/__	__/__/__	__/__/__
COMP :	COMP :	COMP : 84/12/01	__/__/__	__/__/__	__/__/__

HQ COMMENT:

HQ COMMENT:

COOP AGR #	AMENDMENT #	STATUS	STATE %

REGION: 04
STATE: PC

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE
C E R C L A

.2 - COMMENT MAINTENANCE FORM

SITE: WESTINGHOUSE ELEC METER & LIGHT DIV

EPA ID: PCD003195963

COM NO.	COMMENT	ACTION
001	PART A- ON FILE	

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE
C E R C L A

M.2 - SITE MAINTENANCE FORM

* ACTION: _ *

IV: NCD003195963

NAME: WESTINGHOUSE ELEC METER & LIGHT DIV SOURCE: H * _____ _ *

EI: US 1 N CONG DIST: 04 * _____ __ *

: RALEIGH ZIP: 27603 * _____ _____-____ *

NAME: WAKE CNTY CODE: 083 * _____ ___ *

TUDE: 35/49/30.0 LONGITUDE: 078/36/30.0 * __/__/__.__ ___/__/__.__ *

: 6640 HYDRO UNIT: 03020201 * ____ _____ *

NTORY IND: Y REMEDIAL IND: Y REMOVAL IND: N FED FAC IND: N * _ _ _ _ *

IND: N NPL LISTING DATE: NPL DELISTING DATE: * _ __/__ __/__ *

OACH: SITE CLASS: * ___ __ *

/SPILL IDS: * __ __ __ __ __ *

NAME: RPM PHONE: - - * _____ ___-___-____ *

IN TIER: REG FLD1: REG FLD2: * ____ _____ _ *

TIER: PENDING (X) NO FURTHER ACTION ( ) * PENDING (_) NO FURTHER ACTION (_) *

DISP: NO VIABLE RESP PARTY ( ) VOLUNTARY RESPONSE ( ) * _ _ *

ENFORCED RESPONSE ( ) COST RECOVERY ( ) * _ _ *

DESCRIPTION:

* _____ *

* _____ *

* _____ *

* _____ *

North Carolina Department of Natural Resources & Community Development
James B. Hunt, Jr., Governor
James A. Summers, Secretary

DIVISION OF PARKS & RECREATION
James S. Stevens, Jr.
Director
Telephone 919 733-4181

N.C. Natural Heritage Program
September 14, 1984

Ms. Elizabeth Seely
U.S. Environmental Protection Agency
345 Cortland St., NE
Atlanta, Georgia 30365

SUBJECT: Proposed Hazardous Waste Disposal Sites in North Carolina

Dear Ms. Seely:

We have examined out data for occurrences of Endangered, Threatened, or rare species or significant natural areas, geologic features or natural communities in the area of the propsed sites. The Raleigh site (Wake Co., US1 North) does not contain any of these sensitive resources.

The Cedar Mountain (Transylvania County) site however is in the vicinity of several natural features of state significance. Cedar Mountain occurs in an area of the N.C. mountains that has some of the few remaining examples of shrub/Sphagnum wetland types (never very common in the s.Appalachians), commonly referred to as "bogs." An area to the north of Brevard, for example, called the Pink Beds, is the largest known example of this wetland type in N.C.

Southwest of Cedar Mtn., associated with a tributary of the Little River (Clear Creek) a similar bog was partially destroyed, some years ago, by the creation of Arrowhead Lake (see enclosed map). Nevertheless, four state Endangered or Threatened plant species still occur in the remaining boggy areas (see list below). The bog, as a physical feature and natural community, is considered significant, and is believed to be a floristically rich example. It should be noted that the owner of this property has been found to be decidedly unsympathetic to the cause of conservation and, thus, we believe the habitat is in serious danger of destruction if the owner is provoked or irritated.

Other bogs are known to occur at other locations on the Little River's floodplain, suggesting that more inventory is needed along the River. There may be some relationship between geology of the area and the formation of these wetlands. Another site (16-acre) similar to the above -discussed bog occurs along Walker Creek and contains some of the same sensitive species (see map).

Species Name	NC Status[1]	US Status[2]
Arethusa bulbosa bog rose	T	--
Dalibarda repens false violet	E	--
Helonias bullata swamp pink	T	Category 2
Sarracenia jonesii Mtn. sweet pitcher plant	E	Category 1

[1] from Sutter *et al*. 1983 (enclosed)

[2] from U.S. Fish & Wildlife Service. 1983.

I am passing your request for information on recreation use to Mr. Jim Halsey, who should be able to respond to you next week, when he returns to his office.

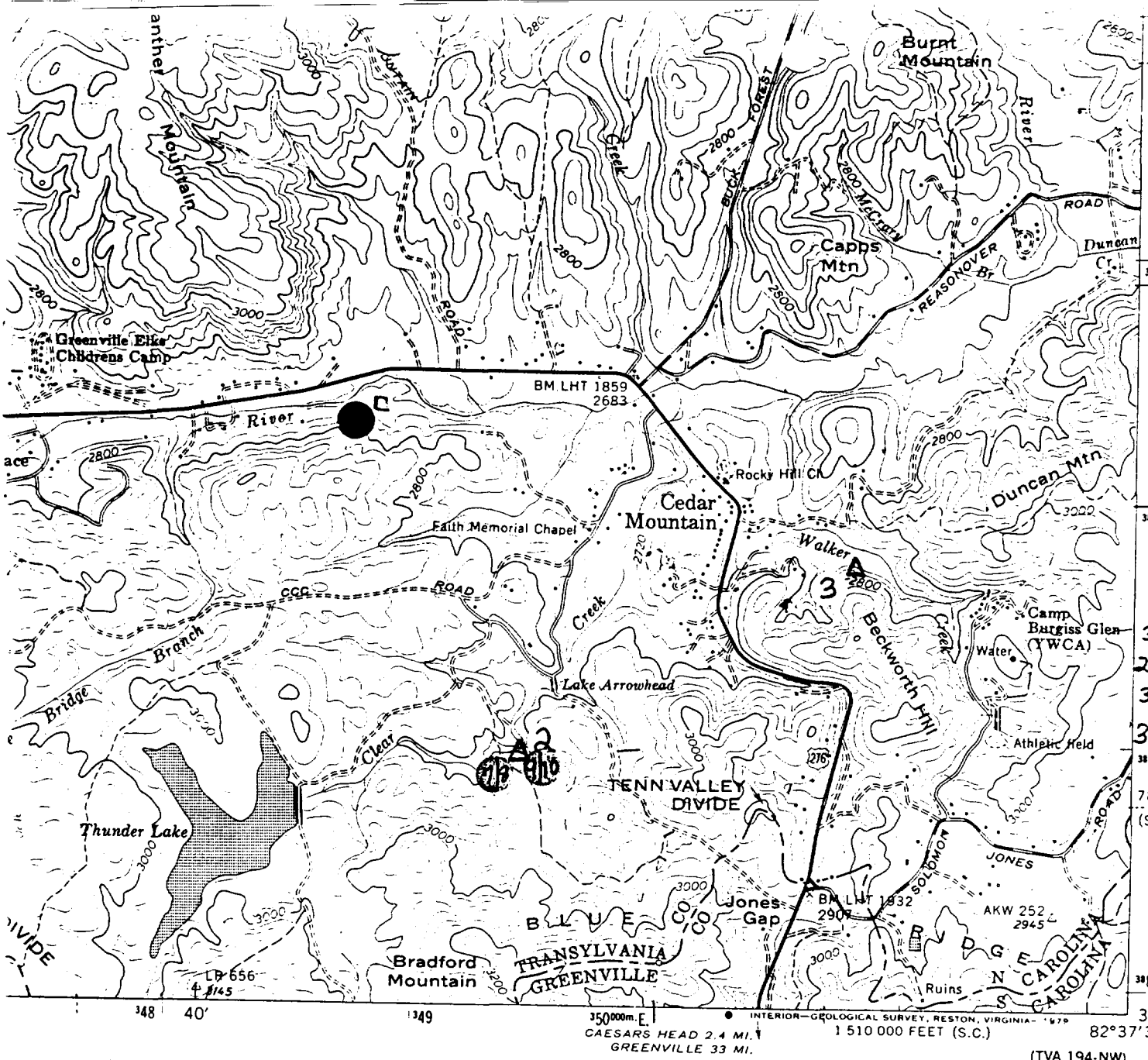
I hope this information will be of use; please let us know if we can be of further assistance, and thank you for the opportunity to comment of these proposals.

Sincerely,

Laura Mansberg

Laura Mansberg
Botanist

Encl.



1. PF03.
350950N
2. PF15.50
350805N
3. PF15.50
350830
4. 351025N

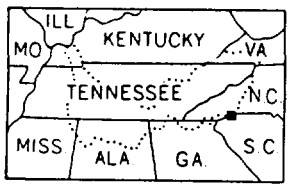
1 MILE

ROAD CLASSIFICATION

Heavy-duty	═══	Poor motor road	═══
Medium-duty	═══	Wagon and jeep track	— — —
Light-duty	═══	Foot trail	- - - - -

U. S. Route — State Route

In developed areas, only through roads are classified



QUADRANGLE LOCATION

LLE, TENN. 37902
EST

3508226

BREVARD, N.C.–S.C.

N3507.5—W8237.5/7.5

1965
PHOTOREVISED 1978
AMS 4454 II NW-SERIES V842

△ = sites discussed

DMA 5254 IV SE-SERIES V842

FOR

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

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

June 29, 1984

Mr. David Daugherty
Westinghouse Electric Corporation
Box 9533
Raleigh, N. C. 27611

RE: Hazardous Substance Disposal/
Releases

Dear Mr. Daugherty:

As a follow-up to our telephone conversation on June 27, 1984, I would like to request information and documentation concerning the management of hazardous substances/wastes at the Westinghouse facility in Raleigh.

This information is needed to complete evaluations required by a U.S. EPA mandated inventory of potential hazardous substance sites in North Carolina as authorized by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The purpose of this inventory is to identify potential areas of concern resulting from past hazardous substances or hazardous wastes handling.

Please provide any documentation or explanations that would describe the following activities since the start-up of operations at the plant site, with applicable dates:

- Waste storage, treatment and disposal practices of RCRA hazardous wastes generated prior to November 19, 1980. Include types, amounts, transporters and disposal locations and dates for each waste.

- Waste storage, treatment and disposal practices for other toxic or hazardous substances not regulated by RCRA but designated as a hazardous substance under CERCLA (eg. PCBs).

- Information concerning releases of CERCLA hazardous substances at your plant site such as spills of feed-stocks, waste waters, materials at transfer areas, leaking storage tanks and other waste handling and/or recovery areas with descriptions of any remedial actions undertaken.

- Identify locations of any groundwater monitoring wells or other sampling points used to monitor areas of potential concern with current chemical analyses for each (locate on site map).

- Include copies of any notifications or correspondence made to the United States EPA or the State of North Carolina in reference to possible CERCLA site activities/releases.

- Provide a chronological history of site owners and or operators where applicable. (Records indicate this facility established 1953.)

This information will be used to assess and process this site through the 3012 system. The information will be on file at the North Carolina Solid and Hazardous Waste Management Branch 3012 Office and copies will be forwarded to U.S. EPA, Region IV, Atlanta, Georgia, in the near future.

Your assistance in compiling this information is very much appreciated. Please contact me (919) 733-2178 if you are not able to complete this information request within the next four weeks. I am also enclosing information on the 3012/CERCLA program for your use.

If you have questions or if I can be of any assistance, please contact me.

Sincerely,

Frank E. Moore

Frank E. Moore, Geologist

Solid & Hazardous Waste Management Branch
Environmental Health Section

FEM:jj

1. Users Manual
2. PA dated 7-24-84
3. Letter to Frank Moore from David Pougherty dated 8-15-84

✓ Wake.

J+R

February 2, 1976

Mr. Howard J. Matthews
Works Engineer
Westinghouse Electric Corporation
Meter Division
Box 9533
Raleigh, N. C. 27603

Dear Mr. Matthews:

Your letter of December 22, 1975, with reference to industrial waste was received on February 2, 1976.

The information presented is much too incomplete for this office to evaluate the suitability of the material for landfilling.

We will need a complete chemical analysis of the two types of waste that you listed in your letter.

We are also very much concerned with how long you have been generating this amount and type of waste as well as where it has been placed.

Sincerely,

O. W. Strickland, Supervisor
Solid Waste Management Unit
Solid Waste & Vector Control Branch
Sanitary Engineering Section

OWS/ct

cc: Mr. Terry F. Dover
Wake County Health Department

RECORD OF COMMUNICATION	☒ PHONE CALL ☐ DISCUSSION ☐ FIELD TRIP ☐ CONFERENCE ☐ OTHER (SPECIFY) (Record of item checked above)	
TO: Laura Mansberg (919) 733-7795 NC Natural Heritage Parks + Recreation Dept.	FROM: Betsy Seely EPA Region IV ERRB, ICS	DATE Sept 11 + Sept 12 1989 TIME 3:00 PM

SUBJECT
Conversation with Laura Mansberg

SUMMARY OF COMMUNICATION

I asked if there were any critical habitats of endangered species or national wild life refuges within a mile of the Dupont site in Cedar Mtn NC (NCD003152329) or the Westinghouse elec. meter + LVIT Div. site in Raleigh NC (NCD003195963).

She looked up these sites and returned my call the next day. She said there were none of these types of areas near the Westinghouse site, but the Dupont site was in a wetlands area which is also a critical habitat of 4 endangered plant species. She is mailing me a copy of a map indicating the location of this area.

CONCLUSIONS, ACTION TAKEN OR REQUIRED

INFORMATION COPIES
TO:

EPA Form 1300-6 (7-72) REPLACES EPA HQ FORM 5300-3 WHICH MAY BE USED UNTIL SUPPLY IS EXHAUSTED.

EPA

NFRAP
RCRA / TSD

Site Inspection Report

for

Westinghouse Electric Meter
and
Light Division
US #1 North
Raleigh, N.C.

NCD 003195963

by

Frank E. Moore
Geologist, 3012

Frank E. Moore

August 28, 1984

Summary

Westinghouse, located off the Beltline on US #1 North in Raleigh, N.C., manufactures all types of electric metering devices. They have been at this location--manufacturing and assembling meters--since 1954. This is a well established area with commercial/industrial and residential sections all believed to be serviced with city water and sewer.

Westinghouse notified us, through a CERCLA 103C, for the disposal of treated electroplating sludge on-site in a diked impoundment. From information received from the Company, we have concluded that on-site disposal took place from about 1954 until 1973. From 1974 until 1980, the metal plating sludges were generally drumed and sent to Wake County landfills nearby. The majority of the sludge disposed of during this time was "fixed" with sodium silicate and cement. It is estimated that 2,000 cubic yards of fixed and unfixed metal plating sludges remain on the site today.

A medium priority for site inspection was recommended in the PA and the site inspection was scheduled for July 20, 1984. The objectives of the SI were to confirm the presence of a hazardous waste disposal area and to sample for potential off-site migration routes. Ten (10) samples were taken at the site including sludge, soil, surface water and sediment samples. Based on these samples, we concluded there was a hazardous waste disposal area. There didn't appear to be any significant impact on the environment (soil, groundwater or surface water) and it presents no public health risks at this time.

Depending upon the outcome of discussions with the RCRA program, this site may be addressed as part of the RCRA regulations. However, if the site remains in CERCLA, it would be easy enough to initiate a clean-up of the site. This site will need to be addressed in the future and may deserve a low priority for follow-up at this time.

Location

The exact location for Westinghouse Electric Meter and Light Division metal plating sludge disposal area is as follows:

Westinghouse Electric
Box 9533
US #1 North
Raleigh, N.C. 27611

Wake County

Lat 35° 49' 30"
Long 78° 36' 30"

The plant occupies the east corner of the intersection of US #1 North and the Raleigh Beltline.

The waste water treatment facility and disposal area is located just off the SW corner of the main plant building.

The diked sludge disposal impoundment was overgrown with Kudzu at the time of our site inspection. Attached is a USGS 7.5° Quad map showing the location of the facility and the surrounding area. (Attachment A)

Site Layout

Entrance to the facility is from the north side of the property, off of US #1 North. The main building (office and manufacturing facility) site parallel to US #1 in a NE to SW orientation. The Raleigh Beltline runs parallel to the western property line of Westinghouse. The main railroad lines border the property on the southern side. The entire property is reported as covering some 100 acres which affords Westinghouse generous buffer zones on all sides of the facility.

The waste water treatment plant and sludge processing and disposal areas are just off the SW corner of the main building. The area drains southward towards the Beltline and railroad tracks. The drainage receives some surface water from the facility area before exiting a culvert near the waste water treatment plant. Historical information indicates that the drainage was formed as an intermittent stream (unnamed) and wet weather spring. (Est. flow 1 gal/min.)

Below and to the west of the waste water treatment facility is the area used for past metal plating sludge disposal. Originally, sludge was treated and pumped into about a 100' diked impoundment. Later a cement mixer was added with sludge set-up areas (concrete areas) to facilitate their chem-fix operation. The sludge impoundment is easily recognized by the overgrowth of Kudzu vines covering the impoundment.

The surrounding area is heavily commercialized with some urban residential areas nearby. The entire area, however, is reportedly serviced by city sewer and water. (Sketch map of Impoundment Area - Attachment B)

Ownership and Site Use History

Westinghouse Electric Corporation has been the sole owner and operator of the facility of US #1 North in Raleigh, N.C., according to the Company.

The facility was built around 1953 and for the first year or so was used only for assembly of meters until the plating equipment was installed. From 1954 to present the facility has manufactured and assembled all types of electrical metering devices for many residential and commercial applications. Plating sludges were disposed of on site from 1954 until 1973. In 1973 modifications in the sludge treatment process were completed and the treated sludge was drumed and landfilled in Wake County. The Company has estimated that between 40 to 60 drums per month were landfilled off site between mid 1974 and the end of 1975.

Other potential hazardous wastes including solvents from degreasing still bottoms, paint sludges, and precipitates from plating tanks were also believed to have been drumed and disposed of off site in the County landfill prior to 1976.

From 1976 until 1980, plating sludges were chem-fixed, drumed and disposed of off site in a landfill. Other solvent and paint residues were shipped to various recyclers and disposers and not landfilled.

Permit and Regulatory History

According to our information Westinghouse has a N.C. Permit #3637 for Air Pollution Abatement Facilities and/or Emission Sources. They also have a SPCC plan and are a RCRA generator facility.

In 1975 the N.C. Solid Waste Program requested that Westinghouse stop disposing of drumed plating sludge in the landfill. A "chem-fixed" process was incorporated into the treatment facility and again the fixed sludge was allowed by the State to be landfilled. No fines or penalties were assessed.

In 1980, RCRA regulations mandated that proper disposal of plating sludges be to a secure landfill. Westinghouse tried, unsuccessfully, for about two years to have their waste delisted as non-hazardous. However, due to higher than allowed Cyanide levels, the delisting was denied.

All plating wastes are manifested to SCA at this time under RCRA. Other solvent/paint wastes are also properly disposed of under RCRA.

Remedial Actions

No remedial actions have taken place at Westinghouse due to the disposal of their plating sludges in the impoundment. No complaints or environmental problems have ever been noted due to this disposal on site.

Trip Report

Mr. Dave Daugherty, Senior Engineer at the Westinghouse facility, was the site contact before, during and after the site inspection on July 20, 1980. Mr. Daugherty also provided information requested for completing the PA report.

On the morning of July 20, 1980, the following participated in the site inspection at Westinghouse:

Frank Moore	Geologist	DHR, 3012
Len Bramble	Engineer	DHR, 3012
Lee Crosby	Chemist	DHR, 3012
Dave Daugherty	Engineer	Westinghouse, Raleigh, NC
Paul Jack	Engineer	Westinghouse, Pittsburg, PA

Permission for the SI was granted by Mr. Daugherty who also wished to receive splits of all samples taken during the SI. Mr. Jack was acting as an observer for Westinghouse and took notes during the inspection. Photographs were planned during the SI but due to problems with the film none are available. (I didn't load the camera correctly)

Sampling strategy was discussed and sampling began about 0930 hours. Sampling was done in accordance with recognized EPA protocol and transported to the lab using chain-of-custody procedures. A total of ten (10) samples were taken:

Map #	Sample #	Description
#1	001267	At Culvert, up-gradient drainage water, metals
#2	001268	At Culvert, up-gradient drainage sediment, metals
#3	001269	Adjacent to waste, drainage water, metals
#4	001270	Adjacent to waste, drainage sediment, metals
#5	001475	Down-gradient, drainage water, metals
#6	001476	Down-gradient, drainage sediment, metals
#7	001477	Impoundment, sludge composite 0-6', metals
#8	001334	Impoundment, sludge composite 0-6', organics
#9	001478	Impoundment, soil below sludge, metals
#10	001479	Chem-fixed sludge area, metal

The results of these samples are attached. The drainage water and sediment samples do not indicate any significant migration of the waste has occurred. The pieces of chem-fixed material in the drainage may have influenced the pH of the water by raising it slightly from 5.9 up-stream to 6.4 down-stream. (pH from field measurements)

The waste samples did show high total metal levels but none of the metals showed significant concentrations when extracted. No organic solvents were detected in the sludge sample from the impoundment. Cyanide values were high in the sludge.

The soil sample taken from below the sludge in the impoundment also showed the presence of metals in minor concentrations. It should also be noted that even after a very rainy spring and summer the soil was very dry. The sludge was saturated with water, but appeared to almost form a cap over the soil. There didn't appear to be a great deal of vertical movement of water. A background soil sample would have to be taken before a complete comparison of the soil's metal levels could be compared.

Photographs were planned for the SI, but because of film problems no pictures are available from the SI.

Environmental Setting

Topographic Map Attached

The disposal area is off on the SW corner of the facility. The waste area is overgrown with Kudzu and through the years have built up a 4" layer of organic humus material. Some small "critters" were observed in the humus layer. The area around the impoundment is well maintained (grass cut regularly) and a security fence is about 40'-50' from the impoundment on the south and east sides. The drainage, which runs along north to south just to the east of the disposal area, reportedly receives run-off from the facility before exiting a culvert at the waste water treatment plant. (Sampling point #1 and #2) This drainage was running at an estimated 1 gallon/minute and "dried-up" approximately 400' - 500" downstream from the impoundment, still on Westinghouse property. The area outside of the fence is forested with mixed pines and hardwoods. As before, US #1 and the Raleigh Beltline borders the facility on the North and West. The unnamed drainage empties into Crabtree Creek approximately .5 miles away.

The land use in the immediate area surrounding the site would be considered urban commercial/industrial. The topo map does show several residential subdivisions approximately 1/2 mile away. This entire area is reportedly served by city water and sewer.

The unlined impoundment lies in weathered mica and hornblende gneiss. The saprolite clayey soils are generally mapped as firm clayey soils on felsic rocks and classified as Cecil-Appling-Pacolet soils. Bedrock would probably be fairly shallow in this area.

The site around the impoundment slopes to the south, same as the drainage flow.

No additional subsurface information was available at the time of this writing, but Westinghouse might be able to furnish some additional information from foundation studies used in the construction of the plant buildings. No wells are reported in the area, so groundwater studies were also not available.

Based on the available information, it is the opinion of the author that this disposal has not caused any significant impact on the environment surrounding the impoundment. Also, there doesn't appear to be a health risk associated with the disposal area as it exists at this time. A low priority for follow-up work may be recommended for this site.

Waste Types and Quantities

Mr. Dave Daugherty of Westinghouse reports that original estimates of the waste on site to be high--3700 cubic yards. Recent measurements indicate about 950 cubic yards of unfixed sludge present in the impoundment and about the same volume remains of the chem-fixed sludge and contaminated soil from grading associated with the fixed operations. The total volume of metal plating sludge wastes is estimated to be about 2000 cubic yards of material.

Additional waste was disposed of off site and is still being investigated.

References

- Raleigh East, N.C. USGS 7.5' Quad Map
  1968 Photo Revised 1973

- Impoundment Sketch Map with Sampling Locations

- Copy of Field Notes

- Copy of Westinghouse Letter - August 15, 1984
  Daugherty to Moore

- Lab Results with Chain-of-Custody Form

- Consent for Access to Property Form

- Receipt for Samples Form

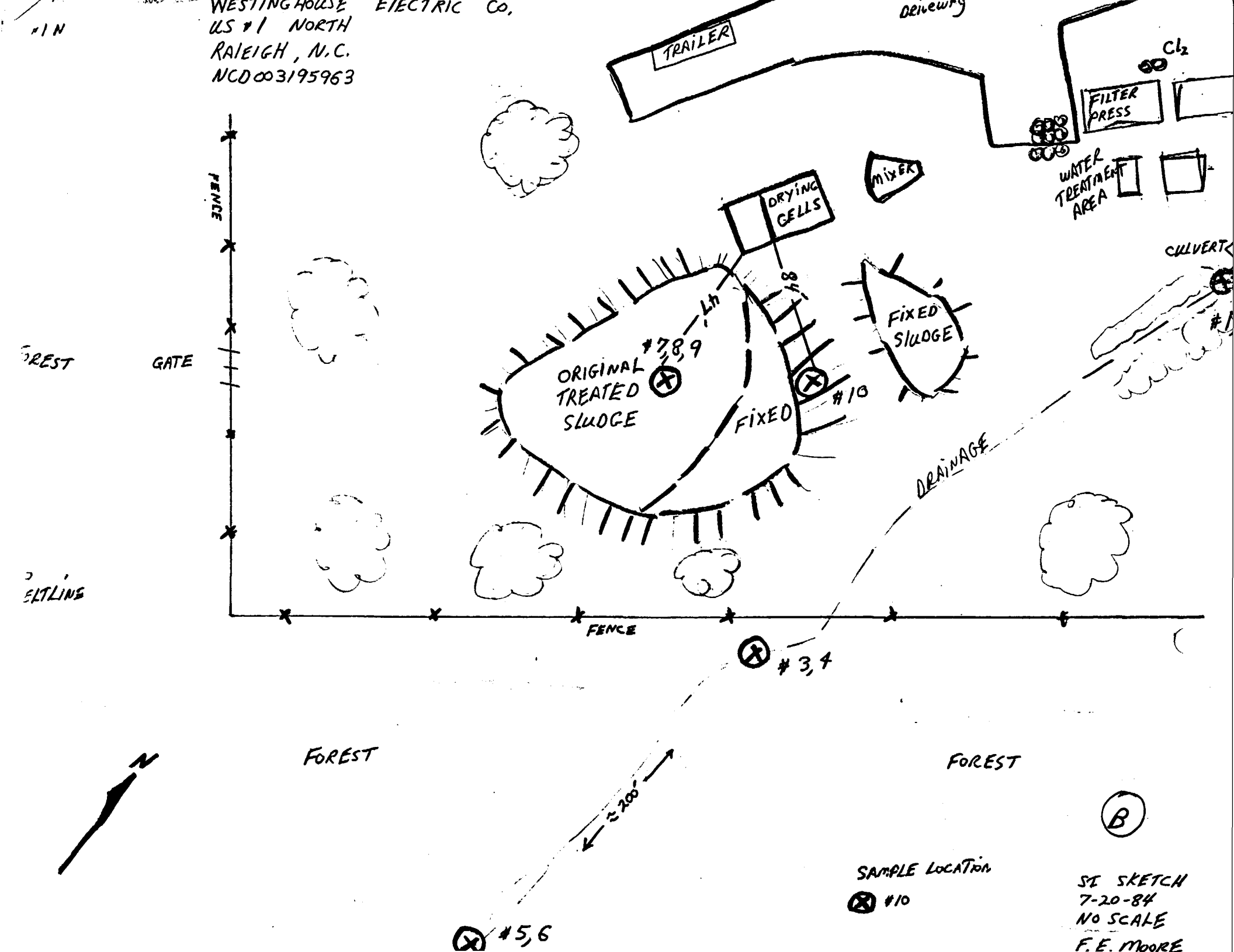
- SI Form 2070-13 with Instructions

- Information in Delisting Petition from RCRA Files

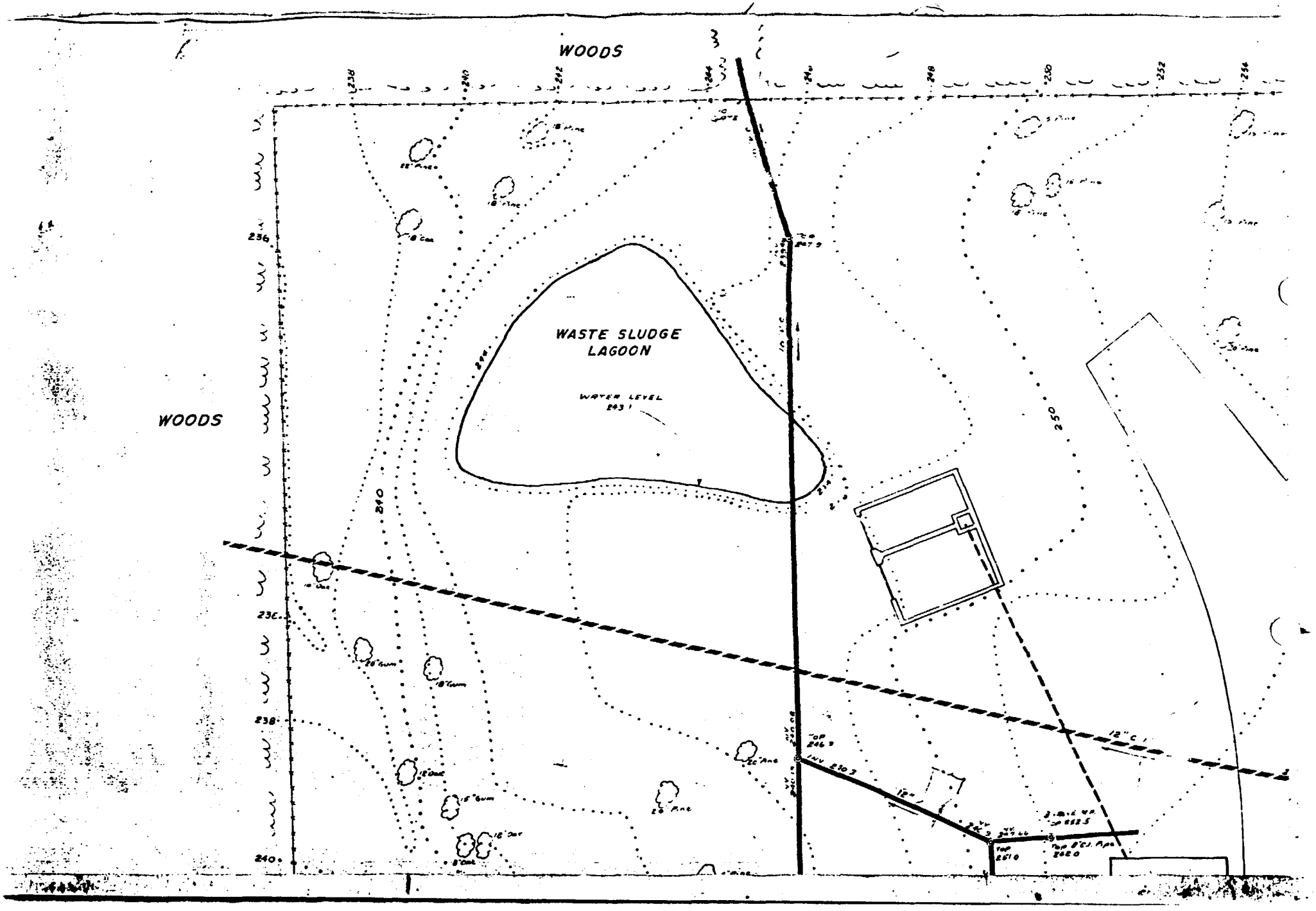
Westinghouse - Wake NCD 003195963
Raleigh East, N.C USGS 7.5' QUAD
1968 Photo Revised 1973

