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ORIGINAL
(RED)

FEDERAL ON-SCENE COORDINATOR'S REPORT

WESTINGHOUSE GETTYSBURG SITES
Gettysburg, Pennsylvania

CERCLA Immediate Removal
January 4, 1984 through September 7, 1984

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY

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Westinghouse Gettysburg Sites
OSC Report

TABLE OF CONTENTS

FACTS SHEET

REGION III
CERCLA EMERGENCY RESPONSE/IMMEDIATE REMOVAL ACTION — FACTS SHEET

SITE:	Westinghouse
SIZE:	4 to 5 acres in four locations
LOCATION:	Gettysburg, Pennsylvania
APPROVAL DATE:	March 22, 1984
PROJECT DATES:	March 26, 1984 through September 7, 1984
DESCRIPTION:	The Westinghouse Elevator Plant in Gettysburg dumped waste solvents and paint sludges on 5 sites within a 10-mile radius of Gettysburg, PA. Three of the sites have waste in drums exposed on the surface of the ground. One site has two lagoons. Soil and groundwater contamination have been documented at four of the sites. Extensive groundwater contamination requires an alternative water supply for ten households.
HAZARDOUS MATERIAL:	Trichloroethylene, 1,1,1-trichloroethane; other organics; lead, cadmium, chronium
QUANTITIES REMOVED:	244 drums and 144 truckoads (2,880 tons) of hazardous materials and/or contaminated soil.
OSC	Michael Zickler and David P. Wright
REMOVAL CONTRACTOR:	O.H. Materials, Inc.
DISPOSAL LOCATIONS:	Fondessey Enterprisesd, Oregon, OH RCRA# OHØ45243706
PROJECT CEILING:	$690,000
PROJECT COST:	$65,397.00
COMMENTS:	Voluntary compliance by Westinghouse Electric Corporation. EPA action only involved sampling, extent of contamination study, and contractor monitoring. The responsible party undertook all cleanup and disposal activities, but refused compliance with a demand order issued on August 6, 1984 concerning the erection of a fence around the lagoon site. Subsequently, a fence was constructed on September 7, 198 at the Hunterstown Road lagoon site at a cost of $16,961.

Michael Zickler

AR100192 Michael Zickler, OSC

AR100192

SECTION I

FOREWORD

FOREWORD

This report is submitted in accordance with the requirements of Section 300.56 of the National Oil and Hazardous Substances Contingency Plan (NCP). The primary thrust of the Plan is to provide for a coordinated Federal response capability at the scene of an unplanned, sudden discharge of oil or hazardous substance that poses a threat to the public health or welfare. Additionally, the provisions of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) permit a coordinated Federal response to mitigate situations at sites that pose an imminent hazard to public health and the environment. The illegal disposal of waste solvents from the Westinghouse Elevator Plant which resulted in extensive groundwater contamination, direct contact threats due to surface contamination, and a continuing threat to the environment, provided a legal basis for Federal response activities.

Special thanks go to the many agencies, groups and individuals who participated in this project. The extra time and energy expended by all personnel involved contributed greatly to a timely and efficient cleanup, successfully mitigating the threat to public health and the environment.

I wish to thank all those persons who were involved in this project and commend them on their professionalism and expert handling of this removal action.

Michael Zickler
On-Scene Coordinator
U.S. EPA, Region III
Philadelphia, Pennsylvania

SECTION II

INTRODUCTION

Westinghouse Gettysburg Sites
OSC Report

INTRODUCTION

A. Nature of the Site/Initial Situation

In 1968, Westinghouse Electric Corporation built an elevator manufacturing plant in Cumberland Township, Adams County, Pennsylvania. The elevators were processed through a paint and degreasing line where chlorinated solvents such as trichloroethylene (TCE) and 1,1,1-trichloroethane (methyl chloroform) were utilized. Until 1980, the company's practice was to drum the waste solvents and sludges and have them disposed of by a local hauler, Mr. Fred Shealer, with no direction given as to proper disposal procedures.

In response to a complaint from the Adams County Community Environmental Control, the Pennsylvania Department of Environmental Resources (PADER) conducted an extensive investigation which ultimately identified five contaminated sites located within a ten-mile radius of Gettysburg. As the investigation progressed, it became apparent that assistance from the U.S. Environmental Protection Agency (EPA) would be necessary to further the investigation.

On January 10, 1984 PADER officially requested assistance from the EPA in investigating, and if necessary, implementing a CERCLA response where appropriate.

The five sites investigated were: 1) The Westinghouse elevator plant located on PA Route 34 (Biglerville Road); 2) the Culp farm located on Culp Road; 3) the F. Shealer property located at 510 Hunterstown Road including the lagoon site across this road; 4) the T. Shealer property located on PA Route 394 (Shriver's Corner Road); and 5) a site located on the Gettysburg National Military Park property.

The initial investigations revealed extensive soil and groundwater contamination at the Westinghouse site, the Culp farm, the F. Shealer properties and the T. Shealer property. No contamination was found at the site located on the Gettysburg National Military park property.

A. Nature of the Site/Initial Situation (continued)

Subsequently, the investigations provided information concerning extensive groundwater contamination which resulted in residential well water being declared unfit to drink, as well as direct contact threats due to surface contamination, and a continuing threat to the environment.

In response to this situation, a 10-point document (Funding Authorization Request) was submitted requesting Federal monies for immediate removal action to mitigate the imminent and substantial threat to the environment.

B. Site Location

The Westinghouse Electric Corporation elevator plant was located on PA Route 34, (Biglerville Road) in Cumberland Township, Adams County, Pennsylvania, approximately 1.3 miles north of Gettysburg. An estimated six hundred people lived in the vicinity immediately adjacent to and downgradient from the plant. A hydrogeologic assessment of the groundwater contamination indicated that the Westinghouse elevator plant was the most probable source of the chlorinated organic solvents in the well water downgradient from the plant.

The Westinghouse plant itself was the primary source of extensive groundwater contamination which resulted in numerous residential drinking water wells to be rendered as unfit for use and/or consumption.

Investigations revealed elevated levels of trichloroethylene, 1,1,1-trichloroethane, 1,1-dichloroethylene, 1,2-dichloroethylene, tetrachloroethylene, 1,1-dichloroethane, dichloromethane and trichloromethane in home drinking water wells downgradient from the Westinghouse plant.

For approximately ten years between 1970 and 1980, Mr. Fred Shealer hauled and disposed of approximately 20 55-gallon drums per month of Westinghouse waste materials. Most of these drums were emptied, cleaned and then resold. Mr. Shealer disposed of these wastes, effectively increasing the number of contaminated sites, by relocating these wastes outside the natural boundaries as described in the hydrogeologic assessment (see Appendix J).

B. Site Location (continued)

These additional sites are described as follows:

- The Culp farm; investigations revealed elevated levels of 1,1,1-trichloroethane and 1,1-dichloroethylene in the household wells, spring water and ponded water on that site. In addition to groundwater and soil contamination, the contents of several drums located on the Culp farm failed several RCRA tests including the flash below 60°C, EP Tox levels of lead and chromium, and a pH of 1.5.

- The F. Shealer property/Hunterstown Road lagoon; investigations revealed elevated levels of lead, total phenols, cadmium, 1,4-dichloro-benzene, d-n-butylphthalate and para-para-ddt.

The various site locations are depicted in the maps and sketches provided in Appendix A.

C. Efforts to Obtain a Response by the Responsible Party

Investigations of the potential responsible parties (Westinghouse, Fred Shealer, Tom Shealer, William Culp and C.E. Williams) revealed evidence necessary in order to prepare an Administrative Order, proceeding under Section 106[a] of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980 (42 U.S.C. 9606[a]). Westinghouse Electric Corporation was designated as the primary responsible party or respondent.

On February 27, 1984 EPA On-Scene Coordinator (OSC) Michael Zickler received verbal notification from Westinghouse representatives of their intent to comply with the terms of the Administrative Order. This was verified via written correspondence on April 3, 1984.

SECTION III

ROSTER OF AGENCIES, ORGANIZATIONS AND INDIVIDUALS
Organization of the Response

ROSTER OF AGENCIES ORGANIZATIONS AND INDIVIDUALS, Westinghouse Gettysburg Sites, Gettysburg, PA

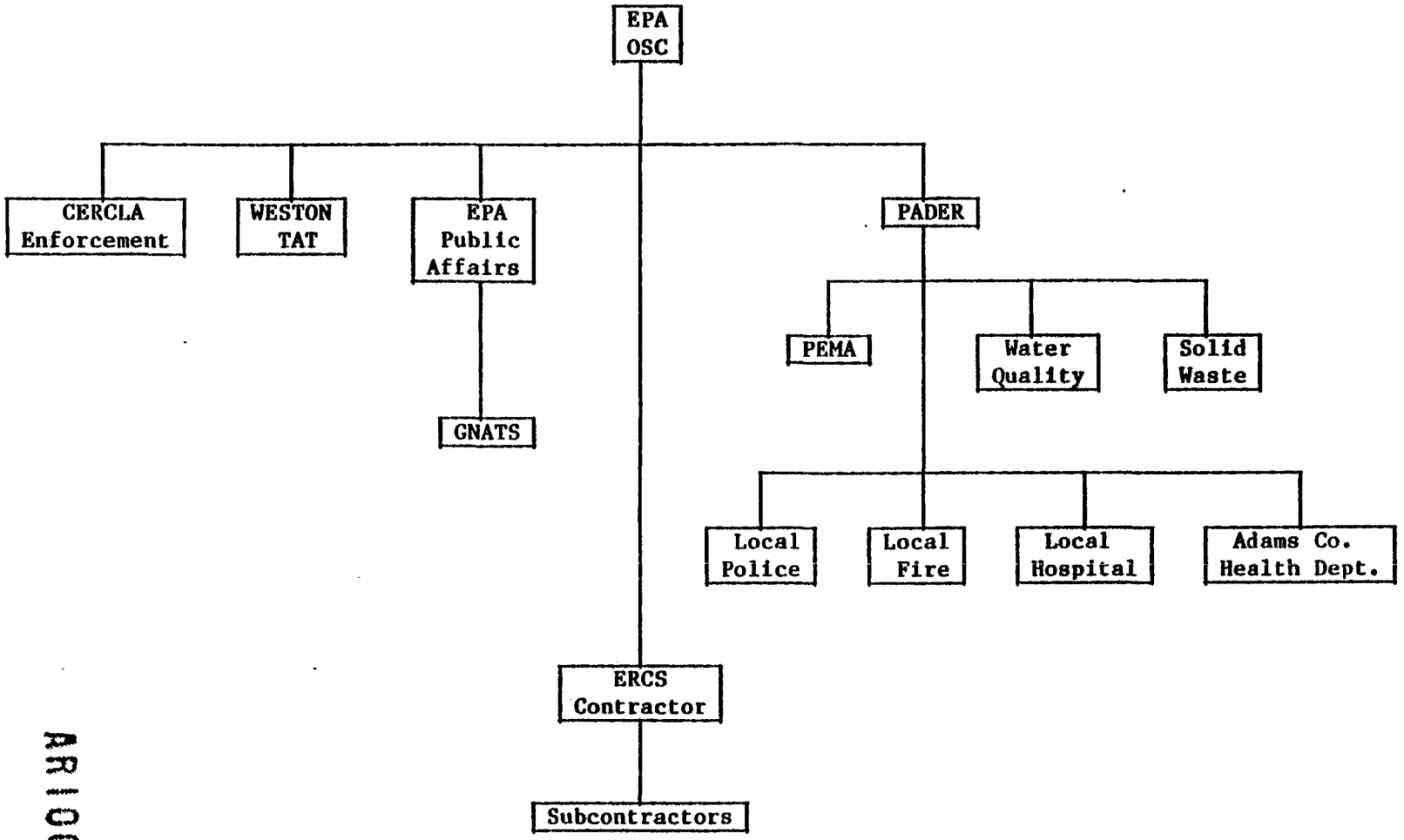
NAMES AND ADDRESSES	CONTACT	DESCRIPTION OF DUTIES
U.S. EPA - Region III Emergency Response Section 841 Chestnut Building Philadelphia, PA 19107 (215) 597-9898	Michael Zickler David Wright	On-Scene Coordinator Junior On-Scene Coordinator
U.S. EPA - Region III Office of Public Affairs 841 Chestnut Building Philadelphia, PA 19107 (215) 597-9825	Harold Yates	Public Affiars Coordinator
U.S. EPA - Region III CERCLA Enforcement Section 841 Chestnut Street Philadelphia, PA 19107 (215) 597-8177	Kathy Hodgkiss	Chief, CERCLA Enforcement Section
Centers for Disease Control (CDC) Atlanta, GA (404) 452-4100	Dr. Frank Mitchell	Certified that the incident presented an immediate threat to the public health and welfare.
Pennsylvania Department of Environmental Resources Harrisburg Regional Office 407 South Cameron Street (717) 787-9697	Francis P. Fair Kenneth Mallick	Coordinated all State agencies involved in the removal action. Coordinated sampling of residential drinking water wells.
Roy F. WESTON, Inc., SPER Division 5090 Central Highway, Suite 4 Pennsauken, NJ 08109 (609) 663-7995	Rich Habrukowich Ken McGill Robert Keating John DeMelas	Provided air and contractor monitoring, site safety, hydro-geological evaluation and an extent-of-contamination study.

