

915066

New York State Department of Environmental Conservation
Division of Hazardous Waste Remediation
Bureau of Hazardous Site Control
Additions/Change to Registry Summary of Approvals

Site Name Westinghouse Electric Corp. DEC I.D. Number 915066
Current Classification 2a

Activity Add as Class Reclassify to 2 Delist Category Modify

Approvals.

Regional Hazardous Waste Engineer Yes No

NYSDOH Yes No

DEE Yes No

BHSC: a. Investigation Section Yes No

b. Site Control Section Paul Manning Date 8/9/91

c. Director [Signature] Date _____

DHWR Assistant Director Charles W. Gaddis Date _____

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NEW YORK STATE DEPARTMENTS OF ENVIRONMENTAL CONSERVATION AND HEALTH
INACTIVE HAZARDOUS WASTE DISPOSAL SITE PRIORITY RANKING WORKSHEET

SITE # 915066 SITE NAME WESTINGHOUSE ELECTRICAL CORPORATION

- ° **Priority I** - Top priority sites; supersede all others. Priority I can be assigned if any of the following criteria is met:
 - a) A sole source or primary aquifer, or a public or private water supply is being contaminated or threatened, or
 - b) Human exposure to contaminants has been identified which represents a Significant health risk as determined by DOH, or
 - c) There is a bioaccumulation of site contaminants in flora or fauna which results in a health advisory, or
 - d) Site contaminants are at levels that are acutely toxic to fish or wildlife or have caused documented fish or wildlife mortality, or
 - e) An expedient response could measurably reduce the threat to health or the environment, reduce the scope of a corrective action, or reduce potential remedial costs.

- ° **Priority II** - Important sites. Priority II can be assigned if any of the following criteria is met:
 - a) A Class AA or a Class A surface water body or a principal aquifer is being contaminated or threatened; however, no existing water supply has been contaminated, or
 - b) There is a bioaccumulation of site contaminants in flora or fauna which results in advisory or actionable levels but below levels necessitating a health advisory, or
 - c) Site contaminants are at levels chronically toxic to fish/wildlife, or
 - d) Endangered, threatened or rare species, significant habitats, designated coastal zone areas or regulated wetlands are being impacted by releases from the site, or
 - e) The site is identified by the International Joint Commission (IJC) as a component in a Remedial Action Plan (RAP), or
 - f) The site is within a State Economic Development Zone or is targeted for local government supported development and the developer has expressed a willingness to enter into a consent order with DEC to finance investigation and remediation.

- ° **Priority III** - General Site Category. Priority III will be assigned unless one or more of the site prioritization criteria, specified above, apply to a site. When resources become available, after remedial needs for Priority I and II sites have been accommodated, remediation of sites under this category can be considered.

COMMENT _____

Filled out by (Name): Mark P. Matunas Date: 7/12/91

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
 DIVISION OF SOLID AND HAZARDOUS WASTE
 INACTIVE HAZARDOUS WASTE DISPOSAL REPORT

CLASSIFICATION CODE: 2 REGION: _____ SITE CODE: _____
 EPA ID: _____
 NAME OF SITE: _____
 STREET ADDRESS: _____
 TOWN/CITY: _____ COUNTY: _____ ZIP: _____

SITE TYPE: Open Dump- Structure- Lagoon- Landfill- Treatment Pond-
 ESTIMATED SIZE: _____ Acres

SITE OWNER/OPERATOR INFORMATION:
Current Owner: Niagara Frontier Transportation Authority
 Current Owner Address: 181 Ellcott Street
 Buffalo NY 14203
 CURRENT OWNER NAME: Erie County Industrial Development Agency
 CURRENT OWNER ADDRESS: 424 Main Street Suite 300 Buffalo NY 14202
 OWNER(S) DURING USE: Westinghouse Electric Corp, Curtis-Wright Corp
 OPERATOR DURING USE: same as above
 OPERATOR ADDRESS: 4457 Genesee Street Cheektowage NY 14225
 PERIOD ASSOCIATED WITH HAZARDOUS WASTE: From _____ To _____

SITE DESCRIPTION:

The existing facility was constructed in 1940 for aircraft production by the Curtis-Wright Corporation. In 1946, the site was sold to Westinghouse Electric Corporation where they manufactured AC and DC industrial motor controls; electric motors and generators; metal machining, fabrication, plating and finishing; etc. until 1984. Although Westinghouse stated that on-site disposal did not occur, reference is made in a 1955 memorandum to an unknown, on-site disposal area for cyanide waste from a heating room. Through aerial photographs, it was determined that disposal took place at the northern end of the site.

In June 1980, this site was listed in the Registry as "suspected" of disposing cyanide salts on-site at the northern end of the site. A Phase I Investigation, completed in January 1986, did not have enough information to classify the site and recommended additional work be done. Based upon interviews with former Westinghouse employees and site visits, the study area for a preliminary site assessment (PSA) to be performed on this property was broadened to cover the whole site. The PSA was completed in 1991 with analytical data showing the following contravened groundwater parameters and values:
 tetrachloroethene - 160 ppb (5 ppb); trichloroethene - 58,000 ppb (5 ppb); 1,2-dichloroethene - 15,000 ppb (5 ppb); vinyl chloride - 2,500 ppb (2 ppb); 1,1,1-trichloroethane - 1,400 ppb (5 ppb).

HAZARDOUS WASTE DISPOSED: TYPE	Confirmed- <input checked="" type="checkbox"/>	Suspected- QUANTITY (units)
tetrachloroethene		unknown
trichloroethene		unknown
1,1,1-Trichloroethane		unknown

SITE CODE: .

ANALYTICAL DATA AVAILABLE:

Air- Surface Water- Groundwater- ~~X~~Soil- ~~X~~Sediment- ~~X~~None-

CONTRAVENTION OF STANDARDS:

Groundwater- ~~X~~ Drinking Water- Surface Water- ~~X~~ Air-

LEGAL ACTION:

TYPE...: State- Federal-
STATUS: In Progress- Completed-

REMEDIAL ACTION:

Proposed- Under design- In Progress- Completed-
NATURE OF ACTION:

GEOTECHNICAL INFORMATION: bedrock depth estimated at 40 feet
SOIL TYPE: glacial till - clayey silt matrix, varying amounts of fine to coarse sand, gravel
GROUNDWATER DEPTH: 5 1/2 feet

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:

Findings from this study show that organic solvents have been disposed on-site, contaminating groundwater, thereby posing a significant threat to the environment. No cyanide was found.



New York State Department of Environmental Conservation

MEMORANDUM

TO: File
 FROM: Mark P. Mateunas, P.E., EIS, BHSC, DHWR *MPM*
 SUBJECT: Westinghouse Electric Corporation, Cheektowaga(T), Erie County
 Site No. 915066 - Summarized Sampling Data
 DATE: July 12, 1991

This memorandum is to be attached to the ADDITIONS/CHANGES TO REGISTRY OF INACTIVE HAZARDOUS WASTE DISPOSAL SITES in response to Question 11.b., List the contravened parameters and values.

<u>Hazardous Waste</u>	<u>Groundwater</u>	<u>Surface Water</u>
tetrachloroethene	160	
trichloroethene	7 - 58,000	31 - 17,000
1,2-dichloroethene	19 - 15,000	7 - 38
vinyl chloride	350 - 2,500	
1,1,1-trichloroethane	100 - 1,400	7 - 41

	<u>Soil</u>	<u>Sediments</u>
tetrachloroethene	76	53 - 13,000
trichloroethene	23 - 30,000	41,000 - 1,500,000
1,2-dichloroethene	71 - 22,000	540
vinyl chloride		
1,1,1-trichloroethane	19 - 6,000	

* units are in parts per billion (ppb)

EXECUTIVE SUMMARY

This Preliminary Site Assessment (PSA) Report for the Westinghouse Electric Corporation Site (New York State Site Number 915066, USEPA Site Number NY D092474592) has been prepared by Dunn Geoscience Engineering Company, P.C. (DUNN) under the State Superfund Standby Contract (Work Assignment No. D002520-8) with the New York State Department of Environmental Conservation (NYSDEC). All project activities associated with this work assignment were conducted during August 1990 to June 1991.