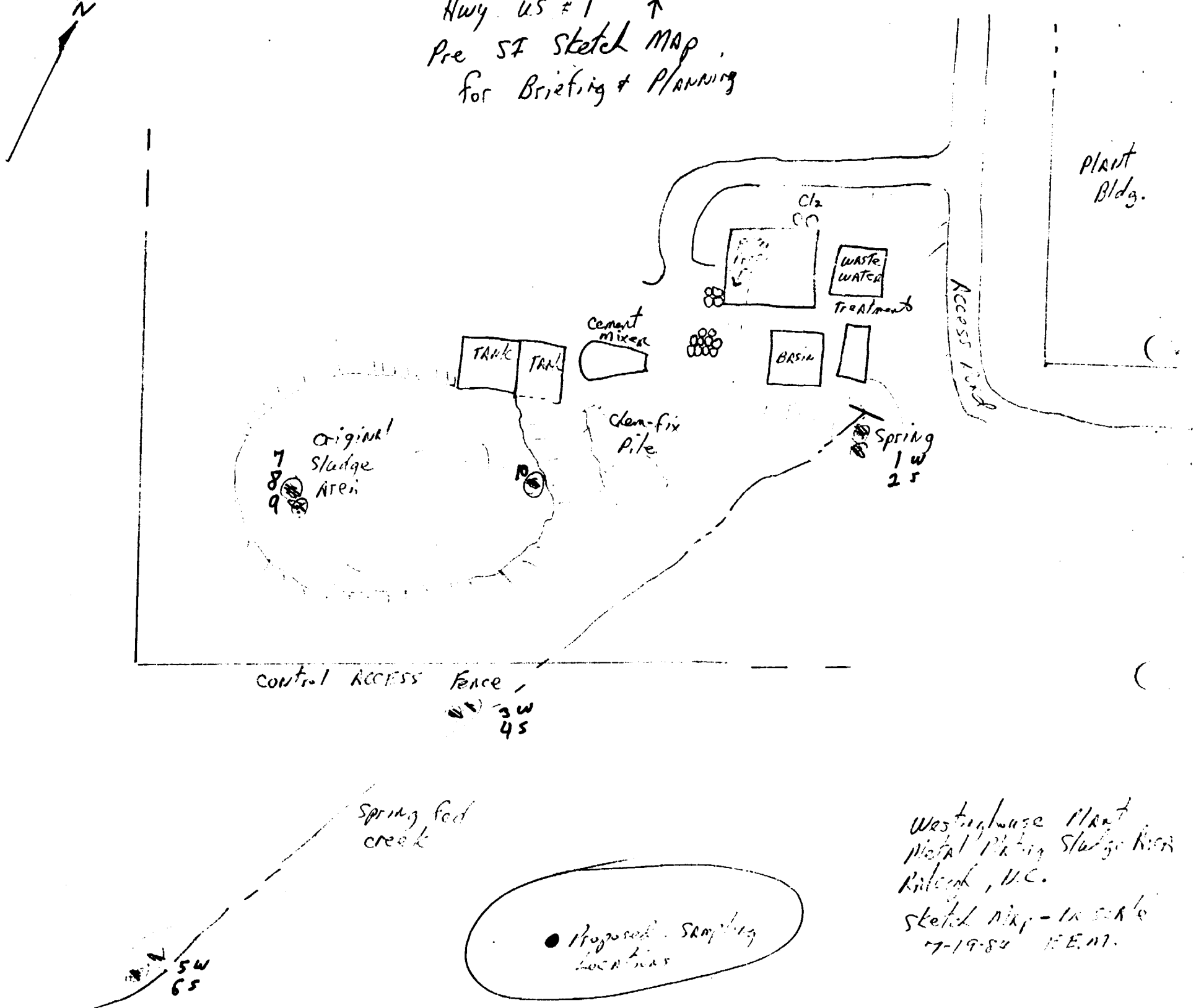
A

WESTINGHOUSE ELECTRIC CO.
US #1 NORTH
RALEIGH, N.C.
NCD003195963



SI SKETCH
7-20-84
NO SCALE
F.E. MOORE


WOODS
WOODS
WASTE SLUDGE LAGOON
WATER LEVEL
243.1
238
240
242
244
248
250
252
254
236
238
240
250
12" C.I.
12"


N
Hwy US #1
Pre SI Sketch MAP
for Briefing & Planning
Plant Bldg.
Cl2
Waste Water Treatment
Access Road
Cement mixer
TANK
TANK
BASIN
Clean-fix Pile
Original Sludge Area
7
8
9
10
Spring
1 W
2 S
Control Access Fence
3 W
4 S
Spring fed creek
5 W
6 S
Proposed Sampling Locations
Westinghouse Plant
Metal Plating Sludge Area
Raleigh, N.C.
Sketch Map - In Scale
7-19-84 F.E.M.

3012 SI of Westinghouse - US #1 - Raleigh

By: F. Moore, L. Crosby, L. Bramble

Date: 20 July 1984

Time: 9 am - 11:30 am

Place: Westinghouse U.S. #1 N Raleigh, N.C.

Weather: hot, humid overcast

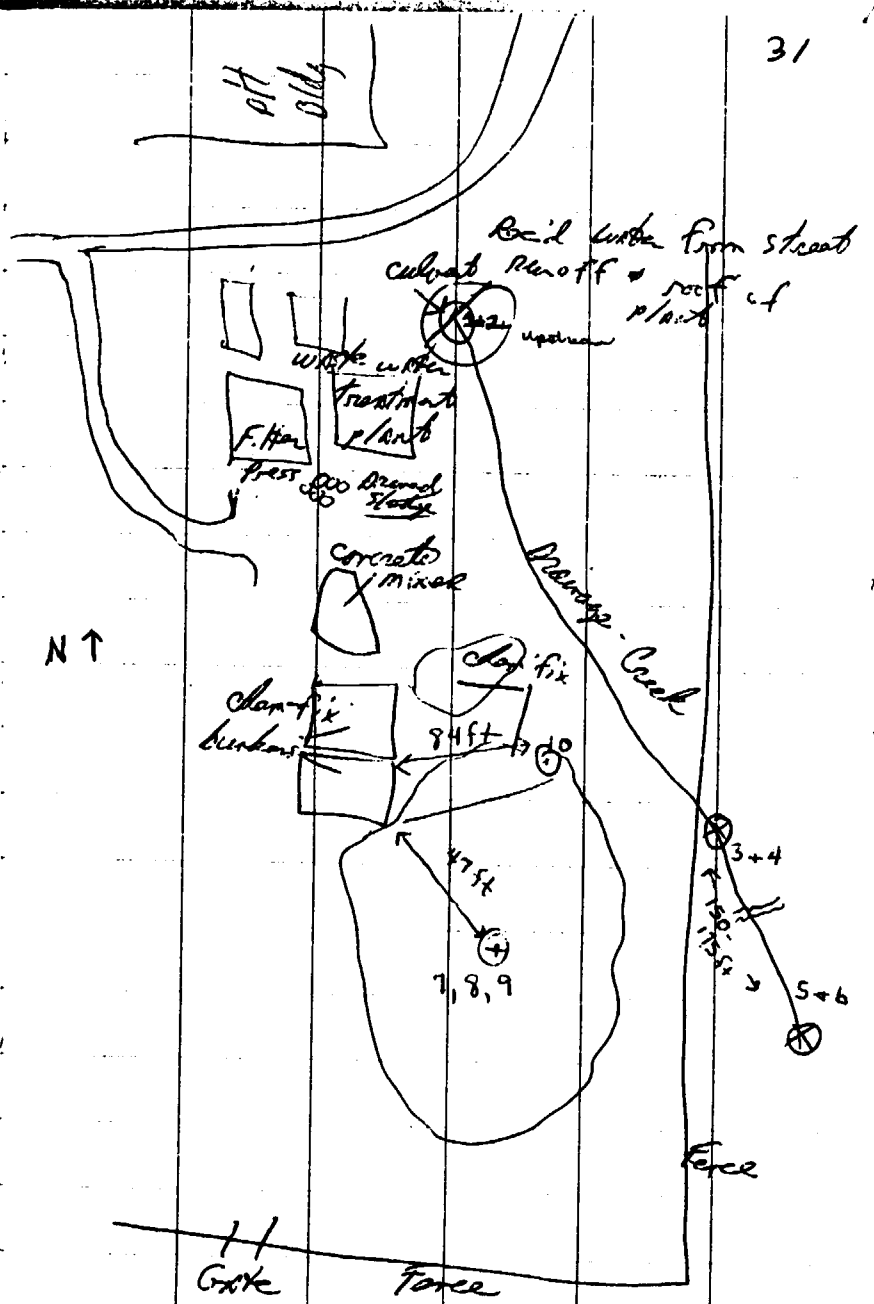
Site Contacts:

Dave Dougherty

Paul Jack

W.A. Peables

Eng. Hydrogeologist present at SI 7-20-84



Westinghouse US #1 N - Ral., N.C.

Paul P Jack

Project Engineer
Environmental Control
Environmental Affairs

Westinghouse Electric Corporation
Westinghouse Building
Gateway Center
Pittsburgh Pennsylvania 15222
(412) 642-3192
WIN 272-3192

B.
D. Water sample # 1
I. pH 5.9
F. temp 24 C
U. cond 95

WATER Sample # 3
pH: 6.3
T: 24°C
COND: 103

WATER Sample # 5
pH: 6.4
T: 22°C
COND: 109

Samples (locations are marked on map on preceding page)

1 Upstream water sample 9:30 AM
2 Upstream sediment sample 9:35 A.M.

3 Stream sample adj to pile
4 Sediment sample adj to pile

5 Down stream water sample
6 Down stream sediment sample

7 Sludge composite (heavy metals)
8 Sludge at 6 ft down (volitile organics)
sludge is covered by 4 to 6 inch of soil + organic matter (humus)
root structure of Cudzu is excellent
assorted insects are prevalent
9 Soil sample 6½ - 7 ft below surface
Red Clay - below sludge pile
10 Chem fixed sludge

~~In Organic Sample~~

#	Lab #	Description
9	~~001333~~	~~Red loamy, clayey soil - assumed to be bottom of pit 6½'-7'~~

Long Boards were laid down to provide acess on the waste pile.
- Covered w/ Kudzu - 4"-6" organic humus layer on top.
- Several small centiped like critter in humus layer.

Tape measurer was pulled to SE corner of concrete bunker 47'.

Samples were cored w/ 3" soil auger - soft & moist - no odor

Composite was cored & cored - Split & sampled

Organic Sample 11:00 A.M.

# 8	Sampled = 5-6' in Sludge
001334	pile/pit - ck for solvent

In Organic Samples

#1	Up-gradient water - gi comes
01267	from some run-off & spring
	≈ 1 gal per/min" Flow 9:30 A.M.
#2	Up-gradient sediment - 9:35 A.M.
01268	
#3	stream sample adjacent to 9:45
01269	waste pile
#4	stream sediment sample 9:50
01270	adjacent to pile

150' from 3 & 4

#5 Downstream water [Sluggish]
001475 10:15 A.M.

#6 Downstream Sediment
001476 10:20 A.M.

#7 Sludge composite 1'-6'
001477 10:30

#8 see Organic Sample
01334 10:45

#9 Soil sample 6½'-7'
01478 (Assumed bottom of Pit) 11:00 A.M.

#10 Dam-Fixed Sludge
01479 11:10 A.M.

Westinghouse
Electric Corporation

Electronics, Measurement
and Control Divisions

Box 9533
Raleigh North Carolina
(919) 834 5271

RECEIVED
AUG 15 1984
HAZARDOUS WASTE MANAGEMENT BRANCH

August 15, 1984

Mr. Frank E. Moore
Solid & Hazardous Waste Management Branch
Environmental Health Section
Division of Health Services
P. O. Box 2091
Raleigh, NC 27602-2091

Dear Mr. Moore:

Following is our response to your letter of June 29, 1984 requesting information and documentation concerning the management of hazardous wastes and substances at our facility. The information provided below regarding storage, treatment and disposal activities is based upon our review of available documents.

The sole owner and operator of the Westinghouse plant on North Boulevard, Raleigh, North Carolina has been Westinghouse Electric Corporation since its construction in 1954. From its construction until mid-1955, operations at the plant consisted mainly of assembly of watthour meters and should have generated little or no hazardous wastes. In 1955 manufacture of watthour meter components was added to the assembly operations. Since then, manufacturing operations have resulted in the following general categories of hazardous wastes: sludges from treatment of plating wastewaters, degreasing still bottoms, waste solvents, paint and ink sludges, and precipitates, and solutions from plating tanks. Aside from the treatment of plating solutions, wastewater, and wastewater sludges, there has been no on-site treatment. The only disposal on-site has been of sludges from the wastewater treatment facility.

Sludges from the treatment of plating wastewater have been and still are the largest volume hazardous waste from this facility. Prior to 1974, plating wastewaters, after being subjected to cyanide destruction and chrome reduction, were treated with lime to produce a metal hydroxide sludge which settled in a thickener and which was then disposed in an on-site impoundment.

In 1973 modifications were begun to the wastewater treatment plant to improve the wastewater quality. Upon completion of these modifications in early 1974, lime precipitation of metals was replaced by caustic soda precipitation. We estimate 40 to 50 drums per month of sludge was produced after completing the modifications. These drums were shipped off-site to landfill from mid-1974 until the end of 1975. There are no records of where these wastes were disposed; however, a December 1975 letter to O. W. Strickland from H. J. Matthews, Works Engineer, advised that these wastes were being disposed of at the Wake County landfill in Knightdale, NC.

Sludge produced in 1976 was fixed with cement and sodium silicate, first on an experimental basis and later as a full scale operation.

We have records of three shipments of fixed material in 1978 and of several more shipments of fixed material through September 1980 for a total of about 900 cubic yards. This material was shipped to Rowlands Private Landfill, Raleigh, NC during the May 1978 to September 1980 period.

Fixed sludge produced from October 1980 through August 1983 was shipped to SCA Services, Inc., Pinewood, SC. Sludge produced after August 1983 has been filtered in a plate and frame filter press to about 25 weight percent solids and shipped to SCA Services, Inc. in the unfixed condition in drums.

Other wastes generated at the plant are degreasing still bottoms, paint sludges, and precipitates from plating tanks. We believe that all of these wastes were drummed and landfilled off-site prior to 1975. No records were found of which disposers were used other than the December 1975 letter to O. W. Strickland which estimated 10 barrels per month of this type waste had been being disposed of in

the Wake County landfill. We believe none of these wastes were sent to the landfill in 1976 or later.

We have records of the shipment and disposal of 170 drums of waste in 1979 and 1980 via RAD Services (now TRI of Reidsville, NC).

We have records of one shipment of three drums of PCB capacitors to Chemical Waste Management of Emmelle, Alabama on October 31, 1980.

Records exist of one spill of hazardous waste. On September 3, 1981 an equipment malfunction caused a spill of approximately 500 gallons of sludge from the neutralizing plant. The spilled sludge was contained on Westinghouse property by diking and was cleaned up on September 8 and 9, 1981. The sludge was placed in the mixer as cleanup progressed and was subsequently fixed with cement and sodium silicate. The environment or human health were not threatened by this event.

There are no ground water monitoring wells or other such sample monitoring points on the plant site.

Attached is a copy of our original CERCLA site notification to the U.S. EPA. Also to aid in your site evaluation, a topographic map of our inactive disposal area with updated waste volumes is included. The originally reported value of 100,000 cubic feet (3700 cubic yards) is high. Measurements indicate about 950 cubic yards of unfixed sludge are present on-site. Adjacent to the unfixed sludge disposal site is an area of about equal volume which is believed to be soil from grading done on the site in the early 1970s and some fixed material placed on-site before August 1980. The total volume of waste is estimated to be less than 2000 cubic yards.

Sincerely,

David P. Daugherty

David P. Daugherty
Senior Manufacturing Engineer

Enclosure

5248T

EPA Notification of Hazardous Waste Site

EXHIBIT "B"

United States Environmental Protection Agency Washington DC 20460

This initial notification information is required by Section 103(c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and must be mailed by June 9, 1981.

Please type or print in ink. If you need additional space, use separate sheets of paper. Indicate the letter of the item which applies.

1 Person Required to Notify:

Enter the name and address of the person or organization required to notify.

Name: Westinghouse Electric Corporation

Street: Gateway Center

City: Pittsburgh State: Pa. Zip Code: 15230

3 Site Location:

Enter the common name (if known) and actual location of the site.

Name of Site: Raleigh Energy Metering, and Control Business Unit

Street: P. O. Box 9533 2728 North Blvd.

City: Raleigh County: Wake State: N. C. Zip Code: 27611

5 Person to Contact:

Enter the name, title (if applicable), and business telephone number of the person to contact regarding information submitted on this form.

Name (Last, First and Title): Parker, P. T.

Phone: 919-834-5271

7 Dates of Waste Handling:

Enter the years that you estimate waste treatment, storage, or disposal began and ended at the site.

From (Year): 1955 To (Year): 1973

9 Waste Type: Choose the option you prefer to complete

Option 1: Select general waste types and source categories. If you do not know the general waste types or sources, you are encouraged to describe the site in Item 1—Description of Site.

General Type of Waste:
Place an X in the appropriate boxes. The categories listed overlap. Check each applicable category.

1. ☐ Organics
2. ☒ Inorganics
3. ☐ Solvents
4. ☐ Pesticides
5. ☒ Heavy metals
6. ☐ Acids
7. ☐ Bases
8. ☐ PCBs
9. ☐ Mixed Municipal Waste
10. ☐ Unknown
11. ☐ Other (Specify)

Source of Waste:
Place an X in the appropriate boxes.

1. ☐ Mining
2. ☐ Construction
3. ☐ Textiles
4. ☐ Fertilizer
5. ☐ Paper/Printing
6. ☐ Leather Tanning
7. ☐ Iron/Steel Foundry
8. ☐ Chemical, General
9. ☒ Plating/Polishing
10. ☐ Military/Ammunition
11. ☐ Electrical Conductors
12. ☐ Transformers
13. ☐ Utility Companies
14. ☐ Sanitary/Refuse
15. ☐ Photofinish
16. ☐ Lab/Hospital
17. ☐ Unknown
18. ☐ Other (Specify)

Option 2: This option is available to persons familiar with the Resource Conservation and Recovery Act (RCRA) Section 3001 regulations (40 CFR Part 261).

Specific Type of Waste:
EPA has assigned a four-digit number to each hazardous waste listed in the regulations under Section 3001 of RCRA. Enter the appropriate four-digit number in the boxes provided. A copy of the list of hazardous wastes and codes can be obtained by contacting the EPA Region serving the State in which the site is located.

D-006		
D-007		
D-008		
F-006		

Form Approved
OMB No. 2000-0138

EPA Form 8900-1

F Waste Quantity

Place an X in the appropriate boxes to indicate the facility types found at the site.

In the "total facility waste amount" space give the estimated combined quantity (volume) of hazardous wastes at the site using cubic feet or gallons.

In the "total facility area" space, give the estimated area size which the facilities occupy using square feet or acres.

Facility Type

1. ☐ Piles
2. ☐ Land Treatment
3. ☐ Landfill
4. ☐ Tanks
5. ☒ Impoundment
6. ☐ Underground Injection
7. ☐ Drums, Above Ground
8. ☐ Drums, Below Ground
9. ☐ Other (Specify) _____

Total Facility Waste Amount

cubic feet 100,000

gallons

Total Facility Area

square feet 10,000

acres

G Known, Suspected or Likely Releases to the Environment:

Place an X in the appropriate boxes to indicate any known, suspected, or likely releases of wastes to the environment.

☐ Known ☐ Suspected ☐ Likely ☒ None

Note: Items H and I are optional. Completing these items will assist EPA and State and local governments in locating and assessing hazardous waste sites. Although completing the items is not required, you are encouraged to do so.

H Sketch Map of Site Location: (Optional)

Sketch a map showing streets, highways, routes or other prominent landmarks near the site. Place an X on the map to indicate the site location. Draw an arrow showing the direction north. You may substitute a publishing map showing the site location.

See Attachments "A" and "B"

I Description of Site: (Optional)

Describe the history and present conditions of the site. Give directions to the site and describe any nearby wells, springs, lakes, or housing. Include such information as how waste was disposed and where the waste came from. Provide any other information or comments which may help describe the site conditions.

This site is on property owned by Westinghouse Electric Corporation and located at 2728 North Blvd., Raleigh, N. C. It was utilized as a disposal area for sludge from our electro-plating wastewater operation from 1955 to 1973. The site is impounded by means of an earthen dam and at present is overgrown with vegetation.

J Signature and Title:

The person or authorized representative (such as plant managers, superintendents, trustees or attorneys) of persons required to notify must sign the form and provide a mailing address (if different than address in item A). For other persons providing notification, the signature is optional. Check the boxes which best describe the relationship to the site of the person required to notify. If you are not required to notify, check "Other".

Name C. E. Bell, General Manager

Street P. O. Box 9533

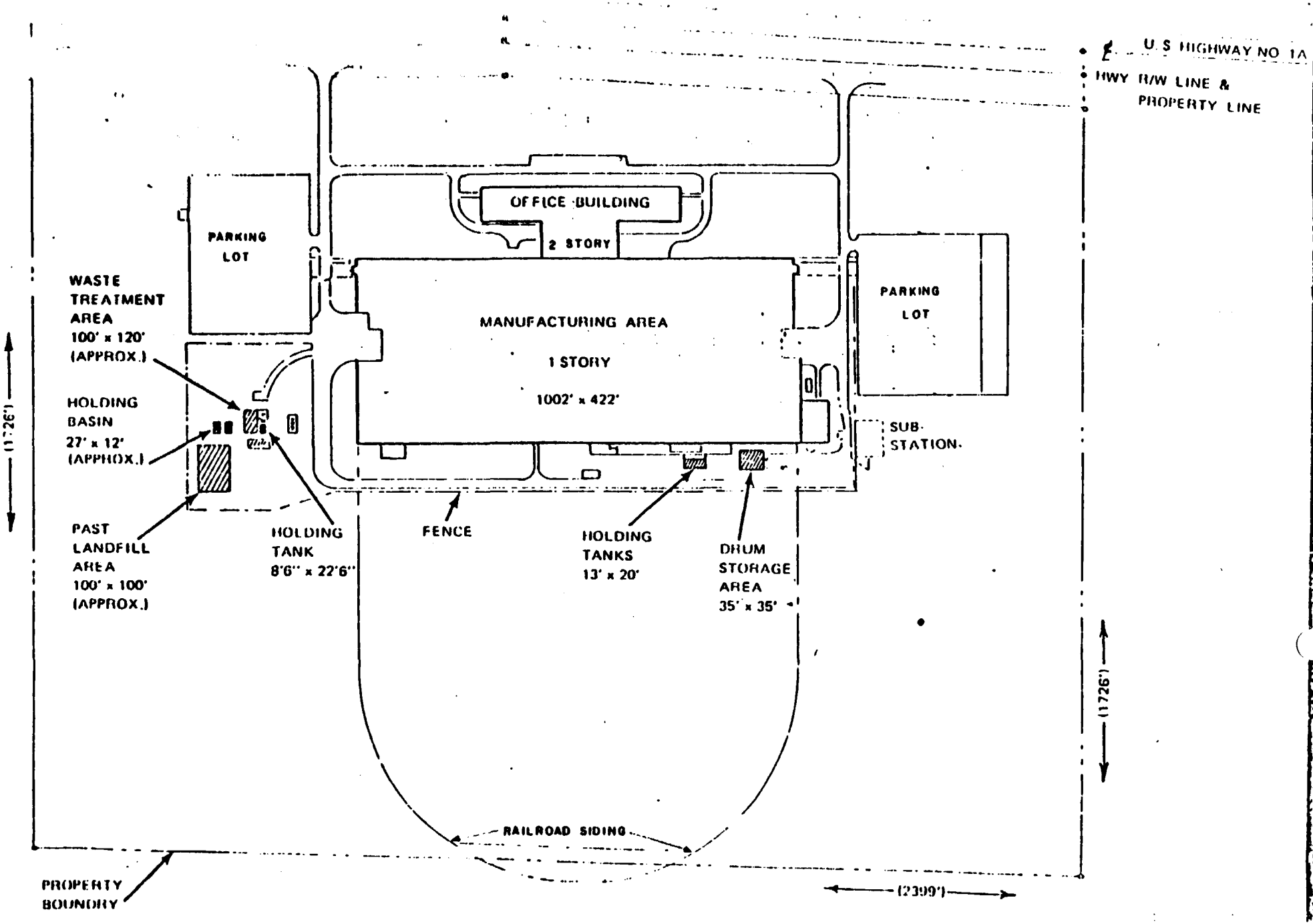
City Raleigh State N. C. Zip Code 27611

Signature C. E. Bell Date 5/12/82

☐ Owner, Present
☐ Owner, Past
☐ Transporter
☐ Operator, Present
☐ Operator, Past
☐ Other

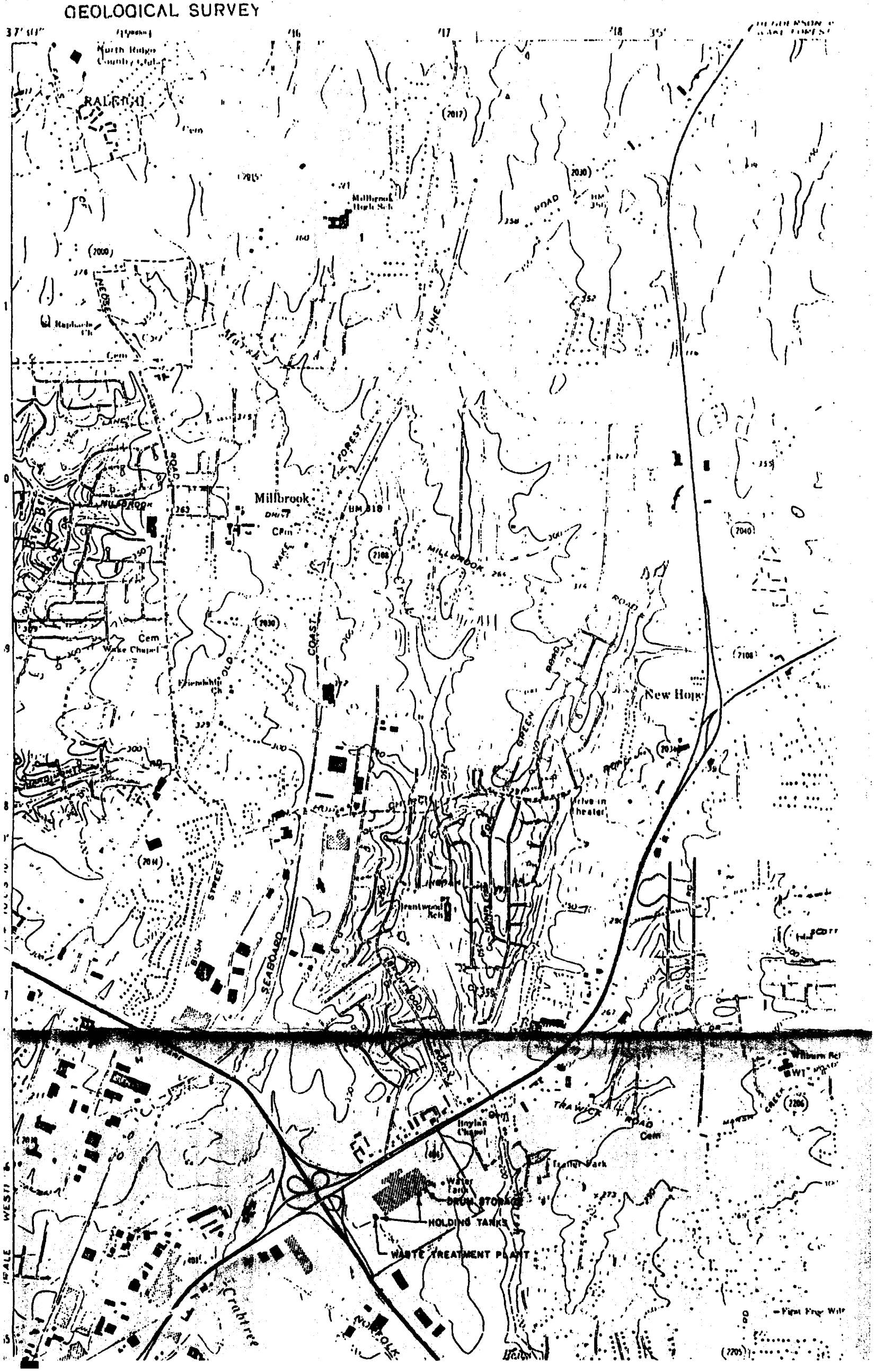
Continued from page 4

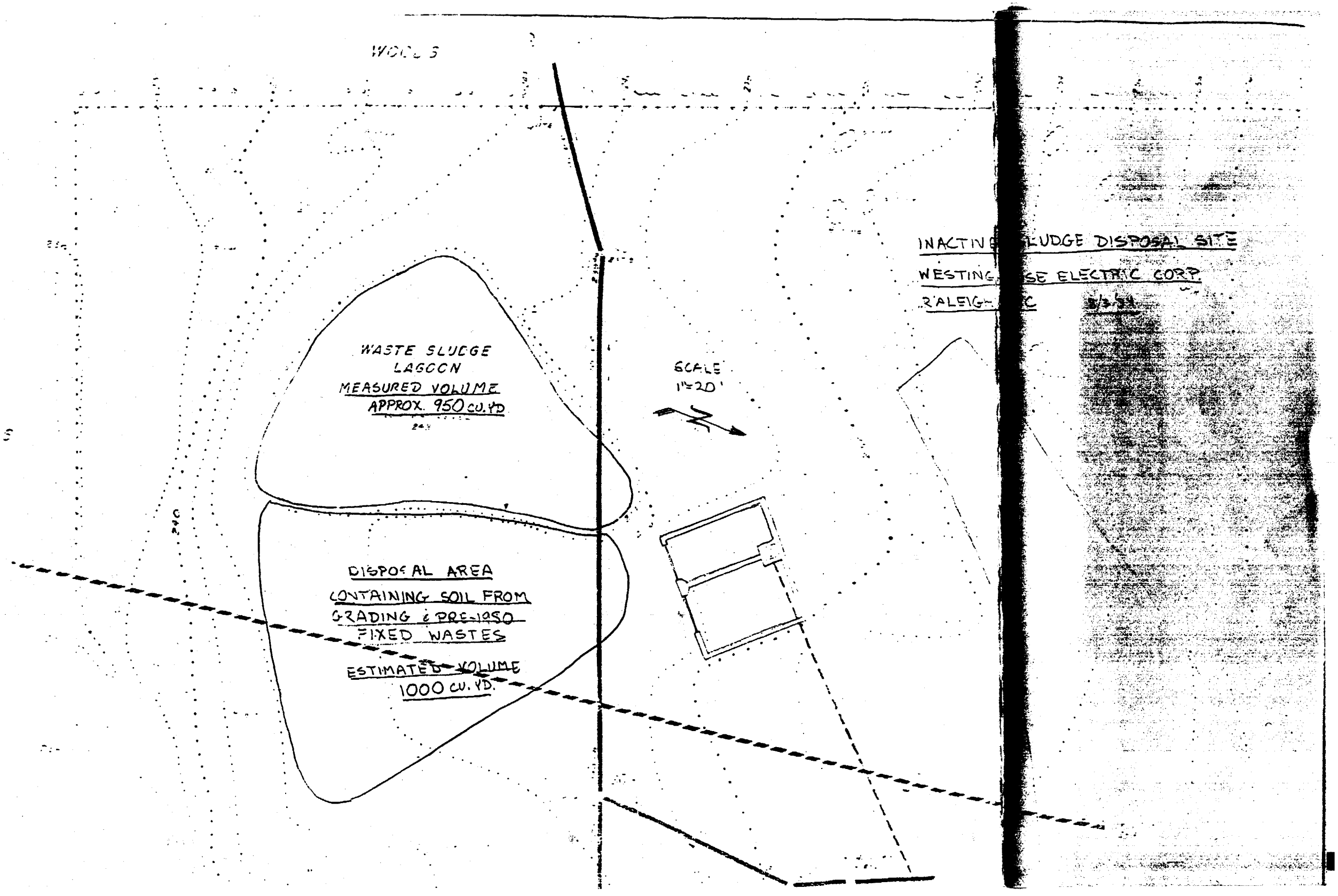
FACILITY DRAWING (see page 4)



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Attachment B




WOOD 5
INACTIVE SLUDGE DISPOSAL SITE
WESTINGHOUSE ELECTRIC CORP.
RALEIGH, N.C.
WASTE SLUDGE
LAGOON
MEASURED VOLUME
APPROX. 950 CU. YD.
SCALE
1"=20'
DISPOSAL AREA
CONTAINING SOIL FROM
GRADING & PRE-1950
FIXED WASTES
ESTIMATED VOLUME
1000 CU. YD.

