

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES

BUREAU OF WASTE MANAGEMENT
Highland Building
121 South Highland Avenue
Pittsburgh, Pennsylvania 15206-3988
(412) 645-7100 (answers 24 hrs.)

August 10, 1988

CERTIFIED MAIL #P 536 374 160

Westinghouse Electric Corporation Westinghouse Building Gateway Center pittsburgh, PA 15222

Attention: Linda L. LeGoullon, P.E.

Project Engineer

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ENVIRONMENTAL CONTROL

RE: Westinghouse Electric Corporation Beaver Plant Vanport, Beaver County

Groundwater Assessment - VOC Contamination

Dear Ms. LeGoullon:

The Department has reviewed the Groundwater Assessment Plan as received in correspondence from you dated August 1, 1988.

The Plan was prepared in response to the discovery of Volatile Organic compounds in several of the groundwater monitoring wells in Area A-9 of the Westinghouse - Beaver Plant. The proposal, as outlined in your August 1st letter, refers in large part to a March, 1987 report entitled "Revised Remedial Action Plan" which was originally developed to address existing cyanide/acid contamination in Area A-9 at the Beaver Plant.

The Department generally agrees with the intent of the August 1, 1988 Groundwater Assessment Plan and approves the plan for implementation with the following conditions:

 An additional shallow zone monitoring well should be placed near the southeast corner of the waste storage tanks just east of well B-1. Based on the Department's recent analytical results from the wells, it is suspected that groundwater may be contaminated by VOCs in this area.

MPL 005 3856

A report by Paul C. Rizzo Associates dated September 17, 1985 indicates that two monitoring wells, B-2 and B-3, are already located in this area. These wells might be useful if they are still in place and constructed properly.

2. Deep zone monitoring well 8-5 does not appear to be constructed properly and may be allowing communication between the upper and lower groundwater zones. Based on the boring log and well construction diagram shown in the May 1986 Groundwater Assessment Report, it appears that there is no bentonite seal above the well. It is also uncertain whether the annular space was appropriately sealed. This may account for the presence of VOCs in the lower groundwater zone at monitoring well 8-5.

Another deep zone monitoring well should be properly constructed in the vicinity of 8-5. Well construction details should be submitted to the Department for review.

- Typical well construction diagrams should be submitted to the Department for the proposed shallow and deep monitoring wells.
- 4. Boring logs and accurate construction detail diagrams for all existing monitoring wells in Area A-9 should be submitted to the Department.
- 5. Due to its low chemical resistance to chlorinated solvents, PVC casing and screens should not be used for well construction as proposed in the Assessment Plan. PVC materials could potentially adsorb solvents or leach organic compounds from its polymer matrix. This may significantly bias the monitoring results. In this assessment, monitoring wells should be constructed with stainless steel or teflon casings and screens.

The nature of this groundwater assessment and any subsequent abatement/cleanup will require the analysis of VOC concentrations to very low levels. It is generally believed that the adsorption of chlorinated solvents onto PVC may be greater in lower concentrations than in high concentrations. Representative analytical results are critical in achieving an accurate description of the contaminant plume and in making decisions regarding the extent and level of cleanup.

5. Due to the reasons stated in the preceding comment, monitoring equipment constructed of PVC should not be used for sampling. It has been shown that at low concentrations of VOCs, under field conditions, the type of sampling device can significantly affect the analytical results. Sampling equipment should be constructed from stainless steel or teflon.

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MPL 005 3857 132/ 6117043 7. Sampling and analysis of all monitoring wells should be performed monthly for three months following the construction of the proposed monitoring wells. The initial sampling event should occur within 10 days of the construction of the proposed monitoring wells.

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After the third month of sampling and analyses, the Department will review all associated analytical and field data and make a determination regarding the need for and frequency of additional sampling.

If the initial analytical results for any of the new wells is positive for any VOC, the suspect well should be resampled within 72 hours of receipt of the positive analytical result. The Department should be notified before the well is resampled.

All analytical results and sampling field data should be submitted to the Department within ten (10) days of receipt of the results from the laboratory.

The Department reserves the right to obtain and/or "split" groundwater samples as deemed necessary.

The Department will refer to this initial plan, as detailed in the August 1, 1988 letter and the conditions set forth herein, as the Phase 1 Groundwater Assessment.

Westinghouse should be prepared to submit to the Department a summary report of the Phase 1 results and conclusions along with recommendations and plans on implementing the next stage of investigation. The Department will refer to the next stage as the Phase 2 Groundwater Assessment.

The Phase 1 Groundwater Assessment Summary Report and the Phase 2 Groundwater Assessment Plan should be received by the Department within thirty (30) days of the first groundwater sampling event.

Westinghouse should be prepared to implement the Phase 2 Groundwater Assessment Plan within thirty (30) days of the Department's final approval.

Please supply the information required in the preceding comments to the Department within fourteen (14) days of receipt of this letter.

Enclosed you will find copies of the Department's analytical results of samples obtained from the groundwater monitoring wells in Area A-9 of the Beaver Plant on July 14, 1988.

WPL 005 3858

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Westinghouse Elec. Corp.

August 10, 1988

If you have any questions concerning this letter, please contact this office.

Sincerely,

Anthony D. Orlando Regional Manager Bureau of Waste Management Southwestern Region

ADO/ETM/kld

Enclosure

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COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES BUREAU OF LABORATORIES SPECIAL ANALYSES REPORT

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COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES BUREAU OF LABORATORIES

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COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES BUREAU OF LABORATORIES

Lab Number (NG-5919
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