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BUFFALO FIELD UNIT

October 16, 1991

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REPORT

REMOVAL OF CONTAMINATED SOIL  
EASTERN ELECTRIC FACILITY  
BUFFALO, NEW YORK

FOR

WESTINGHOUSE ELECTRIC CORPORATION

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 **DAMES & MOORE**

3065 Southwestern Blvd., Suite 202  
Orchard Park, New York

REPORT  
REMOVAL OF CONTAMINATED SOIL  
WESTINGHOUSE ELECTRIC CORPORATION  
EASTERN ELECTRIC APPARATUS FACILITY  
BUFFALO, NEW YORK

1.0 INTRODUCTION

This report summarizes contaminated soil removal operations at the Eastern Electric Apparatus Facility, 1132 Seneca Street, Buffalo, New York. The report and the work upon which it is based were performed under the responsible charge of Mr. Robert R. Blickwedehl, P.E. (State of New York), in accordance with Section 9.0 of the Work Plan "Certification of New York P.E. Engineer." The report is prepared pursuant to Amendment 1 to the Remediation Work Plan for the above referenced site, dated January 15, 1990. The report includes a certification that this portion of the work was done in accordance with Westinghouse Electric Corporation's prescribed Work Plan dated August 30, 1989.

Soil removal was one of two components of the limited remediation effort at the Eastern Electric Site. The other component involved decontamination of a spray pit. This activity is documented in Dames & Moore's report dated October 16, 1991, and entitled Spray Booth Area Decontamination and Sewer Evaluation.

Dames & Moore provided overall project management support for the soil removal project. The onsite observation was performed by Mr. J. Britt Quinby, Project Civil Engineer, under the responsible charge of Mr. Blickwedehl. Mr. Quinby and Mr. Blickwedehl also provided technical consultation during discussions and meetings with Mr. Thomas D. Johnson and Mr. E. Joseph Sciasca, P.E., of the NYSDEC. Copies of the curriculum Vitae for Messrs Quinby and Blickwedehl are included in Appendix D of this report.

Contaminated soil removal was performed in three phases. The first phase was performed in November of 1989, the second phase was in June, 1990, and the third in October 1990. Westinghouse Environmental & Geotechnical Services, Inc. (WEGS) of Toledo, Ohio performed the excavation and remedial work for the first phase, Buffalo Drilling, Inc. of Buffalo, New York performed drilling and sampling during Phase II, and Environmental Products and Services, Inc. of Buffalo, New York performed the soil removal of Phase III. Buffalo Drilling and Environmental Products and Services were subcontractors to Dames & Moore.

The technical content of the report is divided into six sections as follows:

1. A description of soil removal activities;
2. A summary of the quantities of soil removed and disposed of;
3. Photocopies of manifest and disposal documents;
4. A sketch showing soil sample locations;
5. Laboratory analysis of soil samples along with SW 846 Section 1.5 QA/QC reportables and deliverables package; and
6. Certification that the work was done in accordance with the approved work plan.

## 2.0 DESCRIPTION OF SOIL REMOVAL ACTIVITIES

The soil removal activities consisted of the removal of two piles of contaminated sludge, (referred to as pile #1 and pile #2), and the effected soil below and around them. The piles were located on the North East corner of the facility property and encompassed an area approximately 40 feet square, (reference Figure 1 and 2 in Appendix B).

### 2.1 PHASE I

On Friday, November 17, 1989, the area surrounding Pile #1 and #2 was separated into a Hot Zone, Support Zone and decontamination area for exit/entry. The Hot Zone encompassed Pile #1, Pile #2 and an area sufficiently large enough to contain the trackhoe and two 25-cubic yard roll-off boxes. A decontamination area and Support Zone was established just to the south of the site prior to the edge of the gravel parking lot.

Two sides of the newer chain link fence (the Southern and Western sides) and approximately 50 feet of the old chain link fence were temporarily removed. The trackhoe was then placed in the north-west corner of the area with the roll-off boxes to the south and to the west of Pile #1. This enabled the trackhoe to excavate contaminated soil and transfer it to roll-off boxes while being positioned in a "clean" area.

Prior to excavation the NYSDEC was notified. Mr. Johnson of the NYSDEC was on site during the excavation activities.

The trackhoe excavated Pile #2 first, then Pile #1. The contents of piles plus 6 to 8 inches of subsoil were removed. The horizontal excavation limits extended 4 to 8 feet out from each pile. One 25 c.y. rolloff box, lined with visqueen, was filled.

\* During excavation, water or saturated soil was encountered approximately 12 to 18 inches below the ground surface. This limited the depth of the excavation in accordance with the terms of the work plan which did not contain provisions to handle a wet excavation and the risk of potential spread of contamination. Therefore, nine (9) post excavation soil samples were taken above these saturated conditions at several locations as shown on Figure 1.0 in Appendix B of this report.

The samples were collected in accordance with the procedures outlined in Appendix B of the Work Plan. It was the intent of the field crew to do a headspace screening of each sample for volatile organics five minutes after the samples were collected, but due to a malfunctioning OVA, this was not possible. A field judgement was made by Mr. Quinby, and Messrs. Bowman and Alliman of WEGS, to forward the samples to NUS without doing the headspace screening. This was based on the premise that even if the OVA readings were above the 10 ppm limit, further excavation would not be possible during this project phase due to the presence of water.