ROSTER OF AGENCIES ORGANIZATIONS AND INDIVIDUALS, Westinghouse Gettysburg Sites, Gettysburg, PA

NAMES AND ADDRESSES	CONTACT	DESCRIPTION OF DUTIES
O.H. Materials, Inc. 16406 U.S. Route 224 East P.O. Box 551 Findlay, OH 45839-0551 (419) 423-3526	Richard Toeppe	ERCS contractor on scene, also retained by primary responsible party for cleanup activities.
Westinghouse Electric Corporation Westinghouse Building Gateway Center Pittsburgh, PA 15222 (412) 642-3864	B.A. Kerns	Coordinated responsible party cleanup activities.
Good Neighbors Against Toxic Substances (GNATS) R.D. #6 Gettysburg, PA 17325	Franklin O. Felt	President, local citizens' group

Westinghouse Gettysburg Sites
OSC Report
ROSTER OF AGENCIES, ORGANIZATIONS AND INDIVIDUALS (continued)

ORGANIZATION OF THE RESPONSE



SECTION IV

CHRONOLOGY OF EVENTS

CHRONOLOGY OF EVENTS

Following is a brief summary of major events occurring during the Westinghouse Gettysburg Sites cleanup activity. A more detailed description can be found in Appendix S (POLREPS) of this report.

January 4, 1984	OSC Michael Zickler was informed of potential problems concerning surface drums and contaminated groundwater in the vicinity of Gettysburg, PA.
January 5, 1984	OSC, PADER, TAT, Regional Counsel and Remedial representatives participated in a conference call to discuss strategy for site investigation.
January 10, 1984	PADER officially requested EPA participation in an investigation of the Westinghouse Gettysburg Sites.
January 11, 1984	OSC interviewed Mr. Fred Shealer, a potential responsible party.
January 12, 1984	OSC, TAT and PADER conducted a site inspection and collected samples from various locations.
January 23, 1984	OSC, TAT and PADER conducted an additional site inspection and collected samples from various locations.
January 24, 1984	OSC met with Westinghouse representatives to discuss terms of the Administrative Order.
February 7, 1984	OSC, TAT and PADER conducted an additional site inspection and collected samples from various locations.
February 23, 1984	The 10-point document (funding request) was approved by the Regional Administrator and forwarded to ERD for approval.
February 24, 1984	CDC recommended the use of alternate water supplies based on the analysis of samples collected from residential drinking water wells.

Westinghouse Gettysburg Sites
OSC Report
CHRONOLOGY OF EVENTS (continued)

February 27, 1984	OSC was notified by Westinghouse that they would comply with the Administrative Order. Subsequently, the ERCS contractor was notified to terminate any further development of the Work Plan as required by Delivery Order #60-01-6893.
February 28, 1984	OSC contacted the property owners concerning access rights and received verbal consent for all parties involved in cleanup actions to have access to their properties.
March 19, 1984	OSC requested ERT assistance to define the extent of contamination and to provide other expertise as needed.
March 22, 1984	The Administrative Order was signed by the Regional Administrator requiring Westinghouse to undertake the majority of the work involving cleanup activities, including the Culp and Shearer properties. The 10-point document (funding request) was approved by ERD.
March 26, 1984	ERCS contractor conducted sampling of the lagoon and drum sites.
March 27, 1984	ERCS contractor conducted sampling of the lagoon and drum sites.
March 28, 1984	ERCS contractor conducted sampling of the lagoon and drum sites.
April 3, 1984	OSC received written verification of Westinghouse intent to comply with the Administrative Order.
April 10, 1984	OSC conducted a site inspection to evaluate Westinghouse compliance with the Administrative Order.
April 11, 1984	OSC met with Westinghouse personnel concerning the extent-of-contamination study, plans for alternate water supplies and the possible formalization of their voluntary compliance agreement.

April 16, 1984 — The initial shipment of 20 truckloads of contaminated materials left the site for disposal at Fondessy Enterprises in Oregon, Ohio (RCRA #OHD045243706).

April 26, 1984 — The Westinghouse cleanup effort at the lagoon site was completed, including the removal of 244 drums (44 from the Culp property, 140 from the Shealer property and 60 from the lagoon site) and 144 truckloads (approximately 2880 tons) of contaminated soil. A meeting was held between EPA, PADER, Westinghouse and R.E. Wright Associates (Westinghouse's hired environmental consultant) concerning the Westinghouse elevator plant site. R.E. Wright Associates were to: 1) Determine the extent and rate of migration of contaminants; 2) determine the concentrations of contaminants in the groundwater; and 3) implement a groundwater quality improvement program.

May 2, 1984 — Additional residential water supply sampling was performed by TAT personnel.

June 5, 1984 — The analytical results of water samples collected on May 2 indicated that no action by the immediate removal program was necessary as per the "10-day health advisory."

July 20, 1984 — Based on a telephone conversation involving M. Zickler (OSC), D. Wright (Jr. OSC), T. Massey (Chief, ERS), K. Hodgkiss (CERCLA Enforcement), R. Zambito (SRS) and N. Swanson (SISS) concerning the excessively high concentrations of organic compounds in the soil and ponded water at the lagoon site, which had undergone responsible party cleanup, it was determined that the installation of a fence was warrented to eliminate the threat of direct contact.

August 6, 1984 — OSC gave oral notice to Westinghouse concerning the installation of the fence.

August 15, 1984 — Westinghouse responded that they would not install the fence.

August 26, 1984 — OSC gave oral notice to Fred Shealer concerning the installation of the fence.

August 29, 1984	Jr. OSC met with ERCS contractor response manager on site to facilitate the immediate removal action of the fence installation.
September 5, 1984	The installation of the fence was commenced by the ERCS contractor.
September 7, 1984	The fence installation was completed; locks were installed on the gates to the fence and access road. OSC awaited final invoices.

SECTION V

RESOURCES COMMITTED

Resources Committed

A. Initial Funding Request

The total project cost was originally estimated at $659,000 for cleanup activities which included sampling and the removal and disposal of drums, surface contaminants and lagoon sludge. However, the cleanup activities performed by the primary responsible party resulted in a significant reduction of the total project cost.

A copy of the 10-point document requesting removal monies and detailing response actions is located in Appendix B.

B. Total Cost Summary

I.	Extramural Costs	
	A. ERCS contractural services (O.H. Materials Co.)	$42,755.81
	B. Technical Assistance Team (TAT)	13,022.00
	C. Total Extramural Costs	55,777.81
II.	Intramural Costs	
	A. Government Expenditures (EPA)	$ 9,619.47
	B. Total Intramural Costs	$ 9,619.47
III.	Total Project Cost	$65,397.28

SECTION VI

EFFECTIVENESS OF THE REMOVAL

EFFECTIVENESS OF THE REMOVAL

A. Responsible Parties

Westinghouse Electric Corporation voluntarily undertook removal activities for the Westinghouse Gettysburg Sites. These activities included the removal of drums, surface contaminants and lagoon sludge; the provision of alternate drinking water supplies to those residences whose well water was contaminated and the installation of four monitoring wells around the Westinghouse elevator plant. All removal activities were performed in a timely, efficient manner; however, the responsible party refused to install the fence around the lagoon site resulting in additional Federal monies being expended for that purpose.

B. Federal, State and Local Agencies

Michael Zickler was the EPA Region III On-Scene Coordinator for the duration of the project and was responsible for the overall coordination and success of the removal. He was assisted by Jr. OSC David Wright.

PADER representative Kenneth Mallick assisted in the coordination of State and Federal sampling strategies to eliminate duplication of effort and facilitate the continuity of the project. PADER representative Francis P. Fair was involved in the coordination of all State agencies involved in the removal action.

Franklin O. Felt, President of the citizens' group GNATS, chaired numerous public meetings concerning the residents' interests.

C. Contractors

Personnel from Roy F. WESTON, Inc., Spill Prevention and Emergency Response Division (TAT) provided the OSC with technical assistance, including air monitoring, site safety, contractor monitoring, an extent-of-contamination study and hydrogeological technical support.

C. Contractors (continued)

O.H. Materials, Inc., of Findlay, Ohio was responsible for initial site sampling and the work plan under the original delivery order in addition to subsequent immediate removal activities under a second delivery order issued by the OSC under the ERCS contract for Zone 1.

Disposal Methods and Quantities Removed

All removal and disposal procedures were implemented by the responsible party, Westinghouse Electric Corporation. A total of 244 drums and 144 truckloads (2880 tons) of contaminated soil were removed by the responsible party.

SECTION VII

PROBLEMS ENCOUNTERED AND RECOMMENDATIONS

PROBLEMS ENCOUNTERED AND RECOMMENDATIONS

Operations at the Westinghouse Gettysburg Sites proceeded fairly smoothly with few difficulties. The problems encountered are summarized below to enable the reader to appreciate the challenges faced during this cleanup and to serve as a learning tool for future operations.

Concurrent TAT commitments imposed by a heavy work schedule resulted in an insufficient number of TAT personnel available to provide support to the OSC. Additic upport for sampling was provided by the ERCS contractor as required by the O

Although it was well documented that the Westinghouse plant was the primary source of extensive groundwater contamination, the OSC could not justify the expenditure of Federal monies to provide alternate drinking water supplies to the residences where sample analysis did not indicate an imminent and substantial danger to human health and welfare, or exceed the levels deemed harmful by the Centers for Disease Control (CDC) "10-day health advisory." Subsequently, direct negotiations between the local citizens' group, Good Neighbors Against Toxic Substances (GNATS), and Westinghouse representatives resulted in the eventual extension of the Gettysburg Municipal Authority water line to those residences regardless of the level of contamination of their wells under Westinghouse Corporation's "good neighbor policy."

Public interest remained high throughout the course of the removal. The local citizens' group GNATS was formed and held numerous public meetings. Representatives from EPA and PADER attended these meetings and provided information relative to the status of the project to those concerned citizens.

EPA's Resource Conservation and Recovery Act (RCRA) was implemented to reduce the amount of improper storage and disposal of hazardous wastes. CERCLA was enacted to provide a means to prevent improper dumping and disposal from affecting public health and the environment. Many states have enacted similar legislation on their own.

Increased inspection and enforcement of preventative regulations such as RCRA should effectively reduce the number of illegel dumps and operations requiring cleanup in the future. Increased public vigilance and State and Federal awareness should result in a more rapid notification of the existence of potentially hazardous waste sites such as those encountered at the Westinghouse Gettysburg Sites.