Frank

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

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

August 29, 1984

Mr. David Daugherty
Westinghouse Electric Corporation
Box 9533
Raleigh, N. C. 27611

RE: Site Inspection Sample Results

Dear Dave:

Please find attached the lab results from the 3012 Program Site Inspection on July 20, 1984. Sorry for the delay, the lab has been very busy this summer.

If you have any questions concerning these results or the site inspection, please contact me at (919) 733-2178.

Sincerely,

Frank E. Moore

Frank E. Moore, Geologist

Solid & Hazardous Waste Management Branch
Environmental Health Section

FEM:jj
attachments

N. C. DEPARTMENT OF HUMAN RESOUR
DIVISION OF HEALTH SERVICES
SOLID AND HAZARDOUS WASTE MANAGEMENT BRANCH

Chain of Custody Record

Hazardous Waste Materials

Location of Sampling: ____Generator ____Transporter ____Treatment Facility
____Storage Facility ____Disposal Facility ____Landfill
X Other: Waste Sludge Pile - 3012-52

Company's Name Westinghouse Telephone (919) 834-5271

Address US 81 Raleigh N.C.

Collector's Name Frank E. Moore Telephone (919) 733-2178
signature

Date Sampled 7-20-84 Time Sampled 9:30 - 11:30 AM

Type of Process Generating Waste Electroplating

Field Information

Field Sample No. 001267 1268 1269 1270 1475 1476 1477
1478 1479

Chain of Possession:

1. Frank E. Moore — Geologist — 7-20-84
signature — title — inclusive dates

2. Paul J. Childers — Chemist — 7/20/84
signature — title — inclusive dates

3. _____ — _____ — _____
signature — title — inclusive dates

Results reported

_____ — _____ — _____
signature — title — date

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

#1

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

Site Number 92-00000100-X Field Sample Number 001267
Name of Site Westinghouse Site Location Pol
Collected By F. Moore ID# 027 Date Collected _____ Time _____

Type of Sample:

Environmental	Concentrate	Comments
___ Groundwater	___ Solid	(#1) Up-gradient stream sample
X Surface Water	___ Liquid	
___ Soil	___ Sludge	
___ Other	___ Other	

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
___ Arsenic		Arsenic	<0.01	Chloride	6
___ Barium		Barium	<0.1	Conductivity	107 4 mhos
___ Cadmium		Cadmium	<0.005	Copper	<0.05
___ Chromium		Chromium	<0.01	Fluoride	0.62
___ Lead		Lead	<0.03	Iron	0.30
___ Mercury		Mercury	<0.0002	Manganese	0.07
___ Selenium		Selenium	<0.005	Nitrate	<1.0
___ Silver		Silver	<0.05	pH	7.1
		Nickel	<0.05	Sulfates	14
				TDS	104
				Zinc	0.22
				TOC	10

ORGANIC CHEMISTRY

Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
___ Endrin		___ Toxaphene		___ PCB's	
___ Lindane		___ 2,4-D		___ Petroleum	
___ Methoxychlor		___ 2,4,5-TP(Silvex)		___ EDB	
				___ TOX	

MICROBIOLOGY

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

RADIOCHEMISTRY

Parameter	Results PCi/l
___ Gross Alpha	
___ Gross Beta	

Date Received _____ Date Reported 8/2/84
Date Extracted _____ Date Analyzed _____
Reported By _____ Lab Number 38994 JUL 23 84

DHS 3191 (Revised 2/84)
Solid and Hazardous Waste

(2)

C55

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

Site Number 88-00000100-X Field Sample Number 0268

Name of Site [redacted] Westinghouse Site Location [redacted] US #1 N

Collected By [redacted] ID# 027 Date Collected 7-20 Time 9:35 [redacted] A.M.

Type of Sample:

	Concentrate	Comments
(Environmental)		
___ Groundwater	___ Solid	UPGRADIENT SEDIMENTS (2)
___ Surface Water	___ Liquid	
___ Soil	___ Sludge	
X Other, SEDIMENTS	___ Other	

INORGANIC CHEMISTRY

Extractables Parameter	Results mg/l	Total Parameter	Results mg/l	Parameter	Results mg/l
Arsenic	<0.01	Arsenic	0.49	Chloride	
Barium	0.1	Barium	15	Conductivity	
Cadmium	<0.05	Cadmium	<2.4	✓ Copper	~~<0.05~~
Chromium	<0.05	Chromium	37	Fluoride	
Lead	<0.1	Lead	54	✓ Iron	~~0.13~~
Mercury	<0.02	Mercury	<0.10	✓ Manganese	~~0.15~~
Selenium	<0.10	Selenium	<4.9	Nitrate	
Silver	<0.05	Silver	<2.4	✓ pH	7.3
Nickel	<0.05	Nickel	11	Sulfates	
Copper	<0.05	Copper	88	TDS	
Iron	0.13	Iron	12,500	✓ Zinc	~~0.78~~
Manganese	0.15	Manganese	87	TOC	
Zinc	0.78	Zinc	240		

ORGANIC CHEMISTRY

Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
Endrin		Toxaphene		PCB's	
Lindane		2,4-D		Petroleum	
Methoxychlor		2,4,5-TP(Silvex)		EDB	
				TOX	

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

Date Received ___ Date Reported 8 Aug 84

Date Extracted ___ Date Analyzed ___

Reported By ___ Lab Number 39006 JUL 23 84

DHS 3191 (Revised 2/84)
Solid and Hazardous Waste

1-2

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

Site Number 92-00000100-X Field Sample Number 001269
Name of Site Westinghouse Site Location Rd
Collected By F. Moore ID# 027 Date Collected 7-20-84 Time 9:45 AM
Type of Sample:

~~Environmental~~	Concentrate	Comments
___ Groundwater	___ Solid	Stream Sample Adjacent to waste
X Surface Water	___ Liquid	pile #3
___ Soil	___ Sludge	
___ Other	___ Other	

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
___ Arsenic		✓ Arsenic	<0.01	✓ Chloride	8
___ Barium		✓ Barium	<0.1	✓ Conductivity	110 µmhos
___ Cadmium		✓ Cadmium	<0.005	✓ Copper	<0.05
___ Chromium		✓ Chromium	<0.01	✓ Fluoride	0.79
___ Lead		✓ Lead	<0.03 ~~<0.03~~	✓ Iron	0.12
___ Mercury		✓ Mercury	<0.0002	✓ Manganese	0.04
___ Selenium		✓ Selenium	<0.005	✓ Nitrate	<1.0
___ Silver		✓ Silver	<0.05	✓ pH	7.4
		✓ Nickel	<0.05	✓ Sulfates	15
				✓ TDS	108
				✓ Zinc	0.18
				✓ TOC	8

ORGANIC CHEMISTRY

Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
___ Endrin		___ Toxaphene		___ PCB's	
___ Lindane		___ 2,4-D		___ Petroleum	
___ Methoxychlor		___ 2,4,5-TP(Silvex)		___ EDB	
				___ TOX	

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

Date Received ___ Date Reported 8/2/84
Date Extracted ___ Date Analyzed ___
Reported By ___ Lab Number 38995 JUL 23 84

DHS 3191 (Revised 2/84)
Solid and Hazardous Waste

FO #4

CST

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

Site Number 92-0000 -X Field Sample Number 00/270

Name of Site Westinghouse Site Location Rac: US #1 N

Collected By F. Moore ID# 027 Date Collected 7-20-84 Time [illegible] A.M.

Type of Sample:

Environmental	Concentrate	Comments
___ Groundwater	___ Solid	Sediment to waste file #4
___ Surface Water	___ Liquid	
___ Soil	___ Sludge	
X Other Sediment	___ Other	

INORGANIC CHEMISTRY

Extractables Parameter	Results mg/l	Total Parameter	Results mg/l	Parameter	Results mg/l
Arsenic	<0.01	Arsenic	<0.5	Chloride	
Barium	0.1	Barium	10	Conductivity	
Cadmium	<0.05	Cadmium	<2.5	✓ Copper	
Chromium	<0.05	Chromium	19	Fluoride	
Lead	<0.1	Lead	20	✓ Iron	
Mercury	<0.02	Mercury	<0.10	✓ Manganese	
Selenium	<0.10	Selenium	<5.0	Nitrate	
Silver	<0.05	Silver	<2.5	✓ pH	8.3
Nickel	<0.05	Nickel	10	Sulfates	
Copper	0.11	Copper	69	TDS	
Iron	0.07	Iron	7550	✓ Zinc	
Manganese	0.23	Manganese	80	TOC	
Zinc	0.82	Zinc	250		

ORGANIC CHEMISTRY

Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
Endrin		Toxaphene		PCB's	
Lindane		2,4-D		Petroleum	
Methoxychlor		2,4,5-TP(Silvex)		EDB	
				TOX	

MICROBIOLOGY

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

RADIOCHEMISTRY

Parameter	Results PCi/l
Gross Alpha	
Gross Beta	

Date Received _____ Date Reported 8 Aug 84

Date Extracted _____ Date Analyzed _____

Reported By _____ Lab Number 39007 JUL 23 84

DHS 3191 (Revised 2/84)
Solid and Hazardous Waste

#5

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

Site Number 92-00000100-X Field Sample Number 001475

Name of Site Westinghouse Site Location Rpt

Collected By F. Moore ID# Ø27 Date Collected 7-20-84 Time 10:15 A.M.

Type of Sample:

Environmental	Concentrate	Comments
___ Groundwater	___ Solid	Downstream water #5
X Surface Water	___ Liquid	(sluggish)
___ Soil	___ Sludge	
___ Other	___ Other	

INORGANIC CHEMISTRY

Extractables Parameter	Results mg/l	Total Parameter	Results mg/l	Parameter	Results mg/l
___ Arsenic		✓ Arsenic	<0.01	✓ Chloride	5
___ Barium		✓ Barium	<0.1	✓ Conductivity	115 µmhos
___ Cadmium		✓ Cadmium	<0.005	✓ Copper	<0.05
___ Chromium		✓ Chromium	<0.01	✓ Fluoride	0.72
___ Lead		✓ Lead	<0.03	✓ Iron	0.14
___ Mercury		✓ Mercury	<0.0002	✓ Manganese	0.07
___ Selenium		✓ Selenium	<0.005	✓ Nitrate	<1.0
___ Silver		✓ Silver	<0.05	✓ pH	7.2
		✓ Nickel	<0.05	✓ Sulfates	17
				✓ TDS	104
				✓ Zinc	0.18
				✓ TOC	9

RECEIVED AUG 7 1984 SOLID & HAZARDOUS WASTE MANAGEMENT BRANCH

ORGANIC CHEMISTRY

Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
___ Endrin		___ Toxaphene		___ PCB's	
___ Lindane		___ 2,4-D		___ Petroleum	
___ Methoxychlor		___ 2,4,5-TP(Silvex)		___ EDB	
				___ TOX	

MICROBIOLOGY

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

RADIOCHEMISTRY

Parameter	Results PCi/l
___ Gross Alpha	
___ Gross Beta	

Date Received _____ Date Reported 8/2/84

Date Extracted _____ Date Analyzed _____

Reported By _____ Lab Number 38996 JUL 23 84

DHS 3191 (Revised 2/84)
Solid and Hazardous Waste

I0 #6

CST

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

Site Number 92- [illegible] Field Sample Number 001476

Name of Site [illegible] Westinghouse Site Location Raleigh US 1 N

Collected By [illegible] ID# 027 Date Collected 7-20-84 Time 10:20 A.M.

Type of Sample:

Environmental	Concentrate	Comments
___ Groundwater	___ Solid	Downstream sediment #5 (6)
___ Surface Water	___ Liquid	Down stream sediment
___ Soil	___ Sludge	
X Other Sediment	___ Other	

INORGANIC CHEMISTRY

Extractables Parameter	Results mg/l	Total Parameter	Results mg/l	Parameter	Results mg/l
Arsenic	<0.01	Arsenic	<0.50	Chloride	
Barium	0.1	Barium	10	Conductivity	
Cadmium	<0.05	Cadmium	<2.5	Copper	
Chromium	<0.05	Chromium	10	Fluoride	
Lead	<0.1	Lead	5	Iron	
Mercury	<0.02	Mercury	<0.10	Manganese	
Selenium	<0.10	Selenium	<5.0	Nitrate	
Silver	<0.05	Silver	<2.5	pH	7.2
Nickel	<0.05	Nickel	4	Sulfates	
Copper	<0.05	Copper	19	TDS	
Iron	0.50	Iron	5320	Zinc	
Manganese	<0.05	Manganese	95	TOC	
Zinc	0.25	Zinc	50		

ORGANIC CHEMISTRY

Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
Endrin		Toxaphene		PCB's	
Lindane		2,4-D		Petroleum	
Methoxychlor		2,4,5-TP(Silvex)		EDB	
				TOX	

MICROBIOLOGY

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

RADIOCHEMISTRY

Parameter	Results PCi/l
Gross Alpha	
Gross Beta	

Date Received ___ Date Reported 8 Aug 84

Date Extracted ___ Date Analyzed ___

Reported By ___ Lab Number 39008 JUL 23 84

DHS 3191 (Revised 2/84)
Solid and Hazardous Waste

IC #7

CST

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

Site Number 92-00000100-X Field Sample Number 001477

Name of Site WESTINGHOUSE Site Location RAL

Collected By F. Moore ID# 1027 Date Collected 8-20-84 Time 10:30

Type of Sample:

Environmental	Concentrate	Comments
___ Groundwater	X Solid	SLUDGE COMPOSITE FROM
___ Surface Water	___ Liquid	ONE TO SIX FEET #7
___ Soil	___ Sludge	
___ Other	___ Other	

INORGANIC CHEMISTRY

Extractables Parameter	Results mg/l	Total Parameter	Results mg/l	Parameter	Results mg/l
Arsenic	<0.01	Arsenic	<0.49	Chloride	
Barium	0.7	Barium	212	Conductivity	
Cadmium	0.17	Cadmium	665	Copper	
Chromium	0.97	Chromium	936	Fluoride	
Lead	0.2	Lead	34	Iron	
Mercury	<0.02	Mercury	<0.10	Manganese	
Selenium	<0.10	Selenium	<4.9	Nitrate	
Silver	<0.05	Silver	<2.5	pH	10.0
Nickel	0.19	Nickel	148	Sulfates	
Cu	0.27	Cu	1010	TDS	
Zn	<0.05	CN-	200	Zinc	
Fe	<0.05	Zn	2270	TOC	
MN	0.04	Fe	3720		
		MN	103		

ORGANIC CHEMISTRY

Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
Endrin		Toxaphene		PCB's	
Lindane		2,4-D		Petroleum	
Methoxychlor		2,4,5-TP(Silvex)		EDB	
				TOX	

MICROBIOLOGY

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

RADIOCHEMISTRY

Parameter	Results PCi/l
Gross Alpha	
Gross Beta	

Date Received ____ Date Reported 8 Aug 84

Date Extracted ____ Date Analyzed ____

Reported By ____ Lab Number 39011 JUL 23 84

DHS 3191 (Revised 2/84)
Solid and Hazardous Waste

IO #9

CST

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

Site Number 92-00000100-X Field Sample Number 001478

Name of Site WESTINGHOUSE Site Location RAL

Collected By F. Moore ID# 027 Date Collected 7-20-84 Time 11:00

Type of Sample: F. Moore

Environmental	Concentrate	Comments
___ Groundwater	___ Solid	SOIL MAT ASSUMED BOTTOM
___ Surface Water	___ Liquid	OF PIT (6.5 TO 8 FEET) #9
✓ Soil	___ Sludge	
___ Other	___ Other	

INORGANIC CHEMISTRY

Extractables Parameter	Results mg/l	Total Parameter	Results mg/l	Parameter	Results mg/l
✓ Arsenic	<0.01	✓ Arsenic	<0.5	___ Chloride	
✓ Barium	0.2	✓ Barium	45	___ Conductivity	
✓ Cadmium	<0.05	✓ Cadmium	<2.5	✓ Copper	
✓ Chromium	<0.05	✓ Chromium	225	___ Fluoride	
✓ Lead	<0.1	✓ Lead	10	✓ Iron	
✓ Mercury	<0.02	✓ Mercury	<0.10	✓ Manganese	
✓ Selenium	<0.10	✓ Selenium	<5.0	___ Nitrate	
✓ Silver	<0.05	✓ Silver	<2.5	✓ pH	7.8
✓ Nickel	<0.05	✓ Nickel	24.5	___ Sulfates	
___ Copper	0.21	___ Copper	288	___ TDS	
___ Iron	<0.05	___ Iron	38,100	✓ Zinc	
___ Manganese	0.08	___ Manganese	610	___ TOC	
___ Zinc	0.14	___ Zinc	5.0	___	

ORGANIC CHEMISTRY

Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
___ Endrin		___ Toxaphene		___ PCB's	
___ Lindane		___ 2,4-D		___ Petroleum	
___ Methoxychlor		___ 2,4,5-TP(Silvex)		___ EDB	
___		___		___ TOX	
___		___		___	

MICROBIOLOGY

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

RADIOCHEMISTRY

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

Date Received ___ Date Reported 8 Aug 84

Date Extracted ___ Date Analyzed ___

Reported By ___ Lab Number 39009 JUL 23 84

DHS 3191 (Revised 2/84)
Solid and Hazardous Waste

CST

I0 #10

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

Site Number 92-00000100-X Field Sample Number 001479
Name of Site WESTINGHOUSE Site Location [illegible]
Collected By F. Moore ID# 027 Date Collected 7-[illegible]-84 Time 11:10
Type of Sample:

Environmental
___ Groundwater
___ Surface Water
___ Soil
___ Other

Concentrate
X Solid
___ Liquid
___ Sludge
___ Other

Comments: Cyclon-Fixed sample from Pile

INORGANIC CHEMISTRY

Extractables Parameter	Results mg/l	Total Parameter	Results mg/l	Parameter	Results mg/l
✓ Arsenic	<0.01	✓ Arsenic	0.49	Chloride	
✓ Barium	interference	✓ Barium	interference	Conductivity	
✓ Cadmium	0.71	✓ Cadmium	243	Copper	
✓ Chromium	1.30	✓ Chromium	767	Fluoride	
✓ Lead	0.3	✓ Lead	54	Iron	
✓ Mercury	<0.02	✓ Mercury	<0.10	Manganese	
✓ Selenium	<0.10	✓ Selenium	<5.0	Nitrate	
✓ Silver	0.05	✓ Silver	<2.5	pH ✓	12.1
✓ Nickel	0.42	✓ Nickel	495	Sulfates	
		✓ CN^-	260	TDS	
✓ Cu	0.73	✓ Cu	3248	Zinc	
✓ ZN	7.20	✓ ZN	5150	TOC	
✓ Fe	0.05	✓ Fe	7425		
✓ MN	0.42	✓ MN	146		

ORGANIC CHEMISTRY

Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
Endrin		Toxaphene		PCB's	
Lindane		2,4-D		Petroleum	
Methoxychlor		2,4,5-TP(Silvex)		EDB	
				TOX	

MICROBIOLOGY

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

RADIOCHEMISTRY

Parameter	Results PCi/l
Gross Alpha	
Gross Beta	

Date Received ___ Date Reported 8 Aug 84
Date Extracted ___ Date Analyzed ___
Reported By ___ Lab Number 39010 JUL 23 84

DHS 3191 (Revised 2/84)
Solid and Hazardous Waste

(#8)

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

Site Number 92-00000100 X Field Sample Number 001334
Name of Site Westinghouse Site Location 1151 N Rd
Collected By F. Moore ID# 827 Date Collected 7-20-84 Time 10:45 A.M.

Type of Sample:

Environmental	Concentrate	Comments
___ Groundwater	X Solid	Dugout hole 5-6' in pit
___ Surface Water	___ Liquid	
___ Soil	___ Sludge	Ck for Solvents halogenated /
___ Other	___ Other	non-halogenated

INORGANIC CHEMISTRY

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

ORGANIC CHEMISTRY

Parameter	Results mg/l	Parameter	Results mg/l	Parameter	Results mg/l
__ Endrin		__ Toxaphene		__ PCB's	
__ Lindane		__ 2,4-D		__ Petroleum	
__ Methoxychlor		__ 2,4,5-TP(Silvex)		__ EDB	
				__ TOX	
		✓ VOA	N.D.*		

MICROBIOLOGY

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

RADIOCHEMISTRY

Parameter	Results PCi/l
__ Gross Alpha	
__ Gross Beta	

Ck for halogenated / non-halogenated organics

Date Received 7/20/84 Date Reported 8/24/84
Date Extracted Date Analyzed 8/22/84
Reported By Lab Number 4 3967

* N.D. = < 0.01 ppm (µg/g)

DHS 3191 (Revised 2/84)
Solid and Hazardous Waste

(0)

N. C. DEPARTMENT OF HUMAN RESOURCES
DIVISION OF HEALTH SERVICES
SOLID AND HAZARDOUS WASTE MANAGEMENT BRANCH

Chain of Custody Record

Hazardous Waste Materials

Location of Sampling: ___Generator ___Transporter ___Treatment Facility
___Storage Facility ___Disposal Facility ___Landfill
X Other: Waste Sludge Pile - 3012 SE

Company's Name Westinghouse Telephone (919) 834-5271

Address US #1 Raleigh, N.C.

Collector's Name Frank E. Moore Telephone (919) 733-2178
signature

Date Sampled 7-20-84 Time Sampled 9:30 - 11:30 A.M.

Type of Process Generating Waste Electroplating

Field Information

Field Sample No. #8 001334

Chain of Possession:

	signature	title	inclusive dates
1.	Frank E. Moore	Geologist	7-20-84
2.	Anne L. Gobble	Anal. Chem I	7-20-84
3.			

Results reported

signature	title	date

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

CONSENT FOR ACCESS TO PROPERTY

PROPERTY
ADDRESS: Westinghouse Elect Motor & Light Div.
US #1 N Raleigh, N.C.

I, DAVID P DAUGHERTY, am the ~~owner~~/authorized representative of the owner of real property located at the above address. I hereby consent to the inspection of said property by officers, employees, and authorized representatives of the North Carolina Solid and Hazardous Waste Management Branch. My consent gives the above named parties a right of entry to, upon or through said property, and the right to take photographs and make visual observations of the property as necessary for the inspection. My consent also gives the above named parties a right to bore holes into the subsurface, to survey the elevation of the bore holes, and to sample the surface water and/or ground water on or underlying the property.

Frank C. Mora 7/20/84 David P. Daugherty 7/20/84

Witness Date Signature Date

C. DEPARTMENT OF HUMAN RESOURCES
DIVISION OF HEALTH SERVICES
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

(X) 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.

Frank E. Moore — Inspector's Name
Raleigh - N.C. 733-2178 — Inspector's Address

Westinghouse — Name of Firm
1571 N. Raleigh NC — Firm Address

DAVID P DAUGHERTY — ~~Firm Owner, Operator,~~ or Agent
SR. ENGINEER — Title

SAMPLE NUMBER	COLLECTED DATE	COLLECTED TIME	SAMPLE TYPE WATER	SAMPLE TYPE SOIL	SAMPLE TYPE OTHER	DUPLICATE SAMPLES OFFERED	DUPLICATE SAMPLES ACCEPTED	DUPLICATE SAMPLES REJECTED	SAMPLE LOCATION ON-SITE	SAMPLE LOCATION OFF-SITE
1	20 July 84 9 am		✓			✓	✓		✓	
2				✓		✓	✓		✓	
3			✓			✓	✓		✓	
4				✓		✓	✓		✓	
5			✓			✓	✓		✓	
6				✓		✓	✓		✓	
7					sludge	✓	✓		✓	
8					sludge	✓	✓		✓	
9				✓	[redacted]	✓	✓		✓	
10	11:30 am				sludge	✓	✓		✓	

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

Frank E. Moore
Signature of Inspector

Geologist
Title

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

David P. Daugherty
Signature of ~~Firm Owner, Operator~~, or Agent

SR ENGINEER
Title

COMMENTS

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NC	D003195963

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Westinghouse Electric Meter-Light Div.	US #1 N

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Raleigh	NC	27603	Wake	092	04

09 COORDINATES LATITUDE	LONGITUDE	10 TYPE OF OWNERSHIP (Check one)
35 49 30.0	078 36 30.0	☒ A. PRIVATE ☐ B. FEDERAL ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
7 20 84 (MONTH DAY YEAR)	☒ ACTIVE ☐ INACTIVE	1953 (BEGINNING YEAR) ___ (ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)

☐ A. EPA ☐ B. EPA CONTRACTOR _____ (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR _____ (Name of firm)
☒ E. STATE ☐ F. STATE CONTRACTOR _____ (Name of firm) ☐ G. OTHER 3012 Group (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
Frank E. Moore	Geologist	DHR	(919) 733-2178

09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
Len Bramble	Engineer	DHR	(919) 733-2178
Lee Crosby	Chemist	DHR	(919) 733-2178
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Dave Daugherty	SR. Eng.	Westinghouse US #1 N	(919) 834-5271
Paul Jack	Proj. Eng.	Raleigh, N. C.	(412) 255-3616
W. A. Peebles	Plt. Mgr.		(919) 834-5271
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	0900	Sunny, Clear, Light Breeze

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Dave Daugherty	Sr. Eng. - Westinghouse	(919) 834-5271

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Frank E. Moore	DHR	S & HW	919/733-2178	8 27 84 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NC	D003195963

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- [X] A. SOLID
- [ ] B. POWDER, FINES
- [X] C. SLUDGE
- [ ] D. OTHER _____ (Specify)
- [ ] E. SLURRY
- [ ] F. LIQUID
- [ ] G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS _____
CUBIC YARDS 2,000
NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- [X] A. TOXIC
- [X] B. CORROSIVE
- [ ] C. RADIOACTIVE
- [X] D. PERSISTENT
- [ ] E. SOLUBLE
- [ ] F. INFECTIOUS
- [ ] G. FLAMMABLE
- [ ] H. IGNITABLE
- [ ] I. HIGHLY VOLATILE
- [ ] J. EXPLOSIVE
- [X] K. REACTIVE
- [ ] L. INCOMPATIBLE
- [ ] M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	2,000	Cu Yd	Neutralized Electroplating
OLW	OILY WASTE			Metal ludges (Lime)
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	Included	in above	

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently used CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
SLU	Electroplating Sludge				
MES					
	See attached analyses				

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

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

Westinghouse letter Daugherty to Moore 8-15-84
SI sample results 8-8-84 Lab #39011 #7 Sludge Composite

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NC	D003195963

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: Ø — 04 NARRATIVE DESCRIPTION

Based on sample results it would be hard to make any conclusions at this time. However, there doesn't appear to be any major impact on G-W from this disposal.

01 ☒ B. SURFACE WATER CONTAMINATION — 02 ☒ OBSERVED (DATE: 7-20-84) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: Ø — 04 NARRATIVE DESCRIPTION

Pieces of "Chem-fixed" sludge were visible in the drainage (8" - 10" and smaller chunks). However, drainage water samples up-gradient and down-gradient were comparable, O.K.

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

N/A

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

N/A

01 ☒ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Not likely - although the waste is in the "open". Area is fenced and site has security.

01 ☒ F. CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (Acres) — 04 NARRATIVE DESCRIPTION

Just the soil in contact with the sludge pile appears to be susceptible to possible contamination.

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

N/A

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

None reported -

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

N/A

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NC	D003195963

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☒ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None observed

01 ☒ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)

None observed

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES (Spills/Runoff/Standing liquids, Leaking drums) — 02 ☒ OBSERVED (DATE: 7-20-84) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: Ø — 04 NARRATIVE DESCRIPTION

Sludge is in open diked area. Appears that run-off of surface water has transported some sludge.

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Done with the knowledge of the State

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

None

III. TOTAL POPULATION POTENTIALLY AFFECTED: Ø

IV. COMMENTS

Past disposals off-site in landfills will create sites in Knightdale landfill and Rowlands landfill - Wake County

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

SI on 7-20-84
Westinghouse Letter Daugherty to Moore 8-15-84
Branch - Solid Waste Files 1975-6

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NC	D003195963

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☒ C. AIR				NRCD - DEM
☒ D. RCRA				Generator, Treater, Storer
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☐ G. STATE (Specify)				
☐ H. LOCAL (Specify)				
☒ I. OTHER (Specify)				SPCC PLAN
☐ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☒ A. SURFACE IMPOUNDMENT	2,000	Cu Yd
☒ B. PILES	included in above	
☐ C. DRUMS, ABOVE GROUND		
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
☐ F. LANDFILL		
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)

- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☒ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER (Specify)

05 OTHER

- ☒ A. BUILDINGS ON SITE

06 AREA OF SITE: 1 (Acres)

07 COMMENTS

The volume includes chem-fixed sludge pile (cement) as well as original treated sludge that when into a diked impoundment. Westinghouse owns many acres at this facility but only about one (1) acre is involved in the disposal area. (100 ac.)