The samples were packaged and delivered by Mr. Alliman to NUS in Pittsburgh, Pennsylvania the next morning.

When excavation and sampling activities were completed for the day, both Pile #1 and Pile #2 excavated areas were covered with visqueen and the rolloff boxes covered and secured.

On Sunday the 19th, contaminated soil was transferred from the full rolloff box to a second empty rolloff. Bulk waste (visqueen and disposable personnel protective equipment) generated from the spray booth pit cleaning was also placed in the second rolloff. Both rolloff's were then covered and secured.

On Monday, November 20th the Westinghouse crew constructed a decontamination pad out of Hypalon which was elevated at the edges by an earthen berm. A high pressure water rinse was used to clean the entire trackhoe, including the under carriage, of all soil, sludge, and dust. The bucket of the trackhoe was the only part of the equipment that came into contact with PCB contaminated material. It was wiped clean with penetone prior to water rinsing. Rinse and wash water were collected on the decon pad and placed into 55 gallon drums.

That afternoon NUS called with the PCB and total volatile organic sample results from the first round of samples collected the previous Friday (see Table 1.0 for a summary of the results and Appendix C for a copy of the Lab Report and QA/QC package). Two sample locations showed results of PCB concentrations lower

than 1 ppm - #5 and #9. Also, except for 1,1-dichloroethane found in samples #2 and #7, the sample results for the volatile organics were under the 1 ppm target level.

Since the concentrations of PCB's in soil samples #2, #3, #4, #6, #7, #8 and #10 were all above 1 ppm, further excavation in these areas was needed. Mr. Joseph Sciasca of the NYSDEC was on site shortly after the sample results were available. A site meeting was held between Mr. Sciasca, Mr. Bowman of WEGS, and Mssr's Quinby and Blickwedehl of Dames & Moore to determine how to proceed with the work under conditions involving saturated soil.

Mr. Sciasca suggested that the excavations continue under these "wet" conditions. He proposed that the confirmation samples of the soil under the piles be obtained using a core sampler. However, because this is below the water table, and would constitute a significant change from the original work plan, and since there was a possibility of contaminating clean underlying soil with water in the excavation and/or sampling holes, the determination was made to remove soil to only the depth that was at or close to saturated conditions. Therefore, WEGS used shovels to remove an additional 2 to 3 inches of soil within the excavated areas.

That afternoon, November 21, 1989, a second round of soil sampling was performed (see Figure 1.0). The samples were again collected in accordance with Appendix B of the Work Plan. These samples were screened via a headspace measurement with an OVA. The results of this screening can be found in Table 2.0 provided at the end of this report. The samples were then packaged and shipped to NUS for analysis.

The contaminated soil area was then covered with visqueen, hazard tape was placed around the area, and a snow fence was erected to serve as a temporary barrier until the project could be completed. The same day WEGS completed their demobilization activities and left the site. No further work could be done until the receipt of the second round of soil sample results.

The second round of sample results were available the week of December 16, 1989. Original sample point locations #2, #3, #4, #6, #7, #8, and #10 had been resampled and were relabeled #2P, #3P, #4P, #6P, #7P, #8P, and #10P respectively. The results are summarized in Table 1.0 and a copy of the Lab Report and QA/QC package can be found in Appendix C.

The concentrations of PCB's and the volatile organics in the second round of sampling did not meet the target clean up levels as outlined in the Work Plan. The concentrations of PCB's ranged from less than 2 ppm to 64 ppm, and the concentrations for some of the volatile organics were above the 1 ppm target level.

## 2.2 PHASE II

Since the confirmation soil sample results from the second round of sampling did not meet the target clean up levels as outlined in the Work Plan, and groundwater was encountered near the resultant surface of the excavated area, Amendment 1 to the Remediation Work Plan dated January 15, 1990 was developed by Dames & Moore. This amendment addressed procedures to be used in characterizing the depth to which contamination had penetrated the soil, (Phase II), and excavation of soil under saturated conditions, (Phase III). The plan was submitted to the NYSDEC on January 17, 1990 and subsequently approved on January 30, 1990.

On Monday, June 11, 1990, Buffalo Drilling Company, Inc., of Buffalo, New York, working under the direction of Dames & Moore, mobilized a track mounted drill rig to the site to sample the soil in the affected area. The samples were needed to characterize the extent of the contamination as outlined by Amendment 1. Continuous split spoon samples were taken at the six locations shown on Figure 2.0 in Appendix B. The samples extended from the bottom of the excavation surface (approximately 18" below original grade) to a depth of 6 feet. Sampling locations #22, #32, #42, #62, #72, and #102 taken from Pile 1 area and #82 taken from Pile 2 area correspond to sampling locations #2P, #3P, #4P, #6P, #7P, and #10P from Pile 1 area and sample #8P from Pile 2 area collected during sampling activities of November 1989. All soil sampling and handling procedures were in accordance with Amendment 1 to the Remediation Work Plan, dated January 15, 1990.

The soil samples were inspected in the field by Mr. Quinby and descriptions were logged. Field screening was performed on the upper two split spoon samples (0-2' and 2-4' samples) using an organic vapor analyzer (OVA) in accordance with Section 5.2.3, of the Work Plan. The concentrations of VOC's detected by the OVA ranged from 0 to 5 ppm for the series of samples collected from the upper 0 to 2 foot depths, (see Table 2.0 located at the end of this report). The split spoon samples collected from the 4 to 6' depth interval were used to visually classify the soils and make observations as to the soils general condition and make-up.