SECTION VIII

APPENDICES

APPENDIX A

MAPS AND

SITE SKETCHES

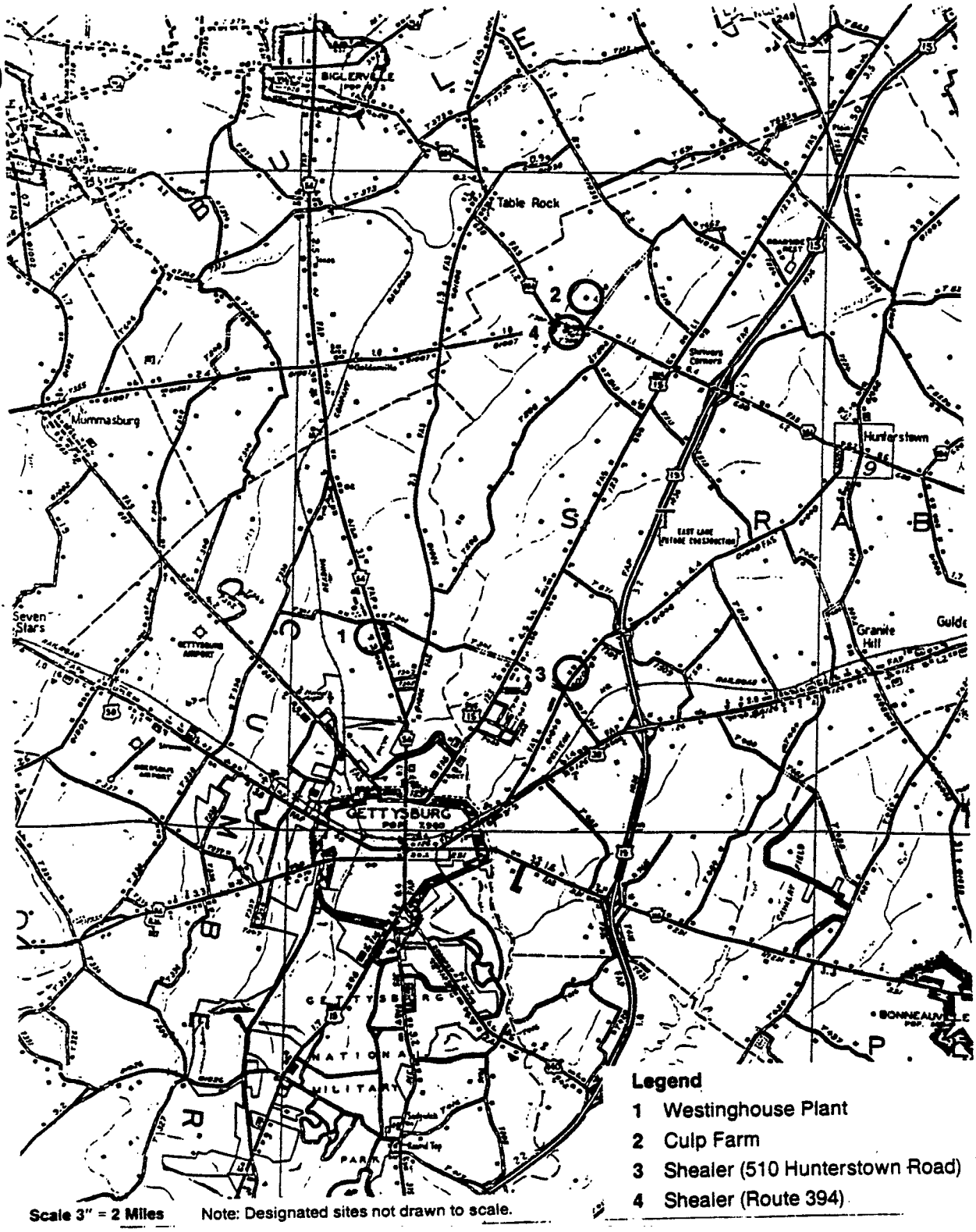
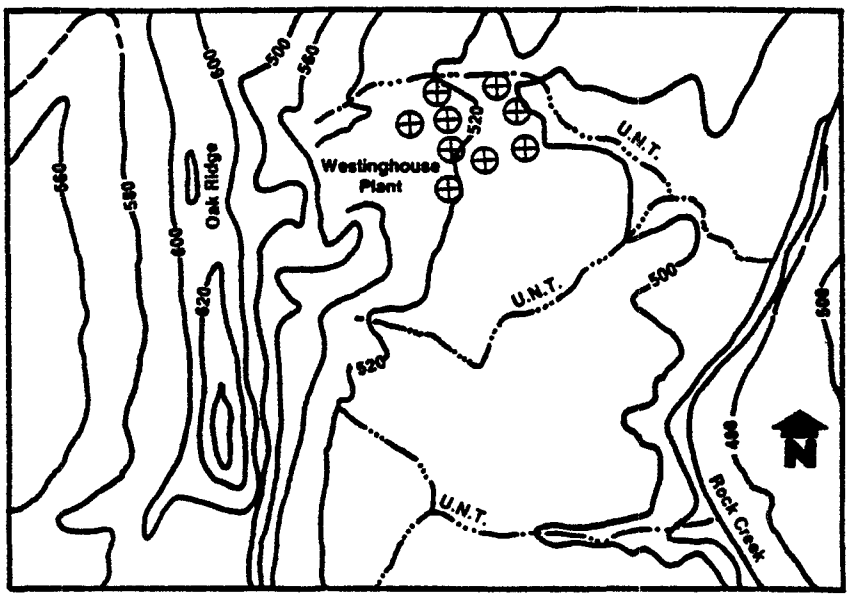
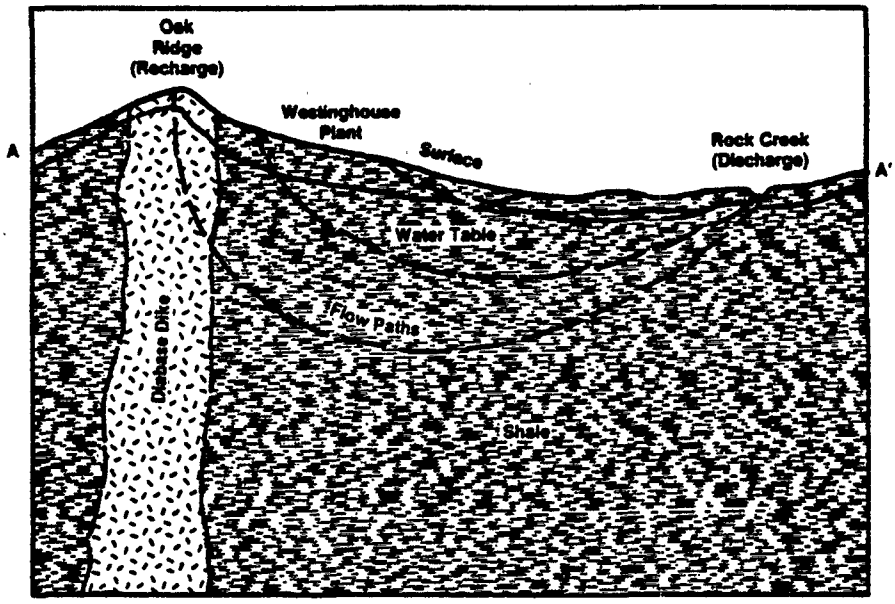


Figure 1. CERCLA - removal activities, Westinghouse Gettysburg sites.



Topographic map outlines the contaminated area at Gettysburg.



The cross-section diagram illustrates the flow patterns in the recharge area.

Figure 2. CERCLA - removal activities, Westinghouse Gettysburg site. Hydrogeologic assessment.

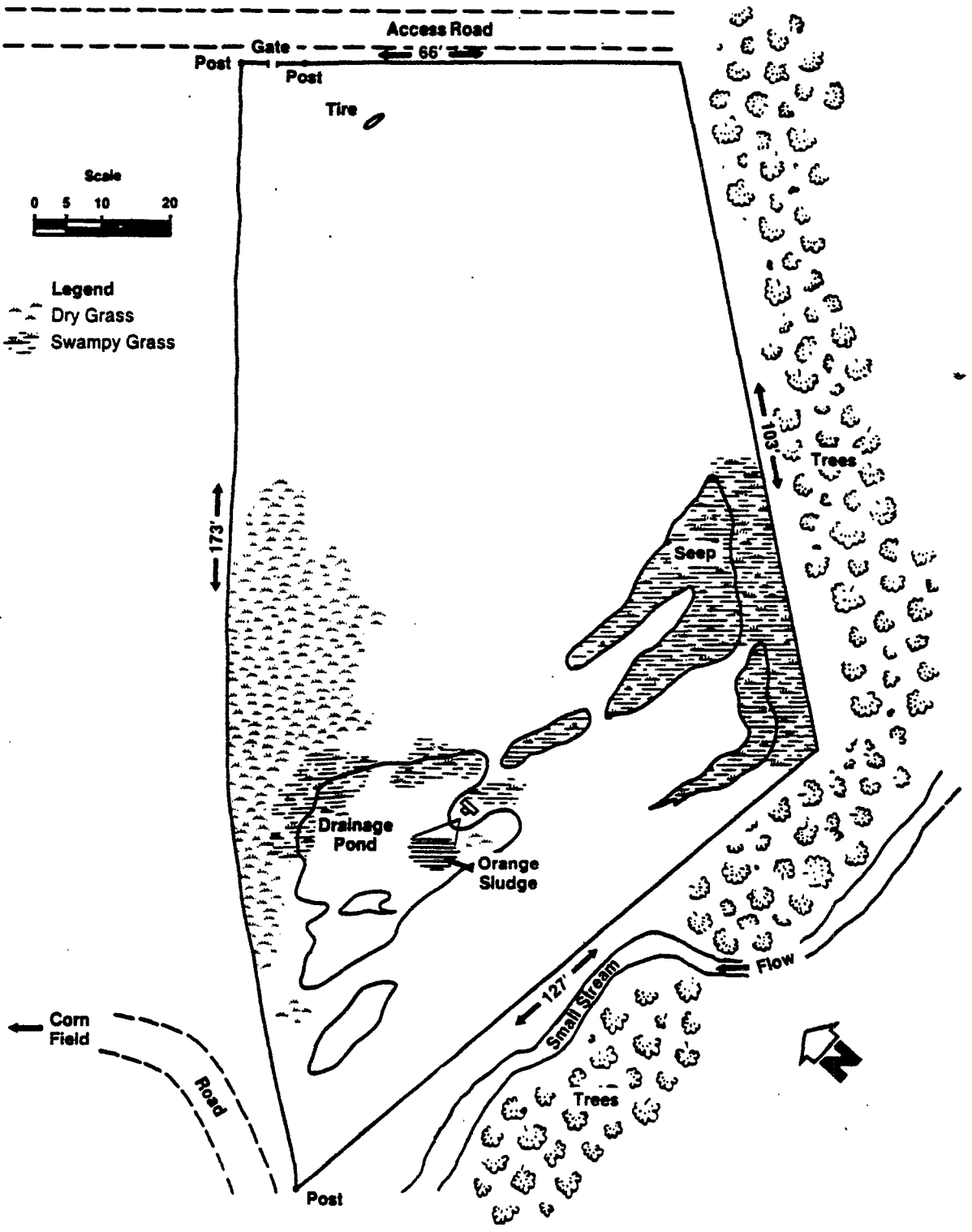


Figure 3. CERCLA - removal activities, Westinghouse Gettysburg sites. Shealer 510 Hunterstown Road, lagoon site: fence installation.

APPENDIX B

10-POINT DOCUMENT

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
6TH AND WALNUT STREETS
PHILADELPHIA, PENNSYLVANIA 19106

FEB 23 1984

SUBJECT: CERCLA Funding Request for Westinghouse (Gettysburg) Well Contamination and Drum Site

FROM: Thomas P. Eichler
Regional Administrator (3RA00)

TO: William Hedeman, Director
Office of Emergency and Remedial Response (WH-548)

The attached CERCLA Fund Authorization Request pertains to the Westinghouse (Gettysburg) well contamination and drum site in the Gettysburg, Pa., vicinity. This site is not on the National Priorities List.

The Pennsylvania Department of Environmental Resources (DER) and my staff have performed a preliminary assessment of this site and found that contaminated drinking water and direct contact threats exist. As indicated in the attached document, the DER has specifically requested EPA's involvement and has agreed to participate in funding the Planned Removal portion of this project.

Please note that as further information becomes available on the degree and extent of groundwater contamination, we may request supplemental Removal funds to provide temporary alternate water supplies for certain residences. The decision on the need for a permanent alternate water supply and whether to fund it via Planned Removal or Remedial mechanisms will be made subsequent to ranking this site for NPL consideration.

Based on the joint assessment performed by EPA and DER and in accord with National Contingency Plan guidelines, I recommend that a CERCLA Removal be initiated at the site. Since total project costs will exceed my funding authority, I am referring the enclosed Fund Authorization Request for your expeditious consideration.

If you have any questions concerning this request or site particulars, please do not hesitate to contact Thomas Voltaggio, Chief, Superfund Branch at FTS 597-9402.

MZ:lal
Enclosure

cc: Stanley Laskowski (3DA00)
Steve Wassersug (3HW00)
Bruce Smith (3HW30)
Thomas Voltaggio (3AW00)
Thomas Massey (3ES30)

FUND AUTHORIZATION REQUEST
WESTINGHOUSE (GETTYSBURG) WELL CONTAMINATION & DRUM SITES
GETTYSBURG, PENNSYLVANIA

OSC's Name, Region, and Telephone Number

Michael Zickler
U.S. EPA, Region III
Philadelphia, PA 19106
215-597-9888

2a. Name and Location of the Incident

Westinghouse (Gettysburg) well contamination and drum sites,
Gettysburg Vicinity
Adams County, Pennsylvania

2b. State Official requesting assistance

Michael Steiner, Chief
Emergency and Remedial Response Section
Bureau of Solid Waste Management
Harrisburg, PA

3. Nature of the Incident

In 1968, Westinghouse Electric Corporation built an elevator manufacturing plant in Cumberland Township, Adams County, PA. The elevators are processed through a paint and degreasing line, where chlorinated solvents such as trichloroethylene (TCE), and 1,1,1 trichloroethane (111 TCE) are utilized. Until 1980, company practice was to drum the waste solvents and sludges and have them disposed of by a local hauler, with no direction given as to proper disposal procedures.