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.

The original impoundment and sludge appears to be intact but due to activity around the chem-fix area, surface run-off has transported some of the fixed material into the drainage. The impoundment is unlined.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☐ YES ☒ NO

02 COMMENTS

The area is fenced off and is off to one side of the facility. The area is open with kudzu covering the waste. Only trespassers would be affected.

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

RCRA Branch Files
Westinghouse Letter 8-15-84, Daugherty to Moore
SI visit 7-20-84

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NC	0003195963

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

	SURFACE	WELL
COMMUNITY	A. ☒	B. ☐
NON-COMMUNITY	C. ☐	D. ☐

02 STATUS

ENDANGERED	AFFECTED	MONITORED
A. ☐	B. ☐	C. ☐
D. ☐	E. ☐	F. ☐

03 DISTANCE TO SITE

A. _____ (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 Ø

03 DISTANCE TO NEAREST DRINKING WATER WELL _____ (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
_____ (ft)	_____	_____ (ft)	_____ (gpd)	☐ YES ☐ NO

09 DESCRIPTION OF WELLS (including useage, depth, and location relative to population and buildings)

10 RECHARGE AREA		11 DISCHARGE AREA	
☐ YES ☐ NO	COMMENTS	☐ YES ☐ NO	COMMENTS

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☒ A. RESERVOIR, RECREATION DRINKING WATER SOURCE
☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES
☐ C. COMMERCIAL, INDUSTRIAL
☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
Unnamed drainage to Crabtree Creek	☐	0.5 - .75 (mi)
	☐	(mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. Hundreds NO. OF PERSONS	B. Thousands NO. OF PERSONS	C. _____ NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION On-Site (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE Hundreds

04 DISTANCE TO NEAREST OFF-SITE BUILDING Ø.15 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

This site is at the intersection on two major roadways in Raleigh, US #1 and the Beltline around downtown Raleigh. Along the highways it is commercialized and several subdivisions are within 1/2 mile of the site. Urban commercial - urban residential.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NC	D003195963

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one) EST. Saprolite Clays (red)

☐ A. $10^{-6} - 10^{-8}$ cm/sec ☒ 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)

☐ 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	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
_____ (ft)	Est. .5-1 (ft)	_____

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
45" (in)	4" - 6" (in)	2-3 %	South	1 - 2 %

09 FLOOD POTENTIAL

SITE IS IN _____ YEAR FLOODPLAIN

10 ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE: A. _____ (mi) OTHER: B. _____ (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

_____ (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	AGRICULTURAL LANDS: AG LAND
A. .1 (mi)	B. .5 (mi)	C. _____ (mi)	D. _____ (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

The disposal area is off on the SW corner of the facility. The waste area is overgrown with kudzu. The area around the disposal area is well maintained (grass cut regularly) and a security fence is near (40') the impoundment on the south and east sides. A drainage area, which does receive run-off from the facility, runs along just to the east of the impoundment (50'). The drainage was running at an estimated 1 gal/min. and "dried-up" approximately 400' - 500' down stream from the impoundment, still on Westinghouse property. The area outside of the fence is forested in mixed pines and hardwoods. As before, US #1 and the Beltline boarder the property on the North and West.

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

USGS 7.5' Quad - Raleigh East, N. C. Photo Revised 1973
SI visit 7-20-84
N.C. infor Atlas

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NC	D003195963

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER			
SURFACE WATER	3	N.C. Health Services Lab - Raleigh, N. C.	4-5 weeks
WASTE	3	Bath Bldg.	
AIR		all rec'd by 8-22-84	
RUNOFF			
SPILL			
SOIL	1		
VEGETATION			
OTHER Sediment	3		

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
pH, Cord., Temp.	Surface water measurements - Up-gradient-adjacent-down-gradient.
	of waste area along drainage next to impoundment. The waste was augered
	through to determine the approximate depth - approx. 6 feet.
	Waste area measured and estimated at 2,000 cu yd by Westinghouse.

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☐ GROUND ☐ AERIAL

02 IN CUSTODY OF Camera Problems - No photos on SI (Name of organization or individual)

03 MAPS ☒ YES ☐ NO

04 LOCATION OF MAPS NC 3012 Office-Sketch Maps

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

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

SI visit 7-20-84
Lab results
Westinghouse Letter 8-15-84 Daugherty to Moore

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NC	000319596 3

II. CURRENT OWNER(S)			PARENT COMPANY (if applicable)		
01 NAME: Westinghouse Company	02 D+B NUMBER		08 NAME: Westinghouse Electric Co.	09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.): US #1 North	04 SIC CODE: 3545		10 STREET ADDRESS (P.O. Box, RFD #, etc.): Gateway Center - Stanwix Street	11 SIC CODE	
05 CITY: Raleigh	06 STATE: NC	07 ZIP CODE: 27603	12 CITY: Pittsburgh	13 STATE: PA	14 ZIP CODE: 15222
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	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
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)

RCRA Part "A"

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NC	D003195963

II. CURRENT OPERATOR (Provide if different from owner)			OPERATOR'S PARENT COMPANY (If applicable)		
01 NAME SAME	02 D+B NUMBER		10 NAME	11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER				

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)			PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)		
01 NAME	02 D+B NUMBER		10 NAME	11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD				
01 NAME	02 D+B NUMBER		10 NAME	11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD				
01 NAME	02 D+B NUMBER		10 NAME	11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD				

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

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NC	D003195963

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
Westinghouse	
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
N/A			
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)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NC	0003195963

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ F. WASTE REPACKAGED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☒ G. WASTE DISPOSED ELSEWHERE — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION Mid 1974 to end of 1975 - plating sludge drumed and disposed in Knightdale landfill. May 1978 to 1980 disposed chem-fixed sludge in Rowlands landfill

01 ☐ H. ON SITE BURIAL — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ L. ENCAPSULATION — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ N. CUTOFF WALLS — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NC	D003195963

II PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

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

Westinghouse Letters 12-22-75 H Matthews to Strickland
8-15-84 Daugherty to Moore

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NC	D003195963

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☒ YES ☐ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

In 1975 the State's Solid Waste Program notified Westinghouse that they could not dispose of their plating sludge in the Knightdale landfill. The State then worked with Westinghouse in developing a chem-fixed method with cement.

The chem-fixed sludge was then disposed of in the Rowlands landfill.

This disposal was stopped when RCRA started.

The waste plating sludge was disposed of on site from around 1955 until 1973.

Note: Some waste solvents were also drumed and disposed of off-site (ldfl).

III. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

Branch Solid Waste Files

EPA

POTENTIAL HAZARDOUS WASTE SITE
TENTATIVE DISPOSITION

REGION	SITE NUMBER
IV	NCD003195963

File this form in the regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency; Site Tracking System, Hazardous Waste Enforcement Task Force *(EN-335)*; 401 M St., SW, Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME	B. STREET	
Westinghouse Electric Motor & Light Div.	US #1 N	
C. CITY	**D. STATE**	**E. ZIP CODE**
Raleigh	NC	27603

II. TENTATIVE DISPOSITION

Indicate the recommended action(s) and agency(ies) that should be involved by marking 'X' in the appropriate boxes.

RECOMMENDATION	MARK 'X'	ACTION AGENCY: EPA	STATE	LOCAL	PRIVATE
A. NO ACTION NEEDED -- NO HAZARD					
B. INVESTIGATIVE ACTION(S) NEEDED *(If yes, complete Section III.)*		X	X		
C. REMEDIAL ACTION NEEDED *(If yes, complete Section IV.)*	X	X	X		
D. ENFORCEMENT ACTION NEEDED *(If yes, specify in Part E whether the case will be primarily managed by the EPA or the State and what type of enforcement action is anticipated.)*					

E. RATIONALE FOR DISPOSITION

Attached information states that although there is a 2000 yd³ of electroplating sludge (which is hazardous) the samples indicate minimal migration. The site is in a rural area however the surface impoundment is unlined. We need more sample data & ultimately removal of wastes

F. INDICATE THE ESTIMATED DATE OF FINAL DISPOSITION *(mo., day, & yr.)*

G. IF A CASE DEVELOPMENT PLAN IS NECESSARY, INDICATE THE ESTIMATED DATE ON WHICH THE PLAN WILL BE DEVELOPED *(mo., day, & yr.)*

H. PREPARER INFORMATION

1. NAME	2. TELEPHONE NUMBER	3. DATE *(mo., day, & yr.)*
Ron W. Joyner	FTS 257-2234	12/12/84

III. INVESTIGATIVE ACTIVITY NEEDED

A. IDENTIFY ADDITIONAL INFORMATION NEEDED TO ACHIEVE A FINAL DISPOSITION.

B. PROPOSED INVESTIGATIVE ACTIVITY *(Detailed Information)*

1. METHOD FOR OBTAINING NEEDED ADDITIONAL INFO.	2. SCHEDULED DATE OF ACTION *(mo, day, & yr)*	3. TO BE PERFORMED BY *(EPA, Contractor, State, etc.)*	4. ESTIMATED MANHOURS	5. REMARKS
a. TYPE OF SITE INSPECTION				
(1)				
(2)				
(3)				
b. TYPE OF MONITORING				
(1)				
(2)				
c. TYPE OF SAMPLING				
(1)				
(2)				

Continue On Reverse

Continued From Front

III. INVESTIGATIVE ACTIVITY NEEDED and PART B - PROPOSED INVESTIGATIVE ACTIVITY *(Continued)*

d. TYPE OF LAB ANALYSIS (1)				
(2)				
e. OTHER *(specify)* (1)				
(2)				

C. ELABORATE ON ANY OF THE INFORMATION PROVIDED IN PART B *(on front & above)* AS NEEDED TO IDENTIFY ADDITIONAL INVESTIGATIVE WORK.

D. ESTIMATED MANHOURS BY ACTION AGENCY

1. ACTION AGENCY	2. TOTAL ESTIMATED MANHOURS FOR INVESTIGATIVE ACTIVITIES	1. ACTION AGENCY	2. TOTAL ESTIMATED MANHOURS FOR INVESTIGATIVE ACTIVITIES
a. EPA		b. STATE	
c. EPA CONTRACTOR		d. OTHER *(specify)*	

IV. REMEDIAL ACTIONS

A. SHORT TERM EMERGENCY STRATEGY *(On Site & Off-Site)* List all emergency actions needed to bring site under immediate control, e.g., restrict access, provide alternate water supply, etc. See instructions for a list of Key Words for each of the actions to be used in the space below.

1. ACTION	2. EST. START DATE *(mo, day, & yr)*	3. EST. END DATE *(mo, day, & yr)*	4. ACTION AGENCY *(EPA, State, Private Party)*	5. ESTIMATED COST	6. SPECIFY 311 OR OTHER ACTION; INDICATE THE MAGNITUDE OF THE WORK REQUIRED
				$	
				$	
				$	
				$	
				$	
				$	

B. LONG TERM STRATEGY *(On Site & Off-Site)* List all long term solutions, e.g., excavation, removal, ground water monitoring wells, etc. See instructions for a list of Key Words for each of the actions to be used in the spaces below.

1. ACTION	2. EST. START DATE *(mo, day, & yr)*	3. EST. END DATE *(mo, day, & yr)*	4. ACTION AGENCY *(EPA, State Private Party)*	5. ESTIMATED COST	6. SPECIFY 311 OR OTHER ACTION; INDICATE THE MAGNITUDE OF THE WORK REQUIRED
				$	
				$	
				$	
				$	
				$	
				$	

C. ESTIMATED MANHOURS AND COST BY ACTION AGENCY

1. ACTION AGENCY	2. TOTAL EST. MANHOURS FOR REMEDIAL ACTIVITIES	3. TOTAL EST. COST FOR REMEDIAL ACTIVITIES	1. ACTION AGENCY	2. TOTAL EST. MANHOURS FOR REMEDIAL ACTIVITIES	3. TOTAL EST. COST FOR REMEDIAL ACTIVITIES
a. EPA			b. STATE		
c. PRIVATE PARTIES			d. OTHER *(specify)*		

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

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

September 19, 1984

Ms. Denise Bland
EPA NC 3012 Project Office
Air and Hazardous Material Division
345 Courtland Street, N.E.
Atlanta, Georgia 30365

Dear Denise:

Submitted herewith is the Site Investigation Report for Westinghouse Electric Meter and Light Division, Raleigh, N.C. - NCD 003195963.

This site was recommended for a medium priority for a site inspection to obtain information on a metal plating sludge disposal impoundment on site. The SI was successful in documenting the existence of the disposal impoundment and in sampling for off-site migration potential.

Based on our review of the available data, we have concluded that this site is a hazardous waste disposal area and that a possible clean-up will be needed at some time in the future. Even though the waste was disposed in an unlined impoundment, there doesn't appear to be any significant impact to the environment of the surrounding area. Also, no public health risks are known to exist due to this sludge disposal. A low priority for follow-up as a CERCLA site is recommended at this time.

It is possible that either RCRA or N.C. Solid Waste regulations will expedite the proper disposal of this sludge in the near future without CERCLA help.

If you have any questions about this report, please contact me.

Sincerely,

Frank E. Moore

Frank E. Moore, Geologist

Solid & Hazardous Waste Management Branch
Environmental Health Section

FEM/lw

Enclosure

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460
OFFICE OF SOLID WASTE

Sludge "Delisting" Summary

SEP 17 1982

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Mr. W. Peoples
Superintendent, Plant Services
Westinghouse Electric Corporation
Raleigh, North Carolina 27603

Dear Mr. Peoples:

The purpose of this letter is to outline the reasons why the we cannot proceed with the review of the delisting petition submitted by Westinghouse Electric Company, as indicated in our previous telephone conversations. Clarification of the data submitted on February 10, 1982 is of primary importance. The leachable cyanide levels reported under 2(a) of that submission were unacceptable for each of the four runs reported. The acceptable leachate level for cyanide is generally 2 ppm using the EP toxicity test with distilled water only, without adjustment with acetic acid. According to Douglas P. Hall of Grainger Laboratories, the cyanide leachate tests performed were adjusted with acetic acid. Under these conditions, it is probable that additional leachable cyanide which would have shown up in the extract could have been oxidized to hydrogen cyanide gas by the acetic acid. Therefore, leachable cyanide levels in excess of those reported in your petition probably would occur if only distilled water was used. Under normal circumstances, we would recomend to to the Assistant Administrator for Solid Waste and Emergency Response that your petition be denied due to these cyanide levels. However, since Westinghouse incorporates a cyanide destruction step in its treatment system we believe that the efficiency of the system could be adjusted, possibly alleviating this cyanide leachate problem. If this assumption is correct then Westinghouse would have to submit additional cyanide leachate data to verify any adjustment.

A confounding point which also needs clarification is how the levels of free cyanide in the treatment residue can be lower than the levels of free cyanide found in the extracts (i.e., levels of 2.00 ppm were identified in the treatment residue where as levels as high as 9.25 ppm were found in the extract). In order to properly address this problem it is suggested that additional representative samples of the treatment residue should be collected and analyzed for total and amenable cyanide using method 8.55 of Test Methods for Evaluating Solid Waste (SW-846); and leachable cyanide using the EP toxicity test with no adjustment of the distilled water with acetic acid. A minimum of four samples is normally required, however, due to the previous data descrepancies it

might be prudent to run additional samples. I have included an additional cyanide test, (Test Method for the Determination of Reactive Cyanide), which should also be performed on these same samples for the purpose of comparison and to aid in resolving the previous data descrepancies reported.

Also included in the February 10, 1982 submission from Westinghouse, was an explanation describing why both cyanide and chromium EP toxicity extract concentrations were higher for the treated waste than for the untreated waste. These results were said to be caused by the higher pH of the treated waste, (exhibiting a pH of 10 to 11 after the addition of the maximum amount of acetic acid), than that of the untreated waste (exhibiting a pH of 5 after addition of the maximum amount of acetic acid). This explanation is unsatisfactory since the solubility curve for chromium indicates that its solubility would increase at least equivalently at pH levels above and below a pH range of 8 to 9. It would not be expected that either of these two waste residues would leach increased levels of chromium due primarily to their pH at the levels indicated.

In addition to the problems described above, we will need the method of standard additions performed on at least one of the previous EP toxicity test analyses for each of the listed constituents in your waste. This is a quality assurance test (described in SW-846) which would indicate the presence of any interferences in the waste extract. This procedure may have already been performed by Grainger Laboratory, in which case verification including spiked levels used for each parameter tested and percent recoveries should be submitted.

One final point that Westinghouse should be aware of is that since the samples tested for all previous analyses were of the cured treatment residue, any exclusion that may be granted, would apply only to the cured treatment residue. The uncured slurry entering the drying bed would still be considered a listed hazardous waste and would have to be managed as such under 40 CFR 264 and 265 of the regulations. If you wish to exclude the uncured material, additional test data would be necessary.

If you have any problems or questions about any of the requests described above, please call either myself or Mr. Matthew Straus at (202)755-9187.

Sincerely

Myles E. Morse

Myles E. Morse
Hazardous and Industrial Waste Division

cc: W. Gallagher
EPA Region IV

Michelle Gutman
Westinghouse

Paige

Westinghouse Electric Corporation Power Systems

Meter Division
Box 9533
Raleigh North Carolina 27603
(919) 834 5271

RECEIVED
APR 27 1981
SOLID & HAZARDOUS WASTE MANAGEMENT BRANCH

April 23, 1981

Ms Jacque Sales
Office of Solid Waste
Mail Code WH-565
US EPA
401 M Street South West
Washington, D. C. 20460

Subject: Petition to de-list treated final waste from a non-specific source
(261.31-F.006)
(Reference: EPA I. D. #NCD003195963)
Petition to Solid and Hazardous Waste Management Division, Raleigh, N.C.

Dear Ms Sales:

This will confirm our telephone conversation on April 22, 1981 regarding the above subject.

1. I am B. K. Pierce, Manager Plant Services, with the responsibility of the operation of the waste water treatment facilities and handling and disposal of sludge generated by this facility.

2. The samples taken were from six different mixes of sludge, generated on different days. They were then blended into a representative composite for EP toxicity test.

3. These were typical samples as our cleaning and plating processes are consistent.

4. There are no solids in the waste water that is treated and generate this sludge.

5. A Flow Chart is attached of the waste water treatment plant.

   It is my understanding that upon your receipt of this flow chart, Westinghouse will be issued a temporary de-listing.

6. A constituent analysis for cadmium, chromium, nickel, and cyanide will be performed as soon as possible on samples taken as before.

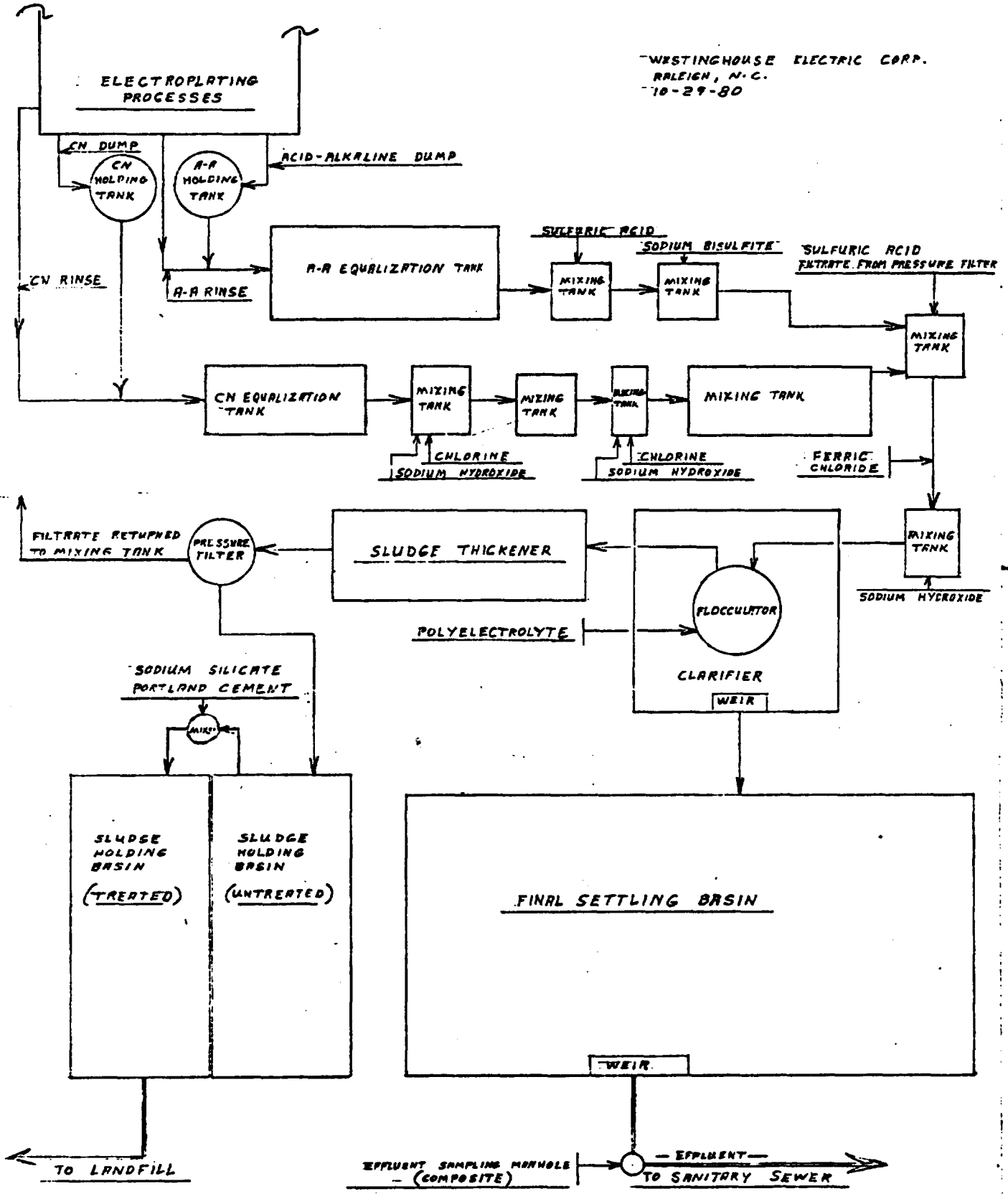
This analysis will have to be forwarded to you before a permanent de-listing can be issued.

Your expediting of a temporary de-listing is greatly appreciated, and should you need additional information, please give me a call at 919-834-5271, extension 302.

B. K. Pierce, Jr.
Manager, Plant Services

Attachment

lcc: Mr. William Paige
Solid and Hazardous Waste Management Division, Raleigh, North Carolina


WESTINGHOUSE ELECTRIC CORP.
RALEIGH, N.C.
10-29-80
ELECTROPLATING PROCESSES
CN DUMP
ACID-ALKALINE DUMP
CN HOLDING TANK
A-A HOLDING TANK
CN RINSE
A-A RINSE
A-A EQUALIZATION TANK
SULFURIC ACID
SODIUM BISULFITE
MIXING TANK
MIXING TANK
SULFURIC ACID
FILTRATE FROM PRESSURE FILTER
MIXING TANK
CN EQUALIZATION TANK
MIXING TANK
MIXING TANK
MIXING TANK
CHLORINE
SODIUM HYDROXIDE
CHLORINE
SODIUM HYDROXIDE
FERRIC CHLORIDE
FILTRATE RETURNED TO MIXING TANK
PRESSURE FILTER
SLUDGE THICKENER
MIXING TANK
SODIUM HYDROXIDE
FLOCCULATOR
POLYELECTROLYTE
CLARIFIER
WEIR
SODIUM SILICATE
PORTLAND CEMENT
MIXER
SLUDGE HOLDING BASIN (TREATED)
SLUDGE HOLDING BASIN (UNTREATED)
FINAL SETTLING BASIN
WEIR
TO LANDFILL
EFFLUENT SAMPLING MANHOLE (COMPOSITE)
EFFLUENT
TO SANITARY SEWER

Westinghouse Electric Corporation Power Systems

Meter Division

Box 9533
Raleigh North Carolina 27603
(919) 834 5271

March 17, 1981

Mr. William Paige
N. C. Environmental Chemist
Solid & Hazardous Waste Management Division
Bath Building
306 N. Wilmington Street
P. O. Box 2091
Raleigh, North Carolina 27602

Subject: Petition to de-list treated final waste from a non-specific source (261.31-F.006)
(Reference: EPA I. D. #NCD003195963)

Dear Mr. Paige:

This letter is a written petition to your office for the de-listing of our waste as shown in the hazardous waste from non-specific sources and listed in the May 19, 1980 Federal Register (261.31) under subpart "D" of Part 261.

We generate this waste with a cleaning and plating process for ferrous and non-ferrous metals using tin, nickel, zinc, copper, zinc phosphate, iron phosphate and chromate solutions. The wastewater from these processes flow to our wastewater treatment facilities through separate acid-alkalai and cyanide lines. The cyanide wastewater has its pH adjusted, chlorine is then added with sufficient retention time allowed to destruct the cyanide. The acid-alkalai wastewater has its pH adjusted and sodium bisulfite added for the destruction of hexavalant chrome. The two wastewaters are then combined with further pH adjustment and ferric chloride is added to aid in the precipitation of the sludge. Again the pH is adjusted and a polymer is added to complete the separation of the sludge from the wastewater. This sludge collects in the bottom of the flocculator-clarifier where it is drawn off into a thickening basin. The sludge is later passed through a pressure filter for de-watering and then to a holding basin. In this untreated aqueous form it is 12% to 14% solids and contains metal hydroxides. Our present average sludge generated is 4300 gallons per month with an average annual total of approximately 51,000 gallons. Our maximum generated in any one day is approximately 200 gallons.

Prior to the November 19, 1980 implementation of the Federal Hazardous Waste Regulation, this sludge had been mixed with sodium silicate and portland cement in proportions that the reaction with each other converted the sludge into a consolidated chemically and physically stable solid product

that was substantially insoluble in water with its metal hydroxides or pollutants entrapped in the solidified silicate. Extraction from representative samples were analyzed by your laboratories and permission was granted by Mr. O. W. Strickland of the Solid Waste Management Unit, Division of Health Services, State of North Carolina, for its disposal in the private landfill. Copies of the letter dated January 17, 1978, granting permission and your analysis are enclosed for information.

The procedure used to prepare sludge for disposal in a landfill is to mix 100 Cu. Ft. of sludge with 940 lbs. of portland cement and 22-1/2 gallons of sodium silicate. This equates to a ratio by volume of 0.10 cement and 0.03 silicate. These ingredients are mixed in a permanently installed cement mixer a minimum of ten minutes and then discharged into the sludge holding bed for setting. Holding time is a minimum of two weeks before it is taken to a privately owned landfill. The material is separated at the landfill from other routine solid waste by a minimum of one foot of earth as specified by Mr. O. W. Strickland's letter of January 17, 1978.

For the purpose of this request for de-listing, six representative samples of sludge were taken on March 2, 1981. Samples were taken by Mr. Don Richards, Westinghouse Technician, and W. A. Peoples, Maintenance Engineer, at the Raleigh Meter Plant and were delivered by Mr. Peoples, in a plastic container, to Grainger Laboratories for EP Toxicity Test. Attached is a copy of the sketch used to show location and depth of samples taken from the holding bed. These samples were taken using a core sampler which extracts 2" diameter by 4" long samples. The Grid pattern used for location and depth of sampling gives us the best representation of various batches of treated waste.

The EP Toxicity Test were performed in the Grainger Laboratories, a laboratory certified in primary drinking water standards, and located at 709 West Johnson Street in Raleigh, North Carolina. The Chemist performing the test was Mr. Vance C. Allen, Laboratory Manager for Grainger Laboratories, and test were performed in accordance with "test methods for evaluating solid waste" (Reference SW-846). Mr. Allen's qualifications include a B. S. Degree in Chemistry and six years practical laboratory experience.

The extraction procedure was accomplished through the use of a Millipore Pressure and Filtration Extraction Apparatus. pH was tested with an Orion model 601 pH Meter and metals were analyzed through the use of a Perkin-Elmer model 2380 Atomic Absorption Spectrophotometer.

A copy of the results of this latest EP Toxicity Test is attached and shows the waste to be well within the safe limits as required by table 1 of part 261.24 "Maximum Concentration of Contaminants for Characteristic of EP Toxicity".

Westinghouse request that the sludge generated by electroplating operations and rendered non-polluting by the above process be de-listed from the present F.006 listing, that we may continue the disposal as per Mr. Strickland's letter. This treated waste does not meet the criteria as set forth in Appendix VII, "Basis For Listing Hazardous Waste", nor does it contain hazardous constituents as listed in Appendix VIII, "Hazardous Constituents".

Your attention will be greatly appreciated and should you need additional information, please give me a call at 919-834-5271, extension 302.

B. K. Pierce, Jr.
Manager, Plant Services

Enclosure

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

B. K. Pierce, Jr.
Manager, Plant Services

STATE OF NORTH CAROLINA

DEPARTMENT OF HUMAN RESOURCES

Division of Health Services

JAMES B. HUNT, JR.
GOVERNOR

SARAH T. MORROW, M.D., M.P.H.
SECRETARY

JACOB KOOMEN, M.D., M.P.H.
DIRECTOR

P. O. Box 2091 Raleigh 27602

1877
One Hundred Years
of Public Health
in North Carolina
1977

January 17, 1978

Mr. B. K. Pierce
Westinghouse Electric Corporation
Raleigh, North Carolina 27609

Dear Mr. Pierce:

This office has completed the testing on the fixed sludge that came from your plant. A copy of the results is enclosed.

I have discussed the test results with Dr. R. J. Drye, Head, Environmental Sciences, Laboratory Section, Division of Health Services, and we recommend the use of a ratio by volume - Cement 0.10 - Silicate 0.03 as this gives the best results.

This office has no objection to the placing of the fixed waste in a sanitary landfill provided it is landfilled with at least one foot of earth separating it from routine solid waste.

Please keep us informed if there are any changes in your process.