At the completion of the sampling effort, the borings were grouted and the drill rig and all associated equipment were decontaminated in accordance with Section 5.2 of the Work Plan.

Subsurface soils encountered during the sampling activities consisted of 12 to 24 inches of loose gravel, sandy gravel and cinders to sandy clay overlying stiff brown silty clay to clay. This dry stiff silty-clay to clay layer was identified down to a

depth of six feet and the borings did not penetrate beneath it. The upper gravel and sandy zones were moist, with decreasing moisture content with depth. The lower most split spoon samples collected at each location (4-6' in depth) appeared dry.

Field screening of these samples with an OVA revealed readings of less than 0.10 to 5 ppm, (see Table 2.0), analytical test results showed concentrations of the VOC's were below 55 parts per billion (ppb) (see Table 1.0). All PCB concentrations were below detection limits.

Analytical and field screening results were combined with boring logs to estimate the extent to which contaminated soil should be excavated and to identify potential problems in the underlying geological conditions which could impact Phase III remedial activities. Based on the available data, a minimum target excavation depth of 24 to 26 inches was established. Excavating to this depth would remove the upper granular soils and a few inches of the underlying silty-clay layer.

Mr. Tom Johnson of the NYSDEC was on site during the boring and sampling activities. He was also present during the head space analyses of the collected samples.

### 2.3 PHASE III

The information obtained during the Phase II characterization activities was used to establish the excavation depth and prepare contract documents for completion of the soil remediation effort. Environmental Products and Services (EPS) was subcontracted by Dames & Moore to complete the soil removal work at the site. NUS Laboratories was again used to perform the confirmation soil sample analyses.

On October 1, 1990, Mr. Jim Vreeland, Mr. Jim Barry, and Mr. John Scott of EPS were met on site by Mr. Quinby. They proceeded to establish the Hot Zone, Support Zone and decontamination area for exit/entry. These areas were the same as used during the excavation activities in November, 1989. Four 20 cubic yard rolloff boxes were delivered onsite the previous Friday and were positioned to the south of Pile #1 and to the east and south of Pile #2.

Prior to excavation Mr. Johnson of the NYSDEC was notified. He was onsite during excavation activities.

A backhoe was used to excavate Pile #1 and then Pile #2. The backhoe was maneuvered outside of the contaminated area with only the bucket contacting the contaminated soil being excavated. Little to no water was encountered during the excavation and approximately 90 cubic yards of soil was removed from the Pile #1 and Pile #2 areas and placed in rolloff containers.

When the desired depth of 24 to 26 inches below the excavated grade (42 to 44 inches below the original grade) was reached, seven confirmation soil samples were taken. The locations of these sample points corresponded to the previous locations of the characterization activities and of November 1989. They were labeled #23, #33, #43, #63, #73, #83, and #103 (see Figure 3.0 in Appendix B). Each sample was collected in accordance with the procedures outlined in Appendix B of the Work Plan. Again, headspace readings using an OVA were performed on each sample in the field. The headspace results were all below 10 ppm and are reported in Table 2.0 attached to this report.

At the request of Mr. Johnson, Mr. Quinby obtained four more soil samples from the perimeter of the excavated area of Pile #1. These samples were labeled North, South, East, and West. Headspace measurements were again performed in accordance with procedures outlined in the Work Plan. The results of these readings indicated nondetectable for all four samples, these results are also listed in Table 2.0.

Since all headspace readings from the confirmation samples were nondetectable or below 10 ppm, the samples were packaged for shipment to NUS. Included with the sample shipment were two additional samples one was of the backfill material and the other was of the topsoil. Both materials were to be used in restoration of the site.

When excavation and sampling activities were completed, both Pile #1 and Pile #2 excavated areas were covered with visqueen, rolloff boxes covered and secured, the equipment decontaminated as outlined by the Work Plan, and a snow fence erected around the excavated area.

Laboratory results of the confirmation samples were received by Dames & Moore on October 11, 1990. A copy of these results and the respective QA/QC package can be found in Appendix C. The concentration levels of PCB's and total volatile organics in the samples were all within the target cleanup levels outlined in the Work Plan.

Analysis of the backfill sample showed a 9 ppb concentration of benzene. Even though the work plan did not call for confirmation that the material be free of volatile organics, EPS was asked to obtain another sample from a different source and analyze the source for PCBs as reviewed by the Work Plan. A sample was obtained directly from a truck that delivered backfill to the site. It was tested for PCB's and the results were nondetectable. The results of the analysis of the topsoil sample initially provided by EPS were nondetectable for both volatile organics and PCB's. These analyses can be found in Appendix C, and are also tabulated in Table 1.0.



These analytical data were transmitted to Mr. Johnson on October 19, 1990 during a meeting held at the Dames & Moore office in Orchard Park, New York. Ms. Maryann Grotefend of Westinghouse Electric Corporation, and Mr. Quinby were also in attendance at the meeting, the purpose of which was to discuss the status of the project and relay the results of the confirmation sample analysis to Mr. Johnson.

#### 2.4 SITE RESTORATION

With the required analytical data showing that the target cleanup levels for PCB's and volatile organics as outlined in the Work Plan have been met, a decision was made by Westinghouse and agreed to by NYSDEC to backfill the excavation and commence with site restoration.