In response to a complaint from the Adams County Community Environmental Control, PADER conducted an extensive investigation which ultimately identified five contaminated sites in the Gettysburg area, all potentially associated with Westinghouse. The sites are three separate Shealer properties, the Culp property, and the Westinghouse Plant itself. (See attached Quad map).

In an interview with PADER, Mr. Fred Shealer claimed he hauled and disposed of Westinghouse waste for roughly ten (10) years from 1970 to 1980. He estimated he hauled 20 55-gallon drums per month and he did not know what was in the drums. Most of the drums were dumped, cleaned out and resold. Mr. Shealer said he disposed primarily in four locations:

3. Nature of the Incident (cont'd)

- In the rear of Fred Shealer's house at 510 Hunterstown Road
- On Fred Shealer's property across from his 510 Hunterstown Road home. This disposal site is described as a "lagoon", about 300 to 400 yards off the road.
- Route 394 behind his son's (Tom) house.
- The Culp Farm, on Culp Road near the Tom Shealer property (discontinued in 1977).

Investigation of the sites by the EPA and PADER revealed that there were drums in various stages of deterioration on all sites. Only the Culp site had any readily visible full liquid drums. There was no detectable groundwater contamination in the vicinity of Fred Shealer's 510 Hunterstown road address; however, there has been extensive groundwater contamination near the Shealer and Culp properties. Harmful levels of 1,1,1-trichloroethane and 1,1-dichloroethylene were found in three household wells, and samples of spring water and ponded water on the surface of the Culp property. Site security is virtually non-existent at all locations.

The sludge lagoon on Fred Shealer's property appears to contain paint sludges of varying colors. The sludge lagoon and sediment from a nearby unnamed tributary were sampled and the analysis revealed that the sludge lagoon and stream sediment were a RCRA waste with a flash below 60°C. Also, one of the samples contained a near RCRA level of lead. Dangerous levels of total phenols, cadmium, 1,4 dichloro-benzene, d-n-butylphtalate, and para-para ddt were also discovered in the sludge lagoon and stream sediment. (See Attachment 1 for details of sample analysis.) Shealer indicated that in addition to the Westinghouse wastes, he has hauled material from Dal Tile and Spectra-Kote to this lagoon.

Investigation of the Culp property by EPA and DER defined two locations with intact, full drums. After sampling, the contents failed several RCRA tests, including the flash below 60°C, EP Toxic levels of lead and chromium, and a pH of 1.5. The priority pollutant analysis showed extreme levels of napthalene, ethyl-benzene, toulene, 111 TCE, and 1,1 dichloroethane. Previous soil analysis by DER showed high concentrations of 111 TCE and TCE. There have been reports of animals dying on the Culp property during high water table periods.

3. Nature of the Incident (con'd)

In August of 1983, the DER sampled an unnamed surface stream in the vicinity of the Westinghouse plant, on Route 34, where a resident had noticed a discoloration and odor in the past. The results revealed trace amounts of 111 TCE and TCE in the surface water and prompted DER to begin a comprehensive well sampling program of all the nearby homes (see attachment). At this time numerous residences have been instructed not to drink and/or bathe with their water by PADER. (See attached site sketch.)

4. Why did the OSC decide to Act? Why did the State decide not to fund the action?

The following conditions exist which warrant an immediate removal action:

1. Certain residences with contaminated groundwater wells require a temporary alternate water supply and a permanant solution to their problem. Further investigation is required to determine the extent of contamination and the total number of homes involved. The National Academy of Science has determined that the permissible level of TCE in drinking water is 4.5 ppb, based on the 1 in 1,000,000 cancer risk assessment.

2. The sludge lagoon on the Shealer property is classified as a RCRA waste and is directly impacting a nearby stream. There are no security measures to prevent direct contact with the lagoon contents

3. The full drums on the Culp property are directly impacting an adjacent stream and present a direct contact threat. Several drums are within 10 feet of a county road.

4. The full drums on the Shealer property pose an ongoing threat to the soil, groundwater and nearby streams, as well as a direct contact threat

The State of Pennsylvania does not have the manpower or financial resources to respond to an emergency of this magnitude and has requested EPA to respond (see attached letter). They are in complete agreement with the phased approach outlined below and have agreed to commit themselves to the 10% share requested for Planned & Remedial Removal.

The DER laboratory equipment is currently inoperative and therefore they cannot perform any analytical work for an indefinite period into the future.

5. Who certifies that the incident presents an immediate threat to the public health and welfare?

Dr. Frank Mitchell
Center for Disease Control
Atlanta, Georgia
(404) 452-4100

6&7. Proposed Project and Budget (Preferred Option)

A.1. Superfund Immediate Removal monies will be used to accomplish two phases:

Phase I - To continue sampling private wells in all the affected areas for volatile organics to determine the full extent of groundwater contamination, and to determine the need to provide a temporary supply of bottled water for drinking purposes to any home that is not being presently serviced by Westinghouse. If alternate water is required, a supplemental request for additional funds will be submitted.

Phase II - Removal of intact surface drums and surface contamination on the Bill Culp and Fred Shealer properties on Route 394 in Straban Township.

A.2. Superfund Planned Removal monies will be used to accomplish a third phase:

Phase III - Removal of the sludge lagoon across from Fred Shealer's 510 Hunterstown Road property.

B. Costs

Phase I - Continued well sampling for volatile organics (approx.) 50 samples x $140 — $ 7,000

Phase II - Removal of surface drums and visible surface contaminants on Shealer and Culp property:

1. Removal of 50 full drums, Shealer property

Mobilization/demobilization	$10,000
Analytical	10,000
Manpower/equipment	30,000
Drum removal (50 @ $500 ea.)	25,000
Surface contaminants (50 cu. yds.)	10,000
Soil cover (50 cu. yds.)	1,000
Total Shealer Property	$86,000

B. Costs (cont'd)

Phase II - (cont'd)

2. Removal of 30 full drums and contaminated soil from Culp property

Mobilization/demobilization	$ 10,000	
Analytical	10,000	
Manpower/equipment	30,000	
Drum removal (30 @ $500 ea.)	15,000	
Surface contaminants (100 cu. yds.)	20,000	
Soil cover	1,000	
Total Culp Property	$ 86,000	
Total cost Phase II		$172,000
TOTAL COST FOR PHASES I and II		$179,000

Phase III - Removal of Sludge Lagoon

Mobilization/Demobilization	$ 10,000	
Analytical	10,000	
Manpower/Equipment	30,000	
Removal/Disposal/Transportation of sludge lagoon, 40 yds. x 20 yds. x 2.5 yds. = 2000 cu. yds.	400,000	
Soil Cover	30,000	
Total Phase III	$480,000	
TOTAL PROJECT COST		$659,000

8. What is the current project ceiling?

To date, no ceiling has been given to this project.

9. What efforts have been made to find a responsible party and obtain a response through an oral demand, written demand or Federal or State court action?

Written notices will be given to the Potential Responsible Parties when/if funding approval is received.

9. (cont'd)

Lengthy discussions have taken place with Westinghouse regarding voluntary compliance to certain aspects of this problem, and an Administrative Order is being developed. They are presently providing alternate water to 12 homes in the vicinity of their plant, and they have retained a consultant to undertake a study on the Westinghouse property itself to determine if Westinghouse is the most likely source of the contamination. If the study indicates Westinghouse is the probable source, then Westinghouse may voluntarily undertake further portions of the required work. Westinghouse has refused to accept any responsibility for the Shealer/Culp sites. They are also presently unwilling to conduct an extent-of-contamination study in the vicinity of their plant or supply alternate water to homes whose wells are contaminated with less than 45 ppb of TCE.

10. What options were considered? Why was the preferred option selected?

A. No Action - This option is unacceptable because it would not resolve the uncertainty regarding the potability of residential well water in the area and would allow direct contact and environmental threats to continue unabated.

B. Provision of Potable Water - This option is being deferred pending the results of the sampling program. Please note that as further information becomes available on the degree and extent of groundwater contamination, we may request supplemental Removal funds to provide temporary alternate water supplies for certain residences. The decision on the need for a permanent alternate water supply and whether to fund it via Planned Removal or Remedial mechanisms will be made subsequent to ranking this site for NPL consideration.

C. Removal of Surface Contaminants and Groundwater Sampling Program (Preferred Option) - This option, as outlined in Items 6 and 7 above, addresses the water supply, direct contact and environmental problems in a time frame commensurate with the significant threats they pose. By deferring the more expensive phase to Planned Removals, the CERCLA Trust Fund will be better utilized.

D. Extensive Soil Removal and/or Groundwater Treatment - This option is more appropriately addressed by the Remedial Program after the conclusion of the Removal Project.

APPENDIX C

SITE SAFETY PROTOCOL

SITE/SAFETY PROTOCOL 3/26/84

Gettysburg Sites
Immediate Removal Action

GENERAL

This protocol addresses the safety procedures that will be followed by any and all personnel visiting the site or involved in the CERCLA removal activity at the Gettysburg Sites. All personnel entering the site shall read and sign this safety plan. The protocol will remain in effect until the OSC certifies that the activity is terminated. It does not supercede any Federal OSHA or State or local regulations but is in addition to them. In the event of a conflict between this protocol and a regulation, the more stringent of the two will be in force. The protocol is in accordance with and refers to the terminology used in the Office of Emergency and Remedial Response (OERR), Interim Standard Operating Safety Procedures (attached).

Since data available at the present time does not allow a complete characterization of the barrelled waste on the site, levels of protection for personnel will be set in accordance with the hazard of the job function and location on-site as indicated on the attached diagram.

Respiratory Protection Program

All contractor and governmental personnel involved in on-site activities shall have a written respiratory protection program and prove that they are physically fit to wear a respirator. All personnel wearing air-purifying respirators on-site are required to be fit tested, while those wearing pressure-demand self-containing breathing apparatus or air-line apparatus, must be properly trained and experienced in their use. All respiratory protection equipment is to be properly decontaminated at the end of each workday.

Persons having beards or facial hair must not wear a respirator.

Training and Medical Monitoring Program

Personnel will have either formal training or on-the-job training for those tasks they are assigned to perform on the active site. All unfamiliar activities will be rehearsed beforehand.

All contractor and governmental personnel who are exposed to hazardous levels of chemicals shall prove that they are enrolled in a medical monitoring program.

General Safety Rules and Equipment

a. There will be no eating, drinking or smoking in the Exclusion Area or hot side of the Contamination Reduction Area.

b. All personnel must pass through the Contamination Reduction Area to enter the Exclusion Area.

c. An emergency eye wash will be on the hot side of the Contamination Reduction Area.

d. As a minimum, an emergency deluge shower/spray can is to be located on the clean side of the Contamination Reduction Area.

e. At the end of the work, all personnel working in the Exclusion Area shall take a hygienic shower.

f. All supplied breathing air shall be certified as Grade D or better.

g. Where practical, all tools/equipment will be spark proof, explosion resistant and/or bonded and grounded.

h. Fire extinguishers will be on-site for equipment or personnel fires only.

i. Since site evacuation may be necessary if an explosion, fire, etc., occurs on-site, and individual shall be assigned to sound a horn. The evacuation signal will be two long blasts every 30 seconds until all personnel are evacuated and accounted for. This procedure will be reviewed at each morning's safety meeting.

j. A first-aid kit will be on-scene at all times during operational hours. An oxygen inhalator respirator and a qualified operator will be available. The location of these items on-site will be posted.

k. Persons having beards or facial hair must not wear respirators.

l. No work will be performed in the exclusion area during hours of darkness as determined by the site safety officer.

Morning Safety Meeting

A morning safety meeting will be conducted each day for all site personnel who sign a daily attendance sheet. The safety procedures, evacuation procedures, and escape procedures, as well as the day's planned operations, should be discussed.

CONTROL AT THE SITE

Access to the site will be restricted by Banner Guard or other appropriate flagging material. Entry and exit from the site shall be through the CRA except in a life-threatening emergency.

All persons entering the site shall sign in and out at the OSC command post.