The Westinghouse Electric Corporation Site, approximately 143 acres in size, is located in the western portion of Erie County, New York, at 4454 Genesee Street in the Town of Cheektowaga (refer to Figure ES-1). The site is bordered to the north and west by the Greater Buffalo International Airport, to the east by Holtz Drive, and to the south by Genesee Street.

Between 1940 to 1946, Curtis-Wright Corporation utilized the facility for the manufacture and production of aircraft for World War II. In 1946, the 143 acre plant site was sold to the Westinghouse Electric Corporation. During 1946 to 1984, Westinghouse utilized the facility to manufacture electric motors and controls.

In 1964, Westinghouse sold approximately 0.7 acres of the northern tip portion of the property to the Niagara Frontier Transportation Authority (NFTA).

During 1984, Westinghouse sold an additional 11.4 acres of the northern tip of the subject property to the NFTA, and in December of that year, sold the plant building and remaining property to Mr. Barry M. Weinstein.

In June 1985, Mr. Weinstein assigned all his rights and interest in the facility to the Buffalo Airport Center Associates (BACA). In August of the same year, the BACA assigned all its rights and interest in the facility to the Erie County Industrial Development Agency (ECIDA), who in turn, leased the premises back to the BACA.

Presently, the BACA manages the site and subleases portions of the property for a variety of uses, including general office and warehousing and distribution operations. In addition, Westinghouse continues to lease a portion (approximately 100,000 square foot) of the main plant

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building from BACA for limited manufacturing activities associated with its International and Speciality Services Division.

In 1979, the Interagency Task Force on Hazardous Wastes in Erie and Niagara Counties (a coalition of the NYSDEC, New York Department of Health (NYSDOH) and Region II USEPA personnel) identified Westinghouse as a significant generator of hazardous waste. However, it could not identify where wastes generated at the facility were disposed prior to 1971. According to the Task Force Report, the following waste materials were generated in varying quantities by Westinghouse's manufacturing processes:

- General refuse;
- Waste oil;
- Non-ferrous scrap;
- Ferrous scrap;
- Waste mineral oil;
- Ultra filter rinse oil;
- Iron phosphate solution;
- Deionized resin solution; and
- Chemical wastes.

No information could be found pertaining to waste generation and disposal practices associated with Curtis-Wright's manufacturing activities at the plant site.

In June of 1980, Westinghouse was listed in the registry of Inactive Hazardous Waste Disposal Sites as "suspected" of disposing cyanide salts on-site at an unknown location. The issue of suspected disposal of cyanide salts was raised as a result of a Westinghouse memorandum concerning a conference between Westinghouse and D. B. Stevens of the New York State Water Pollution Control Board. This January 10, 1955 memorandum makes reference to cyanide waste from the heat treating room: *"The spent solid cyanide is collected and disposed of by burial on the property."* In that same memorandum are references to off-site disposal of sludges, as well as plating solutions, that are *"...diluted and flushed down the drain."*

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Based on the review of aerial photograph coverage of the Westinghouse Site (Dames and Moore, 1986), the alleged dumping of solid cyanide, waste oil and lubricants may have taken place in the portion of the property north of the paved parking lot areas.

Allegations have subsequently been made by the NFTA that there are other areas of the property, both inside and outside the main building structure, where additional environmental concerns may exist as a result of past disposal practices or site operations.

Based on the information obtained from site reconnaissance/interviews and the results of previous investigations conducted at the Westinghouse Electric Site, Dunn Engineering Company, P.C. (DUNN) recommended that a detailed surface/subsurface investigation of the study area be conducted to properly classify the site. The initial study area, an 11.4 acre site situated at the northern portion of the property, was significantly broadened to incorporate the total 143 acres of the subject property. The increase in the study area was based upon information provided by former Westinghouse employees pertaining to alleged on-site disposal of chemical wastes, site reconnaissance observations made by DUNN and NYSDEC personnel, and from the increase in information concerned with the use, storage and handling of bulk chemical products/by-products utilized at the Westinghouse plant.

Analytical results obtained from the PSA study indicated that hazardous waste materials have been disposed on various portions of the project site over an extended period of time. This conclusion is further supported by historic documentation and statements made by former Westinghouse Electric employees.

Based on the findings and conclusions presented in this report, DUNN recommends that the entire Westinghouse Electric Corporation Site, approximately 143± acres in size, be reclassified by the NYSDEC to a Class 2 site, and that a more extensive investigation be undertaken to define the extent of contamination and provide the necessary information required to evaluate possible alternatives for remediating the project site.

5.0 SUMMARY OF CONCLUSIONS

Based on the analytical results presented in Section 4.0 of this report, it can be concluded that hazardous waste materials have been improperly disposed of on various portions of the project site over an extended period of time. This conclusion is further supported by historic documentation and statements made by former Westinghouse Electric employees.

Volatile organic compounds (VOCs), in excess of New York State Water Quality Standards and/or Guidance Values, were detected in groundwater samples collected from the following areas:

- Area I-Oil Storage Building (WEC-MW7);
- Area J-Underground Solvent Tank Storage Area (WEC-MW8);
- Area K-Hazardous Storage Facility (WEC-MW10);
- Area Q-Railroad Track Area (WEC-MW16); and
- Existing Monitoring Well Locations (WEC-MW2 and WEC-MW3).

In general, the highest VOCs concentration levels detected in the groundwater consisted of:

- Vinyl chloride;
- 1,1-Dichloroethane;
- 1,1-Dichloroethene;
- 1,2-Dichloroethane;
- 1,1,1-Trichloroethane;
- Trichloroethene; and
- Toluene.

Two of the above contaminants of concern, 1,1,1-trichloroethane and trichloroethene, are listed hazardous wastes as established in New York State Regulations-6NYCRR Part 371 (Section

371.4). Past records indicate that both 1,1,1-trichloroethane and trichloroethene were routinely utilized and stored at the facility.

Contamination of subsurface soil was detected in the following areas:

- Area D-Storm Sewer Line 003;
- Area F-Captain's Pool Area;
- Area I-Oil Storage Building;
- Area J-Underground Solvent Tank Storage Area;
- Area O-Gunnery Range;
- Area P-"Flying Tiger's" Area; and
- Area Q-Railroad Track Area.

Samples collected from these areas exhibited elevated concentrations of various compounds and/or analytes in excess of NYSDEC Soil Guidance Values.

Surface water contamination was detected in the following areas:

- Area A-Fan Room;
- Area C-Heat Treatment/Plating Area;
- Area E-Storm Sewer System; and
- Area M-Underground Mixing Room.

Samples collected from these areas exhibited elevated concentration levels of various compounds and/or inorganic analytes in excess of New York State Water Quality Standards and/or Guidance Values.

Elevated concentrations of several compounds and/or analytes in excess of NYSDEC Soil Guidance Values were detected in sediment samples collected from the following areas:

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- Area A-Fan Room;
- Area C-Heat Treatment/Plating Area;
- Area E-Storm Sewer System;
- Area H-Boiler House Facility;
- Area M-Underground Mixing Room; and
- Area O-Gunnery Range.

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7.0 RECOMMENDATIONS

Based on the findings and conclusions presented in this report, Dunn Geoscience Engineering Company, P.C. (DUNN) recommends that the entire Westinghouse Electric Corporation Site, approximately 143± acres in size, be reclassified by the NYSDEC to a Class 2 site, and that a more extensive investigation be undertaken to define the extent of contamination and provide the necessary information required to evaluate possible alternatives for remediating the project site.