On October 25, 1990 EPS backfilled the excavations and restored the area back to its original grade.

The Contract Laboratory Protocol (CLP) backup package for the lab results were not received until after the backfill had been placed. While reviewing the CLP package, Mr. Quinby discovered (as a result of a misunderstanding by the laboratory) the analyses performed on the confirmation soil sample for volatile organics had been performed using the TCLP extraction protocol, and not on an as received basis as was done on all previous samples. Even though the results from the TCLP extraction indicated extremely low to nondetectable concentrations of volatile organics, the decision was made to obtain another set of confirmation samples and redo the VOC analysis on an as received basis. This was needed to provide a consistent comparison to the November 1989 results using the same analytical procedures for the confirmation sample analyses both times.

On November 2, 1990 Mr. Quinby accompanied by Ms. Jane Staten of Dames & Moore obtained seven more soil samples. The samples were labeled #24, #34, #44, #64, #74, #84, and #104, and correspond to the previous soil sample points (see Figure 3.0 in Appendix D). Samples of the underlying native material were obtained by hand boring through the newly placed backfill material to the resultant level of the excavation. This interface was easily identified. The backfill is a well graded sandy loam material which is dark in color. The native material consisted of silty, sandy, clay, fairly consolidated and light in color. The samples were collected and headspace readings taken with an OVA in accordance with the Work Plan. The results of the headspace readings are listed in Table 2.0 attached to this report.

Headspace readings were nondetectable for all samples but one which was approximately 1 to 5 ppm. The samples were packaged and shipped to NUS for analysis. The volatiles were analyzed on an as received basis, consistent with the analysis performed on the samples from November, 1989.

Mr. Johnson, of the NYSDEC, was onsite during the resampling activities and collected two duplicate soil samples. Mr. Johnson packaged the samples and forwarded them to an independent lab as chosen by the NYSDEC.

Analytical results for the samples analyzed for Dames & Moore were available on November 13, 1990. All results were within the target cleanup levels and are listed in Table 1.0 located at the end of this report. The data and respective QA/QC package can be found in Appendix C.

Mr. Johnson informed Mr. Quinby on December 19, 1990 of the results from the analyses performed on the duplicate samples he had taken. They were consistent with the results obtained from NUS. A copy of these results can be found in Appendix C, and are summarized in Table 2.0.

On May 8, 1990, Environmental Products and Services completed the site restoration work by installing a chain link fence in the location where the original one had been previously removed in order to perform the soil excavation activities. They also placed seed and mulch over the affected area as required by Section 5.2.5 of the Work Plan.

### 3.0 CHARACTERISTICS AND DISPOSITION OF REMOVED SOIL

#### 3.1 SOIL REMOVAL DURING THE NOVEMBER 1989 ACTIVITIES (PHASE I)

During the remedial activities of November, 1989 approximately 30 cubic yards of soil and debris were removed from the area in and around piles #1 and #2. The material was placed into two 30 cubic yard rolloff containers. A sample of the soil was obtained and forwarded to RECRA Environmental, Inc., (a New York State Certified laboratory), for TCLP extraction and a subsequent analysis for F-listed spent solvents (VOA's) to determine the soil's disposal status under 40 CFR Part 268, "Land Disposal Restrictions". The results of this analysis are provided in Appendix C and show a concentration of xylene which is above the limits imposed by the regulations for material that can be disposed in a permitted land disposal facility. Because of the elevated concentrations of xylene, the soil was considered an F listed waste, for which the Best Demonstrated Available Technology (BDAT) for disposal is incineration.

Since the material contained in the rolloff's needed to be incinerated, the sample analytical results and another sample of soil was forwarded to Aptus Inc., in Coffeyville, Kansas. Based on this information and their evaluation of the sample, approval was granted for incineration of the soil by Aptus. The two rolloff containers were then transported off site in route to Coffeyville on May 30, 1990.

The permitted hazardous waste carrier contracted by Westinghouse Electric Corp. to transport the material to Aptus was Buffalo Fuel Corp., of Niagara Falls, New York. The material arrived in Coffeyville on June 1, 1990, and copies of the hazardous waste manifests are provided in Appendix A. The material in one rolloff container was destroyed by Aptus on August 1, 1990, and a copy of the Certificate of Destruction has been provided in Appendix A. Due to time constraints during the trial burn, at Aptus, the remaining material could not be incinerated there and was transported to a Chemical Waste Management permitted facility in Chicago for incineration. However, prior to it's destruction the incinerator was shut down due to operational problems. Therefore, the rolloff was transported back to Aptus, and was destroyed the week of October 7, 1991. A copy of the manifests and Certificate of Destruction are included in Appendix A.

### 3.2 SOIL REMOVED DURING THE OCTOBER 1990 ACTIVITIES (PHASE III)

The material excavated during October, 1990 totaled approximately 90 cubic yards and was placed in four 25 cubic yard rolloffs. A composite sample was obtained from the rolloffs and forwarded to RECRA Environmental Laboratory for TCLP extraction and a subsequent analysis to determine it's disposal status in accordance with 40 CFR Part 268, (as was done for the for the material removed in November, 1989). The results of this analysis are presented in Appendix C and show very low to nondetectable concentrations of the F-listed solvent wastes (VOA's). Based on these results, and PCB concentrations of 64 ppm, the soil could be disposed in a permitted land disposal facility. This information along with a soil sample was forwarded to Chemical Waste Management, Inc.'s permitted landfill located in Model City New York, and was subsequently approved for disposal at this facility.