DESIGNATION OF WORK AREAS AT THE SITE

The entire site will be divided into three areas: (1) Exclusion Area which known to be or have a potential for becoming contaminated: (2) the Contamination Reduction Area where decontamination of personnel and equipment exiting the Exclusion Area is performed; (3) the Support Area which is not contaminated. These areas are shown on the site sketch accompanying this document.

The Exclusion Area (EA)

At the Gettysburg Sites, the Exclusion Areas shall initially include the area delineated by Banner Guard or similar flagging material.

The Contamination Reduction Area (CRA)

At the Gettysburg Sites, the Contamination Reduction Area will be located immediately outside the exclusion area and will be delineated by roped off area.

The Support Area (SA)

At the Gettysburg Sites, the Support Area will be the area outside the Banner Guard not roped off.

Changes in Designation of Work Areas

As work progresses on-site, the OSC may determine that an area previously designated an EA is no longer classified in that manner. It is not intended, however, to change the designation of the CRA since this may involve the movement of the decontamination facilities and added expense.

SAFETY PROCEDURES AND LEVELS OF PROTECTION

Exclusion Area

1. All personnel shall enter and exit the Exclusion Area through the Contamination Reduction Area.

2. Emergency escape routes from the Exclusion Area will be established and reviewed as appropriate at each morning safety meeting.

SAFETY PROCEDURES AND LEVELS OF PROTECTION (continued)

Exclusion Area

3. All personnel in the Exclusion Area shall use the protective equipment designated for their job function.

4. Personnel performing the following job functions in the Exclusion Area will utilize the designated level of protection equipment.

Prime Contractor

a. Barrel handling, including opening, sampling, pumping, moving, emptying, or any direct or indirect disturbance of a full-barrel will be performed in Level B. This applies to anyone involved, including equipment operators.

b. Soil removal operations will be performed in Level C due to the possibility of uncovering volatile materials and filtering airborne particulate matter unless photo-ionization detector readings are above 5 ppm, in which case Level B will be used.

c. Placement of the clay cap, if required, will be performed in Level C using a cartridge or canister capable of filtering airborne particulate matter unless photoionization detector readings are above 5 ppm in which case Level B will be used.

d. Sampling of wells will be performed in Level C.

Contamination Reduction Area

1. Personnel and equipment decontamination will be performed in Level C.

2. All personnel entering the CRA will utilize a minimum of Level C protection.

3. All personnel entering the CRA must decontaminate will be performed in Level C.

4. All equipment entering the CRA must be decontaminated prior to leaving the CRA.

Support Area

1. No contaminated equipment or personnel may enter the Support Area.

2. Except in the case of a release of a Toxic vapor, Level D will be appropriate for all personnel in the Support Area.

3. Emergency escape routes and procedures for the Support Area will be established and reviewed as appropriate at each morning safety meeting.

DECONTAMINATION PROTOCOL

All equipment and personnel entering the Middletown Road Dump must be thoroughly decontaminated prior to leaving the gate. Since there are various protocol and equipment available for this purpose, the OSC will determine if the proposed decontamination techniques are applicable. Such determinations will be made on a day-to-day basis as on-site operations dictate.

ON-SITE AIR MONITORING

Since Level C protection appears to applicable for sludge/soil removal and Level B for drum removal, a limited air monitoring program is necessary. Background data on the materials on-site indicates that the principle air problem will be from toxic organic compounds. The following program will, therefore, be instituted to identify and quantitate these vapors.

Total vapor/gas air monitoring will be conducted daily with the photoionizer/OVA. The number of sampling stations and location will vary with atmospheric conditions. Generally, total vapor/gas readings will be taken at ground level, breathing zone, and near the surface of the suspected hazardous waste. Sample stations will be within the suspected contaminated area as well as downwind near the property line.

After defining those site locations which have the highest total vapor/gas readings, personnel monitoring pumps with carbon/Tenax thermal desorption tubes will be run in those areas, if the OSC decides it is necessary. The type of collection pumps, media, and flow rates will vary. The initial setup, however, will consist of a personnel monitoring pump, Tenax thermal desorption tubes with backup tubes operating a t 100cc/min, for sufficnet time to pull a minimum of 5 liters per sample. Initially, AM and PM samples will be collected to establish a base line of data. Sample stations will be within the suspected contaminated area as well as downwind and upwind near the property line.

If contaminants are revealed at the above mentioned sampling stations on the field GC (Century OVA w/Thermal Desorber), additional personnel monitoring pumps will be run with those containing the Tenax thermal desorption tubes. Initially, the additional collection tubes used will be the 100 mg and 600 mg carbon collection tubes pending suspected concentration. Initial collection rate will be 2 liters per minute with a minimum volume of 10-15 liters taken. These samples will be analyzed off-site following the NIOSH Organic Solvents in Air Method No. P&CAM 127 as closely as possible with the option for further GC/MS analysis, if necessary.

Additional air sampling will be dependent on the data obtained from this sampling scheme.

EMERGENCY PROCEDURES

In the event of a medical or other emergency, the OSC or his designee will notify the appropriate authority. The following list of phone numbers will be posted prominently at each telephone on-site:

1. Fire (717) 334-8101
2. Ambulance (717) 334-8101
3. Police (717) 334-1168
4. Federal Government (EPA Region) (215) 597-9898
5. State Government (717) 787-9697 (Frank Fair)
6. County/City Government _____
7. EPA Environmental Response Team (201) 321-6660
8. Hospitals Gettysburg (717) 334-2121

Date: 3/26/84

Michael Zickler
On-Scene Coordinator
U.S. EPA Region III
Philadelphia, PA

APPENDIX D

POLREPS

SPILLSEPA WSH

EPAOHM PHA

SPILLSEPA WSH
EPA SPILLS WSH
710-822-9269

POLREP 1 WESTINGHOUSE GROUNDWATER CONTAMINATION AND DRUM SITES, GETTYSBURG, PA

I SITUATION 3/20/84

A. OSC M. ZICKLER INFORMED, BY PADER AND REGIONAL REMEDIAL PROGRAM, ON 1/4/84 OF POTENTIAL PROBLEM INVOLVING CONTAMINATED GROUNDWATER AND SURFACE DRUMS OF SEVERAL LOCATIONS IN GETTYSBURG, PA VICINITY, ATTRIBUTED TO WESTINGHOUSE CORPORATION ELEVATOR MANUFACTURING FACILITY AND WASTES HAULED FROM THAT FACILITY BY A MR. FRED SHEALER.

B. RESULTS OF SAMPLES OBTAINED BY PSDER INDICATE EXTENSIVE GROUNDWATER CONTAMINATION IN PRIVATE WELLS ADJACENT TO WESTINGHOUSE PROPERTY AND IN VICINITY OF DRUM DUMPING AREAS.

C. PA DER OFFICIALLY REQUESTED EPA'S PARTICIPATION IN AN INVESTIGATION OF THIS SITUATION BY LETTER DATED 1/10/84.

II ACTIONS TAKEN

A. OSC PARTICIPATED IN CONFERENCE CALL ON 1/5/84 WITH DER, TAT, REGIONAL COUNSEL, AND REMEDIAL REPRESENTATIVES TO DISCUSS STRATEGY FOR INVESTIGATION.

B. OSC, TAT AND PA DER CONDUCTED SITE INSPECTION AND OBTAINED SAMPLES FROM VARIOUS LOCATIONS ON 1/12/84, 1/23/84, AND 2/7/84. -N 1/11/84, OSC INTERVIEWED MR. SHEALER, A PRP.

C. OSC COOVUK'ETED WITH REGIONAL WATER SUPPLY PVO-GRAM, REGIONAL TOXICOMOGIST, AND DCD REGARDING HEALTH EFFECTS OF TCE AND RELATED COMPOUNDS FOUND IN PRIVATE WELLS. OSC HAS RECOMMENDED THAT ALTERNATE WATER BE SUPPLIED WHERE LEVELS EXCEED ONE IN A MILLION RISK FACUOR. AT THE PRESENT TIME, THERE IS INSUFFICIENT SUPPORT FOR THIS POSITION, HOVEVER.

D. OSC PREPARED, AND DISTRIBUTED, SECTION 104E INFORM.TIOO REQUESTS FOR POTENTIAL RESPONSIBLE PARTIES WITH AS ISTANCE FROM REGIONAL COUNSEL REPRESENTATIVE KERMIT RADER.

E. OSC PREPARED DRAFT AND ADMINISTRATIVE CONSENT ORDERS MET WITH VESTINGHOUSE REPRESENUATIVES TO DISCUSS TERMS ON 1/24/84. SUBSEQUENT TO THIS MEETING, REORGANIZATION PLACED RESPONSIBILITY FOR ISSUANCE OF ORDERS INTO A SEPARATE BRANCH UNDER THE DIRECTION OF BRUCE SMITH.

F. OSC PREPARED FUNDING REQUEST, WHICH WAS APPROVED BY RA ON 2/23/84 AND FORWARDED TO ERD FOR APPROVAL.

G. PURSUANT TO REGIONAL PROTOCOL, OSC COOPERATIOG WITH REGIONAL COUNSEL AND ENFORCEMENT BRANCH TO DEVELOPE AND ISSUE ADMIO-ISTRATIVE ORDERS IN A TIMELY FASHION.

H. OSC HAS ATTENDED SEVERAL PUNLIC MEETINGS IN GETTYSBURG AREA IN RECENT WEEKS TO DISCUSS STATUS OF PROJECT.WITH CITIZENS GROUPS (GNATS) AND ELECTED OFFICIALS.

III FUTURE PLAOS

A. OSC AWAITING FUNDING APPROVAL FROM HQ, AND ISSUANCE OF ORDERS AT REGIONAL LEVEL.

B. ERT ASSISTANCE REQUESTED BY OSC ON 3/19/84 TO DEFIOE EXTENT-OF-CONTAMINATION AND PROVIDE OTHER EXPERT ADVICE AS NEEDED.

C. PENDING FUNDING APPROVAL. OSC HAS ARRAOGED WITH AFO TO ANALYZE SAMPLES OBTAINED BY DER/

D. CASE PENDS

MICHAEL ZICKLER
OSC REGION
SPILLSEPA WSH

SPILLSEPA WSH

EPAOHM PHA
EPA SPILLS WASHINGTOO
7108229269

TO: HENRY VANCLEAVE

POLREP 2 WESTINGHOUSE GROUNDWATER AND DRUM SITES
GETTYSBURG, PENNSYLVANIA

I. SITUATION 3/22/84

A. FUNDING REQUEST APPROVED 3/22/84 BY HEADQUARTERS/

B. ADMINISTRATIVE ORDER SIGNED BY RA 3/22/84, REQUIRING WESTINGHOUSE TO UNDERTAKE MAJORITY OF WORK INCLUDED AT CULP AND SHEALER PROPERTIES.

II ACTIONS TAKEN

A. OSC PROVIDED ORAL NOTICE TO WESTINGHOUSE, FOLLOWED BY WRITTEO NOTICE.

B. OSC COORDINATING STATE SUPERFUND CONTRACT FOR PLANOED REMOVAL PHASE WITH ERD.

C. COMMUNITY RELATIONS PLAN TO BE DEVELOPED BY REGIONAL PUBLIC AFFAIRS STAFF IN COOPERATION WITH PADER.

D. TAT TASKED TO DEVELOP SITE SAFETY PLAN, MAKE APPROPRIATE CONTACTS WITH PEMA. CDC HAS SUPPLIED ACTION LEVELS FOR INCLUSION IN PLAN.

