

Post-It™ brand fax transmittal memo 7671		# of pages > 8
To <i>Mark Roberts</i>	From <i>Bo Bowman</i>	
Co. <i>NRC</i>	Co. <i>Westinghouse</i>	
Dept.	Phone #	
Fax #	Fax #	

*Mark - Response Ltr.*  
 Westinghouse  
 Electric Corporation



*T. Basilone*

Westinghouse Building  
 Gateway Center  
 Pittsburgh Pennsylvania 15222

February 20, 1991

Mr. John Defina, Section Chief  
 Bureau of Environmental Evaluation and  
 Cleanup Responsibility Assessment  
 New Jersey Department of Environmental Protection  
 401 East State Street, 5th Floor  
 Trenton, NJ 08625-0028

Subject: Exterior Site Cleanup Plan  
 Westinghouse Electric Corporation  
 Bloomfield, New Jersey, Facility  
 ECRA Case No. 86070  
 BCM Project No. 00-6885-01

Dear Mr. Defina:

Westinghouse Electric Corporation (WEC) confirms receipt of your letter on February 6, 1991, containing review comments on the July 1990 Cleanup Plan for our Bloomfield, New Jersey facility (ECRA Case No. 86707).

As we previously discussed on several occasions, WEC has proceeded at risk and considerable expense with cleanup activities at this facility and regularly provided information to New Jersey Department of Environmental Protection (NJDEP) personnel. The most recent communication occurred during a site visit on December 4, 1990. During this meeting an update of the site activities was presented and a site tour conducted. NJDEP was informed that WEC had retained BCM Engineers Inc. (BCM) to prepare an Exterior Site Cleanup Plan for soils and groundwater at this facility. Many of the items listed as comments in your letter have been addressed in the Exterior Site Cleanup Plan prepared by BCM and formally submitted as an attachment to this letter.

For ease of review, WEC is responding to the comments outlined in your letter in the same order as they were presented.

#### SOILS

##### 1. Area F

The results and locations of soil samples from Area F that contain metals at concentrations which exceed suggested ECRA action levels are provided on Figure 2A in the attached Exterior Site Cleanup Plan.

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It is HEC's belief that the presence of base neutral compounds in Area F is attributed to normal railroad activities. To document this belief, HEC proposes to collect and analyze offsite background soil samples for BN+15 for correlation with the values found in Area F. The background sampling points are located offsite along the railroad tracks. The background sampling is discussed in Section 3.1 of the Exterior Site Cleanup Plan.

No post-excavation samples are proposed at this time.

2. Area T

Westinghouse proposes to excavate approximately 4 cubic yards of surface soil containing PCBs from Area T and perform the requested post-excavation sampling. This cleanup activity is discussed in Section 4.1 of the Exterior Site Cleanup Plan.

3. Catch Basin Cleaning

HEGS collected composite samples of sediment and liquid removed from the stormwater catch basins. The analytical results are provided in Appendix D of the Exterior Site Cleanup Plan.

Additional remedial activities proposed for the basins are presented in Section 3.3 of the Exterior Site Cleanup Plan. Remedial activities will include verification of the integrity of the basins and discharge points.

4. Gasoline Underground Storage Tank (UST)/500 Gallon

The details regarding the tank excavation and removal are provided in the ECRA Underground Storage Tank Removal and Post-Excavation Sampling Report, dated January 17, 1991, prepared by HEGs. The report was submitted to the NJDEP. An additional copy of the report is enclosed with the Exterior Site Cleanup Plan.

5. Area C

The depth and location of all previous Area C soil sampling results above suggested ECRA action levels are shown in Figure 2B of the Exterior Site Cleanup Plan.

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A licensed New Jersey Professional Engineer (P.E.) will assess the ability to remove any or all of the underground storage tanks (USTs) in Area C. Refer to Section 3.2 and 5.2 of the Exterior Site Cleanup Plan.

A detailed proposal for soil remediation in Area C will be provided based upon the results of a feasibility study. The feasibility study will include an evaluation of remedial alternatives and bench-scale treatability studies. Refer to Section 5.1 of the Exterior Site Cleanup Plan.

#### 6. Soil Sampling Program

A substantial quantity of soil data has been collected from the site to date. The existing data indicate that the volume of soil that may require remediation is large enough to make onsite treatment a feasible alternative. At this time, HEC plans to conduct benchscale treatability studies to evaluate onsite soil treatment alternatives. The benchscale studies will be performed as part of a feasibility study to determine the ultimate soil remediation methods and corresponding cleanup criteria. Refer to Sections 4.1 and 5.1 of the Exterior Site Cleanup Plan.

Additional soil sampling activities adjunct to the remediation phase are discussed in Section 3.1 of the Exterior Site Cleanup Plan. Excavation/remediation activities are not contained in the current scope of activities.