The rolloff containers remained on site during the time required to characterize the waste and obtain approval for disposal from Chemical Waste Management. During this time, the covers on the containers were damaged by vandalism and adverse weather. As a result of the damage some rain water collected in the rolloffs. Thus, removal and proper disposal of the water was required prior to the transport of the material to Model City. To determine if the water could be disposed of by discharging it

into the Buffalo Sanitary Sewer system, a composite sample of the water was collected and forwarded to RECRA Environmental, Inc. for analysis. Due to the presence of organics that were found in the TCLP extract and PCB concentration in the soil, the Buffalo Sewer Authority requested that the sample be analyzed for PCB's per 40 CFR Part 136, method 608. The results of this analysis showed a PCB concentration of 13 ppb. This was communicated to Mr. James Overholt of the Buffalo Sewer Authority. Based on the information furnished, approval was granted by the Sewer Authority to discharge the water in the rollofs into the sewer system. Copies of the water sample analytical results are provided in Appendix C; the letter from Mr. Overholt approving the discharge of the water into the sewer system is provided in Appendix A.

On Thursday March 28, 1991 Mr. Quinby meet a laborer from Environmental Products and Services at the Eastern Electric site to transfer soil contained in the two overfilled rollofs into a fifth one that had been delivered the preceding day, and to remove the water in the containers and discharge it into the sewer. Mr. Overholt met us on site and located the sewer inlet where the water was to be discharged. The soil and water transfer operations were completed that day and the pickup and transport of the containers to Model City was scheduled for the following day.

On Friday March 29, 1991 the permitted hazardous waste hauler contracted by Westinghouse Electric Corp., Tonawanda Tank Transport Service, Inc. picked up the five rollofs of material for transport to CWM in Model City, NY. However, due to scheduling problems, the containers were transported to, and staged at Tonawanda Tank's facility until the following Monday, (April 1, 1991) at which time Chemical Waste Management could accept the shipment at their Model City facility. Four of the rollofs were transported to Model City that Monday with the remaining one transported Tuesday April 2, 1991. Copies of the hazardous waste manifests used are provided in Appendix A.

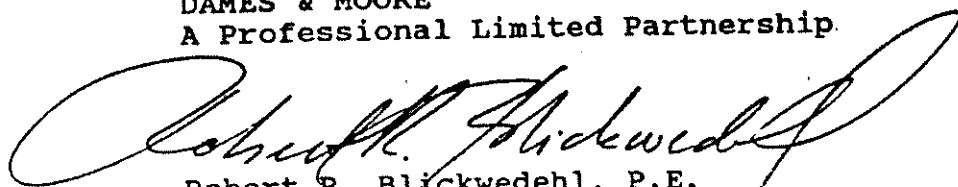
Table 3.0 attached to this report provides a listing of the quantity of material removed and disposed. It also provides the location, date, and method of disposal.

#### 4.0 SUMMARY AND CONCLUSIONS

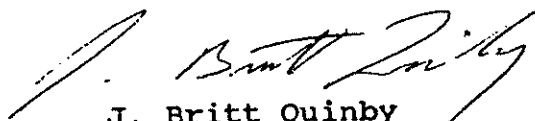
As described in the previous sections of this report, all exterior cleanup activities required by the Work Plan were completed in accordance with the methods specified in the Work Plan as amended. A certification document to this effect is attached to this report.

The activities documented in this report and those documented in Dames & Moore's report entitled Spray Booth Area Decontamination and Sewer Evaluation, dated December 13, 1990, fulfilled all remediation requirements cleanup objectives for the site.

Respectfully submitted,  
DAMES & MOORE  
A Professional Limited Partnership



Robert R. Blickwedehl, P.E.  
New York Registration No. 54177  
Partner, (Ltd.)



J. Britt Quinby  
Project Manager

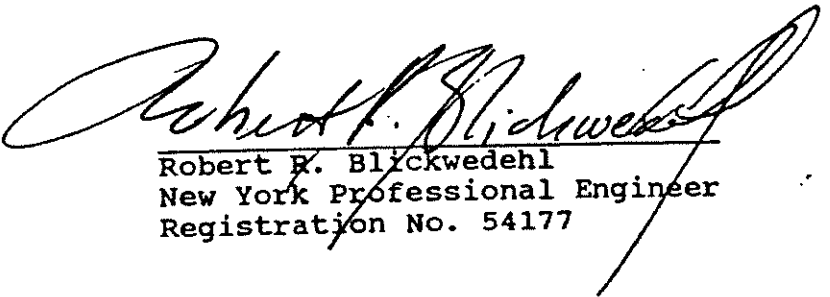
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CERTIFICATION OF COMPLETION

CONTAMINATED SOIL REMOVAL

Eastern Electric Apparatus Facility  
1132 Seneca Street  
Buffalo, New York

I hereby certify based on personal knowledge and belief that the soil removal work performed at the subject facility during the period of November 17, 1989, May 30, 1990, and March 28 and 29, 1991 was performed in accordance with the Approved Work Plan dated August 31, 1989, and addendum to the work plan dated January 15, 1990.