E. DUE TO INADEQUATE SUPPLY OF TAT PERSONNEL, OSC REQUIRED TO UTILIZE ADDITIONAL ERCS PERSONNEL FOR SITE SUPPORT.

F. OSC REQUESTED SUPPORT FROM VSCO-AST. AT PRESENT, NONE IS PROJECTED TO BE AVAILABLE.

III FUTURE PLANS

A. OSC AWAITING RESPONSE TO NOTICE LETTER FROM PRP.

B. ERCS CONTRACTOR TO BE MOBILIZED FOR SITE VISIT, SAMPLING TO CHARACTERIZE FOR DISPOSAL.

C. PUBLIC MEETING TENTATIVELY SCHEDULED FOR 4/2/84.

D. CASE PENDS.

MICHAEL ZICKLER, OSC
EPA REGION III

SPILLSEPA WSH

EPAOHM PHA

WU INFOMASTER 4-011729S094-001 04/03/84
ICS IPMSWGZ CSP
2155628911 DGM TDSN READING PA 412 04-03 1110A EST
TWX 7106700716 EPAOHM PHA
EMERGENCY RESPONSE
4218 EPA PHA

POLREP 2 WESTINGHOUSE [illegible] AND DRUM SITES
GETTYSBURG, PA

I. SITUATION (4/2/84) 1700 HOURS
A. OSC NOTIFIED BY WESTINGHOUSE ON 2/27/84 THAT THEY WOULD COMPLY WITH ALL ASPECTS OF THE ADMINISTRATIVE ORDER AND NOTICE LETTER REGARDING IMMEDIATE AND PLANNED REMOVAL SCOPE OF WORK. BASED ON THIS ASSUSANCE, OSC NOTIFIED ERCS CONTRACTOR TO TERMINATE ANY FURTHER DEVELOPMENT OF WORK PLAN AS REQUIRED BY DELIVERY ORDER.
B. OSC CONTINUING TO CO-ORDINATE FULLY WITH REGIONAL ENFORCEMENT-REGARDING VOLUNTARY COMPLIANCE NEGOTIATIONS.
C. CONTRACT COSTS TO DATE INCLUDING ALL WORK DONE AND ANTICIPATED NECESSARY THROUGH ERCS AND STANDS AT $39,000. DELIVERY ORDER CEILING IS $50,000.

II. ACTION TAKEN
A. OSC ISSUED DELIVERY ORDER TO ERCS CONTRACTOR ON 3/26/84 TO CONDUCT SAMPLING OF LAGOON AND DRUM CONTENTS AND DEVELOPED WORK PLAN. A SUMMARY OF THE SAMPLING CONDUCTED ON 3/27 AND 3/28 FOLLOW.
-17 SAMPLES WERE COLLECTED FROM THE LAGOON WHICH COMPOSITED TO 4 SAMPLES FOR ANALYTICAL WORK.
-26 DRUM SAMPLES WERE COLLECTED FOR ANALYSES.
THE ANALYTICAL WORK IS BEING PERFORMED BY THE PRIME CONTRACTOR THROUGH A PRIVATE CONTRACT LAB (STABLEX REUTTER). ANALYTICAL DATA (VERBAL RESULTS) EXPECTED 4/4/84.
B. OVER 200 DRUMS HAVE BEEN FOUND ON SITE. THESE DRUMS ARE EITHER EMPTY, PARTIALLY FULL OR COMPLETELY FULL. PRESENT ESTIMATES INDICATE THAT 50 PERCENT OR MORE OF THESE DRUMS CONTAIN MATERIAL.
C. ON 2/28/84 OSC CONTACTED PROPERTY OWNERS FOR FURTHER CLARIFICATION ON ACCESS RIGHTS TO EPA PERSONNEL, EPA CONTRACTOR, AND EPA AGENTS, IF ANY INCLUDING WESTINGHOUSE. VERBAL APPROVAL WAS GIVEN BY BOTH SHEALER AND CULP. REGIONAL COUNSEL WILL CONFIRM THIS IN WRITING.
D. PUBLIC MEETING SCHEDULED FOR 4/2/84. EPA -OFFICE OF PUBLIC AFFAIRS HAS CO-ORDINATED WITH PADER AND PEMA AND REPRESENTATIVES FROM BOTH AGENCIES EXPECTED TO ATTEND THE PUBLIC MEETING AS WELL AS LOCAL CITIZENS GROUP (GNATS).
E. OSC REQUESTED AND RECEIVED SUPPORT FROM WATER SUPPLY BRANCH REGARDING RECOMMENDATION ON SAMPLING FREQUENCY FOR GAC FILTERS INSTALLED BY WESTINGHOUSE. WESTINGHOUSE HAS AGREED TO COMPLY WITH THIS RECOMMENDATION.
F. OSC AND TAT HAVE IDENTIFIED SEVERAL PROBLEMS WITH CONTRACTOR DAILIES SUBMITTED BY ERCS CONTRACTOR. THESE WILL BE PRESENTED TO CONTRACTOR FOR REVISION. ALSO, FAILURE OF ERCS CONTRACTOR TO UTILIZE LOCAL SUBCONTRACTOR HAS RESULTED IN INCREASED PROJECT COSTS DUE TO TRAVEL AND PERDIEM.

III. FUTURE PLANS
A. EPA TO HOLD PUBLIC MEETING 4/2/84 TO RELATE STATUS OF PROJECT TO ALL CONCERNED.
B. SAMPLE RESULTS, WHEN AVAILABLE, WILL BE PROVIDED TO WESTINGHOUSE TO ASSIST THEM ON THE CLEAN UP AND DISPOSAL.
C. EPA TO PROVIDE CONTINUED PERIODIC OVERSIGHT OF WESTINGHOUSE CLEAN UP.

ON-SCENE CO-ORDINATOR, MICHAEL ZICKLER
ON-SCENE CO-ORDINATOR, MICHAEL ZICKLER

1118 EST

EPAOHM PHA

WU INFOMASTER 4-005652S109-001 04/18/84
ICS IPMBNGZ CSP
2155970496 DGM TDBN PHILADELPHIA PA 456 04-18 0857A EST
TWX 7106700716 EPAOHM PHA
EMERGENCY RESPONSE
4218 EPA PHA

ATTN HENRY VANCLEAVE
POLREP 5 WESTINGHOUSE SITES GETTYSBURG PA
I. SITUATION 4-17-84 1700 HOURS

A. WESTINGHOUSE EXPECTED TO COMPLETE CLEAN-UP ACTIVITIES AT THE LAGOON SITE BY FRIDAY APRIL 20 1984 AT CURRENT PROJECTIONS. 20 LOADS OF WASTE MATERIALS LEFT FOR FONDESSEY LANDFILL IN OHIO YESTERDAY 4-16-84. 20-30 LOADS EXPECTED TO BE TRUCKED OUT DAILY.

II. ACTIONS TAKEN

A. OSC ADVISED ON 4-16-84 BY A WESTINGHOUSE REPRESENTATIVE THAT DISPOSAL APPROVAL FOR THE WASTES WAS RECEIVED AND THAT DISPOSAL WOULD BEGIN THIS WEEK.

B. EPA REGION 3 SUPERFUND BRANCH CHIEF, THOMAS VOLTAGGIO ADVISED THE OSC ON 4-16-84 THAT AFTER COMPLETION OF PHASE 2 AND 3 OF THE CLEAN-UP (SEE 10 POINT DOCUMENT), THE CERCLA ENFORCEMENT SECTION WILL PURSUE SAMPLING ISSUES, EXTENT OF CONTAMINATION, AND THE NEED FOR ADDITIONAL ALTERNATE WATER SUPPLIES.

C. AS INSTRUCTED BY THE OSC WESTINGHOUSE HAD CULLIGAN RESAMPLE ALL WATER FILTERS FOR VOLATILE ORGANICS AND ONE FILTER FOR COLOFORM ORGANISMS. ALL RESULTS WERE NON-DETECTABLE.

D. CURRENT MAJOR SITE ISSUE TO BE RESOLVED ASAP

WATER SUPPLY ISSUE: WHAT WILL BE THE EXTENT OF COVERAGE BY THE EXTENSION OF THE MUNICIPAL WATER SUPPLY SYSTEM SO AS IT WILL INCLUDE ALL AFFECTED RESIDENTS. THE REGIONAL APPROACH WILL BE TO SEND WESTINGHOUSE AN INFORMAL LETTER IDENTIFYING ADDITIONAL WORK NEEDED IN THE AREAS OF SAMPLING AND ALTERNATE WATER SUPPLIES. DEPENDING UPON THEIR RESPONSE, ADDITIONAL 106 ORDERS WILL BE CONTEMPLATED.

E. SEVERAL RESIDENCES WHERE FILTERS WERE INSTALLED ARE COMPLAINING ABOUT A SULPHUR-LIKE ODOR EMINATING FROM FILTERED WATER. WESTINGHOUSE WILL BE ADVISED OF THIS IN THE INFORMAL LETTER AND WILL BE REQUESTED BY OSC TO TAKE APPROPRIATE ACTION.

F. OSC SPOKE WITH WESTINGHOUSE REPRESENTATIVES AT 1000 HOURS THIS DATE CONCERNING THE STATUS OF THE LAGOON SITE CLEAN-UP AND THE EXTENSION OF WATER LINES. THE OSC WAS ADVISED BY WESTINGHOUSE THAT THE WATER LINE CONSTRUCTION CONTRACT WAS AWARDED, MATERIALS WERE ORDERED AND CONSTRUCTION IS SLATED FOR EARLY MAY WITH COMPLETION EXPECTED IN ONE MONTH.

G. MEETING HELD 1020 HOURS THIS DATE IN THE REGION CONCERNING SITE STATUS. THOSE IN ATTENDANCE MIKE ZICKLER OSC, DAVID WRIGHT JUNIOR OSC, RICHARD ZAMBITO CERCLA ENFORCEMENT AND KERMIT RADER REGIONAL COUNCIL.

H. JUNIOR OSC DAVID WRIGHT TO COORDINATE ANY FURTHER ACTION NECESSARY FROM A REMOVAL STANDPOINT AND TO MONITOR WESTINGHOUSE VOLUNTARY COMPLIANCE CLEAN-UP.

III.

A. MEETING SCHEDULED APRIL 26 1984 IN HARRISBURG PA WITH EPA, PADER, WESTINGHOUSE AND THEIR CONSULTANT WRIGHT ASSOCIATES TO DISCUSS VOLUNTARY COMPLIANCE MEASURES BEING TAKEN BY WESTINGHOUSE AND MORE IMPORTANTLY REMEDIAL GROUND WATER CLEAN-UP AT THE PLANT SITE.

B. OSC TO EVALUATE THE NEED FOR FURTHER EPA SAMPLING BASED ON DATA TO BE RECEIVED AND ACTIONS TAKEN OR EXPECTED TO BE TAKEN BY WESTINGHOUSE.

C. OSC PLANS TO INSPECT THE CLEAN-UP SITE (LAGOON AREA) SOMETIME NEXT WEEK FOLLOWING COMPLETION AND PRIOR TO DEMOBILIZATION OF EQUIPMENT. DAVID WRIGHT, JUNIOR OSC AND MIKE ZICKLER OSC

0903 EST

EPAOHM PHA

WU INFOMASTER 4-006873S102-001 04/11/84
ICS IPMBNGZ CSP
7173346235 DGM TDBN GETTYSBURG PA 402 04/11 0958A EST
TWX 7106700716 EPAOHM PHA
EMERGENCY RESPONSE
4218 EPA PHA

POLRET 4 WESTINGHOUSE SITES, GETTYSBURG PA

I. SITUATION 4/10/84

A. PUBLIC MEETING HELD ON 4/2/84 CHAIRED BY EPA-OPA AND CITIZENS GROUP. WESTINGHOUSE DID NOT ATTEND, BUT ISSUED A PRESS RELEASE INDICATING THEY WOULD EXTEND PUBLIC WATER LINES, CONDUCT A REMEDIAL INVESTIGATION, AND UNDERTAKE SURFACE CLEANUP AT THE CULP, TOM SHEAMER, AND FRED SHEALER (LAGOON SITE). AT THE MEETING TWO LOCAL CITIZENS SAID THEY WERE AWARE OF ADDITIONAL SITES WHICH SHOULD BE INVESTIGATED.

B. AT THE MEETING, OSC AND PEMA REPRESENTATIVES ARRANGED FOR FIRE FIGHTING, POLICE AND HOSPITAL SUPPORT TO SUPPLEMENT EXISTING COUNTY EVACUATION PLAN.

II. ACTIONS TAKEN

A. OSC BRIEFED ERD ON STATUS OF VOLUNTARY COMPLIANCE ON 4/9/84

B. TADER HAS SUPPLIED WESTINGHOUSE WITH COMPLETE LIST OF ALL HOMES THEY RECOMMEND NOT DRINK THEIR WATER BASED ON ONE IN A MILLION EXCESS CANCER RISK LEVELS. EPA ENFORCEMENT WIPURSUE THE ISSUE OF ALTERNATE WATER TO ALL AFFECTED HOMES, AS WELL AS NEED FOR ADDITIONAL SAMPLING TO FULLY DEFINE EXTENT OF CONTAMINATION.

C. ANALYTICAL RESULTS FROM PREVIOUS SAMPLING (3/27) HAVE BEEN MADE AVAILABLE TO WESTINGHOUSE TO FACILITATE THE DISPOSAL OF MATERIAL.