TABLE A-1

WESTINGHOUSE ELECTRIC CORPORATION SITE
 SUMMARY TABLE OF VOLATILE AND SEMI-VOLATILE ORGANIC COMPOUNDS
 SURFACE WATER SAMPLES
 AREA A - FAN ROOM SUMP(S)
 (Concentration Values in ug/l - ppb)

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	SURFACE WATER LOCATION		NYS Water Quality Standards	NYSDEC TOGS (1.1.1)
	WEC-SP1-L A55712 Sump	WEC-FD1-L A55717 Floor Drain		
VOLATILE ORGANIC COMPOUNDS				
Methylene Chloride	ND	7 J	NS	50
Trichloroethene	17000 D	ND	NS	11
Total Volatiles	17000	7	NS	-
Total Volatile TICs	ND	ND	NS	-
SEMI-VOLATILE ORGANIC COMPOUNDS				
Total Semi-Volatiles	0	NA	NS	-
Total Semi-Volatile TICs	ND	NA	NS	-

TABLE A-3

WESTINGHOUSE ELECTRIC CORPORATION SITE
SUMMARY TABLE OF VOLATILE AND SEMI-VOLATILE ORGANIC COMPOUNDS
SEDIMENT SAMPLES
AREA A - FAN ROOM SUMP(S)
(Concentration Values In ug/kg - ppb)

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	SEDIMENT SAMPLE	
	LOCATION	
	WEC-SP1-S A55714 Fan Room Sump	NYSDEC Soil Guidance Values *
VOLATILE ORGANIC COMPOUNDS		
Trichloroethene	1500000 D	15.75
Tetrachloroethene	13000 JV	45.5
Total Volatiles	1513000	NS
Total Volatile TICs	1100000 J	NS
SEMI-VOLATILE ORGANIC COMPOUNDS		
1,3 - Dichlorobenzene	410 J	212.5
1,4 - Dichlorobenzene	300 J	212.5
1,2 - Dichlorobenzene	2400	212.5
1,2,4 - Trichlorobenzene	440 J	1150
Naphthalene	290 J	325.0
2 - Methyl-naphthalene	270 J	10000
Phenanthrene	1500 J	10000
Anthracene	240 J	10000
Di-n-Butylphthalate	770 J	-
Fluoranthene	3100	10000
Pyrene	2800	10000
Benzo(a)Anthracene	1500 J	69.0
Chrysene	2000	10000
Bis(2-Ethylhexyl)Phthalate	5200	10.0
Benzo(b)Fluoranthene	7000 V	275.0
Benzo(a)Pyrene	2600 V	61.0
Total Semi-Volatiles	30820	NS
Total Semi-Volatile TICs	123100 J	NS
PEST/PCB COMPOUNDS		
Aroclor - 1254	12000*	13.25

* Sample result based on manually integrated peak area due to chromatographic interference.

TABLE B-1

WESTINGHOUSE ELECTRIC CORPORATION SITE
 SUMMARY TABLE OF VOLATILE AND SEMI-VOLATILE ORGANIC COMPOUNDS
 SOIL BORING SPLIT-SPOON SAMPLES
 AREA B - SUBSURFACE SOIL/BEDDING MATERIAL - STORM SEWER LINE 003
 (Concentration Values in ug/kg - ppb)

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Boring Location	WEST-B-4-B A55706	WEST-B-5-B A55707	WEST-B-2-B A55709	NYSDEC Soil Guidance Values
Depth Interval (ft.)	0 - 7	0 - 6	1 - 7*	
VOLATILE ORGANIC COMPOUNDS				
1,2 Dichloroethene (Total)	ND	ND	4 J	45.0
Trichloroethene	2 J	ND	180	15.75
Toluene	5	ND	ND	37.5
Total Volatiles	7	ND	184	-
Total Volatile TICs	ND	ND	ND	-
SEMI-VOLATILE ORGANIC COMPOUNDS				
Total Semi-Volatiles	ND	ND	ND	-
Total Semi-Volatile TICs	7400 J	400 J	1200 J	-
PEST/PCB COMPOUNDS				
Aroclor - 1254	42 J	ND	ND	13.25

* Collected VOC sample from fill material depth interval 3 - 5 feet.

TABLE C-5

WESTINGHOUSE ELECTRIC CORPORATION SITE
 SUMMARY TABLE OF VOLATILE AND SEMI-VOLATILE ORGANIC COMPOUND
 SOIL BORING SPLIT-SPOON SAMPLES
 AREA C - HEAT TREATMENT/PLATING AREA
 (Concentration Values in ug/kg - ppb)

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Boring Location	WEC-B31 A55799	NYSDEC Soil Guidance Values
Depth Interval (ft.)	0 - 10	
VOLATILE ORGANIC COMPOUNDS		
Trichloroethene	24	15.75
Total Volatiles	24	-
Total Volatile TICs	ND	-
SEMI-VOLATILE ORGANIC COMPOUNDS		
4- Nitrophenol	200 J	-
Pentachlorophenol	450 J	530
Di-n-Butylphthalate	100 J	-
Pyrene	200 J	10000
Total Semi-Volatiles	950	-
Total Semi-Volatile TICs	16830 J	-

TABLE D-1

WESTINGHOUSE ELECTRIC CORPORATION SITE
SUMMARY TABLE OF VOLATILE AND SEMI-VOLATILE ORGANIC COMPOUNDS
TEST PIT SOIL SAMPLES
AREA D - STORM SEWER LINE 003
(Concentration Values in ug/kg - ppb)

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Test Pit Location	WEST-TP-1-D A55701	WEST-TP-3-D A55702	WEST-TP-5-D A55703	NYSDEC Soil Guidance Values
Depth Interval (ft.)	9 - 10	9 - 10	7 - 8	
VOLATILE ORGANIC COMPOUNDS				
Vinyl Chloride	24	ND	ND	-
1,1 - Dichloroethene	9	ND	ND	8.1
1,2 - Dichloroethene (Total)	22,000 D	17	2 J	45
Trichloroethene	5,100 DV	82	44	15.75
Tetrachloroethene	14	ND	ND	45.5
Toluene	11	ND	ND	37.5
Ethylbenzene	11	ND	ND	137.5
Xylene (Total)	49	ND	ND	30
Total Volatiles	27218	99	46	-
Total Volatiles TICs	900 J	100 J	230 J	-
SEMI-VOLATILE ORGANIC COMPOUNDS				
Pentachlorophenol	ND	ND	46 J	530
Fluoranthene	91 J	490	720	10000
Pyrene	61 J	320 J	440	10000
Benzo(a)Anthracene	ND	210 J	310 J	69
Chrysene	49 J	230 J	320 J	10000
Bis(2-Ethylhexyl)Phthalate	190 J	1800	500	10
Benzo(b)Fluoranthene	190 J	ND	230 J	275
Benzo(k)Fluoranthene	150 J	ND	220 J	27.5
Benzo(a)Pyrene	130 J	ND	180 J	61
Indeno(1,2,3-cd)Pyrene	110 J	ND	130 J	80
Dibenz(a,h)Anthracene	ND	ND	46 J	14
Benzo(g,h,i)Perylene	96 J	ND	110 J	80
Total Semi-Volatiles	1067	3050	3252	-
Total Semi-Volatile TICs	ND	ND	ND	-
PEST/PCB COMPOUNDS				
4,4 - DDD	5.3 JV	ND	ND	19.25
Aroclor - 1254	71 J	190	260	13.25

TABLE E-1

WESTINGHOUSE ELECTRIC CORPORATION SITE
SUMMARY TABLE OF VOLATILE AND SEMI-VOLATILE ORGANIC COMPOUNDS
SURFACE WATER SAMPLES
AREA E - STORM SEWER SYSTEM
(Concentration Values in ug/l - ppb)