Robert R. Blickwedehl  
New York Professional Engineer  
Registration No. 54177

TABLE 1.0  
 SUMMARY OF CONFIRMATION SOIL SAMPLE  
 RESULTS FOR THE EASTERN ELECTRIC APPARATUS FACILITY  
 SOIL REMEDIATION EFFORT

#	Date Sampled	PCB (ppm)	Total Volatile Organics (ppm)	Comments
2	11/17/89	19.3	3.265	PCB's - AR, PH's - AR
2p	11/21/89	64.0	13.330	PCB's - AR, PH's - AR
23	10/01/90	<0.2	0.015	PCB's - AR, PV's - TCLP
24	11/02/90		0.014	PH's - AR
3	11/17/89	5.7	1.204	PCB's - AR, PH's - AR
3p	11/21/89	6.3	0.033	PCB's - AR, PH's - AR
33	10/01/90	<0.2	0.020	PCB's - AR, PV's - TCLP
34	11/02/90		0.009	PH's - AR
4	11/17/89	4.4	0.744	PCB's - AR, PH's - AR
4p	11/21/89	1.4	0.003	PCB's - AR, PH's - AR
43	10/01/90	<0.2	<D.L.	PCB's - AR, PV'S - TCLP
44	11/02/90		<D.L.	PH's - AR
5	11/17/89	<0.2	0.013	PCB's - AR, PH's - AR
6	11/17/89	4.5	1.237	PCB's - AR, PH's - AR
6p	11/21/89	<2.0	0.144	PCB's - AR, PH's - AR
63	10/01/90	<0.2	0.018	PCB's - AR, PV's - TCLP
64	11/02/90		<D.L.	PH's - AR

TABLE 1.0 (Continued)  
 SUMMARY OF CONFIRMATION SOIL SAMPLE  
 RESULTS FOR THE EASTERN ELECTRIC APPARATUS FACILITY  
 SOIL REMEDIATION EFFORT

#	Date Sampled	PCB (ppm)	Total Volatile Organics (ppm)	Comments
7	11/17/89	17.0	3.402	PCB's - AR, PH's - AR
7p	11/21/89	21.0	0.300	PCB's - AR, PH's - AR
73	10/01/90	<2.0	0.011	PCB's - PV's - TCLP
74	11/02/90		0.003	PH's - AR
8	11/18/89	35.0	0.163	PCB's - AR, PH's - AR
8p	11/21/89	<2.0	0.002	PCB's - AR, PH's - AR
83	10/01/90	0.2	0.017	PCB's - AR, PV's - TCLP
84	11/02/90		0.002	PH's - AR
9	11/17/89	0.38	0.010	PCB's - AR, PH's - AR
10	11/17/89	8.8	1.406	PCB's - AR, PH's - AR
10p	11/21/89	19.3	0.981	PCB's - AR, PH's - AR
103	10/01/90	<0.2	<D.L.	PCB's - AR, PV's - AR
104	11/02/90		0.002	PH's - AR

<D.L. = Less than detection limits.  
 PCB's = Polychlorinated Biphenals  
 PH's = Purgable Halocarbons  
 PV's = Priority Pollutant  
 AR = As Received  
 TCLP = Toxicity Characteristic Leachate Procedure



TABLE 2.0  
SUMMARY OF SOIL SAMPLE FIELD  
HEAD SPACE READINGS FOR THE  
EASTERN ELECTRIC APPARATUS FACILITY  
SOIL REMEDIATION EFFORT

<u>Sample #</u>	<u>Date of Reading/Sampling</u>	<u>Results (ppm)</u>
2	11/18/89	N.R.
2P	11/21/89	750.00
22A	6/11/90	2.00 to 3.00
23	10/01/90	N.D.
24	11/02/90	1.00 to 5.00
3	11/18/89	N.R.
3P	11/21/89	4.50
32A	6/11/90	1.00
33	10/01/90	N.D.
34	11/02/90	N.D.
4	11/18/89	N.R.
4p	11/21/89	2.80
42A	6/11/90	N.D.
43	10/01/90	N.D.
44	11/02/90	N.D.
5	11/18/89	N.R.
6	11/18/89	N.R.
6P	11/21/89	N.D.
62A	6/11/90	N.D.
63	10/01/90	N.D.
64	11/02/90	N.D.
7	11/18/89	N.R.
7P	11/21/89	12.00
72A	6/11/90	2.00
73	10/01/90	0.10
74	11/02/90	N.D.
8	11/18/89	N.R.
8P	11/21/89	N.D.
82A	6/11/90	N.D.
83	10/01/90	N.D.
84	11/02/90	N.R.

TABLE 2.0 (CONTINUED)

<u>Sample #</u>	<u>Date of Reading/Sampling</u>	<u>Results (ppm)</u>
9	11/18/89	N.R.
10	11/18/89	N.R.
10P	11/21/89	4.50
102A	6/11/90	2.00
103	10/01/90	0.10
104	11/02/90	N.D.
South	10/01/90	N.D.
North	10/01/90	N.D.
East	10/01/90	N.D.
West	10/01/90	N.D.

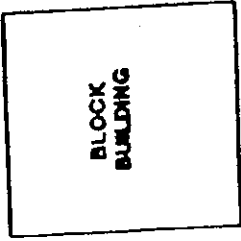
N.D. = Non detectable; less than detection limits = <0.10 ppm.  
 N.R. = No results (head space reading not taken).