D. OSC CONDUCTED SITE INSPECTION ON 4/10/84 TO EVALUATE COMPLIANCE WITH ADMINISTRATIVE ORDER. CULP AND TOM SHEALER SITES HAVE HAD ALL FULL DRUMS REMOVED, AS WELL AS CONTAMINATED SURFACE SOILS. SEVERAL DRUMS WERE NOTICED IMMEDIATELY ADJACENT TO CULP RESIDENCE. SIOCE THESE WERE NOT INCLUDED IN SCOPE OF ORDER, REGIONAL COUNSEL ADVISED WESTINGHOUSE THEY WERE NOT RESPONSIBLE TO REMOVE THEM. THESE WILL HAVE TO BE INVESTIGATED FURTHER BY EPA/DER. ALL SOILS AND DRUMS HAVE BEEN STAGED AT THE LAGOON SITE, AND CONTRACTOR (OHM) IS ON STANDBY PENDING APPROVAL OF DISPOSAL SITE. WORK IS EXPECTED TO RESUME IN TWO TO THREE DAYS.

E. WESTINGHOUSE HAS RESAMPLED ALL HOMES WITH GAC FILTERS AND WILL CONTINUE AT 45-DAY INTERVAL AS RECOMMENDED BY WATER SUPPLY PROGRAM. NEED TO ANALIZE FOR BACTERIA WILL BE FURTHER DISCUSSED WITH WESTINGHOUSE.

III. FUTURE PLANS

A. OSC TO MEET WITH WESTINGHOUSE ON 4/11/84 TO DISCUSS EXTENT OF CONTAMINATION STUDY, PLANS FOR ALTERNATE WATER, AND POSSIBLE NEED TO FORMALIZE THEIR VOLUNTARY COMPLIANCE AGREEMENT.

B. CLEANUP TO CONTINUE ASAP PENDING APPROVAL OF DISPOSAL SITE.

C. SAMPLING OF ADDITIONAL HOMES TO DETERMINE NEED FOR ALTERNATE WATER MUST BE COORDINATED AND A SCHEDULE DEVELOPED.

D. REMEDIAL PROGRAM SHOULD BEGIN PLANS TO INVESTIGATE ALLEGATIONS OF ADDITIONAL DRUM BURIAL SITES, AS WELL AS FURTHER STUDY OF CONTAMINATED SOIL/GROUND WATER AT THE CULP AND SHEALER SITES.

E. CASE PENDS.

MICHAEL ZICKLER, OSC

1004 EST

EPAOHM PHA

EPAOHM PHA

WU INFOMASTER 4-0175755113-0C1 04/27/84
ICS IPMSWGZ CSP
2155622552 DGN TDBN READING PA 366 04-27 1201P EST
TWX 7106700716 EPAOHM PHA
EMERGENCY RESPONSE
4218 EPA PHA

ATTN HENRY VAN CLEAVE

POLREP #6
WESTINGHOUSE SITE
GETTYSBURG PA

I. SITUATION 1200 HOURS 4/27/84

A. WESTINGHOUSE CLEAN UP EFFORTS AT THE LAGOON SITE COMPLETE AS OF 4/26/84. SITUATION AS FOLLOWS:

-244 DRUMS REMOVED 44 (CULP PROPERTY), 140 (T. SHEALER PROPERTY), 60 (LAGOON SITE).

-144 TRUCKS OF CONTAMINATED SOIL REMOVED APPROXIMATELY 2880 TONS.

B. WESTINGHOUSE IS CURRENTLY IN COMPLIANCE WITH THE ORDER ISSUED TO THEM.

C. WESTINGHOUSE HAS NOT AGREED TO EXTEND THE WATER LIDE WESTWARD ON BOYD SCHOOL RD. TO 2 RESIDENCE WHO HAVE BEEN INFORMED BY DER NOT TO DRINK THEIR WATER.

D. MEETING HELD IN HARRISBURG PA PADER OFFICE AT 1100 HOURS. THOSE AGENCIES IN ATTENDANCE EPA, DER, WESTINGHOUSE, R.E. WRIGHT ASSOCIATES. MAJOR ISSUE DISCUSSED: PLANT SITE.

E. WESTINGHOUSE HAS NOT AGREED TO PERFORM ADDITIONAL SAMPLING REQUESTED BY EPA (I.E. BACTERIA AND ADDITIONAL HOMES).

F. R.E. WRIGHT ASSOCIATES (WESTINGHOUSE CONSULTANT) TO PERFORM THE FOLLOWING AS PRESENTED IN YESTERDAY'S MEETING (PLANT SITE).

1. DETERMINE EXTENT AND RATE OF MIGRATION OF CONTAMINANTS.

2. DETERMINE CONCENTRATIONS OF CONTRAMINANTS IN THE GROUND WATER.

3. IMPLEMENT GROUND WATER QUALITY ABATEMENT PROGRAM AS SOON AS POSSIBLE. DER TO BE THE LEAD ON THE ACTION AND WILL COORDINATE ALL NECESSARY PERMITS AND TREATMENT REQUIREMENTS.

G. R.E. WRIGHT ASSOCIATES TO TAKE IMMEDIATE ACTION IN CONJUNCTION WITH WESTINGHOUSE AND PADER IN CONSTRUCTION OF A GROUND WATER PUMPING TREATMENT FACILITY AND STUDY.

II. ACTIONS TAKEN

A. OSC MIKE ZICKLER CONTACTED AND BRIEFED EPA ERD SUSAN DELPERO THIS DATE.

B. OSC MIKE ZICKLER INFORMED WESTINGHOUSE YESTERDAY THAT EPA WOULD BE PERFORMING ADDITIONAL SAMPLING THAT WESTINGHOUSE INDICATED THEY WOULD NOT UNDERTAKE BASED ON THEIR CONSULTANT'S RECOMMENDATION SAMPLING TO BE PERFORMED WITH MONIES APPROVED PER 10 POINT DOCUMENT.

III. FUTURE PLANS

A. OSC TO INSPECT LAGOON SITE CLEAN UP NEXT WEEK.

B. OSC TO ACTIVATE TAT TO PERFORM ADDITIONAL SAMPLING NEXT WEEK OF RESIDENTIAL HOMES AND WATER FILTERS (BACTERIA). OSC TO COORDINATE THESE ACTIVITIES WITH PADER.

C. OSC MIKE ZICKLER TO PREPARE ERCS DELIVERY ORDER TO COVER THE ANALYSIS OF THE SAMPLES.

D. OSC CONCERNED ABOUT TAT AVAILABILITY DUE TO HIGH LEVEL OF ACTIVITY IO THE REGION.

E. EPA REGION III PUBLIC AFFAIRS TENTATIVELY SCHEDULING PUBLIC MEETING IN GETTYSBURG PA THE WEEK OF MAY 13, 1984.
DAVID WRIGHT

1205 EST

EPAOHM PHA

EPAOHM PHA

WU INFOMASTER 4-007149S121-001 04/30/84
ICS IPMBNGZ CSP
2155622552 DGM TDBN READING PA 131 04-30 0913A EST
TWX 7106700716 EPAOHM PHA
EMERGENCY RESPONSE
4218 EPA PHA

ATTN HENRY VAN CLEAVE
POLREP #7

WESTINGHOUSE SITES
GETTYSBURG PA

I. SITUATION (1000 HOURS 4/30/84)
A. OSC CONTACTED PADER KEN MALICK 0905 HOURS THIS DATE CONCERNING THIS WEEKS SCHEDULED HOME WELL SAMPLING BY TAT. MR MALICK INFORMED THE OSC THAT HE WILL BE MEETING WITH PADER MANAGEMENT AT 1300 HOURS THIS DATE. DER MAYBE PERFORMING A MAJORITY OF THE SAMPLE FOR PURPOSES OF CONTINUITY. MR MALICK WILL CONTACT THE OSC AS SOON AS POSSIBLE TODAY AND INFORM ME OF DER'S EXPECTED PLANS. THE OSC WILL COORDINATE SAMPLIOG WITH DER SO AS TO NOT DUPLICATE EFFORTS.

II. ACTIONS TAKEN
A. MIKE ZICKLER, OSC, CONTACTED OHM (ERCS) TO ISSUE DELIVERY ORDER FOR ANALYTICAL SUPPORT.

III. FUTURE PLANS
A. OSC 208 PADER'S CALL AND ADVISED TAT OF FINAL PLANS FOR THIS WEEKS WELL SAMPLING.
DAVID WRIGHT

0916 EST

EPAOHM PHA

AR100242

EPAOHM PHA

WU INFOMASTER 4-018148S123-001 05/02/84
ICS IPMBNGZ CSP
2155622552 DGM TDBN READING PA 169 05-02 1135A EST
TWX 7106700716 EPAOHM PHA
EMERGENCY RESPONSE
4218 EPA PHA

ATTN HENRY VAN CLEAVE

POLREP 8

WESTINGHOUSE SITES
GETTYSBURG, PA

I. SITUATION (1200 HOURS, 5/2/84)
A. TAT ON SCENE ON GETTYSBURG 900 HOURS T HIS DATE TO PERFORM ADDITIONAL RESIDEN TIAL WATER SUPPLY SAMPLING FOR VOLATIL E ORGANICS AND BACTERIA (HOMES WITH FI LTERS INSTALLED BY WESTINGHOUSE). PADE R TO ASSIST TAT.

B. 0140 HOURS 4/30/84 KEM MALLICK (PADER) INFORMED THE OSC THAT PADER WOULD BE S AMPLING APPROXIMATELY 26 HOMES IN THE WESTINGHOUSE PLANT AREA AS FOLLOWS: 10 ON MAY 7, 10 ON MAY 14, AND 6 ON MAY 21.

C. OSC MIKE ZICKLER TO BE ON SCENE AT THE LAGOON SITE THIS DATE TO PERFORM FINAL INSPECTION.

II. ACTIONS TAKEN
A. 1130 HOURS OSC, CONTACTED GEORGE SCHI LLING, WESTINGHOUSE REPRESENTATIVE, T O CONFIRM THOSE HOUSES WHICH HAVE HAD CARBON FILTERS INSTALLED.

III. FUTURE PLANS
A. OSC TO PREPARE MEMO TO CERCLA ENFORC EMENT SECTION CONCERNING WESTINGHOUS E'S INTENTIONS ON THE PROPOSED WATER LINE. (WILL NOT INCLUDE ADDITIONAL H OMES OF CONCERN).

B. OSC TO AWAIT SAMPLE RESULTS.
DAVID WRIGHT

1138 EST

EPAOHM PHA

AR100243

EPAOHM PHA

WU INFOMASTER 4-024929S13e-001 05/15/84
ICS IPMBNGZ CSP
2155628911 DGM TDEN READING PA 59 05-15 1219P EST
TWX 7106700716 EPAOHM PHA
EMERGENCY RESPONSE
4218 EPA PHA

ATTN HENRY VAN CLEAVE
POLREP #9

WESTINGHOUSE SITES
GETTYSBURG, PA
I. SITUATION
A. PUBLIC MEETING WITH CITIZENS GNATS GROUP SCHEDULED FOR TOMORPOW EVENING (MAY 16 1984) AT 7:30PM IN THE CUMBERLAND TOWNSHIP MUNICIPAL BUILDING. OSC AND EPA PUBLIC AFFAIRS HAL YATES TO ATTEND.

B. OSC AWAITING WATER SAMPLE RESULTS FROM SAMPMING PERFORMED THE FIRST WEEK IN MAY BY TAT.
DAVID WRIGHT

1222 EST

EPAOHM PHA

EPAOHM PHA

WU INFOMASTER 4-016922S139-001 05/18/84
ICS IPMBNGZ CSP
2155628911 DGM TDBN HAMBURG PA 186 05-18 1057A EST
TWX 7106700716 EPAOHM PHA
EMERGENCY RESPONSE
4218 EPA PHA

ATTENTION HENRY VAN CLEAVE
POLDER NUMBER 10
WESTINGHOUSE SITES
GETTESBURG PA

I. SITUATION (2230 HOURS, 5-16-84)

(A) OSC AND EPA PUBLIC AFFAIRS HAL YATES ATTENDED GNATS MEETING AT 1930 HOURS THIS DATE. DER WAS ALSO IN ATTENDANCE.

(B) LOCAL RESIDENTS WERE EXTREMELY UPSET WITH EPA ON THE WHOLE SITUATION WITH THE WESTINGHOUSE PLANT SITE. MOST OF THE LEVELS VOC'S DO NOT MEET THE CRITERIAN TO QUALIFY FOR IMMEDIATE ACTION.

(C) WATER SAMPLES RESULTS FROM THE 5-2-84 SAMPLING RECEIVED THIS DATE/ OSC REVIEWING THE DATA.