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	SURFACE WATER LOCATION						NYS Water Quality Standards	NYSDEC TOGS (1.1.1)
	WEC-S1-L A55719 Line 001 MH-001-06 Upgradient	WEC-S2-L A55720 Outfall 001 Downgradient	WEC-S3-L A55721 Line 002 MH-002-12 Upgradient	WEC-S4-L A55722 Outfall 002 Downgradient	WEC-S5-L A55723 Line 003 MH-003-13 Upgradient	WEC-S6-L A55724 Outfall 003 Downgradient		
VOLATILE ORGANIC COMPOUNDS								
Methylene Chloride	3 J	3 J	4 J	3 J	3 J	3 J	5.0*	50.0
1,2 - Dichloroethene (Total)	38	7	8	4 J	2 J	33	5.0	-
Chloroform	ND	5	4 J	5	ND	3 J	7.0*	50.0
1,1,1 - Trichloroethane	41	ND	7	ND	ND	29	5.0*	50.0
Bromodichloromethane	ND	2 J	2 J	3 J	ND	1 J	NS	50.0
Trichloroethene	40	6	31	6	7	180	NS	11
Tetrachloroethene	1 J	3 J	ND	ND	ND	ND	NS	1.0
Ethylbenzene	ND	ND	1 J	ND	ND	ND	5.0*	50.0
Total Xylene	ND	ND	5 J	ND	ND	ND	5.0*	50.0
Total Volatiles	123	26	62	21	12	249	NS	100
Total Volatile TICs	ND	ND	ND	ND	ND	ND	NS	-
SEMI-VOLATILE ORGANIC COMPOUNDS								
1,2 - Dichlorobenzene	ND	ND	ND	ND	9 J	ND	5.0	-
2,4 - Dimethylphenol	ND	ND	3 J	ND	ND	ND	NS	50.0
Benzoic Acid	ND	5 J	5 J	ND	ND	5 J	NS	50.0
Pentachlorophenol	ND	ND	ND	4 J	ND	ND	0.4	-
Total Semi-Volatiles	ND	5	8	4	9	5	NS	-
Total Semi-Volatile TICs	ND	ND	ND	ND	ND	ND	NS	-

* Represents Groundwater Standard (Class GA)

TABLE E-3

WESTINGHOUSE ELECTRIC CORPORATION SITE
SUMMARY TABLE OF VOLATILE ORGANIC COMPOUNDS
SEDIMENT SAMPLES
AREA E - STORM SEWER SYSTEM
(Concentration Values in ug/kg - ppb)

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	SEDIMENT SAMPLE LOCATION					NYSDEC Soil Guidance Values
	WEC-S5-S A55727 Outfall 001 Downgradient	WEC-S3-S A55730 Line 002 MH-002-12 Upgradient	WEC-S4-S A55728 Outfall 002 Downgradient	WEC-S5-S A55731 Line 003 MH-003-13 Upgradient	WEC-S6-S A55729 Outfall 003 Downgradient	
VOLATILE ORGANIC COMPOUNDS						
Methylene Chloride	120	ND	ND	ND	ND	-
1,2 - Dichloroethene (Total)	4 J	3 J	ND	ND	540+	45.0
1,1,1 - Trichloroethane	5 JV	6 J	ND	ND	ND	19.0
Trichloroethene	6 JV	16	ND	ND	4100 D+	15.75
Tetrachloroethene	4 JV	2 J	ND	ND	53+	45.5
Chlorobenzene	ND	ND	ND	93+	ND	41.25
Ethylbenzene	ND	ND	ND	330+	ND	137.5
Total Xylene	ND	ND	ND	1600 E+	77+	30.0
Total Volatiles	139	27	0	2023	4770	-
Total Volatile TICs	ND	ND	ND	ND	ND	-

+ Out of compliance, but useable data.

TABLE I-1

WESTINGHOUSE ELECTRIC CORPORATION SITE
SUMMARY TABLE OF VOLATILE AND SEMI-VOLATILE ORGANIC COMPOUNDS
SOIL BORING SPLIT-SPOON SAMPLES
AREA 1 - OIL STORAGE BUILDING
(Concentration Values In ug/kg - ppb)

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Boring Location	WEC-B1 A55746		WEC-B4 A55747		WEC-B5 A55748		WEC-B6 A55749		NYSDEC Soil Guidance Values
	6 - 8	4 - 14	6 - 8	0 - 10	16 - 18	2 - 12	8 - 10	6 - 16	
VOLATILE ORGANIC COMPOUNDS									
Methylene Chloride	9		27		7		53		-
Acetone	24		70		14		33		-
Carbon Disulfide	ND		9		16		9		67.5
1,2 - Dichloroethene (Total)	2 J		ND		16		ND		45
Chloroform	ND		1 J		ND		ND		5.4
2 - Butanone	120		70		30		21		-
1,1,1 - Trichloroethane	3 J		4 J		3 J		11		19
Trichloroethene	3 J		ND		30000 D		29		15.75
Toluene	13		15 V		1900 D		9 V		37.5
Total Volatiles	174		196		31970		165		-
Total Volatile TICs	37 J		120 J		14000 J		60 J		-
SEMI-VOLATILE ORGANIC COMPOUNDS									
2 - Methylphenol		ND		ND		140 J		ND	62.5
4 - Methylphenol		ND		ND		120 J		ND	62.5
Benzoic Acid		97 J		760 J		ND		ND	-
Diethylphthalate		ND		110 J		ND		ND	177.5
Phenanthrene		ND		330 J		ND		ND	10000
Anthracene		ND		81 J		ND		ND	10000
DI-n-Butylphthalate		ND		79 J		ND		ND	-
Fluoranthene		ND		390 J		ND		ND	10000
Pyrene		ND		640 J		ND		ND	10000
Benzo(a)Anthracene		ND		470 J		ND		ND	69
Chrysene		ND		490 J		ND		ND	10000
bis (2-Ethylhexyl) Phthalate		140 J		260 J		440 J		ND	10
DI-n-OctylPhthalate		ND		ND		230 J		ND	-
Benzo (b) Fluoranthene		ND		810		ND		ND	275
Benzo (k) Fluoranthene		ND		620 J		ND		ND	27.5
Benzo (a) Pyrene		ND		710 J		ND		ND	61
Indeno (1,2,3 cd) Pyrene		ND		550 J		ND		ND	80
Total Semi-Volatiles		237		6300		930		ND	-
Total Semi-Volatile TICs		10980 J		6910 J		17270 J		1870 J	-

TABLE J-1

WESTINGHOUSE ELECTRIC CORPORATION SITE
SUMMARY TABLE OF VOLATILE ORGANIC COMPOUNDS
SOIL BORING SPLIT-SPOON SAMPLES
AREA J - UNDERGROUND SOLVENT TANK AREA
(Concentration Values in ug/kg - ppb)