#### 7. Muriatic Acid Tanks

HEC plans to remove the muriatic acid tanks as part of the interior decommissioning work. Upon removal, a soil sample will be collected from soil beneath the tanks that exhibits visible staining. Soil samples will be analyzed for priority pollutant metals and pH. Refer to Section 3.1 of the Exterior Site Cleanup Plan.

#### 8. Surface soil in Area K, between Buildings 6 and 2 that exhibits visible staining, will be sampled and analyzed for priority pollutant metals. Refer to Section 3.2 of the Exterior Site Cleanup Plan.

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#### INTERIOR DECOMMISSIONING

1. We believe the Jerome 411 (or the Improved Model 431 Mercury field survey instrument) is suitable for ensuring no mercury levels greater than .001 milligrams per square meter are present. However, HEC understands and will support NJDEP's request to perform some independent assessments of the air monitoring performed with this method. As discussed previously with NJDEP, we would like to substitute an alternative for the "silver wool method" as we feel this method is not suitable to field work. With your approval, it is our intent to use a system developed by Rathje and Macero and now incorporated as NIOSH method 6009 and OSHA method ID145H. The LOD for the method is .03 microgram. For a 100L sample this would mean the minimum detectable concentration would be 0.2 microgram per cubic meter. This method has been used previously<sup>2,3</sup> and is capable of detecting less than the 1 microgram per cubic meter action level. As requested and discussed, we will submit sampling and analytical procedures for your review prior to commencement of sampling for final clearance.
2. Prior to the start of mercury remediation, another Addendum to the Initial Sampling Plan and Cleanup Plan for Mercury will be submitted that indicates the remedial method and any available references or documents that discuss the effectiveness of the chosen method.
3. Pre-samples (wipes) were taken on January 29, 1991, for 34 interior areas using 10 centimeter squared wipe templates and analyzed for the suspected contaminants listed in the Approved Work Plan dated May 5, 1990, (Page 12 of Attachment II). As discussed and approved via telephone on January 23, 1991, at 11:15 a.m. by Frank Camera, BEERA Technical Coordinator, the following practices were used:

One sample was taken per room or one per homogeneous area (not necessarily 900 square feet) for each area listed. A background sample was also taken using gauze pads and distilled water (rather than Hexane) in accordance with the guidelines in the ECRA Field Sampling Guide. Wipes were taken in all instances since dry metallic compounds are the main contaminants of interest. As requested by Mr. Camera, wipes were taken on the wood floors and concrete floors even though they are considered porous surfaces because they still represent the efficiency of the remediation efforts. Aptus Laboratories in Lakeville, Minnesota, have been contracted to perform the analysis of these wipe samples.

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4. Pre-and post-calibration of field instruments will be performed and documented daily.
5. Air clearance data will provide the necessary documentation and proof of remediation effectiveness. Chip or wipe samples analyzed for Total Mercury will be irrelevant since we are dealing with elemental globules of mercury. In addition, we feel the amount of effort to collect the samples and the cost of analysis would not be justified. As discussed with Frank Camera, this issue can be re-evaluated and addressed in the next Addendum for Mercury Remediation.
6. The sump containing Mercury will be addressed also in the forthcoming Addendum per NJDEP comments.
7. The integrity of all interior pits, sumps, trenches, and floor drains is primarily being addressed as a part of the present interior decommissioning effort underway at the facility which began on February 4, 1991, by Inland Pollution Services Inc. A photo documentation log is being prepared for all areas.

#### DATA COMMENTS

The following soil sample locations will be reanalyzed for BN+15: CH1-1, CH1-2, CH3-3. To avoid PHC interference, where PHC values exceed 550 ppm, the following EPA methods will precede BN analyses of the aromatic fraction: EPA methods 3650 (matrix cleanup) and 3611 (alumina partition).

#### GROUNDWATER

##### General:

The attached Exterior Site Cleanup Plan summarizes work performed and analytical results from the ten monitoring wells and four production wells on site and presents a proposed scope of work to assess groundwater contamination, extent, and remediation of identified conditions. This approach, in principle, was discussed with NJDEP personnel during the December 4, 1990, meeting at the Bloomfield site and utilizes existing data and employs a multi-unit groundwater aquifer methodology. A copy of two recent papers discussing this methodology are attached as Appendix C to the Exterior Site Cleanup Plan.

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This methodology established two aquifer systems on site; a shallow unconfined aquifer and a bedrock, multi-unit aquifer system. Application of this methodology will determine future well placement, analytical parameters, additional assessment/characterization tasks, and remediation alternative evaluation.