Sincerely,

O. W. Strickland, Supervisor
Solid Waste Management Unit
Solid Waste & Vector Control Branch
Sanitary Engineering Section

OWS/wss

cc: Mr. Terry F. Dover

Enclosure

GRAINGER LABORATORIES
INCORPORATED
ANALYTICAL AND CONSULTING CHEMISTS

709 West Johnson Street • Raleigh, North Carolina 27603

(919) 828-3360

ANALYTICAL LABORATORY

Pollution Analysis
Construction Materials
Identification of Unknowns
Agriculture
Fuels
Textiles
Chemicals

CONSULTATION

Metallurgical Services
Pollution Abatement
Process Development
Quality Control
Methods Development
Special Investigation
Pesticides

June 15, 1981
81-964

Westinghouse Electric Co.
P. O. Box 9533
Route 1,
Raleigh, N. C. 27603

Attn: B. K. Pierce

Subject: Analysis of sample received 6/1/81

Sample Identification: P. O. #48-21172

1. Untreated slurry from meter plant
1A. Duplicate of #1
2. Treated slurry from meter plant (with concrete)
2A. Duplicate of #2

RESULTS

after acid pH 5.0 | pH " ~ 10.5

	1	1A	2	2A
Cyanide, total as CN, ppm	297	-	-	-
Cyanide, amenable as CN, ppm	117	-	-	-
Cyanide, total extractable as CN, ppm	0.94	0.89	18.6	17.5
Chromium, total extractable as Cr, ppm	0.15	0.15	10.7	10.5
Cadmium, total extractable as Cd, ppm	5.0	5.0	0.03	0.03
Nickel, total extractable as Ni, ppm	17.2	17.4	1.51	1.75

Results on samples 2 & 2A are based on a dried sample passing a 100 mesh sieve.

Douglas P. Hall

Douglas P. Hall
Laboratory Supervisor

DPH/ab

GRAINGER LABORATORIES
INCORPORATED
ANALYTICAL AND CONSULTING CHEMISTS

709 West Johnson Street • Raleigh, North Carolina 27603

(919) 828-3360

ANALYTICAL LABORATORY

Pollution Analysis
Construction Materials
Identification of Unknowns
Agriculture
Fuels
Textiles
Chemicals

CONSULTATION

Metallurgical Services
Pollution Abatement
Process Development
Quality Control
Methods Development
Special Investigation
Pesticides

April 29, 1981
81-705

Westinghouse Electric Co.
P. O. Box 9533
Rt. 1 Raleigh, NC 27603

Attn. B. K. Pierce

Subject:
Analysis of sample received 4-23-81

Sample Identification: #48-24838

1 Sludge Sample 4-23-81

Results:

Cyanide, total as CN, ppm	758
Chromium, total as Cr, ppm	1240
Cadmium, total as Cd, ppm	261
Nickel, total as Ni, ppm	607

Douglas P. Hall
Douglas P. Hall
Laboratory Supervisor

Vance C Allen
Vance C. Allen
Laboartory Manager

DPH/rz

GRAINGER LABORATORIES
INCORPORATED
ANALYTICAL AND CONSULTING CHEMISTS

709 West Johnson Street • Raleigh, North Carolina 27603

(919) 828-3360

ANALYTICAL LABORATORY

Pollution Analysis
Construction Materials
Identification of Unknowns
Agriculture
Fuels
Textiles
Chemicals

CONSULTATION

Metallurgical Services
Pollution Abatement
Process Development
Quality Control
Methods Development
Special Investigation
Pesticides

March 16, 1981

#81-377

Westinghouse Electric Corporation
Meter Division
2728 North Blvd.
P.O. Box 9533
Raleigh, N. C.27603

Attn: B. K. Pierce

Subject: Analysis of sample received 3-2-81

Sample Identification: P.O. #48-S84333

Sludge for E. P. Toxicity

Results:

Chromium, total extractable as Cr, ppm	0.24
Cadmium, total extractable as Cd, ppm	0.03
Silver, total extractable as Ag, ppm	0.05
Lead, total extractable as Pb, ppm	0.3
Nickel, total extractable as Ni, ppm	0.16
Barium, total extractable as Ba, ppm	< 0.3
Arsenic, total extractable as As, ppb	< 2.0
Selenium, total extractable as Se, ppb	< 2.0
Mercury, total extractable as Hg, ppb	< 2.0
Cyanide, total as CN^-, ppm	1.50

Douglas P. Hall

Douglas P. Hall
Laboratory Supervisor

DPH/lmb

GRAINGER LABORATORIES

INCORPORATED

ANALYTICAL AND CONSULTING CHEMISTS

709 West Johnson Street • Raleigh, North Carolina 27603

(919) 828-3360

ANALYTICAL LABORATORY

Pollution Analysis
Construction Materials
Identification of Unknowns
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Fuels
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Chemicals

CONSULTATION

Metallurgical Services
Pollution Abatement
Process Development
Quality Control
Methods Development
Special Investigation
Pesticides

November 10, 1980

#80-1399

Westinghouse Meter Plant
US 1 North
Raleigh, N.C.

Attn: Don Richardson

Subject: Analysis of sludge sample received 11-5-80

Sample Identification: Elect. Plate Sludge for E.P. Toxicity

Results

Chromium, total as Cr, ppm	0.13
Cadmium, total as Cd, ppm	0.02
Silver, total as Ag, ppm	0.05
Lead, total as Pb, ppm	0.5
Barium, total as Ba, ppm	< 0.1
Arsenic, total as As, ppb	< 2.0
Selenium, total as Se, ppb	< 2.0
Mercury, total as Hg, ppb	< 2.0

V. C. Allen

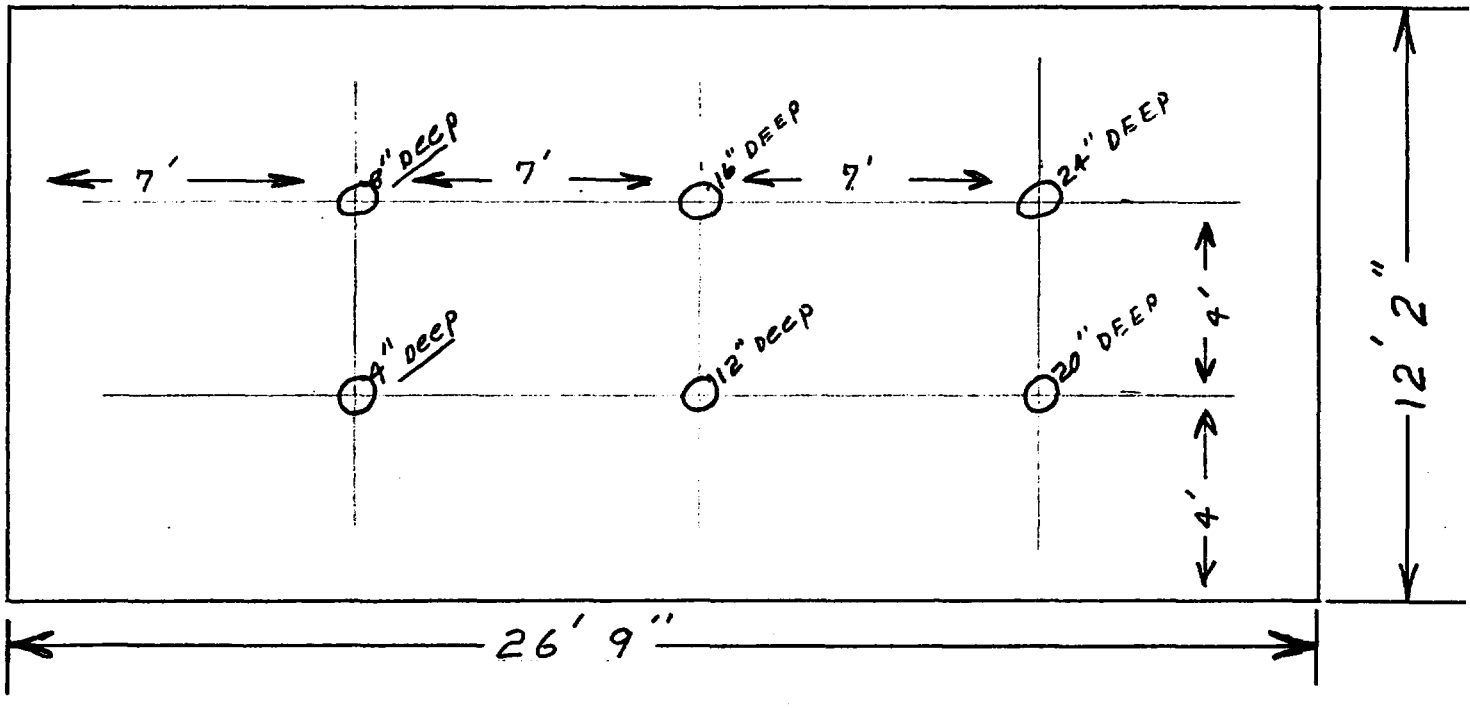
V. C. Allen

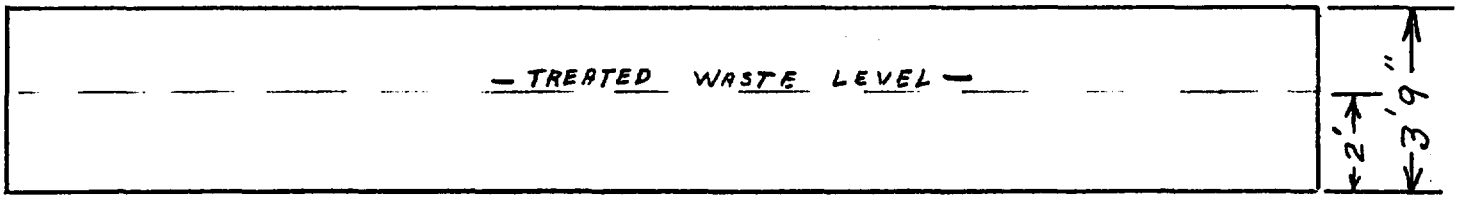
VCA/hcm

HOLDING BED FOR TREATED WASTE

WESTINGHOUSE METER PLANT

GRID PATTERN FOR SAMPLING TREATED WASTE FOR EP TOXICITY TEST.





W.A. Peoples
9-27-81

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

General Information

The Potential Hazardous Waste Site, Site Inspection Report form is used to record information collected during, or associated with, an inspection of the site and other information about responsible parties and past response activities.

The Site Inspection Report form contains eleven parts:

Part 1 — Site Location and Inspection Information

Part 2 — Waste Information

Part 3 — Description of Hazardous Conditions and Incidents

Part 4 — Permit and Descriptive Information

Part 5 — Water, Demographic, and Environmental Data

Part 6 — Sample and Field Information

Part 7 — Owner Information

Part 8 — Operator Information

Part 9 — Generator/Transporter Information

Part 10— Past Response Activities

Part 11— Enforcement Information

Part 1 — Site Location and Inspection Information contains all of the data elements also contained on the Site Identification and Preliminary Assessment forms required to add a site to the automated Site Tracking System (STS). It is therefore possible to add a site to STS at the Site Inspection stage. Instructions are given below.

Part 2 — Waste Information and Part 3 — Description of Hazardous Conditions and Incidents are used to record specific information about substances, amounts, hazards, and targets, e.g., population potentially affected. Parts 2 and 3 are also contained in the Potential Hazardous Waste Site, Preliminary Assessment form. Information recorded on Part 2 and Part 3 during a preliminary assessment may be updated, added, deleted, or corrected on the Site Inspection Report form.

An Appendix with feedstock names and CAS Numbers and the most frequently cited hazardous substances and CAS Numbers is located behind the instructions for the Site Inspection Report.

A number of the data items collected throughout the Site Inspection Report support the Site Ranking Model. The majority of these data items are found in Part 5 — Water, Demographic, and Environmental Data.

General Instructions

1. Complete the Site Inspection Report form as completely as possible.

2. Starred items (*) are required before inspection information can be added to STS. The system will not accept incomplete inspection information.

3. To add a site to STS at the Site Inspection stage, write "New" across the top of the form and complete items II-01, 02, 03, 04, and 06, Site Name and Location, II-09 Coordinates, and II-10, Type of Ownership.

4. Data items carried in STS, which are identical to those on the Site Identification and Preliminary Assessment forms and which can be added, deleted, or changed using the Site Inspection Report form, are indicated with a pound sign (#). To ensure that the proper action is taken, outline the item(s) to be added, deleted, or changed with a bright color and indicate the proper action with "A" (add), "D" (delete) or "C" (change).

5. There are two options available for adding, deleting, or changing information supplied on the Site Inspection Report form. The first is to use a new Site Inspection Report form, completing only those items to be added, deleted, or changed. Mark the form clearly, using "A", "D", or "C", to indicate the action to be taken. If only data in STS are to be altered, the Site Source Data Report may be used. Using the report, mark clearly the items to be changed and the action to be taken.

Detailed Instructions

Part 1 Site Location and Inspection Information

I. **Identification:** Identification (State and Site Number) is the site record key, or primary identifier, for the site. Site records in the STS are updated based on Identification. It is essential that State and Site Number are correctly entered on each form.

*I-01 State: Enter the two character alpha FIPS code for the state in which the site is located. It must be identical to State on the Site Identification form.

*I-02 Site Number: Enter the ten character alphanumeric code for sites which have a Dun and Bradstreet or EPA "user" Dun and Bradstreet number or the ten character numeric GSA identification code for federal sites. The Site Number must be identical to the Site Number on the Site Identification and Preliminary Assessment forms.

II. **Site Name and Location:** If Site Name and Location information require no additions or changes, these items are not required on the Site Inspection Report form. However, completing these items will facilitate use of the completed form and records management procedures.

#II-01 Site Name: Enter the legal, common, or descriptive name of the site.

#II-02 Site Street: Enter the street address and number (if appropriate) where the site is located. If the precise street address is unavailable for this site, enter brief direction identifier, e.g., NW Jct I-295 & US 99; Post Rd, 5 mi W of Rt. 5.

#II-03 Site City: Enter the city, town, village, or other municipality in which the site is located. If the site is not located in a municipality, enter the name of the municipality (or place) which is nearest the site or which most easily locates the site.

#II-04 Site State: Enter the two character alpha FIPS code for the state in which the site is located. The code must be the same as in item I-01.

#II-05 Site Zip Code: Enter the five character numeric zip code for the postal zone in which the site is located.

#II-06 Site County: Enter the name of the county, parish (Louisiana), or borough (Alaska) in which the site is located.

#II-07 County Code: Enter the three character numeric FIPS county code for the county, parish, or borough in which the site is located. (The regional data analyst can furnish this data item.)

#II-08 Site Congressional District: Enter the two character number for the congressional district in which the site is located.

*#II-09 Coordinates: Enter the Coordinates, Latitude and Longitude, of the site in degrees, minutes, seconds, and tenths of seconds. If a tenth of a second is insignificant at this site, enter "0" in the tenths position.

#II-10 Type of Ownership: Check the appropriate box to indicate the type of site ownership. If the site is under the jurisdiction of an activity of the federal government, enter the name of the department, agency, or activity. If Other is indicated, specify the type of ownership and name.

III. Inspection Information

*III-01 Date of Inspection: Enter the date the inspection occurred, or began for multiple day inspections.

*III-02 Site Status: Check the appropriate box(es) to indicate the current status of the site. Active sites are those which treat, store, or dispose of wastes. Check Active for those active sites with an inactive storage or disposal area. Inactive sites are those at which treatment, storage, or disposal activities no longer occur.

#III-03 Years of Operation: Enter the beginning and ending years (or beginning only if operations at the site are on-going), e.g., 1878/1932, of site operation. Check Unknown if years of operation are not known.

*III-04 Agency Performing Inspection: Check the appropriate box(es) to indicate parties participating in the inspection. If contractors participate, provide the name of the firm(s).

III-05 Chief Inspector: Enter the name of the chief, or lead inspector.

III-06 Title: Enter the Chief Inspector's title, e.g., Team Leader, FIT team.

III-07 Organization: Enter the name of the organization where the Chief Inspector is employed, e.g., EPA — Region 4, VA State Health Dept., Environmental Research Co.

III-08 Telephone Number: Enter the Chief Inspector's area code and local commercial telephone number.

III-09 Other Inspectors: Enter the names of other parties participating in the inspection.

III-10 Title: Enter the titles of other parties participating in the inspection.

III-11 Organization: Enter the names of the organizations where other parties participating in the inspection are employed.

III-12 Telephone Number: Enter the area code and local commercial telephone numbers of other parties participating in the inspection.

III-13 Site Representatives Interviewed: Enter the names of individuals representing responsible parties interviewed in connection with the inspection. Interviews do not necessarily occur during the inspection.

III-14 Title: Enter the titles of the individuals interviewed.

III-15 Address: Enter the business, mailing, or residential addresses of the individuals interviewed.

III-16 Telephone Number: Enter the area code and local commercial telephone numbers of the individuals interviewed.

III-17 Access Gained By: Check the appropriate box to indicate whether access to the site was gained through permission or warrant.

III-18 Time of Inspection: Using a 24-hour clock, enter the time the inspection began, e.g., for 3:24 p.m. enter 1524.

III-19 Weather Conditions: Describe the weather conditions during the site inspection, especially any unusual conditions which might affect results or observations taken.

IV. Information Available From

IV-01 Contact: Enter the name of the individual who can provide information about the site.

IV-02 Of: If appropriate, enter the name of the public or private agency, firm, or company and the organization within the agency, firm, or company of the individual named as Contact.

IV-03 Telephone Number: Enter the area code and local telephone number of the individual named as contact.

IV-04 Person Responsible for Site Inspection Report Form: Enter the name of the individual who was responsible for the information entered on the Site Inspection Report form. The person responsible for the Site Inspection Report form may be different from the individual who prepared the form.

IV-05 Agency: Enter the name of the Agency where the individual who is responsible for the Site Inspection Report form is employed.

IV-06 Organization: Enter the name of the organization within the Agency.

IV-07 Telephone Number: Enter the area code and local telephone number of the individual who is responsible for the Site Inspection Report form.

IV-08 Date: Enter the date the Site Inspection Report form was prepared.

Part 2 Waste Information

***I. Identification:** Refer to Part 1—I.

II. Waste States, Quantities, and Characteristics: Waste States, Quantities, and Characteristics provide information about the physical structure and form of the waste, measures of gross amounts at the site, and the hazards posed by the waste, considering acute and chronic health effects and mobility along a pathway.

*II-01 Physical States: Check the appropriate box(es) to indicate the state(s) of waste present at the site. If Other is indicated, specify the physical state of the waste.

*II-02 Waste Quantity at Site: Enter estimates of amounts of waste at the site. Estimates may be in weight (Tons) or volume (Cubic Yards or Number of Drums). Use as many entries as are appropriate; however, measurements must be independent. For example, do not measure the same amounts of waste as both tons and cubic yards.

*II-03 Waste Characteristics: Check all appropriate entries to indicate the hazards posed by waste at the site. If waste at the site poses no hazard, check Not Applicable.

III. **Waste Category:** General categories of waste typically found are listed here. Enter the estimated gross amount of each category of waste and the appropriate unit of measure.

*III-01 Gross Amount: Gross Amount is the estimate of the amount of the waste category found at the site. Estimates should be furnished in metric tons (MT), tons (TN), cubic meters (CM), cubic yards (CY), drums (DR), acres (AC), acre feet (AF), liters (LT), or gallons (GA). Enter the estimated amount next to the appropriate waste category.

*III-02 Unit of Measure: Enter the appropriate unit of measure, MT (metric tons), TN (tons), CM (cubic meters), CY (cubic yards), DR (number of drums), AC (acres), AF (acre feet), LT (liters), or GA (gallons) next to the estimate of gross amount.

III-03 Comments: Comments may be used to further explain, or provide additional information, about particular waste categories.

IV. **Hazardous Substances:** Specific hazardous, or potentially hazardous, chemicals, mixtures, and substances found at the site are listed here. For each substance listed those data items marked with an "at" sign (@) must be included.

@IV-01 Category: Enter in front of the substance name the three character waste category from Section III which best describes the substance, e.g., OLW (Oily Waste).

@IV-02 Substance Name: Enter one of the following: the name of the substance registered with the Chemical Abstract Service, the common or accepted abbreviation of the substance, the generic name of the substance, or commercial name of the substance.

@IV-03 CAS Number: Enter the number assigned to the substance when it was registered with the Chemical Abstract Service. Refer to the Appendix for most frequently cited CAS Numbers. CAS Numbers must be furnished for each substance listed. If a CAS Number for this substance has not been assigned, enter "999".

@IV-04 Storage/Disposal Method: Enter the type of storage or disposal facility in which the substance was found: SI (surface impoundment, including pits, ponds, and lagoons), PL (pile), DR (drum), TK (tank), LF (landfill), LM (landfarm), OD (open dump).

IV-05 Concentration: Enter the concentration of the substance found in samples taken at the site.

IV-06 Measure of Concentration: Enter the appropriate unit of measure for the measured concentration of the substance found in the sample, e.g., MG/L, UG/L.

V. **Feedstocks**

V-01 Feedstock Name: If feedstocks, or substances derived from one or more feedstocks, are present at the site, enter the name of each feedstock found. See the Appendix for the feedstock list.

V-02 CAS Number: Enter the CAS Number for each feedstock named. See the Appendix for feedstock CAS Numbers.

VI. **Sources of Information:** List the sources used to obtain information for this form. Sources cited may include: sample analysis, reports, inspections, official records, or other documentation. Sources cited provide the basis for information entered on the form and may be used to obtain further information about the site.

Part 3 Description of Hazardous Conditions and Incidents

*I. **Identification:** Refer to Part 1—I.

II. **Hazardous Conditions and Incidents:**

II-01 Hazards: Indicate each hazardous, or potentially hazardous, condition known, or claimed, to exist at the site.

II-02 Observed, Potential, or Alleged: Check Observed and enter the date, or approximate date, of occurrence if a release of contaminants to the environment, or some other hazardous incident, is known to have occurred. In cases of a continuing release, e.g., groundwater contamination, enter the date, or approximate date, the condition first became apparent. If conditions exist for a potential release, check potential. Check Alleged for hazardous, or potentially hazardous, conditions claimed to exist at the site.

II-03 Population Potentially Affected: For each hazardous condition at the site, enter the number of people potentially affected. For Soil enter the number of acres potentially affected.

II-04 Narrative Description: Provide a narrative description, or explanation, of each condition. Include any additional information which further explains the condition.

II-05 Description of Any Other Known, Potential, or Alleged Hazards: Provide a narrative description of any other hazardous, or potentially hazardous, conditions at the site not covered above.

III. **Total Population Potentially Affected:** Enter the total number of people potentially affected by the existence of hazardous, or potentially hazardous, conditions at the site. Do not sum the numbers shown for each condition.

IV. **Comments:** Other information relevant to observed, potential, or alleged hazards may be entered here.

V. **Sources of Information:** List the sources used to obtain information for this form. Sources cited may include: sample analysis, reports, inspections, official records, or other documentation. Sources cited provide the basis for information entered on the form and may be used to obtain further information about the site.

Part 4 Permit and Descriptive Information

*I. **Identification:** Refer to Part 1—I.

II. **Permit Information**

II-01 Type of Permit Issued: Check the appropriate box(es) to indicate the types of permits issued to the site. If state, local, or other types of environmental permits have been issued, specify the type.

II-02 Permit Number: Enter the permit number for each issued permit.

II-03 Date Issued: Enter the date each permit was issued.

II-04 Expiration Date: Enter the date each permit expires or expired.

II-05 Comments: Enter any information which further explains the types of permits issued or status of the permits.

III. **Site Description**

*III-01 Storage/Disposal: Check the appropriate box(es) to indicate the types of storage/disposal facilities found at the site. If Other is checked, specify the type of facility.

*III-02 Amount: Enter the gross amount of waste associated with each type of storage/disposal facility. Amounts may be measured in: metric tons, tons, cubic meters, cubic yards, drums, acres, acre feet, liters, or gallons.

*III-03 Unit of Measure: Enter the appropriate unit of measure for each entry. Units of measure are MT (metric tons), TN (tons), CM (cubic meters), CY (cubic yards), DR (drums), AC (acres), AF (acre feet), LT (liters), or GA (gallons).

*III-04 Treatment: If waste is treated at the site, check the appropriated box(es) to indicate treatment methods used. If Other is checked, specify treatment method.

III-05 Other: If there are buildings on site, check this box.

*III-06 Area of Site: Enter total area of site in acres.

III-07 Comments: Enter any other pertinent information.

IV. **Containment:** Containment is a measure of the natural or artificial means taken to minimize or preclude health hazards and to minimize or prevent contamination of the environment from waste at the site.

*IV-01 Containment of Wastes: Check the appropriate box to indicate the condition of containment measures at the site. When choosing the appropriate box, consider the potential for environmental contamination, i.e., the worst case for containment in conjunction with the most hazardous substances.

IV-02 Description of Drums, Diking, Liners, Barriers: Provide a narrative description of the condition of containment measures at the site, e.g., waste adequately contained, drums rusting and leaking, diking collapsing, liners leaking and contaminants leaching into soil and groundwater.

V. **Accessibility:** Accessibility is an indicator of the potential for direct contact with hazardous substances.

*V-01 Waste Easily Accessible: If there are no real barriers preventing human access to hazardous waste, check Yes, otherwise check No.

V-02 Comments: Additional information about accessibility to hazardous waste may be provided.

VI. **Sources of Information:** List the sources used to obtain information for this form. Sources cited may include: sample analysis, reports, inspections, official records, or other documentation. Sources cited provide the basis for information entered on the form and may be used to obtain further information about the site.

Part 5 Water, Demographic, and Environmental Data

*I. **Identification:** Refer to Part 1—I.

II. **Drinking Water Supply**

II-01 Type of Drinking Water Supply: Check the appropriate box(es) to indicate the types and sources of drinking water within the vicinity of the site. Community refers to municipal sources. Non-community refers to private sources, e.g., private wells.

II-02 Status: Check the appropriate box(es) to indicate whether the water supply is endangered or affected by contaminants from the site. Check the appropriate box to indicate if the water supply is being monitored for possible contamination.

II-03 Distance to Site: Enter the distance in miles to the nearest tenth, hundredth, or thousandth (as needed to indicate the precision required) from the site to nearest drinking water source.

III. **Groundwater**

III-01 Groundwater Use in Vicinity: Check the appropriate box to indicate groundwater use in the vicinity of the site. The concern is to indicate the seriousness of groundwater contamination from waste at the site. Only Source for Drinking indicates that current water sources are limited to wells in the vicinity of the site. Drinking; Commercial, Industrial, Irrigation indicates that groundwater is used for drinking, but that other limited drinking sources are available and that no other sources for these additional uses are available. Commercial, Industrial, Irrigation indicates that groundwater is used for these purposes, but that limited other sources of water are available. Not used, Unuseable indicates that groundwater use in the area is not critical.

III-02 Population Served by Groundwater: Enter the number of people served by groundwater in the vicinity of the site. Population for the purposes of the Site Inspection Report includes residents and daytime workers and students but excludes transients in the neighborhood or on local highways and roads. When estimating population from aerial photographs or other sources, the conversion factor is 3.8 persons for each dwelling unit or 3 persons per acre in rural areas.

III-03 Distance to Nearest Drinking Water Well: Enter the distance in miles to the nearest tenth, hundredth, or thousandth (as needed to indicate the precision required) from the site to the nearest drinking water well.

III-04 Depth to Groundwater: Enter the depth in feet to groundwater.

III-05 Depth of Groundwater Flow: Enter the cardinal direction of groundwater flow, e.g., NNW.

III-06 Depth to Aquifer of Concern: Enter the depth in feet to the aquifer of concern.

III-07 Potential Yield of Aquifer: Enter the potential yield of the aquifer in gallons per day.

III-08 Sole Source Aquifer: Check the appropriate box to indicate the aquifer of concern is, or is not, a sole source aquifer.

III-09 Description of Wells: Provide a narrative description of wells in the vicinity of the site, including useage, depth, and location relative to population and buildings.

III-10 Recharge Area: Check the appropriate box to indicate the site is located in a recharge area. Comments provide additional information on the recharge area.

III-11 Discharge Area: Check the appropriate box to indicate the site is located in a discharge area. Comments provide additional information on the discharge area.

IV. Surface Water

IV-01 Surface Water Use: Check the appropriate box to indicate surface water use in the vicinity of the site. The order of precedence is Reservoir, Recreation, Drinking Water Source; Irrigation, Economically Important Reserves; Commercial/Industrial; Not Currently Used.

IV-02 Affected/Potentially Affected Bodies of Water: Enter the names of bodies of surface water affected, or potentially affected, by contaminants from the site. List the body of surface water nearest the site first. For each body of water check Affected if contaminants have been identified in samples of the water. Enter the shortest distance from the body of water to the site in miles to the nearest tenth, hundredth, or thousandth (as needed to indicate the precision required).

V. Demographic and Property Information

V-01 Total Population Within: Enter the total population within one (1) mile, two (2) miles, and three (3) miles of the site. Distances are measured from site boundaries. Population for the purposes of the Site Inspection Report includes residents and daytime workers and students but excludes transients in the neighborhood or on local highways and roads. When estimating population from aerial photographs or other sources, the conversion factor is 3.8 persons for each dwelling unit or 3 persons per acre in rural areas.

V-02 Distance to Nearest Population: Enter in miles to the nearest tenth, hundredth, or thousandth (as needed to indicate the precision required) the distance from the site boundary to the nearest population (one person minimum).

V-03 Number of Buildings Within Two (2) Miles of Site: Enter the number of buildings within two miles from the boundaries of the site.

V-04 Distance to Nearest Off-Site Building: Enter the distance in miles to the nearest tenth, hundredth, or thousandth (as needed to indicate the precision required) from the site boundary to the nearest off-site building.

V-05 Population in Vicinity of Site: Provide a narrative description of the nature of the population within the vicinity of the site. Examples include rural area, small truck farms, urban industrial area, densely populated urban residential area.

VI. Environmental Information

VI-01 Permeability of Unsaturated Zone: Check the appropriate box to indicate the permeability of the earth material above the water table in the vicinity of the site.

VI-02 Permeability of Bedrock: Check the appropriate box to indicate the permeability of the bedrock in the vicinity of the site.

VI-03 Depth to Bedrock: Enter the depth to bedrock in feet.

VI-04 Depth of Contaminated Soil Zone: Enter the depth of the contaminated soil zone in feet.

VI-05 Soil pH: Enter the pH of the soil in the vicinity of the site.

VI-06 Net Precipitation: Enter net precipitation in inches. If net precipitation is not known, subtract the average evaporation figure on the U.S. National Weather Service map showing average annual evaporation in inches from the U.S. Environmental Data Service map showing mean annual precipitation.

VI-07 One Year 24 Hour Rainfall: Enter in inches the figure for one year 24 hour rainfall.

VI-08 Slope: Enter the percentage of site slope, the direction of site slope, and the percentage of the surrounding terrain average slope.

VI-09 Flood Potential: Enter the boundary year for the floodplain in which the site is located. Sites flooded annually are in a 1 (one) year floodplain. Other examples include 10, 20, 50, 100, 500, etc., indicating the probability of flooding within that time period.

VI-10 Site is on Barrier Island, Coastal High Hazard Area, Riverine Floodway: If site is located in one of these areas, check this box.

VI-11 Distance to Wetlands: If applicable, enter the distance in miles to the nearest tenth, hundredth, or thousandth (as needed to indicate the precision required) from the site to the closest wetlands (five acre minimum) for Estuarine and Other types of wetlands.

VI-12 Distance to Critical Habitat: If applicable, enter the distance in miles to the nearest tenth, hundredth, or thousandth (as needed to indicate the precision required) from the site to the nearest critical habitat

of an endangered species. Enter the name(s) of the endangered species.