DRAFT

Boring Location	WEC-B7 A55751		WEC-B8 A55756		WEC-B9 A55757		WEC-B10 A55758		WEC-B11 A55755		NYSDEC Soil Guidance Values
	2 - 4	0 - 10	2 - 4	0 - 10	2 - 4	2 - 12	4 - 6	4 - 14	8 - 10	6 - 16	
VOLATILE ORGANIC COMPOUNDS											
Vinyl Chloride	ND		42		ND		ND		ND		-
Methylene Chloride	250		12		37		21		38		-
Acetone	210		19		ND		ND		11		-
Carbon Disulfide	76		8		5 J		6 J		4 J		67.5
1,1 - Dichloroethene	330		ND		ND		ND		ND		8.1
1,1 - Dichloroethane	480		ND		ND		ND		ND		3.75
1,2 - Dichloroethene (Total)	71		160		ND		ND		2 J		45
Chloroform	ND		2 J		2 J		ND		2 J		5.4
2 - Butanone	250		6 J		ND		ND		4 J		-
1,1,1 - Trichloroethane	6000 D		ND		6 J		4 J		ND		19
Trichloroethene	240		2200		ND		ND		3 J		15.75
1,1,2 - Trichloroethane	20 J		ND		ND		ND		ND		7.0
4 - Methyl - 2- Pentanone	ND		2 J		ND		ND		ND		-
Tetrachloroethene	20 J		ND		ND		8		ND		45.5
Toluene	1900 D		74		2 J		ND		2 J		37.5
Chlorobenzene	ND		38		4 J		ND		ND		41.25
Ethylbenzene	490		75		35		42		ND		137.5
Xylene (Total)	4000 E		5000		55		61		ND		30
Total Volatiles	14337		7638		146		142		66		-
Total Volatile TICs	12800 J		22800 J		243 J		1585 J		25 J		-

TABLE K-1

WESTINGHOUSE ELECTRIC CORPORATION SITE
SUMMARY TABLE OF VOLATILE AND SEMI-VOLATILE ORGANIC COMPOUNDS
SOIL BORING SPLIT-SPOON SAMPLES
AREA K - HAZARDOUS WASTE STORAGE AREA
(Concentration Values in ug/kg - ppb)

DRAFT

Boring Location	WEC-B12 A55760		WEC-B13 A55762		WEC-B14 A55764		WEC-B15 A55768		NYSDEC Soil Guidance Values
	10 - 12	6 - 16	6 - 8	0 - 10	10 - 12	2 - 12	8 - 10	0 - 10	
VOLATILE ORGANIC COMPOUNDS									
Methylene Chloride	33		22		22		ND		-
Carbon Disulfide	4 J		10		4 J		ND		67.5
1,1 - Dichloroethene	ND		4 J		ND		ND		8.1
1,1 - Dichloroethane	ND		19		5 J		ND		3.75
1,2 - Dichloroethene (Total)	ND		6 J		ND		ND		45
Chloroform	1 J		ND		ND		ND		5.4
1,1,1 - Trichloroethane	3 J		36		6 J		ND		19
Trichloroethene	ND		4 J		29		ND		15.75
Benzene	1 J		ND		9		ND		1.5
4 - Methyl - 2 - Butanone	2 J		ND		ND		ND		-
Tetrachloroethene	ND		76		ND		ND		45.5
Toluene	3 J		3 J		6		2 J		37.5
Ethylbenzene	ND		28		3 J		ND		137.5
Styrene	ND		ND		ND		ND		-
Xylene (Total)	ND		39		5 J		ND		30
Total Volatiles	47		247		88		2		-
Total Volatile TICs	26 J		47 J		383 J		ND		-
SEMI-VOLATILE ORGANIC COMPOUNDS									
Fluoranthene		ND		ND		85 J		ND	10000
Pyrene		ND		ND		100 J		ND	10000
bis(2-Ethylhexyl)Phthalate		ND		ND		300 J		ND	10
Total Semi-Volatiles		ND		ND		485		ND	-
Total Semi-Volatile TICs		20260 J		5270 J		7520 J		2770 J	-

TABLE P-1

WESTINGHOUSE ELECTRIC CORPORATION SITE
SUMMARY TABLE OF VOLATILE ORGANIC COMPOUNDS
SOIL BORING/TEST TRENCH SAMPLES
AREA P - FLYING TIGER'S AREA
(Concentration Values in ug/kg - ppb)

DRAFT

Boring/Test Trench Location	WEC-B25	WEC-B26		WEC-B27		WEC-B28		WEC-B-28-DUP		WEC-B29	WEC-TP39	NYSDEC Soil Guidance Values
	A55789	A55790	A55790	A55792	A55792	A55793	A55793	A55796	A55794	A55787		
Depth Interval (ft.)	0 - 10	4 - 6	0 - 10	4 - 6	0 - 10	4 - 6	0 - 10	4 - 6	0 - 10	0 - 10	4 - 5	
VOLATILE ORGANIC COMPOUNDS												
Vinyl Chloride	ND	ND		ND		29 V		9 JV		ND	ND	-
Methylene Chloride	17	8.0		30 V		9 V		7 V		5 J	25 V	-
Carbon Disulfide	3 J	2 J		5 JV		3 JV		3 JV		2 J	6 JV	67.5
1,2 - Dichloroethene (Total)	ND	ND		26 V		4 JV		3 J		ND	ND	45.0
2 - Butanone	11 J	5 J		ND		13 V		13 V		ND	55 V	-
1,1,1 - Trichloroethane	19	12		23 V		15 V		12 V		4 J	170 V	19.0
Vinyl Acetate	ND	1 J		ND		ND		ND		ND	ND	-
Trichloroethene	3 J	ND		12 V		3 JV		ND		ND	23 V	15.75
Benzene	1 J	ND		ND		3 JV		1 JV		ND	5 JV	1.5
4 - Methyl - 2 - Pentanone	3 J	ND		ND		98 V		ND		ND	45 V	-
2 - Hexanone	ND	ND		ND		490 E		ND		ND	ND	-
Toluene	12	2 J		43 V		6100 D		930 D		19	65 V	37.5
Ethylbenzene	ND	ND		ND		1300 D		140 V		1 J	ND	137.5
Styrene	2 J	ND		ND		ND		ND		ND	ND	-
Xylene (Total)	ND	ND		5 JV		9300 D		740 D		4 J	ND	30.0
Total Volatiles	71	30		144		17367		1846		35	394	-
Total Volatile TICs	70 J	530 J		456 J		1270000 J		2598 J		170 J	5110 J	-

TABLE Q-1

WESTINGHOUSE ELECTRIC CORPORATION SITE
SUMMARY TABLE OF VOLATILE AND SEMI-VOLATILE ORGANIC COMPOUNDS
TEST PIT SOIL SAMPLES
AREA Q - RAILROAD TRACK AREA
(Concentration Values in ug/kg - ppb)

DRAFT

Test Pit Location	WEC-TP15 A55763	WEC-TP18 A55765	WEC-TP19 A55766	WEC-TP22 A55767	WEC-TP24 A55770	WEC-TP40 A55788	NYSDEC Soil Guidance Values
Depth Interval (ft.)	7	1 - 2	3 - 4	1 - 2	1 - 4	4 - 5	
VOLATILE ORGANIC COMPOUNDS							
Vinyl Chloride	ND	ND	100 V	ND	ND	ND	-
Chloroethane	ND	ND	38 V	ND	ND	ND	-
Methylene Chloride	21	22	48 V	17 B	ND	10	-
Acetone	ND	ND	150 BV	ND	ND	ND	-
Carbon Disulfide	4 J	4 J	4 JV	2 J	ND	2 J	67.5
1,1 - Dichloroethene	ND	ND	5 JV	ND	ND	ND	8.1
1,2 - Dichloroethene (Total)	2 J	ND	180 D	6 J	ND	11	45.0
Chloroform	ND	ND	1 JV	ND	ND	ND	5.4
2 - Butanone	ND	ND	ND	ND	ND	7 J	-
1,1,1 - Trichloroethane	4 J	5 J	4 JV	1 J	ND	13	19.0
Trichloroethene	12000 D	12	700 D	5 J	ND	840 D	15.75
Tetrachloroethene	36	ND	ND	ND	ND	7.0	45.5
Toluene	110	6.0	5 JV	2 J	ND	46	37.5
Ethylbenzene	51	ND	ND	ND	ND	ND	137.5
Xylene (Total)	190	ND	ND	ND	2 J	ND	30.0
Total Volatiles	12418	49	1235	33	2	936	-
Total Volatile TICs	4000 J	46 J	120 J	ND	ND	600 J	-
SEMI-VOLATILE ORGANIC COMPOUNDS							
Benzoic Acid	ND	ND	ND	250 J	ND	ND	-
Phenanthrene	580 J	ND	ND	110 J	ND	ND	10000
Anthracene	130 J	ND	ND	ND	ND	ND	10000
Di-n-Butylphthalate	ND	ND	ND	99 J	ND	ND	-
Fluoranthene	1400	ND	ND	190 J	ND	ND	10000
Pyrene	1400	ND	ND	150 J	ND	ND	10000
Benzo(a)Anthracene	690 J	ND	ND	100 J	ND	ND	69.0
Chrysene	690 J	ND	ND	120 J	ND	ND	10000
bis(2-Ethylhexyl)Phthalate	360 J	340 J	ND	220 J	120 J	660 J	10.0
Benzo(b)Fluoranthene	690 J	ND	ND	100 J	ND	ND	275
Benzo(k)Fluoranthene	720 J	ND	ND	100 J	ND	ND	27.5
Benzo(a)Pyrene	630 J	ND	ND	99 J	ND	ND	61.0
Total Semi-Volatiles	7290	340	ND	1538	120	660	-
Total Semi-Volatile TICs	4360 J	2480 J	3450 J	10470 J	1120 J	ND	-