1. The groundwater methodology established in the Exterior Site Cleanup Plan (Section 2.2.5) indicates a western groundwater flow direction for the shallow unconfined aquifer and a southerly to southwestern flow direction for the shallow unconfined multi-unit bedrock aquifer. The placement of monitoring well cluster CC-5 is downgradient of Area J (bedrock aquifer) and the unconfined monitoring wells proposed in Section 3.0 of the Exterior Site Cleanup Plan proposes a well location west (downgradient) of Area J which will monitor the shallow unconfined aquifer zone. Upon installation and sampling of this well and evaluation of the data, an additional well, or wells, may be proposed.
2. Section 2.2.5 of the Exterior Site Cleanup Plan presents a discussion of the groundwater model applied to this facility. Completion of wells CC-2, CC-3, and CC-4 as well clusters like existing well clusters CC-5 and BN-1 does not follow the logic of the groundwater model. Wells should be completed to specific intervals of interest identified using a variety of investigation methods. Long, opened bedrock well sections, or screened intervals may establish cross flows in the wells which provides avenues for cross-aquifer contaminant migration. Westinghouse proposes to evaluate the aquifer system to select specific aquifer units of concern to be monitored using the existing wells or new wells in selected locations. This may require recompletion or a new well in the same location. The proposed scope of work to identify these intervals is discussed in Section 3.5.2.2.
3. Westinghouse will assess the onsite sanitary sewer system using a video camera as discussed in Section 3.4 of the Exterior Site Cleanup Plan.
4. & 5. Monitoring wells to assess the former water reservoirs and USTs will be installed as discussed in Section 3.5 of the Cleanup Plan.



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6. The proposed monitoring well sample analyses are discussed in Section 3.5.3. Base/neutral organic compounds (B/N) have not been detected in any wells sampled to date and, therefore, will not be included in the analytical program for existing wells. However, B/Ns will be included in the analytical program for all new proposed monitoring wells with the exception of the well at the former gasoline tank location where post-excavation soil samples did not detect any B/Ns. Radiological parameters will include Gross Alpha, Gross Beta and Total Uranium radionuclides analysis for all the monitoring wells of which only Gross Alpha particle activity in well CC-3 exceeds the Safe Drinking Water Act standards. However, Ra-226, Ra-228, Th-232, U-238, O-234, and U-235 which have not been detected and will not be included in this program.
7. The closure of the existing production wells was discussed during the December 4, 1990, site meeting and is discussed in the Exterior Site Cleanup Plan. Well closure, or partial closure will be completed upon conclusion of the assessment tasks proposed in the Exterior Site Cleanup Plan. To optimize monitoring well replacement, closure, or partial closure of these wells, additional contaminant assessment tasks will be performed prior to this procedure. These tasks will be submitted in project status reports.
8. All NJDEP well forms (Form A and B) will be supplied as required. This will include Form B for existing production wells.

HEC believes that this response and attached Exterior Site Cleanup Plan addresses the comments outlined in your letter satisfying NJDEP's basic requirements. This submittal is consistent with the timeframe outlined.

HEC is committed to the prompt cleanup of this facility. An expression of this commitment is our continued cleanup activities which are currently underway. Furthermore, in order to make decisions in a timely manner, we request a meeting with NJDEP personnel to discuss issues and make decisions in a more timely fashion. In this spirit, we request a meeting at your offices within two weeks of receipt of this Exterior Site Cleanup Plan to discuss the site hydrology presented in this plan because of its impact on the cleanup methodology.

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If, in the interim, you have any questions related to this submittal, please do not hesitate to contact me at (412) 642-4500. Also, please provide me with several tentative dates for the requested meeting with the appropriate NJDEP personnel at your earliest convenience. I will coordinate WEC personnel and activities.

Very truly yours,

*Timothy R. Basilone /TDB*  
Timothy R. Basilone  
Manager  
Environmental Remediation  
Environmental Affairs

/emw 9543q

Attachments

cc: Arnold Gray, Case Manager NJDEP (No attachments)  
Frank Camera, NJDEP (No attachments)  
Rob Lux, NJDEP (No attachments)  
B.M. Bowman, W.E.C.  
R.T. Numbers, BCM  
B.R. Helbig, BCM  
J.C. Obrecht, BCM

## FOOTNOTES

- 1 Rathje, A.O.; Macero, D.H.: Improved Hopcalite Procedure for the Determination of Mercury Vapor in Air by Flameless Atomic Absorption. AM. Ind. Hyg. Assoc. J. 37:311 (1976).
- 2 Kirschner, D.S. et al: Fluorescent Light Tube Compaction. Evaluation of Employee Exposure to Airborne Mercury. Appl. Ind. Hyg. Vol. 3 No. 4 (1988).
- 3 Heber, Joyce: Student Exposure to Mercury Vapors. Journal of Chemical Education, Vol. 63, No. 9. (1986).