VI-13 Land Use in Vicinity: Enter the distance in miles to the nearest tenth, hundredth, or thousandth (as needed to indicate the precision required) to the nearest Commercial/Industrial area; Residential Area, National/State Parks, Forests, or Wildlife Reserves; or Agricultural Lands, Prime Ag Land and Ag Land. Prime Ag Land is that crop, pasture, range, or forest land which produces the highest yield in relation to inputs. Ag Land is the remaining agricultural land, frequently considered marginal.

VI-14 Description of Site in Relation to Surrounding Topography: Provide a narrative description of significant or unusual aspects of the surrounding topography in relation to the site. Examples might include: site is in a valley surrounded on all sides by mountains, site is at edge of a river or stream which floods frequently, etc.

VII. **Sources of Information**: List the sources used to obtain information for this form. Sources cited may include: sample analysis, reports, inspections, official records, or other documentation. Sources cited provide the basis for information entered on the form and may be used to obtain further information about the site.

Part 6 Sample and Field Information

*I. **Identification**: Refer to Part 1—I.

II. **Samples Taken**

II-01 Number of Samples Taken: Next to each sample type enter the number of samples of that type taken.

II-02 Samples Sent To: Enter the name of the laboratory or other facility where the samples were sent for analysis.

II-03 Estimated Date Results Available: Enter the estimated date the results are expected to be available.

III. **Field Measurements Taken**

III-01 Type: Enter the type, e.g., radioactivity, explosivity, organic vapor or gas detection and analysis, reagent type gas detection, of each field measurement taken.

III-02 Comments: Describe results of field measurements, whether they were taken on or off site, and if applicable, the type of disposal facility tested, e.g., drum, surface impoundment, landfill.

IV. **Photographs and Maps**

IV-01 Type: If photographs of the site have been taken, check the appropriate box(es) to indicate the type.

IV-02 In Custody Of: Enter the name of the organization or person who has custody of the photographs.

IV-03 Maps: Check the appropriate box to indicate that maps of the site area have been prepared or obtained.

IV-04 Location of Maps: If site maps are available, indicate their location, e.g., Region 1 Air and Hazardous Materials Division.

V. **Other Field Data Collected**: Provide a narrative description of any other field data collected.

VI. **Sources of Information**: List the sources used to obtain information for this form. Sources cited may include: sample analysis, reports, inspections, official records, or other documentation. Sources cited provide the basis for information entered on the form and may be used to obtain further information about the site.

Part 7 Owner Information

*I. **Identification**: Refer to Part 1—I.

II. **Current Owner(s) — Parent Company**: Current owner(s) and parent companies, for those owners which are companies partly or wholly owned by another company, provide locator information about responsible parties. Each Part 7 provides space for four (4) current owners and their respective parent companies. If additional space is required, complete another Part 7.

II-01 Name: Enter the legal name of the owner of the site. The owner may be a firm, government agency, association, individual, etc.

II-02 D&B Number: Where available, enter the owner's D&B (Dun and Bradstreet) number. If the current owner is a federal agency, enter the GSA identification code.

II-03 Street Address: Enter the business, mailing, or residential street address of the owner.

II-04 SIC Code: If applicable, enter the owner's primary SIC Code.

II-05 City: Enter the city of the owner's business, mailing, or residential address.

II-06 State: Enter the two character alpha FIPS code for the state of the owner's business, mailing, or residential address.

II-07 Zip Code: Enter the five digit zip code for the owner's business, mailing, or residential address.

II-08 Name: If the owner is a partly or wholly owned subsidiary of another company, enter the legal name of the owner's parent company.

II-09 D&B Number: Enter the parent company's Dun and Bradstreet number.

II-10 Street Address: Enter the business or mailing street address of the parent company.

II-11 SIC Code: If applicable, enter the parent company's primary SIC code.

II-12 City: Enter the city of the parent company's business or mailing address.

II-13 State: Enter the two character alpha FIPS code for the state of the parent company's business or mailing address.

II-14 Zip Code: Enter the five digit zip code for the parent company's business or mailing address.

III. **Previous Owner(s)**: List previous owners in reverse chronological order, i.e., most recent first. If additional space is required, complete another Part 7.

III-01 Name: Enter the legal name of the previous owner. The previous owner may have been a firm, government agency, association, individual, etc.

III-02 D&B Number: Enter the previous owner's Dun and Bradstreet number if available. If the previous owner was a federal agency, enter the GSA identification code if available.

III-03 Street Address: Enter the business, mailing, or residential street address of the previous owner.

III-04 SIC Code: If applicable, enter the primary SIC Code of the previous owner.

III-05 City: Enter the city of the previous owner's business, mailing, or residential address.

III-06 State: Enter the two character alpha FIPS code for the state of the previous owner's business, mailing, or residential address.

III-07 Zip Code: Enter the zip code of the previous owner's business, mailing, or residential address.

IV. **Realty Owner(s):** Realty owner applies when the owner leased to another entity property which was used for the storage or disposal of hazardous waste. List current or most recent first.

IV-01 Name: Enter the legal name of the realty owner. The realty owner may be a firm, government agency, association, individual, etc.

IV-02 D&B Number: Enter the previous owner's Dun and Bradstreet number if available. If the previous owner was a federal agency, enter the GSA identification code if available.

IV-03 Street Address: Enter the realty owner's business, mailing, or residential street address.

IV-04 SIC Code: If applicable, enter the realty owner's primary SIC Code.

IV-05 City: Enter the city of the realty owner's business, mailing, or residential address.

IV-06 State: Enter the two character alpha FIPS code for the state of the realty owner's business, mailing, or residential address.

IV-07 Zip Code: Enter the zip code of the realty owner's business, mailing, or residential address.

V. **Sources of Information:** List the sources used to obtain information for this form. Sources cited may include: sample analysis, reports, inspections, official records, or other documentation. Sources cited provide the basis for information entered on the form and may be used to obtain further information about the site.

Part 8 Operator Information

I. **Identification:** Refer to Part 1—I.

II. **Current Operator—Operator's Parent Company:** Information on operators is applicable when the operator is not the owner.

II-01 Name: Enter the legal name of the operator. The operator may be a firm, government agency, association, individual, etc.

II-02 D&B Number: Enter the operator's Dun and Bradstreet number if available. If the operator is a federal agency, enter the GSA identification code if available.

II-03 Street Address: Enter the operator's business, mailing, or residential street address.

II-04 SIC Code: If applicable, enter the operator's primary SIC Code.

II-05 City: Enter the city of the operator's business, mailing, or residential address.

II-06 State: Enter the two character alpha FIPS code for the state of the operator's business, mailing, or residential address.

II-07 Zip Code: Enter the zip code of the operator's business, mailing, or residential address.

II-08 Years of Operation: Enter the beginning and ending years (or beginning only if operations are on-going), e.g., 1932/1948, of operation at the site.

II-09 Name of Owner: Enter the name of the owner for the period cited for this operator.

II-10 Name: If applicable, enter the legal name of the operator's parent company.

II-11 D&B Number: Enter the operator's parent company Dun and Bradstreet number if available.

II-12 Street Address: Enter the operator's parent company business, mailing, or residential street address.

II-13 SIC Code: If applicable, enter the operator's parent company primary SIC Code.

II-14 City: Enter the city of the operator's parent company business, mailing, or residential address.

II-15 State: Enter the two character alpha FIPS code for the state of the operator's parent company business, mailing, or residential address.

II-16 Zip Code: Enter the zip code of the operator's parent company business, mailing, or residential address.

III. **Previous Operator(s)—Previous Operators' Parent Companies**

III-01 Name: Enter the legal name of the previous operator. The previous operator may be a firm, government agency, association, individual, etc.

III-02 D&B Number: Enter the previous operator's Dun and Bradstreet number if available. If the previous operator was a federal agency, enter the GSA identification code if available.

III-03 Street Address: Enter the previous operator's business, mailing, or residential street address.

III-04 SIC Code: If applicable, enter the previous operator's primary SIC Code.

III-05 City: Enter the city of the previous operator's business, mailing, or residential address.

III-06 State: Enter the two character alpha FIPS code for the state of the previous operator's business, mailing, or residential address.

III-07 Zip Code: Enter the zip code of the previous operator's business, mailing, or residential address.

III-08 Years of Operation: Enter the beginning and ending years of operation for this operator at the site.

III-09 Name of Owner: Enter the name of the owner for the period cited for this operator.

III-10 Name: If applicable, enter the legal name of the previous operator's parent company.

III-11 D&B Number: Enter the previous operator's parent company Dun and Bradstreet number if available.

III-12 Street Address: Enter the previous operator's parent company business, mailing, or residential street address.

III-13 SIC Code: If applicable, enter the previous operator's parent company primary SIC Code.

III-14 City: Enter the city of the previous operator's parent company business, mailing, or residential address.

III-15 State: Enter the two character alpha FIPS code for the state of the previous operator's parent company business, mailing, or residential address.

III-16 Zip Code: Enter the zip code of the previous operator's parent company business, mailing, or residential address.

IV. **Sources of Information:** List the sources used to obtain information for this form. Sources cited may include: sample analysis, reports, inspections, official records, or other documentation. Sources cited provide the basis for information entered on the form and may be used to obtain further information about the site.

Part 9 Generator/Transporter Information

*I. **Identification:** Refer to Part 1—I.

II. **On-Site Generator:** A company or agency, located within the contiguous area of the site and generating waste disposed on the site, is entered here.

II-01 Name: If there is an on-site generator, enter the legal name of the on-site generator. The on-site generator may be a firm or government agency.

II-02 D&B Number: Where available, enter the on-site generator's D&B (Dun and Bradstreet) number. If the on-site generator is a federal agency, enter the GSA identification code.

II-03 Street Address: Enter the business or mailing street address of the on-site generator.

II-04 SIC Code: If applicable, enter the on-site generator's primary SIC Code.

II-05 City: Enter the city of the on-site generator's business or mailing address.

II-06 State: Enter the two character alpha FIPS code for the state of the on-site generator's business or mailing address.

II-07 Zip Code: Enter the five digit zip code for the on-site generator's business or mailing address.

III. **Off-Site Generator(s):** Those companies or agencies off-site who have generated waste which has been disposed at the site are listed here.

III-01 Name: Enter the legal name of the off-site generator. The off-site generator may be a firm or government agency.

III-02 D&B Number: Where available, enter the off-site generator's D&B (Dun and Bradstreet) number. If

III-03 Street Address: Enter the business or mailing street address of the off-site generator.

III-04 SIC Code: If applicable, enter the off-site generator's primary SIC Code.

III-05 City: Enter the city of the off-site generator's business or mailing address.

III-06 State: Enter the two character alpha FIPS code for the state of the off-site generator's business or mailing address.

III-07 Zip Code: Enter the five digit zip code for the off-site generator's business or mailing address.

IV. **Transporter(s):** Those carriers who are known to have transported waste to the site are listed here.

IV-01 Name: Enter the legal name of the transporter. The transporter may be a firm, government agency, association, individual, etc.

IV-02 D&B Number: Where available, enter the transporter's D&B (Dun and Bradstreet) number. If the transporter is a federal agency, enter the GSA identification code.

IV-03 Street Address: Enter the business, mailing, or residential street address of the transporter.

IV-04 SIC Code: If applicable, enter the transporter's primary SIC Code.

IV-05 City: Enter the city of the transporter's business, mailing, or residential address.

IV-06 State: Enter the two character alpha FIPS code for the state of the transporter's business, mailing, or residential address.

IV-07 Zip Code: Enter the five digit zip code for the transporter's business, mailing, or residential address.

V. **Sources of Information:** List the sources used to obtain information for this form. Sources cited may include: sample analysis, reports, inspections, official records, or other documentation. Sources cited provide the basis for information entered on the form and may be used to obtain further information about the site.

Part 10 Past Response Activities

*I. **Identification:** Refer to Part 1—I.

II. **Past Response Activities**

II-01 Past Response Activities: Check the appropriate box(es) to indicate response activities initiated prior to the passage of CERCLA, December, 1980.

II-02 Date: Enter the start date (or approximate date) of the activity.

II-03 Agency: Enter the name of the Agency responsible for the activity.

II-04 Description: Provide a brief narrative description of the activity.

III. **Sources of Information:** List the sources used to obtain information for this form. Sources cited may include: sample analysis, reports, inspections, official records, or other documentation. Sources cited provide the basis for information entered on the form and may be used to obtain further information

Part 11 Enforcement Information

***I. Identification: Refer to Part 1—I.**

II. Enforcement Information

II-01 Past Regulatory/Enforcement Action: Check the appropriate box to indicate past regulatory or enforcement action at the federal, state, or local level related to this site.

II-02 Description of Federal, State, Local Regulatory or Enforcement Action: Provide a narrative description of regulatory or enforcement action to date. Do not include any enforcement action contemplated in the process of development.

III. Sources of Information: List the sources used to obtain information for this form. Sources cited may include: sample analysis, reports, inspections, official records, or other documentation. Sources cited provide the basis for information entered on the form and may be used to obtain further information about the site.

Westinghouse
Electric Corporation

Electronics, Measurement
and Control Divisions

Box 9533
Raleigh North Carolina
(919) 834 5271

RECEIVED
AUG 15 1984
SOLID & TOXIC HAZARDOUS WASTE MANAGEMENT BRANCH

August 15, 1984

Mr. Frank E. Moore
Solid & Hazardous Waste Management Branch
Environmental Health Section
Division of Health Services
P. O. Box 2091
Raleigh, NC 27602-2091

Dear Mr. Moore:

Following is our response to your letter of June 29, 1984 requesting information and documentation concerning the management of hazardous wastes and substances at our facility. The information provided below regarding storage, treatment and disposal activities is based upon our review of available documents.

The sole owner and operator of the Westinghouse plant on North Boulevard, Raleigh, North Carolina has been Westinghouse Electric Corporation since its construction in 1954. From its construction until mid-1955, operations at the plant consisted mainly of assembly of watthour meters and should have generated little or no hazardous wastes. In 1955 manufacture of watthour meter components was added to the assembly operations. Since then, manufacturing operations have resulted in the following general categories of hazardous wastes: sludges from treatment of plating wastewaters, degreasing still bottoms, waste solvents, paint and ink sludges, and precipitates, and solutions from plating tanks. Aside from the treatment of plating solutions, wastewater, and wastewater sludges, there has been no on-site treatment. The only disposal on-site has been of sludges from the wastewater treatment facility.

Sludges from the treatment of plating wastewater have been and still are the largest volume hazardous waste from this facility. Prior to 1974, plating wastewaters, after being subjected to cyanide destruction and chrome reduction, were treated with lime to produce a metal hydroxide sludge which settled in a thickener and which was then disposed in an on-site impoundment.

In 1973 modifications were begun to the wastewater treatment plant to improve the wastewater quality. Upon completion of these modifications in early 1974, lime precipitation of metals was replaced by caustic soda precipitation. We estimate 40 to 50 drums per month of sludge was produced after completing the modifications. These drums were shipped off-site to landfill from mid-1974 until the end of 1975. There are no records of where these wastes were disposed; however, a December 1975 letter to O. W. Strickland from H. J. Matthews, Works Engineer, advised that these wastes were being disposed of at the Wake County landfill in Knightdale, NC.

Sludge produced in 1976 was fixed with cement and sodium silicate, first on an experimental basis and later as a full scale operation.

We have records of three shipments of fixed material in 1978 and of several more shipments of fixed material through September 1980 for a total of about 900 cubic yards. This material was shipped to Rowlands Private Landfill, Raleigh, NC during the May 1978 to September 1980 period.

Fixed sludge produced from October 1980 through August 1983 was shipped to SCA Services, Inc., Pinewood, SC. Sludge produced after August 1983 has been filtered in a plate and frame filter press to about 25 weight percent solids and shipped to SCA Services, Inc. in the unfixed condition in drums.

Other wastes generated at the plant are degreasing still bottoms, paint sludges, and precipitates from plating tanks. We believe that all of these wastes were drummed and landfilled off-site prior to 1975. No records were found of which disposers were used other than the December 1975 letter to O. W. Strickland which estimated 10 barrels per month of this type waste had been being disposed of in

the Wake County landfill. We believe none of these wastes were sent to the landfill in 1976 or later.

We have records of the shipment and disposal of 170 drums of waste in 1979 and 1980 via RAD Services (now TRI of Reidsville, NC).

We have records of one shipment of three drums of PCB capacitors to Chemical Waste Management of Emmelle, Alabama on October 31, 1980.

Records exist of one spill of hazardous waste. On September 3, 1981 an equipment malfunction caused a spill of approximately 500 gallons of sludge from the neutralizing plant. The spilled sludge was contained on Westinghouse property by diking and was cleaned up on September 8 and 9, 1981. The sludge was placed in the mixer as cleanup progressed and was subsequently fixed with cement and sodium silicate. The environment or human health were not threatened by this event.

There are no ground water monitoring wells or other such sample monitoring points on the plant site.

Attached is a copy of our original CERCLA site notification to the U.S. EPA. Also to aid in your site evaluation, a topographic map of our inactive disposal area with updated waste volumes is included. The originally reported value of 100,000 cubic feet (3700 cubic yards) is high. Measurements indicate about 950 cubic yards of unfixed sludge are present on-site. Adjacent to the unfixed sludge disposal site is an area of about equal volume which is believed to be soil from grading done on the site in the early 1970s and some fixed material placed on-site before August 1980. The total volume of waste is estimated to be less than 2000 cubic yards.

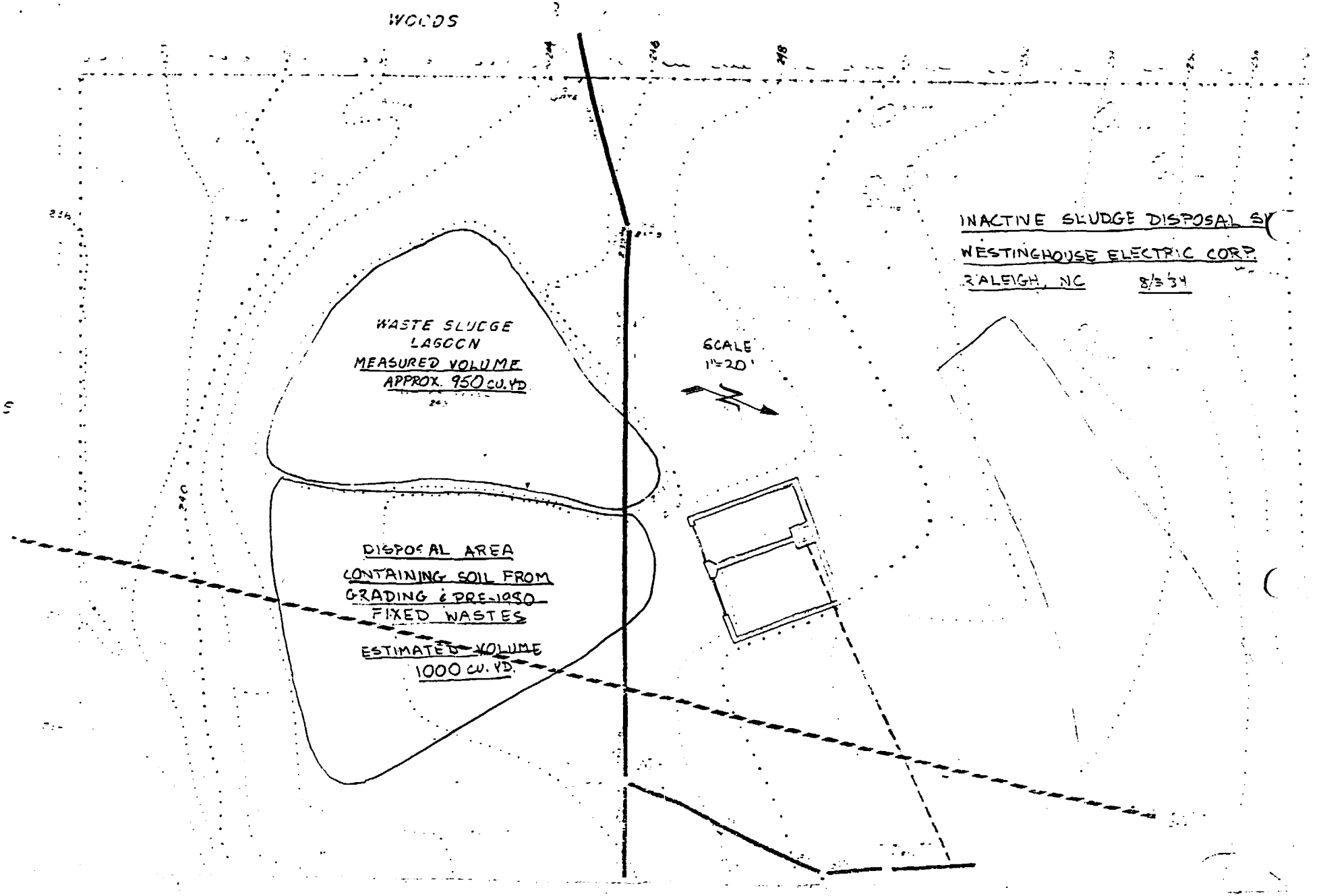
Sincerely,

David P. Daugherty

David P. Daugherty
Senior Manufacturing Engineer

Enclosure

5248T


WOODS
INACTIVE SLUDGE DISPOSAL S
WESTINGHOUSE ELECTRIC CORP.
RALEIGH, NC 8/3/34
SCALE
1"=20'
WASTE SLUDGE
LAGOON
MEASURED VOLUME
APPROX. 950 CU. YD
DISPOSAL AREA
CONTAINING SOIL FROM
GRADING & PRE-1950
FIXED WASTES
ESTIMATED VOLUME
1000 CU. YD.

EPA Notification of Hazardous Waste Site

EXHIBIT "B"

United States Environmental Protection Agency
Washington DC 20460

This initial notification information is required by Section 103(c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and must be mailed by June 9, 1981.

Please type or print in ink. If you need additional space, use separate sheets of paper. Indicate the letter of the item which applies.

A Person Required to Notify:

Enter the name and address of the person or organization required to notify.

Name: Westinghouse Electric Corporation
Street: Gateway Center
City: Pittsburgh State: Pa. Zip Code: 15230

B Site Location:

Enter the common name (if known) and actual location of the site.

Name of Site: Raleigh Energy Metering, and Control Business Unit
Street: P. O. Box 9533 2728 North Blvd.
City: Raleigh County: Wake State: N. C. Zip Code: 27611

C Person to Contact:

Enter the name, title (if applicable), and business telephone number of the person to contact regarding information submitted on this form.

Name (Last, First and Title): Parker, P. T.
Phone: 919-834-5271

D Dates of Waste Handling:

Enter the years that you estimate waste treatment, storage, or disposal began and ended at the site.

From (Year): 1955 To (Year): 1973

E Waste Type: Choose the option you prefer to complete

Option 1: Select general waste types and source categories. If you do not know the general waste types or sources, you are encouraged to describe the site in Item I—Description of Site.

General Type of Waste:
Place an X in the appropriate boxes. The categories listed overlap. Check each applicable category.

1. ☐ Organics
2. ☒ Inorganics
3. ☐ Solvents
4. ☐ Pesticides
5. ☒ Heavy metals
6. ☐ Acids
7. ☐ Bases
8. ☐ PCBs
9. ☐ Mixed Municipal Waste
10. ☐ Unknown
11. ☐ Other (Specify)

Source of Waste:
Place an X in the appropriate boxes.

1. ☐ Mining
2. ☐ Construction
3. ☐ Textiles
4. ☐ Fertilizer
5. ☐ Paper/Printing
6. ☐ Leather Tanning
7. ☐ Iron/Steel Foundry
8. ☐ Chemical, General
9. ☒ Plating/Polishing
10. ☐ Military/Ammunition
11. ☐ Electrical Conductors
12. ☐ Transformers
13. ☐ Utility Companies
14. ☐ Sanitary/Refuse
15. ☐ Photofinish
16. ☐ Lab/Hospital
17. ☐ Unknown
18. ☐ Other (Specify)

Option 2: This option is available to persons familiar with the Resource Conservation and Recovery Act (RCRA) Section 3001 regulations (40 CFR Part 261).

Specific Type of Waste:
EPA has assigned a four-digit number to each hazardous waste listed in the regulations under Section 3001 of RCRA. Enter the appropriate four-digit number in the boxes provided. A copy of the list of hazardous wastes and codes can be obtained by contacting the EPA Region serving the State in which the site is located.

D-006		
D-007		
D-008		
F-006		

Form Approved
OMB No. 2000-0138

EPA Form 8900 1

F Waste Quantity:

Place an X in the appropriate boxes to indicate the facility types found at the site.

In the "total facility waste amount" space give the estimated combined quantity (volume) of hazardous wastes at the site using cubic feet or gallons.

In the "total facility area" space, give the estimated area size which the facilities occupy using square feet or acres.

Facility Type

1. ☐ Piles
2. ☐ Land Treatment
3. ☐ Landfill
4. ☐ Tanks
5. ☒ Impoundment
6. ☐ Underground Injection
7. ☐ Drums, Above Ground
8. ☐ Drums, Below Ground
9. ☐ Other (Specify) _____

Total Facility Waste Amount

cubic feet 100,000

gallons _____

Total Facility Area

square feet 10,000

acres _____

G Known, Suspected or Likely Releases to the Environment:

Place an X in the appropriate boxes to indicate any known, suspected, or likely releases of wastes to the environment.

☐ Known ☐ Suspected ☐ Likely ☒ None

Note: Items H and I are optional. Completing these items will assist EPA and State and local governments in locating and assessing hazardous waste sites. Although completing the items is not required, you are encouraged to do so.

H Sketch Map of Site Location: (Optional)

Sketch a map showing streets, highways, routes or other prominent landmarks near the site. Place an X on the map to indicate the site location. Draw an arrow showing the direction north. You may substitute a publishing map showing the site location.

See Attachments "A" and "B"

I Description of Site: (Optional)

Describe the history and present conditions of the site. Give directions to the site and describe any nearby wells, springs, lakes, or housing. Include such information as how waste was disposed and where the waste came from. Provide any other information or comments which may help describe the site conditions.

This site is on property owned by Westinghouse Electric Corporation and located at 2728 North Blvd., Raleigh, N. C. It was utilized as a disposal area for sludge from our electro-plating wastewater operation from 1955 to 1973. The site is impounded by means of an earthen dam and at present is overgrown with vegetation.

J Signature and Title:

The person or authorized representative (such as plant managers, superintendents, trustees or attorneys) of persons required to notify must sign the form and provide a mailing address (if different than address in item A). For other persons providing notification, the signature is optional. Check the boxes which best describe the relationship to the site of the person required to notify. If you are not required to notify, check "Other".