TABLE S-1

WESTINGHOUSE ELECTRIC CORPORATION SITE
SUMMARY TABLE OF VOLATILE ORGANIC COMPOUNDS
FOR GROUND WATER: AREA S
(Concentration Values in ug/l - ppb)

	MONITORING WELL LOCATIONS										Weather Station A55741	6NYCRR Part 703 Standard	NY TOGS (1.1.1) Guidance	10NYCRR Part 5 Standard	10NYCRR Part 170 Standard
	MW-1 A55733	MW-2 A55739	MW-2 DUP A55742	MW-3 A55738	MW-4 A55734	MW-5 A55735	MW-6 A55740	MW-7 A55818	MW-8 A55819	MW-9 A55813					
VOLATILE ORGANIC COMPOUNDS															
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	350	2500	ND	ND	2.0	-	2.0	-
Methylene Chloride	ND	4.0 JV	4.0 JV	4 J	ND	ND	ND	12 J	ND	ND	ND	5.0	-	5.0	-
Acetone	ND	ND	3 JV	19.0 DJ	ND	ND	ND	180 B	390 B	ND	ND	-	-	50	-
1,1 - Dichloroethene	ND	110 V	100 V	ND	ND	ND	ND	41 J	54 J	ND	ND	5.0	-	5.0	-
1,1 - Dichloroethane	ND	ND	ND	ND	ND	ND	ND	1800	ND	ND	ND	5.0	-	5.0	-
1,2 - Dichloroethene (Total)	ND	ND	ND	100	ND	ND	ND	6300 D	15000 BD	ND	ND	5.0	-	5.0	-
2 - Butanone	ND	ND	ND	ND	ND	ND	ND	150 B	490	ND	ND	-	50	-	-
1,1,1 - Trichloroethane	ND	4 JV	3 J	ND	ND	ND	ND	100	ND	ND	ND	5.0	-	5.0	-
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	40 BJ	ND	ND	-	-	50	-
Trichloroethene	ND	ND	ND	600 DV	ND	ND	ND	28000 BD	1700	ND	ND	5.0	-	5.0	-
Benzene	11	ND	ND	5.0	ND	ND	-	5.0	-						
4 - Methyl - 2 - Pentanone	1 J	ND	ND	ND	ND	ND	ND	27 J	ND	ND	ND	-	50	-	-
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.0	-	5.0	-
1,1,2,2 - Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	33 BJ	ND	ND	5.0	-	5.0	-
Toluene	ND	ND	ND	ND	ND	ND	ND	1200	ND	ND	ND	5.0	-	5.0	-
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	27	ND	5.0	-	5.0	-
Ethylbenzene	2 J	ND	ND	ND	ND	ND	ND	ND	ND	44	ND	5.0	-	5.0	-
Styrene	2 J	ND	ND	ND	ND	ND	ND	ND	31 BJ	ND	ND	5.0	-	5.0	-
Total Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	66 BJ	15	ND	5.0	-	5.0	-
Total Volatiles	16	123	118	869	ND	8	ND	38160	20304	86	ND	-	100	-	-
Total Volatile TICs	10 J	5.7 JV	5.1 JV	ND	-	-	-	-							

TABLE S-1 (CONTINUED)

DRAFT

WESTINGHOUSE ELECTRIC CORPORATION SITE
SUMMARY TABLE OF VOLATILE ORGANIC COMPOUNDS
FOR GROUND WATER: AREA S
(Concentration Values in ug/l - ppb)

VOLATILE ORGANIC COMPOUNDS	MONITORING WELL LOCATIONS										6NYCRR	NY TOGS	10NYCRR	10NYCRR
	MW-10 A55815	MW-11 A55820	MW-12 A55810	MW-13 A55821	MW-14 A55814	MW-15 A55809	MW-16 A55806	MW-17 A55808	MW-17 DUP A55811	MW-18 A55823	Part 703 Standard	(1.1.1) Guidance	Part 5 Standard	Part 170 Standard
Vinyl Chloride	4 J	ND	ND	2.0	-	2.0	-							
Methylene Chloride	4 J	5	ND	6	ND	ND	ND	ND	ND	ND	5.0	-	5.0	-
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	50	-
1,1 - Dichloroethene	200 D	ND	ND	5.0	-	5.0	-							
1,1 - Dichloroethane	680 D	ND	ND	5.0	-	5.0	-							
1,2 - Dichloroethene (Total)	19	ND	ND	5.0	-	5.0	-							
2 - Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	50	-	-
1,1,1 - Trichloroethane	1400 D	ND	ND	5.0	-	5.0	-							
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	50	-
Trichloroethene	7	8	ND	ND	ND	ND	58000	ND	ND	1 J	5.0	-	5.0	-
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	5.0	-
4 - Methyl - 2 - Pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	50	-	-
Tetrachloroethene	160	ND	ND	5.0	-	5.0	-							
1,1,2,2 - Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.0	-	5.0	-
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.0	-	5.0	-
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.0	-	5.0	-
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.0	-	5.0	-
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.0	-	5.0	-
Total Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.0	-	5.0	-
Total Volatiles	2498	13	ND	6	ND	ND	58000	ND	ND	1	-	100	-	-
Total Volatile TICs	ND	6.1 J	ND	5.4 J	ND	ND	ND	ND	ND	ND	-	-	-	-

TABLE 4-1

EXPLANATION OF QUALIFIERS FOR ORGANIC COMPOUND ANALYTICAL RESULTS

- U - Indicates that the compound was analyzed for but not detected at or above the detection limit.
- J - Indicates that the compound was analyzed for and determined to be present in the sample. The mass spectrum of the compound meets the identification criteria of the method. The concentration listed is an estimated value, which is less than the specified quantitation limit but is greater than zero.
- B - The analyte is found in the blanks as well as the sample. It indicates possible sample contamination and warns the data user to use caution when applying the results of this analyte.
- C - Indicates that the compound was detected beyond the calibration range and was subsequently analyzed at a dilution.
- K - This is a common laboratory contaminant, where the sample result was less than 10 times the associated blank value. The original sample was revised to the Contract Required Quantitation Limit (CRQL)/laboratory reporting limit and qualified with a "U".
- L - The parameter is not a common laboratory contaminant, but was in the sample result as less than five times the blank result. The original sample result was revised to the CRQL/laboratory reporting limit and qualified with a "U".
- N - Indicates that the compound was analyzed for but not requested as an analyte. Value will not be listed on tabular result sheet.
- NA - Not analyzed
- ND - Not detected
- NS - A clean-up standard has not been determined.
- M - Matrix spike compound.
- V - Reported value is estimated due to variance from quality control limits.
- R - Reported value is unusable and rejected due to variance from quality control limits.
- E - Reported value is estimated due to the presence of matrix interference.
- D - Reported result taken from diluted sample analysis.
- A - Aldol condensation product.