TABLE 3.0  
SUMMARY OF SOIL DISPOSAL

<u>Dates Material Removed</u>	<u>Quantity Removed</u>	<u>Disposal Facility</u>	<u>Date of Disposal</u>	<u>Method of Disposal</u>
November 17, to November 21, 1989	15 c.y.s.	Aptus Inc. Coffeyville, KS	August 1, 1990	Incineration
November 17, to November 21, 1989	15 c.y.s.	Aptus Inc. Coffeyville, KS	Week of October 7, 1991	Incineration
October 1, 1990	90 c.y.s.	Chemical Waste Management, Inc. Model City, NY	April 1, and April 2, 1991	Land Disposal

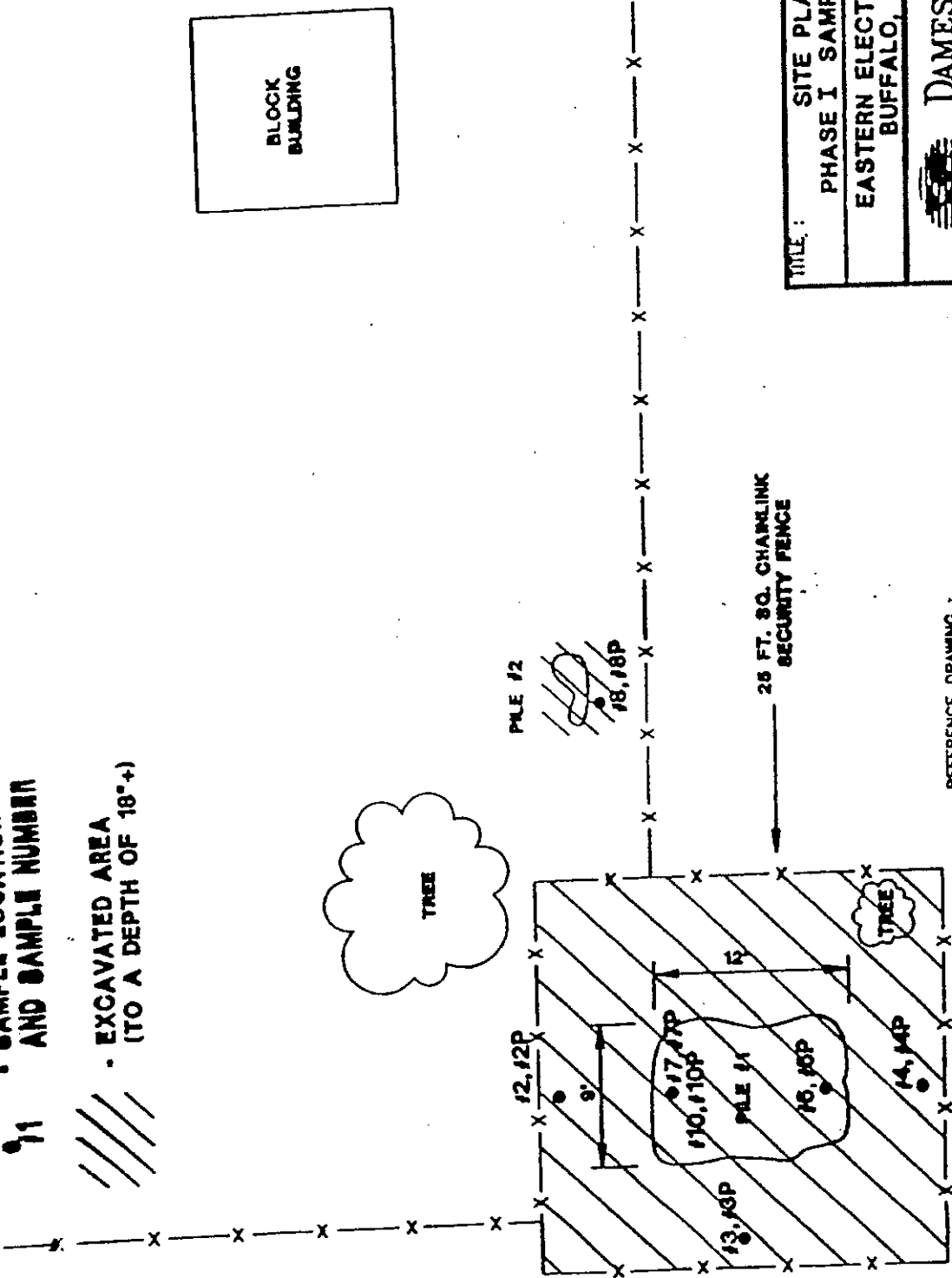


GRAVEL DRIVE




BLOCK BUILDING

- KEY :
- SAMPLE LOCATION AND SAMPLE NUMBER
  - ▨ EXCAVATED AREA (TO A DEPTH OF 18"±)

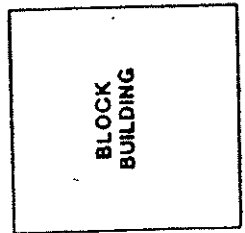


REFERENCE DRAWING :  
 WESTINGHOUSE Environmental Services  
 Drawing No. C-2, Site Plan