Name C. E. Bell, General Manager

Street P. O. Box 9533

City Raleigh State N. C. Zip Code 27611

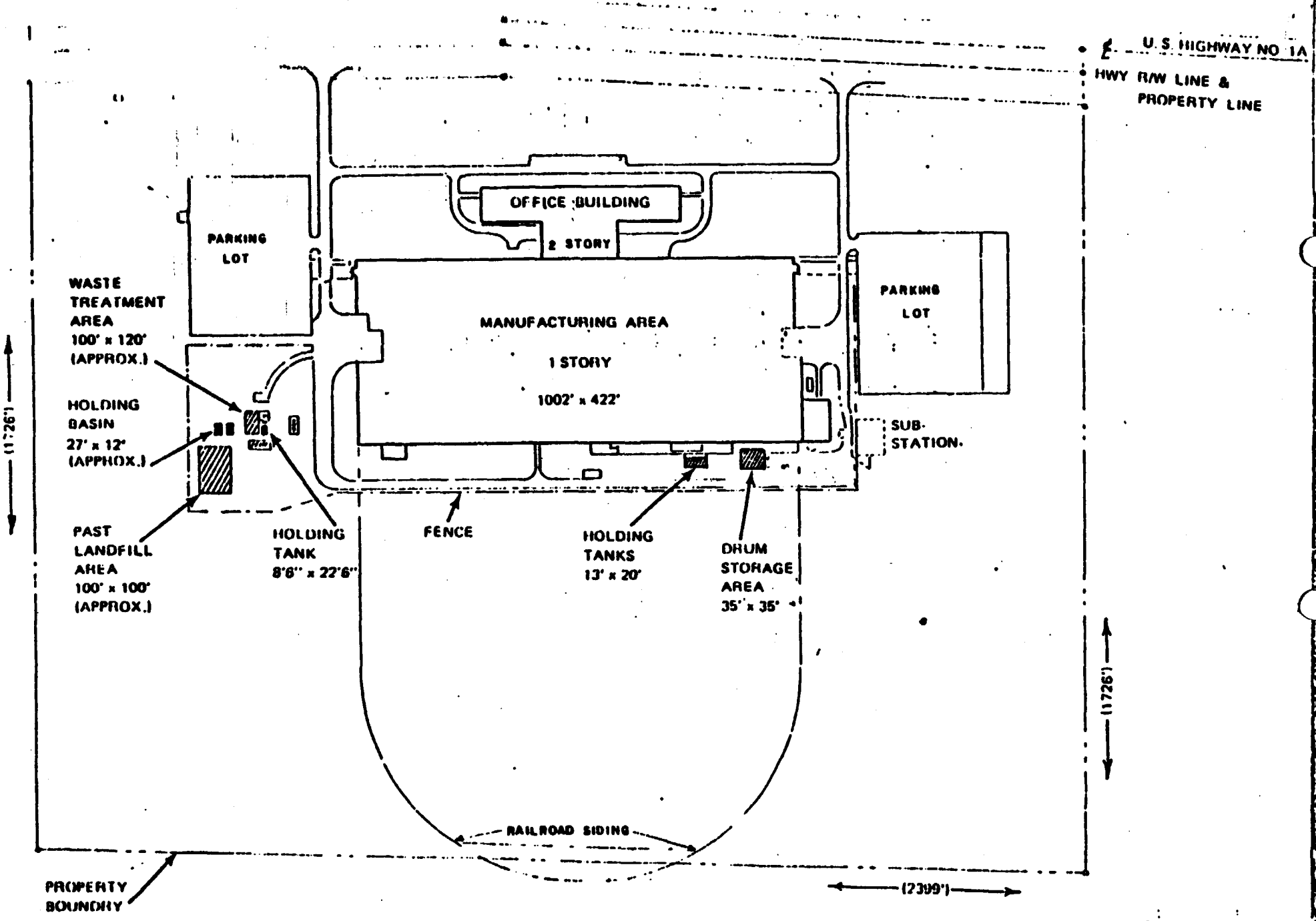
Signature C. E. Bell Date 5/12/82

☐ Owner, Present
☐ Owner, Past
☐ Transporter
☐ Operator, Present
☐ Operator, Past
☐ Other

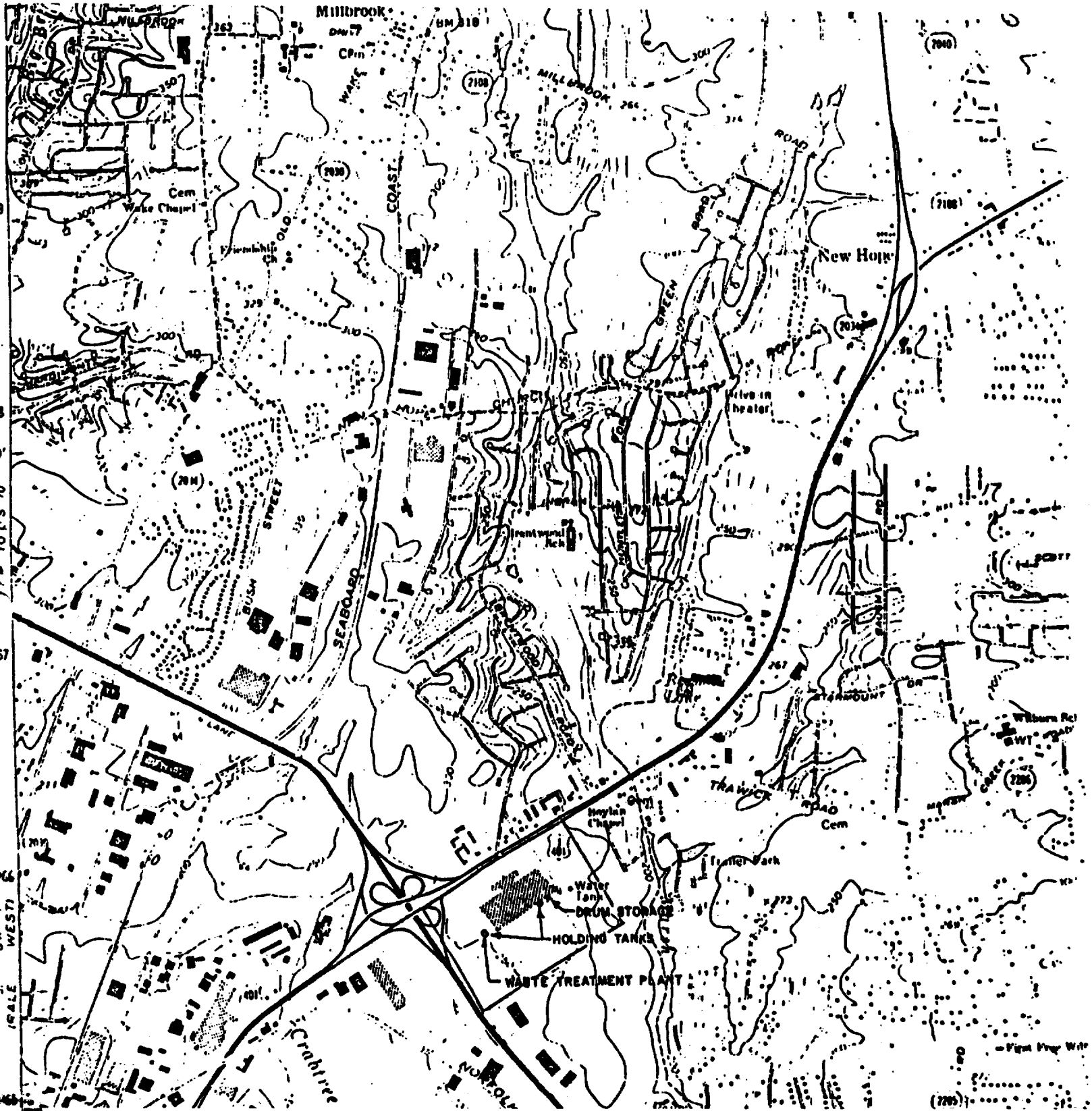
Continued from page 4

FACILITY DRAWING (see page 4)

ATTACHMENT A



Form Approved OMB No 158-S80004


Millbrook
New Hope
Cem
Wake Chapel
Friendship Ch
OLD WAKE COAST
SEABOARD
BUSH STREET
GREEN ROAD
Drive-in Theater
Trentwood Sch
Boylan Chapel
TRAWICK ROAD
Cem
Trailer Park
Water Tank
DRUM STORAGE
HOLDING TANKS
WASTE TREATMENT PLANT
Crabtree
STARMOUNT DR
Wilburn Sch
First Free Wtr

PRELIMINARY ASSESSMENT CHECKLIST (revised 6/30/84)

SITE ID NCD003195963

SITE NAME Westinghouse Meter & LVIT Raleigh, NC

STATE RECOMMENDATION : ___ No Further Action
✓ Further Insvestigation (To be completed by: Needs SI - Med.)
___ Emergency/Remedial (Referred to _____)

___ RCRA Facility
___ Other

WMM 8/24 Checklist Reviewer (name & date)
✓ Site Location Adequate
✓ File Search Completed
___ Rejected (State Reason _____)

✓ Contact (name & phone)
✓ Type & Amount of Hazardous Waste
✓ Responsible Party (address & phone)

___ More information needed (Surface water name, population)
✓ Accepted for entering into ERRIS

CIRCLE THE ITEM(S) PROVIDED, OR CIRCLE THE HEADING NUMBER IF DATA IS MISSING.

1. TYPE OF OWNERSHIP
- P-PRIVATE
- F-FEDERAL
- S-STATE
- C-COUNTY
- M-MUNICIPAL
- O-OTHER
- U-UNKNOWN

2. OWNER NOTIFICATION
- R-RCRA 3001
- C-CERCLA (UNCONTROLLED WASTE SITES)
- N-NONE

3. ON SITE INSPECTION
- E-EPA
- C-EPA CONTRACTOR
- S-STATE
- H-OTHER CONTRACROR
- L-LOCAL HEALTH OFF
- O-OTHER
- * X-MULTIPLE

4. SITE STATUS
- A-ACTIVE
- I-INACTIVE
- U-UNKNOWN

5. PHYSICAL STATES
- S-SOLID
- P-POWDER,FINES
- U-SLUDGE
- R-SLURRY
- L-LIQUID
- G-GAS
- O-OTHER
- * X-MULTIPLE

6. WASTE QUANTITY AT SITE
- * T-TONS
- * Y-CUBIC YARDS 1000 yds³
- * D-DRUMS (NUM)
- * X-MULTIPLE

7. WASTE CHARACTERISTICS
- T-TOXIC
- C-CORROSIVE
- R-RADIOACTIVE
- P-PERSISTENT
- S-SOLUBLE
- I-INFECTIOUS
- F-FLAMMABLE
- G-IGNITABLE
- V-VOLATILE
- E-EXPLOSIVE
- A-REACTIVE
- M-INCOMPATIBLE
- O-OTHER
- N-NOT APPLICABLE
- * X-MULTIPLE

8. WASTE TYPE
- ~~SLUDGE~~
- O-OILY WASTE
- L-SOLVENTS
- P-PESTICIDES
- G-ORGANICS
- A-ACIDS
- B-BASES
- M-HEAVY METALS
- * X-MULTIPLE

* REQUIRES ENTRY UNDER "DESCRIPTION"
e.g. D6 & X7 - 50 Drums of volitile organics and 20 tons of corrosive sludge
D9 Contaminated ground and surface water and soil.

9. HAZARDOUS CONDITIONS
- G-GROUNDWATER CONTAMINATION
- S-SURFACE WATER CONTAMINATION
- A-CONTAMINATION OF AIR
- F-FIRE/EXPLOSIVE CONDITIONS
- D-DIRECT CONTACT
- L-CONTAMINATION OF SOIL
- W-DRINKING WATER CONTAMINATION
- I-WORKER EXPOSURE/INJURY
- P-POPULATION EXPOSURE/INJURY
- R-DAMAGE TO FLORA
- K-DAMAGE TO FLAUNA
- H-CONTAMINATION OF FOOD CHAIN
- T-UNSTABLE CONTAINMENT OF WASTES
- M-DAMAGE TO OFFSITE PROPERTY -CONTAMINATION OF SEWERS, STORM DI
- E-ILLEGAL/UNAUTHORIZED DUMPING
- O-OTHER KNOWN, POTENTIAL, OR ALLEGI
- * X-MULTIPLE

0. RANKING
- N-NATIONAL PRIORITY LIST
- M-MITRE RANKING
- O-OTHER
- * X-MULTIPLE

PRELIMINARY INSPECTION CHECKLIST (revised 6/30/84)

Check each item if complete - leave blank if incomplete or inadequate data provided.

Site Name and Location

- ✓ Site Name
- ✓ Specific Location (include street number)
- ✓ City, State, Zip Code
- ✓ County, County Code
- ✓ Congressional District
- ✓ Coordinates
- ✓ Directions to site

Responsible Parties

- ✓ Owner
- ✓ Owner address and telephone
- ✓ Operator (indicate if same as owner)
- ✓ Operator address and telephone
- ✓ Type of ownership
- ✓ Owner/Operator notification
- ✓ Person to Contact (phone)

Characterization of Potential Hazard

- ✓ Site Inspection
- ✓ Site Status
- ✓ Substances on site (Known or alleged)
- ✓ Potential Hazard Description (include relative population and water body in vicinity)
- ✓ Priority Assessment
- ✓ Years of Operation
- Other (Describe below)

Description of Hazardous Conditions, etc.

- Surface Water Name (river, lake, stream)
- Potential Population (town, population)
- Pertinent Hydrogeologic Information (aquifer recharge area, significant geologic structures in vicinity)
- Type of Hazardous Waste
- Amount of Hazardous Waste
- Concentration of Hazardous Substances
- Measure of concentration
- Source and Date of Reports Cited

Copy to w/ Jerry

Westinghouse
Electric Corporation

Electronics, Measurement
and Control Divisions

Box 9533
Raleigh North Carolina 27611
(919) 834 5271

NCD003195963

May 24, 1984

RECEIVED
MAY 25 1984
SOLID & HAZARDOUS WASTE MANAGEMENT BRANCH

Mr. J. Rhodes
Solid and Hazardous Waste Management Branch
Environmental Health Section
Department of Human Resources
P.O. Box 2091
Raleigh, NC 27602

Dear Mr. Rhodes:

The Westinghouse Electric Corporation meter plant located in Raleigh, North Carolina, would like to withdraw its Part A application and terminate its interim status and therefore does not intend to submit a Part B application. The plant will no longer be a treatment, storage, or disposal facility for the following reasons:

Not a part of formal closure

1. Westinghouse intends to close the drum storage area as a storage facility. The drum storage process indicated on Form 3 by the process code S01 will no longer extend beyond 90 days once closure is complete. We have arranged for drums of hazardous waste to be shipped off-site within the 90-day period allowed after generation. A closure plan is attached for the closure of this drum storage area.

2. The tank storage facility as indicated by the process code T01 (line 4) is no longer used to store hazardous waste. The facility was used to store wastewater treatment sludge which had been solidified. The plant is no longer using this solidification method and therefore will no longer need the tanks. A closure plan is attached for the closure of these tanks and mixer used in the solidification process.

3. The tank treatment process indicated on Form 3 by the process code T01 (line 3) and S02 comprise an industrial wastewater treatment facility as defined in

This covers all requested activities for Part B. However an adjacent surface impoundment is not closed & would likely be considered active.

40 CFR 260.10 and incorporated in 10 NCAC 10 F.0002 is not subject to the standards of 40 CFR 265, 40 CFR 264, or to the permit requirements of 40 CFR 122 or the corresponding North Carolina regulations.

Once the above facilities described in Item 1 and Item 2 are closed, the Raleigh plant will be only a generator of hazardous waste. The facility will comply with the generator's requirements as indicated in 40 CFR 262 and 10 NCAC 10 F.0030.

As required by 10 NCAC 10 F.0033(g), the Raleigh plant is submitting its closure plan for the drum storage area and the storage tanks for approval by the State of North Carolina. Please give us your comments and/or approval by June 8, 1984, so we may begin closure at the facilities.

News-Notice

Upon completion of closure, we will submit an Application for Change in Classification under RCRA.

If you have any questions, please contact David Daugherty on 919-834-5271.

Sincerely,

John S. Robinson

John S. Robinson
Manager, Meter Department and Raleigh Plant

cc: Mr. O. W. Strickland
Solid and Hazardous Waste Management Branch
Environmental Health Section
Department of Human Resources
P.O. Box 2091
Raleigh, NC 27602

00560

Date: May 16, 1984

STORAGE AREAS

CLOSURE PLAN

WESTINGHOUSE ELECTRIC CORPORATION

RALEIGH, NORTH CAROLINA

00560

Section		Page
1.0	General Information	1
2.0	Closure Performance Standard	1
3.0	Maximum Waste Inventory	2
4.0	Closure Activities	
4.1	Containers	3
4.2	Tanks	3
4.3	Mixer	5
5.0	Cost Estimate	5
6.0	Notification of Closure	7
7.0	Schedule	7

INTRODUCTION TO CLOSURE

1.0 General Information

This Section is submitted in accordance with the requirements of 10 NCAC 10 F.0032(f) and 40 CFR 265.112. This plan identifies all steps that will be necessary to completely close the storage facility. A post-closure plan is not required because this is not a disposal facility.

2.0 Closure Performance Standard [40 CFR 265.111]

This closure plan is designed to satisfy closure performance standards and ensure that the facility will not require further maintenance and controls after closure. It attempts to minimize or eliminate threats to human health and the environment and to avoid escapes of hazardous waste, hazardous waste constituents, leachate, contaminated rainfall, or waste decomposition products into the ground or surface waters or into the atmosphere from the drum and tank storage areas.

3.0 Maximum Waste Inventory to be Removed

Container Storage Area — 8800 gallons = 160,55 gal

Wastes consist of:

relative amounts ?

- wastewater treatment sludges (F006) — sep. area
- plating bath sludges (F008)
- stripping and cleaning bath solutions (F009)
- paint wastes
- halogenated solvent still bottoms (F001)
- xylene (F003)
- acetone (F003)
- methyl ethyl ketone (F005)
- zinc phosphate sludge (D002, D006, D007)
- nickel plating sludge (D002)

? are sludges from separate systems yes

Tanks

1

? size

Two concrete tanks	Out of service and empty
Mixer	Out of service and empty

? surface impoundment

? superfund

4.1 Closure of Container Storage Area

what was past schedule? Some may, 85

All the drum containers which have been stored over 90 days in this facility's container storage area will be removed off-site to the SCA Services, Inc. landfill in Pinewood, SC. The drums will be inspected for proper packaging and labeling. The drums will be moved utilizing a forklift. If a container is damaged, starts leaking, or for any reason appears suspicious during closure activities, the drum will be placed in an over-pack or the contents of the drum transferred to new drums.

? check

Any residue in the container storage area will be removed into 55-gallon drums. The material will be sent for disposal at SCA Services, Inc. or Chemical Waste Management via Ashland Chemical Company.

Less than 100 gallons residue are anticipated to result from the container storage area cleanup.

4.2 Closure of Hazardous Waste Tanks

are pretreated or metered

Check this

Wastewaters and solutions from electroplating operations are treated in an on-site wastewater treatment system. Previously, the sludge from this treatment was deposited in a mixing tank for solidification and then the solidified material was collected in two tanks for further solidification. This solidification system is no longer used. Therefore, this closure

plan is being submitted to address the closure of a mixer and the two holding tanks.

Tanks

All liquid in the tanks has been pumped from the tanks to the Westinghouse on-site wastewater treatment facility for treatment. The remaining sludge was shoveled into one 55-gallon drum, along with absorbent material for solidification. Associated piping will be decontaminated and removed. The drums of collected sludge will be sent to SCA Services, Inc. for disposal.

Following waste removal, the tanks will be thoroughly rinsed with a water wash. The contaminated wash waters will be collected for treatment in the Westinghouse wastewater treatment system. Approximately 300 gallons of contaminated wash waters are anticipated to be generated during the cleaning of the tanks.

One floor sample will be taken from each concrete tank and two soil samples from the flat area in front of the northern tank will be taken. These samples will be tested for EP toxicity. If the samples are not EP toxic, no further cleanup will be required. If the tank samples are EP toxic, the tanks will be

removed. If the soil samples are EP ~~toxic~~ extractable, plans for further action will be made.

4.3 Mixer

The only remaining waste in the mixer is a hardened residue. As much residue as possible will be removed from the mixer and placed into 55-gallon drums. If sampling indicates that the mixer residue is not EP ~~toxic~~ extractable, the mixer will be cut up and sold as scrap.

If sampling indicates EP toxicity and further decontamination is not possible, the equipment will be classified as hazardous and disposed of in accordance with the hazardous waste regulations.

check for present condition

Any visible spills or leakage surrounding the mixer will be shoveled into 55-gallon drums and sent to SCA Services, Inc.

5.0 Closure Cost Estimate

The closure cost information presented is submitted in accordance with the requirements of 40 CFR 265.142 and 10 NCAC 10 F.0033(g).

An estimated $14,690.00 will be needed to close the hazardous waste portions described in this closure plan. The closure costs are presented by activity. Activities include removal of waste inventory, decontamination, disposal of waste residue, and sampling.

The closure activities and costs are as follows:

1. Removal of final waste inventory

a.	Disposal costs: 160 drums at $40.00/drum	$ 6400.00
b.	Plant labor (8 hours at $13.00/hour)	$ 104.00
c.	Hauling	$ 1600.00
	Subtotal	$ 8104.00

2. Decontamination of tanks

a.	Removal of accumulated wastes	
	- One drum at $33/drum	$ 33.00
	- Hauling and drum cost	$ 32.00
b.	Labor (20 hours at $13.00/hour)	$ 260.00
c.	Sampling for EP toxicity	$ 1000.00
d.	Grading	$ 500.00
	Subtotal	$ 1825.00
e.	Additional disposal if tanks are hazardous	$10000.00

3. Decontamination of mixer

a.	Sampling for EP toxicity	$ 500.00
b.	Disposal cost: 5 drums at $33.00/drum	$ 165.00
c.	Hauling and drum cost	$ 160.00
d.	Labor (40 hours at $13.00/hour)	$ 520.00
	Subtotal	$ 1345.00
e.	Additional disposal if mixer is hazardous	$10000.00
	Total Closure Costs if samples are not EP toxic	$11274.00
	Total Closure Costs if samples are EP toxic	$31274.00

6.0 Notification of Closure

Upon completion of the procedure described in Sections 4.1, 4.2, and 4.3, Westinghouse Electric Corporation will notify the North Carolina Department of Human Resources Solids and Hazardous Waste Management Branch and obtain any required certifications. by independent PE (add to cost estimate)

7.0 Schedule

The closure schedule for the container storage areas will be as follows:

5/25/84	-	Notify the North Carolina Division of Health Services of intent to close.
6/11/84*	-	Receive plan approval from North Carolina Division of Health Services and begin closure.
7/6/84	-	Take samples for EP toxicity test.
7/13/84	-	Complete removal of containers from drum storage area.
7/20/84	-	Drum storage area decontamination.
8/10/84	-	Completion of decontamination of mixer and tanks.
8/31/84	-	Complete removal of containers from mixer and tank decontami- nation.
9/7/84	-	Disposal of mixer.
9/14/84	-	Back fill or removal of tanks.
9/21/84	-	Final grading of site.
9/28/84	-	Notification of completion of closure to North Carolina Division of Health Services.

* Dates after 6/11/84 are contingent upon receiving plan approval by 6/11/84.

Newspaper notice required

SAMPLING METHODS

Heavy Metals:

"Methods for Analysis of Water and Wastes," EPA-600/4-79-020, March 1979 (Atomic Adsorption and Digestion).

Cyanide (Free and Total):

Standard Methods, 14th Edition, Pg. 360 for Total and Pg. 376 for Free or Amenable to Chlorination

Waste Solvents and Residues:

Gas Chromatography Method 601, December 3, 1979 Federal Register

Flash Point:

Pensky-Martens Closed Cup Tester and ASTM Std. D-93-79; or Setaflash Closed Cup Tester and ASTM Std. D-3278-78

pH:

"Methods for Analysis of Water and Wastes," EPA 600/4-79-020, March, 1979

EP Toxicity:

Appendix II of Part 261, May 19, 1980 Federal Register.

Notes: Analyses performed by off-site analytical laboratory (Grainger Laboratories, Raleigh, NC).

SAMPLING METHODS

Containerized liquid wastes - "Samplers and Sampling Procedures for Hazardous Waste Streams, EPA 600/2-80-018, January 1980

FREQUENCY OF ANALYTICAL REVIEW

See table. Frequency is required by off-site waste disposal facility.

Waste Identification List

06-Mar-84

Drum I.D.#	Waste Description	Hazard Class	Type of Container	EPA #
A-1	Alkaline Zinc Plating Sludge	Corrosive	Non-lined Drum	D002
A-2	Alk. Tin Plating Sludge	Corrosive	Non-lined Drum	D002
A-3	Acidic Nickel Plating Sludge	Corrosive Toxic	Lined Drum	F006, D002
B-1	Cold Action Cleaner Sludge	Corrosive, Toxic	Non-lined Drum	F009, D002
B-2	Floor Drain Sludge (of Plating Room)	Corrosive, Toxic	Non-lined Drum	F007, F009 D007, D008
B-3	Alkaline Cleaner Sludge	Corrosive, Toxic	Non-lined Drum	F009, D002
B-4	Bright Alloy Sludge	Corrosive, Toxic	NOn-lined Drum	F008, D002
B-5	Tunnel Sludge (from Exhaust System)	Corrosive, Toxic	Non-lined Drum	F007, F009 D006, D007 D008
B-6	Endox Sludge (from Metal Cleaning Operation)	Corrosive, Toxic	Non-lined Drum	F009, D002
C-1	Chlorinated Vapor Degreasing Sludge	Toxic	Non-lined Drum	F001
C-2	Freon degreasing Sludge	Toxic	Non-lined Drum	F001
D-1	Aluminum Deoxidizer Residue (Acidic)	Corrosive, Toxic	Lined Drum	D006, D007 D008, D002
E-1	Halogenated Paint Stripper Sludge (Acidic)	Corrosive, Toxic	Lined Drum	F002 D006, D007 D008
F-1	Alkaline Paint Stripper Waste	Corrosive, Toxic	Non-Lined Drum	D002, D006 D007, D008
G-1	Waste Paints, Inks, Solvents	Flammable Toxic	Non-lined Drum	F003, F005

Drum I.D.#	Waste Description	Hazard Class	Type of Container	EPA #
H-1	Photo-Array Process Waste	Toxic	Non-lined Drum	D006, D010
I-1	Phosphate Conversion Coating Waste (Bonderite Process)	Corrosive, (Acidic) Toxic	Lined Drum	D002, D006 D007
J-1	Metal Etching Process Sludge (Bright Dip, Acidic)	Corrosive, Toxic	Lined Drum	D002, D006 D007
K-1	Scapped Nickel-Cadmium Batteries(Alkaline Electro-lytes)	Toxic	Non-lined Drum	D006
L-1	Waste from Chromate Coating Process (Acidic)	Corrosive, Toxic	Lined Drum	D002, D007
M-1	Cement-Fixed Wastewater Treatment Sludge	Toxic	In-Ground Basin	F006, D006 D007
M-2	Unfixed Wastewater Treatment Filtercake	Toxic	55-gal Drum	F006
N-1	Water-based Acrylic Paint Wast	None		
N-2	Lubricating Oil	None		
N-3	Floor Drain Sludge (Tumbling Room)	None		

TABLE # 1

DRUM ID. CODE	WASTE DESCRIPTION	HAZARD CLASS	EPA #
A-1	Alkaline Zinc Plating Sludge (caustic)	Corrosive	F-008
A-2	Alkaline Tin (Su) Plating Sludge (caustic)	Corrosive	F-008
A-3	Nickel Plating Sludge (acidic)	Corrosive	F-008
B-1	Cold Action Cleaner Sludge (caustic)	Corrosive, Toxic	F-009
B-2	Floor Drain (of Plating Room) Residue (caustic)	Corrosive, Toxic	F-008, F-009, D-007, D-008
B-3	Alkaline Cleaner Sludge (caustic)	Corrosive, Toxic	F-009
B-4	Bright Alloy Sludge (caustic)	Corrosive, Toxic	F-008
B-5	Tunnel Sludge (from exhaust system) (caustic)	Corrosive, Toxic	F-008, F-009, D-006, D-007, D-008
B-6	Endox Sludge (cleaning operation) caustic)	Corrosive, Toxic	F-009
C-1	Chlorinated Vapor Degreasing Sludge	Toxic	F-001
C-2	Freon Degreasing Sludge	Toxic	F-001
D-1	Aluminum Deoxidizer Residue (acidic)	Corrosive, Toxic	D-006, D-007, D-008
E-1	Halogenated Paint Stripper Sludge (acidic)	Corrosive, Toxic	F-017
F-1	Alkaline Paint Stripper Sludge	Corrosive	F-017
G-1	Waste Paints, Inks, Solvents	Flammable	F-003, F-005
H-1	Photo Array Process Waste (contains Cd-Se salt complexes)	Toxic	D-006, D-010
I-1	Phosphating Conversion Coating Sludge (bondenite) (acidic)	Corrosive	D-002
	Metal Etching Process Sludge (acidic) (Bright Dip)	Corrosive	D-002
N-1	Acrylic Water Based Paint Waste	Non-hazardous	
N-2	Lubricating Oil/Water Emulsion	Non-hazardous	
N-3	Tumpling Room Residue	Non-hazardous	

Note: All "A" thru "J" codes require that drums be dated where waste material is first placed in drum. "N" code is for non-hazardous [illegible].

ROBERTSON STAMP & SEAL WORKS
P O Box 11128
709 N Person St
Raleigh 27604
Ev Cross Owner
Coastal Region
Phone: (919)833-1858 Emp. A
3953 *Rubber stamps*
3579 *Embossing seals*
3679 *Engraved signs & plates*

ROCKWELL INTERNATIONAL CORP IE
P O Box 1961
1900 S Saunders St
Raleigh 27602
James Grasso, Gen Mgr
B E Hildreth (Export)
1400 North Lexington Ave
Pittsburgh PA
Coastal Region Established 1965
Phone: (919)832-0525 Emp. G
3494 *Valves globe, angle, gate, ball*
*33 *Castings*
*36 *Valve operators*
*33 *Forgings*

RS E MACHINE & TOOL
Raleigh NC
Southeastern Screen Print
Box 115 Q Rt 8
Umstead Ind Park
Raleigh 27612
James C Bradley Gen Mgr
Coastal Region Established 1970
Phone: (919)781-5040 Emp. A
2761 *Screen printing-all materials*

SANDERFORD SAUSAGE CO
Box 3003
170 Jones Sausage Rd
Raleigh 27602
Stan Thompson, Owner
Coastal Region Established 1910
Phone: (919)772-0133 Emp. A
2013 *Fresh sausage*
2013 *Chitterling loaf*
2013 *Liver pudding loaf*

SCOTCH PLASTICS INC
Box 14066
312 Kennedy St
Raleigh 27610
Norman D Olson Pres
Coastal Region Established 1966
Phone: (919)834-1241 Emp. A
3079 *Custom plastic extrusions*
3079 *Jump ropes*
3564 *Air filter systems*
*28 *Plastic resins*
*26 *Cartons corrugated*
*30 *Pe rope*
*34 *Wire mesh*
*28 *Polyester filter media*

‡**SIEMENS A G**
W Germany OC
Siemens-Allis Switchgear Div IE
P O Box 29503
Plt Loc Hwy 64 E Wendell
Raleigh 27626
R A Hincks Div Gen Mgr
R N Wilson (Export)
3223 Perimeter Center Park
Atlanta GA
Coastal Region Established 1981
Phone: (919)365-6660 Emp. H
3613 *Switchgear for elec utilities*
*36 *Electrical equipment*
*33 *Copper*
*33 *Steel*
*34 *Hardware*

‡**SIRCHIE FINGER PRINT LABORATORIES**
Raleigh NC
Pomer Crown Corporation E
P O Box 30576
115 Triangle Dr Umstead Ind Pk
Raleigh 27622
Ken Pomer Pres
Grace Freeman (Export)
Coastal Region Established 1979
Phone: (919)781-3174 Emp. D
3842 *Police protective helmets*
3079 *Motorcycle helmets*
3842 *Fire helmets*
3842 *Riot shields*
*30 *Plastic injection molded parts*
*31 *Straps*
*30 *Foam*
*22 *Fabric*
*34 *Hardware*

SIRCHIE FINGER PRINT LABORATORIES IE
P O Box 30576
115 Triangle Dr Umstead Ind Pk
Raleigh 27622
John H Carrington
Grace Freeman (Export)
Coastal Region Established 1975
Phone: (919)781-3120 Emp. F
3999 *Finger printing equip*
3662 *Crime detection equip*
3662 *Metal detectors & elec sensors*
3861 *Identification cameras*
*36 *Electronic components*
*33 *Metal*
*28 *Chemical*
*28 *Photographic*

SOUTH STATE IND INC
3220 Northside Dr
Raleigh 27609
Howard E Mosier Mgr
Coastal Region Established 1967
Phone: (919)876-3222 Emp. C
3599 *Machine shop*
*33 *Metals*
*34 *Hardware*

SOUTHEASTERN MACHINE & TOOL CO INC
P O Box 31087
Hwy 70 West Baker Rd
Raleigh 27612
J F Richmond Pres
Coastal Region Established 1969
Phone: (919)782-4804 Emp. F
3599 *Gen mach shop & metal fabrication*
*33 *Steel sheet bar tubing*
*33 *Alum sheet bar-tubing*
*35 *Cutting tools & machines*

SOUTHERN CASE INC
P O Box 28147
2315 Laurelbrook St
Raleigh 27611
Andrew E Dembicks Pres
A E Dembicks (Export)
Coastal Region Established 1974
Phone: (919)821-0877 Emp. F
3079 *Plastic carry cases*
*28 *High density polyethylene*
*26 *Corrugated cartons*
*28 *Plastic pigments dry*
*30 *Plastic molded parts*

SPARKS PRESS E
900 W Morgan Street
Raleigh 27603
Edgar H Sparks Owner
Edgar H Sparks (Export)
Coastal Region Established 1954
Phone: (919)834-8283 Emp. B
275 *Printing*
2741 *Publishing*
*26 *Paper*

‡**SQUARE D COMPANY**
Palatine
Square D Co E
P O Box 27446
Hwy 64 East Knightdale
Raleigh 27611
Don J Beck Plt Mgr
Frank Amodeo (Export)
§ Executive Plaza
Palatine
Coastal Region Established 1972
Phone: (919)266-3671 Emp. H
3622 *Electric controls*
3629 *Magnetic components*
*22 *Material*

‡**STACKPOLE CORP, THE**
St Marys PA
Stackpole Components Co E
P O Box 14466
3400 Yonkers Road
Raleigh 27610
R A Schieber, Pres
Reinhart E Rist (Export)
Coastal Region Established 1969
Phone: (919)828-6201 Emp. H
3676 *Variable resistors volume control*
3643 *Slide and rocker switches*
3643 *Rotary switches*
3643 *Line switches*
3643 *Key sws keyboards*
*30 *Fabricated laminates*
*34 *Copper rivets & contacts*
*26 *Shipping containers*
*30 *Plastic molding compounds*
*33 *Insulated copper wire*