TABLE 4-2

EXPLANATION OF QUALIFIERS FOR INORGANIC ANALYTE RESULTS

- U - Indicates analyte result less than Instrument Detection Limit (IDL).
- B - Indicates analyte result between IDL and CRDL.
- V - Reported value is estimated due to variance from quality control limits identified during data validation procedures.
- E - Reported value is estimated because of the presence of interference.
- R - Reported value is unusable and rejected due to variance from quality control limits.
- K - Since this is a common laboratory contaminant, EPA guidelines suggest this data revision whenever the sample is less than 10 times the associated blank value. The original sample result was revised to the CRDL/laboratory reporting limit and qualified with a "U".
- L - Although the parameter is not a common laboratory contaminant, EPA guidelines suggest that if the sample result is less than five times the blank result this data revision is appropriate. The original sample result was revised to the CRDL/laboratory reporting limit and qualified with a "U".
- M - Duplicate injection precision not met.
- N - Spiked sample recovery not within control limits.
- NA - Not analyzed
- ND - Not detected
- NS - A clean-up standard has not been determined.
- S - The reported value was determined by the Method of Standard Additions (MSA).
- W - Post-digest spike recovery furnace analysis was out of 85 - 125 percent control limit, while sample absorbance was less than 50 percent of spike absorbance.
- * - Duplicate analysis not within control limit.
- + - Correlation coefficient for MSA is less than 0.995.

TABLE 4-3

SOURCES OF STANDARDS/GUIDELINE VALUES
APPEARING ON
ANALYTICAL SUMMARY TABLES

- 6NYCRR Part 703 Standards - obtained from the New York State Official Compilation of Codes, Rules and Regulations, Title 6, Chapter X Part 703, (revised 1990). *"Water Quality Regulations: Surface Water and Groundwater Classification and Standards"* September 25, 1990.
- NY TOGS (1.1.1) Guidance - Guidance values obtained from the New York State Division of Water Technical Operations Guidance Series (1.1.1) September 24, 1990.
- 10NYCRR Part 5 Standards - obtained from the New York State Official Compilation of Codes, Rules and Regulations Title 10, Part 5 - NYSDOH Maximum Contaminant Levels for Public Water Supplies.
- 10NYCRR Part 170 Standards - obtained from the New York State Official Compilation of Codes, Rules and Regulations, Title 10, Part 170 - NYSDOH Standard for Sources of Water Supply.
- NYSDEC Soil Guidance Values are based on the Water - Soil Partition Model.

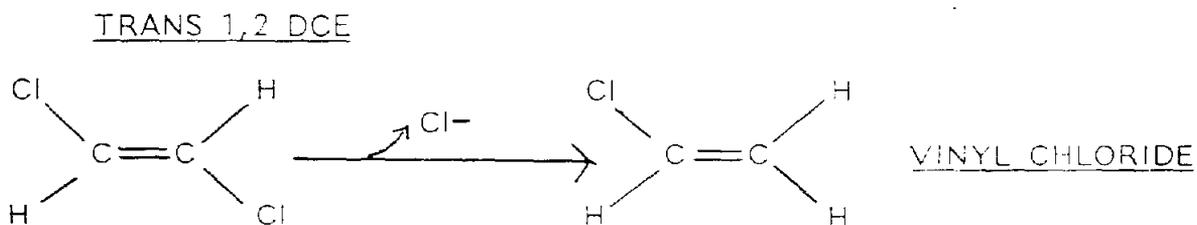
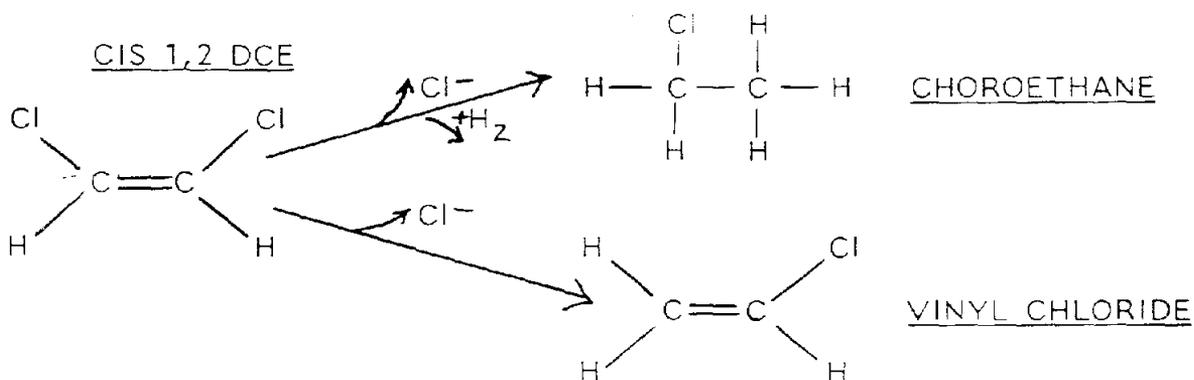
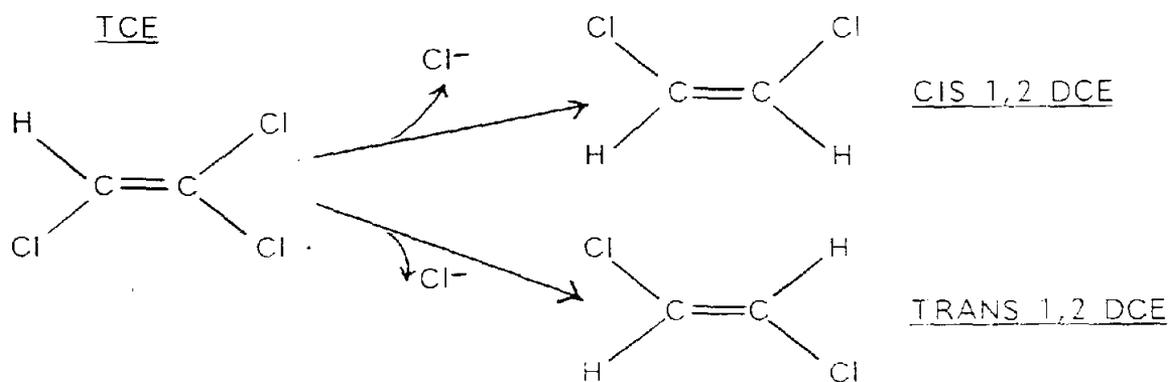
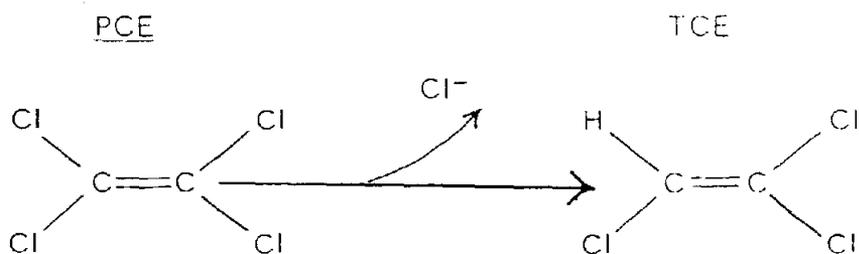
The model predicts the maximum contaminant concentration which is allowed in soil such that if the soil were to be exposed to the groundwater, it would not leach in excess of the groundwater standards. It is based on the soil sorption coefficient between water and soil and the fraction of organic matter in the soil. There is a direct relationship between the organic matter in soils and their capacity to sorb most organic chemicals.