TITLE :	
PHASE I SAMPLE LOCATIONS	
EASTERN ELECTRIC APPARATUS BUFFALO, NEW YORK	
 <b>DAMES &amp; MOORE</b> A PROFESSIONAL LIMITED PARTNERSHIP	
SCALE :	1" = 10'
<b>FIGURE 1</b>	



GRAVEL DRIVE



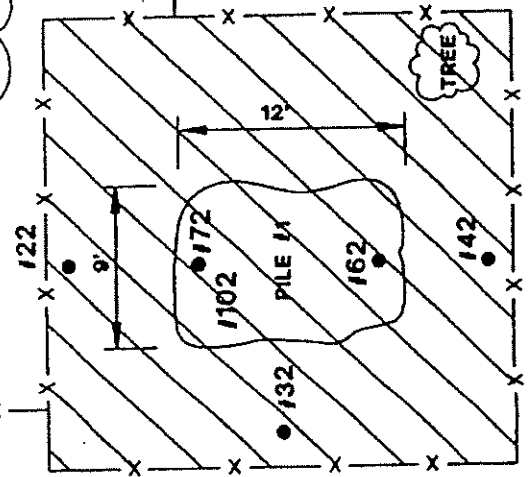
- KEY :
- 11 - SAMPLE LOCATION AND SAMPLE NUMBER
  - ▨ - EXCAVATED AREA (TO A DEPTH OF 18" +)




PILE #2



25 FT. SQ. CHAINLINK SECURITY FENCE

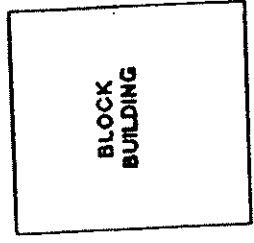


REFERENCE DRAWING :  
WESTINGHOUSE Environmental Services  
Drawing No. C-2 Site Plan

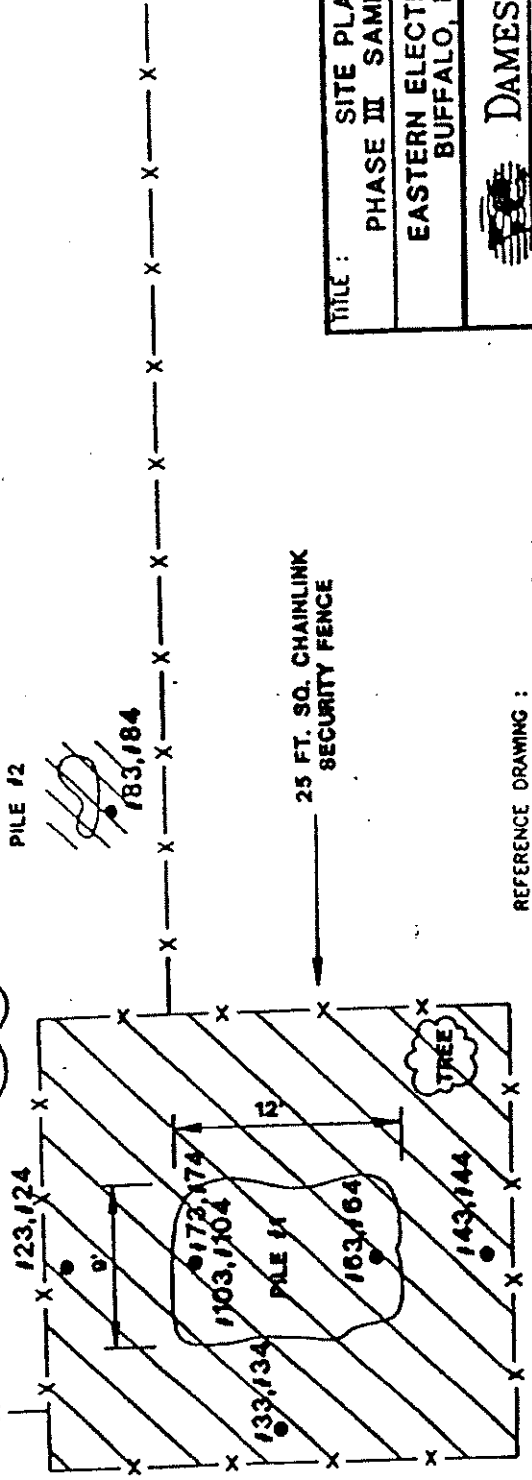
TITLE : SITE PLAN WITH PHASE II SAMPLE LOCATIONS	
EASTERN ELECTRIC APPARATUS BUFFALO, NEW YORK	
 <b>DAMES &amp; MOORE</b> A PROFESSIONAL LIMITED PARTNERSHIP	
SCALE : 1" = 10'	<b>FIGURE 2</b>




GRAVEL DRIVE



- KEY :
- /1 - SAMPLE LOCATION AND SAMPLE NUMBER
  - ▨ - EXCAVATED AREA (TO A DEPTH OF 18" +)



TITLE : SITE PLAN WITH  
 PHASE III SAMPLE LOCATIONS  
 EASTERN ELECTRIC APPARATUS  
 BUFFALO, NEW YORK

 **DAMES & MOORE**  
 A PROFESSIONAL LIMITED PARTNERSHIP

SCALE : 1" = 10'  
**FIGURE 2**

REFERENCE DRAWING :  
 WESTINGHOUSE Environmental Service  
 Drawing No. C-2 Site Plan