STAINED GLASS ASSOCIATES
P O Box 1531
Main St, Knightdale
Raleigh 27602
R J Wysocki Owner
Robert J Wysocki (Export)
§ P O Box 1531
Raleigh NC
Coastal Region Established 1958
Phone: (919)266-2493 Emp. B
3231 *Church windows & decorative glass*
*32 *Hand blown glass*
*33 *Lead canes*
*28 *Putty glazing quality*
*32 *Rolled glass*
*32 *Sheet glass for protective sheet*

STAY-RIGHT TANK CO INC
P O Box 33097
3109 Gresham Lake Rd
Raleigh 27606
H P Walker Pres
Coastal Region Established 1937
Phone: (919)876-8600 Emp. D
3272 *Precast concrete septic tanks*
3272 *Precast utility vaults & manholes*
*32 *Sand*
*32 *Cement*
*32 *Stone*
*33 *Wire reinforcing*

SUPREME COUNTER TOP CO INC
2865 Club Plaza Rd
Raleigh 27603
W C Spivey Owner
Coastal Region
Phone: (919)772-4753 Emp. B
2431 *Counter top*
*30 *Lamenited plastics*
*24 *Novaply*
*28 *Glue*
*33 *Nails*

SURTRONICS
Box 33458
4001 Beryl Rd
Raleigh 27606
Terry Smith
Coastal Region Established 1966
Phone: (919)834-8027 Emp. D
3471 *Precious metal plating*
3471 *Industrial plating*
*33 *Gold*
*33 *Silver*
*28 *Chemicals*

‡**TEER, NELLO CO**
Durham NC
Teer, Nello Co-Crabtree Quarry
5001 Duraleigh Rd
Raleigh 27612
J R Deen Supt
§ P O Box 1131
Durham NC
Coastal Region Established 1965
Phone: (919)787-0613 Emp. D
3295 *Construction crushed stone*
*32 *Crushed stone*

‡**TELEX CORP, THE**
Tulsa OK
Telex Terminal Communications E
3301 Terminal Dr
Raleigh 27604
H L Eberly Pres
Bill Bayles (Export)
§ 6422 E 41st St
Tulsa OK
Coastal Region Established 1969
Phone: (919)834-5251 Emp. H
3573 *Data terminals*
3573 *Data communications equipment*
*33 *Steel aluminum*
*30 *Plastics*
*36 *Electronic components*

THIS END UP E
P O Box 30153
Westgate Rd
Raleigh 27622
S Robertson & R Ward Owners
Coastal Region Established 1975
Phone: (919)782-5520 Emp. E
2511 *Pine handcrafted furniture*

THOMPSON CABINET SHOP INC
4712 Fayetteville Rd
Raleigh 27603
James T Thompson Owner
Coastal Region Established 1961
Phone: (919)772-3030 Emp. D
2434 *Kitchen cab - bookcases - mantels*
2434 *Bathroom vanities*
*24 *Lumber materials*
*28 *Stains*

TRIANGLE FABRICATORS
2407-C Paula Street
Raleigh 27608
Bobby Severn Pres
Coastal Region Established 1980
Phone: (919)821-0123 Emp. B
3444 *Sheet metal fabricators*
*33 *Sheet metal*

U S FLOOR SYSTEMS INC E
P O Box 18425
Hwy 70 W At Ebenezer Chur
Raleigh 27609
Robert Weil Pres
Micheal M Fells (Export)
Coastal Region Established 1975
Phone: (919)782-0101 Emp. E
3589 *Carpet cleaning equip*
2841 *Carpet cleaning chemicals*
3589 *Carpet cleaning accessories*
*25 *Fiberglass cabinets*
*35 *Vacuum blowers*
*35 *Pumps and motors*
*33 *Castings aluminum*

‡**VISHAY INTERTECHNOLOGY INC**
Malvern PA
Measurement Group Inc
P O Box 27777
Hwy 64 Wendell Nc Plt Loc
Raleigh 27601
Coastal Region Established 1979
Phone: (919)365-3800 Emp. F
3829 *Stress analysis equipment*

WARD TRANSFORMER CO E
P O Box 30009
Mt Hermon Church Rd
Raleigh 27612
R E Ward III Pres
Don Moore (Export)
Coastal Region Established 1965
Phone: (919)787-3553 Emp. F
3612 *Transformers electrical*
3613 *Switchgear electrical*
3499 *Lifting magnets*
*33 *Magnet wire copper*
*33 *Steel strip*

‡**WARNER LAMBERT CO**
Morris Plains NJ
American Optical Co
Box 1470
Raleigh Durham Hwy
Raleigh 27602
M A Shearin Mgr
§ 14 Mechanic St
Southbridge MA
Coastal Region
Phone: (919)787-0151 Emp. B
3851 *Ophthalmic goods*

‡**WATSON SEAFOOD & POULTRY CO INC**
Raleigh NC
Feather Processors Inc I
P O Box 14032
Raleigh 27610
Ebern T Watson Jr
Coastal Region Established 1963
Phone: (919)828-9349 Emp. C
3962 *Washed & dried feathers*
*39 *Raw feathers*

WESTINGHOUSE ELECTRIC CORP E
P O Box 9533
2728 North Blvd
Raleigh 27611
C E Bell Gen Mgr
A R Jenny (Export)
§ Gateway Center
Pittsburgh PA
Coastal Region Established 1954
Phone: (919)834-5271 Emp. I
3545 *Elec measuring & timing devices*
*33 *Copper and copper base alloys*
*36 *Electronics*
*34 *Fabricated parts*
*35 *Equipment and tooling*

W.P. 10/21/83

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

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

October 19, 1983

MEMORANDUM

TO: O. W. Strickland, Head
Solid & Hazardous Waste Management Branch

FROM: LDP Larry D. Perry, Waste Management Specialist
ct Solid & Hazardous Waste Management Branch

SUBJECT: RCRA Deficiency Correction Inspection
Westinghouse Electric Meter & Lvit. Division
U.S. 1 North
Raleigh, N. C. 27603
NCD003195963
Contact: Charlie Yates, Materials Manager

On September 26, 1983, an inspection was made at the Westinghouse facility for deficiency compliance as per your letter of August 14, 1983. On this date, all deficiencies had been corrected. Thus, the Westinghouse facility appears to be in compliance with applicable RCRA regulations.

LDP:ct

RCRA INSPECTION REPORT

1. Westinghouse Electric Meter & Lvit. Division
   U.S. 1 North
   Raleigh, N. C. 27603
   NCD003195963

2. Charlie Yates, Materials Manager

3. W. A. Peoples, Manuf. Engineer
   Tommy Parker, Personnel Administrator
   Larry D. Perry, N. C. Solid & Hazardous Waste Management Branch

4. August 8, 1983

5. No Change

6. No Change

7. The plating waste treatment sludge (F007) produced by Westinghouse is now being treated as a hazardous waste by the facility. The Westinghouse facility has been trying for two years to petition EPA to delist this material since it was being chem-fixed. EPA recently notified Westinghouse that the cyanide levels are still too high (9 ppm found in test vs. 2 ppm allowable cyanide residue). Thus, Westinghouse has withdrawn the petition and will now ship the sludge to SCA in South Carolina for disposal. Waste sludge stored at present in tank and after chem-fixing in waste pile.

   No change in the other facets of the operation.

8. 265.192 - Uncovered tank with little freeboard and no containment devices.
   265.194 - Need evidence that tank is being inspected and level of waste is being monitored.
   265.197 - No closure plan available concerning tank.
   265.253 - Waste pile containment inadequate--no impermeable base, no run-off containment, no protection from precipitation.

9. The reason these discrepancies have been reported for the first time now is that material is in reference to a plating waste sludge that Westinghouse has previously been trying to delist, but with no success; thus, material is now in system and must be treated as a hazardous waste. The facility is planning to install filter presses, etc., to comply.

   The facility was given a compliance date of six weeks or September 9, 1983, to put into effect temporary measures to alleviate problem. This would include covering material piles and tank with plastic, dyking, and disposal of accumulated sludge material. Within six months, the facility will have installed permanent measures including filter presses, proper containers with covers, dykes, etc.

   Westinghouse will keep me informed of progress of deficiency correction.

INTERIM STATUS INSPECTION

1. Facility Information

Westinghouse Electric Meter & Lvit. Division
U.S. 1 North
Raleigh, NC 27603 (Wake County)
EPA I.D. #NCD003195963

2. Facility Contact

Charlie Yates, Manager of Materials

3. Survey Participants

W. A. Peoples, Manufacturing Engineer
Paul Parker, Personnel Administrator
Larry D. Perry, Field Representative, N.C. Solid & Hazardous Waste Mgmt. Branch
Keith Lawson, Chemist, N.C. Solid & Hazardous Waste Mgmt. Branch

4. Date of Inspection

August 5, 1981

5. Applicable Regulations

40 CFR Parts 262 and 265, FR May 19, 1981 and amendments

6. Purpose of Survey

RCRA compliance inspection was conducted at the Westinghouse facility by the N. C. Solid and Hazardous Waste Management Branch. The scope of the inspection was comprehensive including a record review and site survey. Regulatory requirements covered those contained in 40 CFR Parts 262 and 265 under generator standards, general facility standards, storage facilities, treatment standards (recycling, recovery, solvent recovery, etc.), and tanks and containers.

7. Facility Description

The Westinghouse facility in Raleigh, N.C., is located on a 100-acre site off U.S. 1 North just north of the 'belt-line'. The company manufactures all types of electrical metering devices.

Prior to RCRA, Westinghouse had two existing environmental permits. Included were an SPCC plan and an N. C. Department of Natural and Economic Resources air permit.

The Part A application filed by Westinghouse listed the company as a generator of electroplating waste (F007, F006, F008, F009), paint residues (F017), halogenated solvents (F001) and non-halogenated solvents (F003, F005), Cadmium (D006), Chromium (D007), and lead (D008) were listed as constituents of the plating waste. Also waste oil is generated.

The plating waste is treated by an on-site treatment plant and the treatment water is released to Raleigh City sewer (NPDES permitted). The resulting sludge from this treatment process is "chem-fixed" by addition of cement, is allowed to "set-up" and then disposed of. No disposal of this chem-fixed material has been performed since November 19, 1980. Westinghouse is in the process of trying to delist this technique in order that the material can be disposed of via local sanitary landfills.

The solvents are reclaimed by the Westinghouse facility. The waste oils are stored in 55-gallon drums and at some point will be disposed of. No shipment of any waste has been done since RCRA became effective.

8. Documentation of Site Deficiencies/Recommendations

Westinghouse was deficient in the areas cited below:

1. (265.16) - Personnel Training Records: written description of hazardous waste handling personnels' records deficient.

2. (265.17(a)) - Waste container leaking: a 55-gallon drum of waste oil observed leaking - to be corrected immediately.

3. (265.32(c)) - Required Equipment: oil storage area to be made spill-proof by erection of berm around storage area.

4. (265.53) - Copies of contingency plan needs to be sent to appropriate agencies (fire station, police, etc.)

5. (265.171) - same as above (265.17(a)).

9. Compliance Schedule

A compliance schedule was agreed upon in that deficiencies must be corrected within 90 days of date of notification letter. Mr. Larry Perry will revisit the Westinghouse site to review the corrections at this deadline or sooner if notified by letter.

October 27, 1981

United States Environmental Protection Agency
Region IV
345 Courtland Street
Atlanta, Georgia 30365

John M. Harvanek III

Hazardous Waste Permit Application, EPA Form 3510-3, for the Meter and LVIT Division of Westinghouse Electric Corporation has been revised to rectify misuse of unit-of-measure codes in Sections III and IV. In accordance with instructions from your office, these changes have been made on the originally submitted forms which are herewith returned to you.

T. J. Daley, Manager
Technical Services
TJD/rsk

Attachments (3)

Please print or type in the unshaded areas only (fill-in areas are spaced for elite type, i.e., 12 characters/inch).

Form Approved OMB No. 158-R0175

FORM 1 GENERAL

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER

F N C D 0 0 3 1 9 5 9 6 3 - D

LABEL ITEMS

I. EPA I.D. NUMBER

III. FACILITY NAME

V. FACILITY MAILING ADDRESS

VI. FACILITY LOCATION

PLEASE PLACE LABEL IN THIS SPACE

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent *(the area to the left of the label space lists the information that should appear)*, please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI *(except VI-B which must be completed regardless)*. Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

II. POLLUTANT CHARACTERISTICS

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

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

III. NAME OF FACILITY

1 SKIP Westinghouse Electric Corporation - Meter & LVIT Division

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*	B. PHONE *(area code & no.)*
2 Daley, Thomas - Manager of Technical Services	919 834 5271

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX

3 P. O. Box 9533

B. CITY OR TOWN	C. STATE	D. ZIP CODE
4 Raleigh	NC	27611

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER

5 2728 North Boulevard

B. COUNTY NAME

Wake

C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE *(if known)*
6 Raleigh	NC	27604	

CONTINUED FROM THE FRONT

VII. SIC CODES *(4-digit, in order of priority)*

A. FIRST	B. SECOND
3825 *(specify)* Instrument for Measuring & Testing of Electricity & Electrical	*(specify)*
C. THIRD	**D. FOURTH**
(specify)	*(specify)*

VIII. OPERATOR INFORMATION

A. NAME: Westinghouse Electric Corporation

B. Is the name listed in Item VIII-A also the owner? ☒ YES ☐ NO

C. STATUS OF OPERATOR *(Enter the appropriate letter into the answer box: if "Other", specify.)*
F = FEDERAL
S = STATE
P = PRIVATE
M = PUBLIC *(other than federal or state)*
O = OTHER *(specify)*

Answer: P *(specify)*

D. PHONE *(area code & no.)*: A 919 834 5271

E. STREET OR P.O. BOX: P. O. Box 9533

F. CITY OR TOWN: Raleigh

G. STATE: NC

H. ZIP CODE: 27611

IX. INDIAN LAND
Is the facility located on Indian lands? ☐ YES ☒ NO

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES *(Discharges to Surface Water)*: N/A	**D. PSD** *(Air Emissions from Proposed Sources)*: N/A
B. UIC *(Underground Injection of Fluids)*: N/A	**E. OTHER** *(specify)*: 3637 *(specify)* N.C. Permit-Air Pollution Abatement Facilities and/or Emission Sources
C. RCRA *(Hazardous Wastes)*: N/A	**E. OTHER** *(specify)*: *(specify)*

XI. MAP

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

XII. NATURE OF BUSINESS *(provide a brief description)*

Manufacturer of electric metering equipment

XIII. CERTIFICATION *(see instructions)*

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

A. NAME & OFFICIAL TITLE *(type or print)*	B. SIGNATURE	C. DATE SIGNED
A. L. Bethel, Executive Vice President Transmission & Distribution	X	

COMMENTS FOR OFFICIAL USE ONLY

C

Please print or type in the unshaded areas (fill-in areas are spaced for elite type, i.e., 12 characters/inch).

Form Approved OMB No. 158-S80004

FORM 3 RCRA

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE PERMIT APPLICATION

Consolidated Permits Program

(This information is required under Section 3005 of RCRA.)

I. EPA I.D. NUMBER

S												T/A	C
F	N	C	D	0	0	3	1	9	5	9	6	3	1

FOR OFFICIAL USE ONLY

APPLICATION APPROVED	DATE RECEIVED (yr., mo., & day)	COMMENTS
23	24 - 29	

II. FIRST OR REVISED APPLICATION

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

A. FIRST APPLICATION *(place an "X" below and provide the appropriate date)*

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

C 8 — YR. 5 3 — MO. 1 2 — DAY 1 4

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

[ ] 2. NEW FACILITY *(Complete item below.)*

YR. — MO. — DAY

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

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

[ ] 1. FACILITY HAS INTERIM STATUS

[ ] 2. FACILITY HAS A RCRA PERMIT

III. PROCESSES – CODES AND DESIGN CAPACITIES

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

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

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

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:		
CONTAINER *(barrel, drum, etc.)*	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
Disposal:		
INJECTION WELL	D79	GALLONS OR LITERS
LANDFILL	D80	ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER
LAND APPLICATION	D81	ACRES OR HECTARES
OCEAN DISPOSAL	D82	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	D83	GALLONS OR LITERS

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Treatment:		
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR
OTHER *(Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)*	T04	GALLONS PER DAY OR LITERS PER DAY

UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G	LITERS PER DAY	V	ACRE-FEET	A
LITERS	L	TONS PER HOUR	D	HECTARE-METER	F
CUBIC YARDS	Y	METRIC TONS PER HOUR	W	ACRES	B
CUBIC METERS	C	GALLONS PER HOUR	E	HECTARES	Q
GALLONS PER DAY	U	LITERS PER HOUR	H		

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

S		T/A	C
C	DUP		1

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
X-1	S 0 2	600	G		5				
X-2	T 0 3	20	E		6				
1	S 0 1	16,500	G		7				
2	S 0 2	31,600	G		8				
3	T 0 1	121,000	U		9				
4	T 0 1	550	U		10				

Continued from the front.

III. PROCESSES *(continued)*

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES *(code "T04")*. FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

IV. DESCRIPTION OF HAZARDOUS WASTES

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

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

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

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

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

D. **PROCESSES**

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

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

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

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

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

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
X-1	K054	900	P	T03 D80	
X-2	D002	400	P	T03 D80	
X-3	D001	100	P	T03 D80	
X-4	D002				included with above

 CONTINUE ON PAGE 3

Continued from page 2.
NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

Form Approved OMB No. 158-S80004

EPA I.D. NUMBER (enter from page 1)	FOR OFFICIAL USE ONLY
W N C D 0 0 3 1 9 5 9 6 3 T/A C 1	W DUP T/A C 2 DUP

IV. DESCRIPTION OF HAZARDOUS WASTES (continued)

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	F007	90-160	T	S 02 T 01	CN- bath solutions
2	F006	225-300	T	S 02 T 01	electro plating wastewater treatment sludge
3	F008	5400-8700	P	S 01	plating bath sludge
4	F009	8500-11000	P	S 01	spent stripping/cleaning solution
5	F017	1800-2300	P	S 01	paint
6	F001	13000-20000	P	S 01	1,1,1 trichloroethane
7	D006	6500-11000	P	S 01	Cd
8	D007	Included w/ above		S 01	Cr
9	D008	Included w/ above		S 01	Pb
10	F003	2700-4600	P	S 01	non-halogenated solvents x, acetone
11	F005	Included W/ above		S 01	" " " toluene
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					

Continued from the front.

IV. DESCRIPTION OF HAZARDOUS WASTES *(continued)*

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 3.

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

F N C D 0 0 3 1 9 5 9 6 3 5 6

V. FACILITY DRAWING

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

VI. PHOTOGRAPHS

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

VII. FACILITY GEOGRAPHIC LOCATION

LATITUDE *(degrees, minutes, & seconds)*	LONGITUDE *(degrees, minutes, & seconds)*
3 5 4 9 3 0	7 8 3 6 3 0

VIII. FACILITY OWNER

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

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

1. NAME OF FACILITY'S LEGAL OWNER	2. PHONE NO. *(area code & no.)*
E Westinghouse Electric Corporation	4 1 2 - 2 5 5 - 3 6 1 6

3. STREET OR P.O. BOX	4. CITY OR TOWN	5. ST.	6. ZIP CODE
F Gateway Center - Stanwix Street	G Pittsburgh	P A	1 5 2 2 2

IX. OWNER CERTIFICATION

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

A. NAME *(print or type)*	B. SIGNATURE	C. DATE SIGNED
A. L. Bethel, Executive Vice President Transmission & Distribution	x A L Bethel	11/26/80

X. OPERATOR CERTIFICATION

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

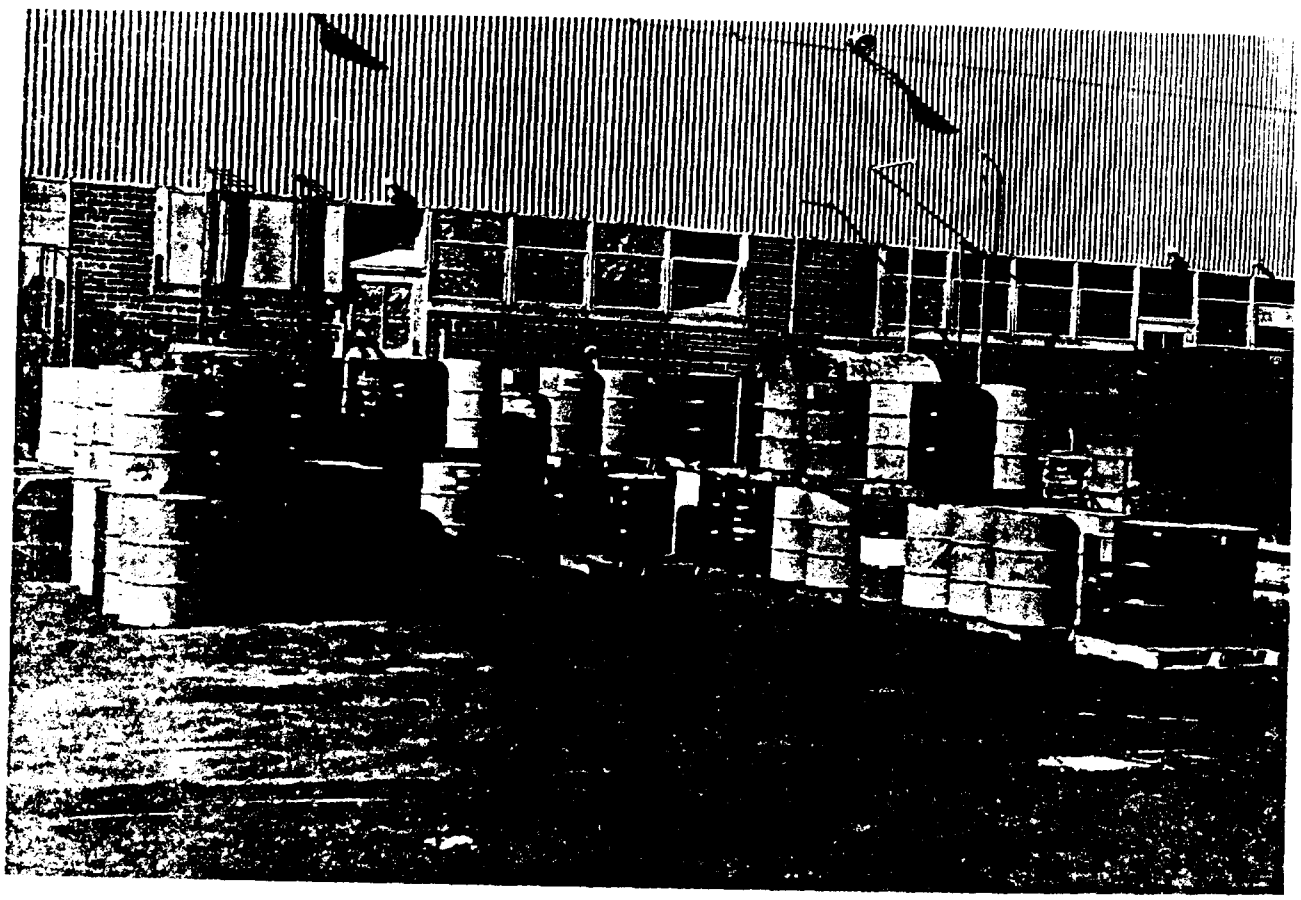
A. NAME *(print or type)*	B. SIGNATURE	C. DATE SIGNED
C. E. Bell	CE Bell	11/7/80

 CONTINUE ON PAGE 5

POOR LEGIBILITY

PORTIONS OF THIS DOCUMENT MAY BE UNREADABLE, DUE TO THE QUALITY OF THE ORIGINAL

File Photos



2600 Bull Street, Columbia, SC 29201
Phone: (803) 758-5681

A. Name	I.D. Code	Address	Phone Number (area code & number)	Date Shipped or Accepted
(1) Generator Westinghouse Elec Corp	NCD003195963	P O Box 9533 Raleigh N C 27611	(919) 834-5271	1982 November 18 (year month day)
(2) Transporter No. 1 Willms Trucking (15)	SCD073709297	P O Box 70427 Charleston Hgts S C 29405	(803) 747-0974	1982 November 18 (year month day)
Transporter No. 2				/ / (year month day)
(3) TSDF SCA Chemical Svc Inc	SCD070375985	Route 1 Box 255 Pinewood S C 28125	(803) 452-5003	1982 November 18 (year month day)

B.

(1) Generator Item Count: Number	(1) Generator Item Count: Container Type	(2) DOT Proper Shipping Name/Hazard Class/ DOT Identification Number	(3) Total Quantity	(4) Weight (pounds)	(5) Waste Code	(6) TSDF Item Check: Number	(6) TSDF Item Check: Container Type	(7) Quantity by Weight (pounds)
1	Dump Trailer	Hazard Waste, Solid, N.O.S., ORME NA9189	24 Yards	73000 Gross 44000 Net	NCD003195963-F006 SCA# 156-1102	1	dump	43,510
					Total Food =			325,840 #

C. Emergency Response Information:
In event of an emergency, phone the Generator at:
(919)834-5271 Westinghouse Elec Corp
Raleigh N C 27604
In event of a spill in South Carolina call the Department at (803) 758-5531

D. Special Handling Instructions: In case of emergency call: SCA Chemical Svc Inc (803)452-5003
Chemtrie (800)424-9300
Coast Guard Response (800)424-8802

E. Comments:
SCA Code# 156-1102
Work Order # 19313

F. This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to all applicable regulations of the U.S. DOT, U.S. EPA, the S.C. PSC and the S.C. DHEC.

Signature: Henry V. Skinner Jr.
Name and Title: Henry V. Skinner, Jr., Manager, Traffic and Shipping
Date: November 18, 1982

G. I hereby certify that I am an authorized representative of the transporter and that the waste(s) and quantity described in this Manifest have been accepted by us for ultimate delivery to the TSDF identified above.

Transporter No. 1: Signature: John Sefars — Name: Willms Trucking — Date: 11-18-82

Transporter No. 2: Signature: ____ Name: ____ Date: ____

H. I hereby certify that I am an authorized representative of the TSDF identified above and that the waste(s) and quantity in this Manifest have been accepted by me for treatment, storage, and/or disposal.

Signature: Hope Barwick
Name and Title: SCA Services, Technician
Date: 11-18-82

DHEC 1988 (3/80)

Instructions for completing this Form on reverse side.

Wake

Westinghouse Electric Corporation **Power Systems**

Meter Division

Box 9533
Raleigh North Carolina 27603
(919) 834 5271

March 1, 1976

RECEIVED
MAR 2 1976
SOLID WASTE VECTOR CONTROL

State of North Carolina
Department of Human Resources
P. O. Box 2091
Raleigh, NC 27602

Attention: Mr. O. W. Strickland, Supervisor
Solid Waste Management Unit
Solid Waste and Vector Control Branch
Sanitary Engineering Section

Dear Mr. Strickland:

I am enclosing Mr. Grainger's analysis of our Neutralizing Plant sludge. This is the quantity I referred to in my letter of December 22, 1975 as approximating sixty (60) barrels a month.

We have determined that our sludge is about 13% solids. Accordingly, we are investigating the possibility of using some method to increase our solids percentage thus decreasing our volume. The remainder of the sludge is water. In the meantime, we could allow these barrels to settle while stacked on our property and syphon off the water before removing them to the landfill if you would approve this procedure.

We are still trying to arrive at an analysis of the remaining barrels of miscellaneous materials referred to in my letter of December 22, 1975 as approximating ten (10) barrels a month.

Sincerely,

Howard J. Matthews

Howard J. Matthews
Works Engineer

hg

Enclosure

GRAINGER LABORATORIES
INCORPORATED
ANALYTICAL AND CONSULTING CHEMISTS

709 West Johnson Street • Raleigh, North Carolina 27605

ANALYTICAL LABORATORY
Pollution Analysis
Construction Materials
Identification of Unknowns
Agriculture
Fuels
Textiles
Chemicals

C. F. GRAINGER
(919) 828-3360

CONSULTATION
Chemical [redacted]
Pollution Abatement
Process Development
Quality Control
Methods Development
Special Investigation

RECEIVED 1976 SOLID WASTE-VECTOR CONTROL

February 26, 1976

Mr. Howard Mathews
Westinghouse Electric Corp.
Meter Division
P.O. Box 9533
Raleigh, N. C. 27603

Subj3ct: Analysis of waste treatment plant sludge sample submitted 2/17/76. P.O. #48-S68799

Results

Iron as Fe_2O_3, %	1.59
Copper as CuO, %	0.17
Manganese as MNO_2	0.010
Chromium as Cr_2O_3	1.00
Zinc as ZnO, %	0.0096
Nickel as NiO, %	0.0071
Cadnium as CdO, %	0.0193
Tin as SnO_2,%	0.560
Aluminum as Al_2O_3, %	0.095
Water @ 1050°C	92.25
Organic (Loss on ignition @ 750°C) %	3.14

Metals are reported as oxides but are probably present as hydroxides at 105°C.

C. F. Grainger
C. F. Grainger

CFG:fg

Westinghouse Electric Corporation Power Systems

Meter Division

Box 9533
Raleigh North Carolina 27603
(919) 834 5271

December 22, 1975

Subject: Industrial Waste

RECEIVED
FEB 2 1976
SOLID WASTE-VECTOR CONTROL

N. C. Dept. of Health
Division of Health Services
P. O. Box 2091
Raleigh, N. C.

Attention: Mr. O. W. Strickland

You recently requested some information on the type of waste that we are placing in the Knightdale, N. C. landfill. I believe I can best identify this waste by dividing it up into two general categories.

Quantities of approximately ten barrels (55 gallons per barrel) per month:

Some of this material is metal chips and residues from vapor degreasing operations. There are also precipitated pigments from painting operations. There are precipitates from plating tanks such as tin plating, phosphatizing and Endox cleaners. Last, there is also a small quantity of polymerized resins.

Quantities of approximately sixty barrels (55 gallons per barrel) per month:

This material is the sludge from our neutralizing plant. I am enclosing a letter from our architects which indicates that these metals will remain insoluble.

If you have any further questions, please advise.

Yours truly,

Howard J. Matthews

Howard J. Matthews
Works Engineer

HJM:rns

1-JZW-535

AQUATECHNICS
From : Oak Brook, IL
WIN : 537-4022
Date : December 16, 1975
Subject: Meter Division
Waste Treatment Facilities
Our File No. MDR03

RECEIVED
FEB 9 1976
SOLID WASTE-VECTOR CONTROL

To : Mr. H. J. Matthews
Westinghouse Electric Corporation
Meter Division
Box 9533
Raleigh, NC 27600

Dear Howard:

As we discussed, the sludge produced in the waste treatment plant is comprised mainly of hydroxides of chrome and zinc, together with small amounts of nickel and miscellaneous heavy metals. As you are operating the treatment process at a pH of approximately 8.5, we feel that these heavy metals will remain insoluble in the slugde.

Additionally, we feel that dewatering the sludge to 40% solids by weight, as you indicated you are achieving, is extremely good for this type of sludge.

If you require any further information, please contact us.

Very truly yours,

Westinghouse Electric Corporation
AQUATECHNICS

Joel

Joel Z. Wolfe
Project Manager

JZW/naj
cc: Mr. B. A. Kerns

FORM 3504W