Using the equation below, the maximum soil concentration can be determined for a contaminant given the values for the fraction of organic matter in the soil, the contaminant's partition coefficient, and the contaminant's groundwater or drinking water standard.

$$C_s = f \times K_{oc} \times C_w$$

- where: C_s = allowable concentration in the soil
 f = fraction of the total organic matter (TOC) in the soil. (A value of 2.5% was used as a conservative estimate.)
 K_{oc} = partition coefficient between water and soil
 C_w = allowable groundwater/drinking water standard (whichever is more stringent)

TRANSFORMATIONS OF TETRACHLOROETHYLENE





New York State Department of Environmental Conservation

MEMORANDUM

TO: File
FROM: Mark P. Mateunas, P.E., EIS, BHSC, DHWR *MM*
SUBJECT: Westinghouse Electric Corporation, Cheektowaga(T), Erie County
 Site No. 915066 - Classification Justification
DATE: July 12, 1991

By using the criteria set forth in the September 14, 1990 draft Division Technical and Administrative Guidance Memorandum (TAGM), Guidance for Classifying Class 1 and 2 Inactive Hazardous Waste Disposal Sites, the determination of the presence of hazardous waste and significant threat can be demonstrated for the above-referenced site.

Hazardous Waste Criteria

Listed hazardous waste under Article 27, Title 9 - show presence by documentation, analytical data or combination of both, reference 6NYCRR Part 371.4a-e.

The analytical data show the following hazardous wastes to be present on-site: tetrachloroethene (U210), trichloroethene (U228), 1,2-dichloroethene (U079), vinyl chloride (U043), and 1,1,1-trichloroethane (U226).

Significant Threat Criteria

The release of contaminants which results in the contravention of ambient groundwater standards set by the Division of Water.

The following hazardous wastes were found in the groundwater sampling results, all in violation of 6NYCRR Part 703:

tetrachloroethene	160 ppb (5 ppb)
trichloroethene	7 - 58,000 ppb (5 ppb)
1,2-dichloroethene	19 - 15,000 ppb (5 ppb)
vinyl chloride	350 - 2,500 ppb (2 ppb)
1,1,1-trichloroethane	100 - 1,400 ppb (5 ppb)

The release of contaminants which will result in contamination of soil/sediment that will likely result in migration of contaminants to surface or ground waters or otherwise adversely impact upon the environment or public health through direct contact as determined by the Departments of Health or Environmental Conservation.

The following areas demonstrate the contamination of soil migrating to groundwater:

- In Area G, the soil sample taken at boring B-5 shows trichloroethene at 30,000 ppb. The groundwater sample taken at monitoring well MW-7 (B-5) shows trichloroethene at 28,000 ppb, 1,2-dichloroethene at 6,300 ppb and vinyl chloride at 350 ppb.
- In Area J, the soil sample taken at boring B-7 shows trichloroethene at 240 ppb and 1,2-dichloroethene at 71 ppb and the soil sample taken at boring B-8 shows trichloroethene at 2,200 ppb and 1,2-dichloroethene at 160 ppb. The groundwater sample taken at monitoring well MW-8 (B-8) shows 1,2-dichloroethene at 5,000 ppb and vinyl chloride at 2,500 ppb.
- In Area K, the soil sample taken at boring B-14 shows trichloroethene at 29 ppb and the soil sample taken at B-13 shows tetrachloroethene at 76 ppb and 1,1,1-trichloroethane at 36 ppb. The groundwater sample taken at monitoring well MW-10 (B-13) shows tetrachloroethene at 160 ppb, trichloroethene at 7 ppb, 1,2-dichloroethene 19 ppb and 1,1,1-trichloroethane at 1,400 ppb.

The following demonstrates the contamination of sediments migrating to surface water.

In Area A, the sediment sample taken at the fan room sump shows tetrachloroethene at 13,000 ppb and trichloroethene at 1,500,000 ppb. The surface water sample at the fan room sump shows trichloroethene at 17,000 ppb.

The following demonstrates the possibility of off-site contamination by surface water migration.

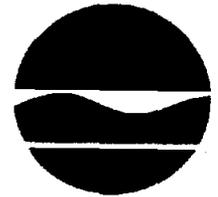
The surface water sample taken at manhole MH-001-06 shows trichloroethene at 40 ppb, 1,2-dichloroethene at 38 ppb and 1,1,1-trichloroethane at 41 ppb. MH-001-06 drains into Outfall 001. The surface water sample taken at Outfall 001 shows 1,2-dichloroethene at 7 ppb.

The fan room sump was formerly connected to Storm Sewer Line 003. The surface water sample taken at the fan room sump shows trichloroethene at 17,000 ppb and the sediment sample taken at the fan room sump shows tetrachloroethene at 13,000 ppb and trichloroethene at 1,500,000 ppb. The surface water sample taken at Outfall 003 shows trichloroethene at 180 ppb, 1,2-dichloroethene at 33 ppb and 1,1,1-trichloroethane at 29 ppb and the sediment sample at Outfall 003 shows tetrachloroethene at 53 ppb, trichloroethene at 4,100 ppb and 1,2-dichloroethene at 540 ppb. Soil samples taken along the

sewer line running from the building toward Outfall 003 show trichloroethene at 5,100 ppb and 1,2-dichloroethene at 2,200 ppb; trichloroethene at 82 ppb; and trichloroethene at 44 ppb, respectively.

By definition, a Class 2 inactive waste disposal site requires the presence of hazardous waste coupled with a significant threat to the public health or the environment. At this site we have both the presence of hazardous waste and a significant threat to the environment. I recommend that this site be classified a Class 2.

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233



Thomas C. Jorling
Commissioner

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

JUL 16 1991

Buffalo Airport Center Associates
4454 Genesee Street
Cheektowaga, NY 14225

Dear Ladies/Gentlemen:

As mandated by Section 27-1305 of the Environmental Conservation Law (ECL), copy enclosed, the New York State Department of Environmental Conservation (NYSDEC) must maintain a registry of all inactive disposal sites suspected or known to contain hazardous wastes. The ECL also mandates that this Department notify, by certified mail, the owner of all or any part of each site or area included in the Registry of Inactive Hazardous Waste Disposal Sites.

Our records indicate that you are the owner or part owner of the site listed below. Therefore, this letter constitutes notification of the inclusion of such site in the Registry of Inactive Hazardous Waste Disposal Sites in New York State.

DEC Site No.: 915066
Site Name: Westinghouse Electric Corp.
Site Address: 4454 Genessee Street, Cheektowaga, New York 14225
Site Classification: 2

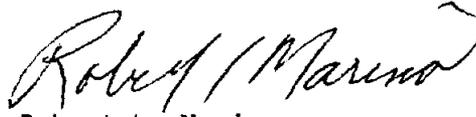
The reason is as follows: Documented disposal of tetrachloroethene, trichloroethene and 1,1,1-trichlorethane in groundwater at concentrations exceeding published groundwater standards.

Enclosed is a copy of the New York State Department of Environmental Conservation, Division of Hazardous Waste Remediation, Inactive Hazardous Waste Disposal Site Report form as it appears in the Registry and Annual Report, and an explanation of the site classifications. The Law allows the owner and/or operator of a site listed in the Registry to petition the Commissioner of the New York State Department of Environmental Conservation for deletion of such site, modification of site classification, or modification of any information regarding such site, by submitting a written statement setting forth the grounds of the petition. Such petition may be addressed to:

Mr. Thomas C. Jorling
Commissioner
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-1010

For additional information, please contact me, at (518) 457-0747.

Sincerely,

A handwritten signature in black ink that reads "Robert L. Marino". The signature is written in a cursive style with a large, sweeping initial "R".

Robert L. Marino
Chief
Site Control Section
Bureau of Hazardous Site Control
Division of Hazardous Waste Remediation

Enclosures