(E) THE ISSUES THE RESIDENTS SEEMED TO BE CONCERNED ABOUT WERE ENFORCEMENT AS IT RELATES TO WESTINGHOUSE AND HEALTH ISSUES.

II. ACTIONS TAKEN

(A) OSC AND HAL YATES DESCRIBED TO THE CITIZENS WHAT WAS DISCUSSED WITH WESTINGHOUSE ON THE APRIL 26 1984 MEETING. (THIS WAS WHY THE GNATS HAS ASKED EPA/EER TO ATTEND)

(B) MANY LOCAL RESIDENTS WANTED THEIR WELLS RESAMPLED. OSC TO EVALUATE THE NEED.

III. FUTURE PLANS

(A) FUTURE COMMUNICATION ON THIS SUBJECT IS REQUIRED TO FURTHER CLARIFY EPA'S POSITION AT THE WESTINGHOUSE PLANT AREA. OSC FEELS THIS IS A CRITICAL ISSUE.

DAVID WRIGHT
JR OSC
US EPA REGION 3
DAVID WRIGHT

1110 EST
†
EPAOHM PHA

AR100245

EPAOHM PHA

WU INFOMASTER 4-024737S157-001 06/05/84
ICS IPMBNGZ CSP
2155970496 DGM TDBN PHILADELPHIA PA 218 06-05 1242P EST
TWX 7106700716 EPAOHM PHA
EMERGENCY RESPONSE
4218 EPA PHA

ATTN HENRY VAN CLEAVE
POLREP 11 WESTINGHOUSE SITES GETTYSBURG PA
I SITUATION 1700 HOURS JUNE 5 1984
A WATER SAMPLE RESULTS FROM THE MAY 2 1984 SAMPLING BY TAT DO NOT INDICATE THAT ACTION CAN BE TAKEN BY THE IMMEDIATE REMOVAL PROGRAM PER THE 10 DAY HEALTH ADVISORY
B CERCLA ENFORCEMENT SECTION REMAINS THE LEAD ON THESE SITES
II ACTIONS TAKEN
A OSC HAS RECEIVED SEVERAL PHONE CALLS FROM LOCAL RESIDENTS SINCE THE MAY 16 1984 MEETING (SEE POLREP #10) CONCERNING FUTURE EPA ACTIONS.
B THE OSC MET WITH SUPERFUND BRANCH CHIEF THOMAS VOLTAGGIO, EMERGENCY RESPONSE SECTION CHIEF, THOMAS MASSEY AND MIKE ZICKLER OF THE SITE RESPONSE SECTION AT 1200 HOURS ON JUNE 4 1984 CONCERNING IMMEDIATE REMOVAL ACTIVITIES. OSC TO PREPARE MEMO TO THE SUPERFUND BRAOCH CHIEF CONCERNING THE STATUS OF THE WESTINGHOUSE SITES. OSC DOES NOT SEE THAT FUTURE ACTION AT THIS TIME BY THE EMERGENCY RESPONSE SECTION IS WARRANTED
III FUTURE PLANS
A OSC TO PREPARE MEMO TO SUPERFUND BRANCH CHIEF THOMAS VOLTAGGIO CONCERNING AN UPDATE AND EVALUATION OF THE EMERGENCY RESPONSE SECTIONS ACTIONS BOTH PAST AND FUTURE.
B PUBLIC MEETING TENTATIVELY SCHEDULED THE WEEK OF JUNE 18 1984 TO CLARIFY SITE ISSUES. OSC IS REQUESTING THAT CDC AND CERCLA ENFORCEMENT ATTEND THIS MEETING
C PUBLIC INTEREST AND CONCERN APPEARS TO BE REMAINING EXTREMELY HIGH
DAVID WRIGHT JR ON SCENE COORDINATOR EPA REGION 3

1248 EST

EPAOHM PHA

EPAOHM PHA

WU INFOMASTER 4-005397S166-001 06/14/84
ICS IPMBNGZ CSP
2155970496 DGM TDBN PHILADELPHIA PA 170 06-14 0802A EST
TWX 7106700716 EPAOHM PHA
EMERGENCY RESPONSE
4213 EPA PHA

ATTN: HENRY VANCLEAVE

POLREP #12 WESTINGHOUSE SITES GETTYSBURG PA
I. SITUATION 0800 HOURS 6-14-84
A. CERCLA ENFORCEMENT REMAINS THE LEAD ON THESE SITES. OSC REMAINS AVAILABLE ON A CONSULTING BASIS.
II. ACTIONS TAKEN.
A. OSC CONTACTED JEFF ALPER OF REGION 3 WATER SUPPLY BRANCH THIS DATE CONCERNING "10 DAY HEALTH ADVISORY" LEVELS FOR 1, 1, 1-TRI CHLORO ETHANE AND 1, 1-DICHLOROETHYLENE. THE OSC REQUESTED GUIDANCE AS TO THE LEVELS THAT SHOULD BE USED FOR THE ABOVE CHEMICALS AS NO NUMBER IS AVAILABLE IN THE MAY 83 GUIDANCE MEMO.
B. AT 1345 HOURS THIS DATE JEFF ALPER AFTER CONSULTING EPA-HQ ADVISED THE OSC PER HQ GUIDANCE THAT THE LONG TERM LEVELS FOR EACH CHEMICAL WOULD BE APPROPRIATE. 1000 PPB FOR 1, 1, 1-TCE AND 70 PPB FOR THE 1, 1-DCE. OSC INQUIRED AS TO IF THIS ADVISEMENT CAN BE MEMO FORM. MR ALPER TO INVESTIGATE.
III. FUTURE PLANS.
A. OSC AWAITING FINAL WELL RESULTS AND MAPS FROM PADER KEN MALICK. OSC TO EVALUATE DATA AND INFORM CERCLA ENFORCEMENT OF ANY DETERMINATIONS.
DAVID WRIGHT JR ON SCEOE COORDINATOR EPA REGION 3

0807 EST
†
EPAOHM PHA

EPAOHM PHA

WU INFOMASTER 4-0241243208-001 07/26/84
ICS IPMBNGZ CSP
2155970496 DGM TDBN PHILADELPHIA PA 230 07-26 1241P EST
TWX 7106700716 EPAOHM PHA
EMERGENCY RESPONSE
4213 EPA PHA

ATTN HENRY VAN CLEAVE

TITLE
POLREP NUMBER 12 WESTINGHOUSE SITES GETTYSBURG PENNSYLVANIA

I. SITUATION 12 HOURS 7-26-84
A. CERCLA ENFORCEMENT REMAINS THE LEAD ON THESE SITES/
B. MIKE ZICKLER REMAINS THE LEAD OSC WITH DAVID WRIGHT ASSISTING.
C. PUBLIC INTEREST AND MEDIA INTEREST REMAINS EXTREMELY HIGH.

II. ACTIONS TAKEN
A. TELEPHONE CONVERSATION HELD 7-20-84 CONCERNING SISS (NEIL SWANSON) FINDINGS OF EXCESSIVELY HIGH LEVELS OF ORGANIC COMPOUNDS (UP TO 28 PERCENT TCE) IN SOIL AND PONDED WATER AT THE LAGOON SITE ADDRESSED BY WESTINGHOUSE UNDER THE 106 ADMINISTRATIVE ORDER. THOSE INVOLVED IN THE TELEPHONE CONVERSATION:
THOMAS MASSEY-CHIEF ERS
KATHY HODGKISS-CERCLA ENFORCEMENT
RICH ZAMBITO-SRS
MIKE ZICKLER-OSC
DAVID WRIGHT-JUNIOR OSC
NEIL SWANSON-SISS
B. BASED ON THE TELEPHONE CONVERSATION AND RECENT FINDINGS THE OSC MIKE ZICKLER FEELS THE INSTALLATION OF A FENCE IS WARRANTED TO ELIMINATE THE DIRECT CONTACT THREAT.
C. CERCLA ENFORCEMENT SECTION CHIEF KATHY HODGKISS ADVISED THE OSC MIKE ZICKLER TO PREPARE MEMO OUTLINING WHAT NEEDS TO BE DONE. CERCLA ENFORCEMENT SECTION WILL THEN PURSUE THE ISSUANCE OF ADDITIONAL ADMINISTRATIVE ORDERS, LETTERS, ETC. AS APPROPRIATE. MEMO WILL ALSO CONTAIN THE OSC DETERMINATION OF WHICH HOMES SHOULD RECEIVE POTABLE WATER UNDER THE EXISTING OR ADDITIONAL ADMINISTRATIVE ORDERS AS APPROPRIATE.
D. PUBLIC MEETING THAT WAS TO BE HELD 7-17-84 WAS CANCELLED BY OPA AS NO ADDITIONAL INFORMATION AND PERSONNEL WERE AVAILABLE DUE TO EMERGENCY COMMITMENTS. MEETING HAS NOT YET BEEN RESCHEDULED.

III. FUTURE PLANS
A. JUNIOR OSC DAVID WRIGHT TO ASSIST OSC MIKE ZICKLER WITH PREPARATION OF MEMO TO CERCLA ENFORCEMENT SECTION.
B. IF WESTINGHOUSE DOES NO AGREE TO INSTALL FENCE AROUND THE LAGOON AREA, THERE ARE CURRENTLY FUNDS UNDER THE ORIGINAL FUNDING APPROVAL BY HQ THAT COULD BE USED TO INSTALL THE FENCE.
MIKE ZICKLER, ON SCENE COORDINATOR EPA REGION 3, DAVID WRIGHT, JUNIOR ON SCENE COORDINATOR EPA REGION 3

1246 EST

EPAOHM PHA

Attn: Tom Massey and Jack Stanton

POLREP #13
Westinghouse Gettysburg Sites
Gettysburg PA

I. Situation 0900 hours 8-22-84

A. Mike Zickler remains OSC on record. Junior OSC David Wright assisting.

B. CERCLA Enforcement Section remains the lead on water issue.

C. Bruce Molholt (CERCLA Enforcement Section) is currently assigned to this site.

II. Actions Taken

A. OSC Mike Zickler gave oral notice to Westinghouse on 8/06/84 concerning installation of fence around the Hunters Town Road lagoon area. Westinghouse responded on 8/15/85 that they would not install the fence.

B. OSC Mike [ickler has not as of the time of this Polrep been able to reach property owner Fred Shealer to issue oral notice concerning the installation of the fence around the lagoon area.

C. CERCLA Enforcement Section awaiting response from Westinghouse concerning the addition of 12 homes to the existing Administrative Order. Response expected 8/24/84.

D. Meeting held at 1500 hours on 8/21/84 concerning current site status. Those in attendance Tom Voltaggio (Superfund Branch Chief), Thomas Massey (Emergency Response Section Chief), Kathy Hodgkis (CERCLA Enforcement), Kermit Rader (Regional Counsel), Neal Swanson (Site Investigation and Support Sectioo), Mike Zickler (On Scene Coordinator), David Wright (Jr. On Scene Coordinator), Bruce Molhop ERCLA Enforcement Section).

Results of meeting as follows:

1. CERCLA Enforcement Section to send representatives to the 8/29/84 public meeting along with Emergency Response Section representative and Office of Public Affairs representative.
2. If property owner Fred Shealer declines to install fence EPA will initiate action.
3. If Westinghouse contests the addition of the 12 homes to the existing Administrative Order the Regions options include court action and possible additional sampling and evaluation of site status.

III. Future Plans

A. Public meeting scheduled for 8/29/84 with G.N.A.T.S. in Gettysburg, Pennsylvania.

B. OSC Mike Zickler to contact property owner Fred Sheeler to issue oral notice concerning fence installation.

C. CERCLA Enforcement awaiting response from Westinghouse concerning the addition of 12 homes to the 106 Order.

Mike Zickler
On Scene Coordinator
David Wright
Junior On Scene Coordinator
EPA Region 3

EPAOHM PHA

MC INFOMASTER 4-0292995837-001 03/24/84
IGC IPHBNGZ CSP
2155970496 DGM TDBN PHILADELPHIA PA 199 03-24 1240T EST
TWX 7100700716 EPAOHM PHA
EMERGENCY RESPONSE
4210 EPA PHA

ATTENTION THOMAS MASSEY AND JACK STANTON
FOLREP 14
WESTINGHOUSE SITES
GETTYSBURG PA
I ACTIONS TAKEN 1300 HOURS 8-27-84

OSC MIKE ZICKLER GAVE ORAL NOTICE TO PRP AT A MEETING ON 3-20-84. PRP SPOKESMAN HAS UNTIL COB 3-27-84 TO ANSWER THE NOTICE. IF NO RESPONSE OR NEGATIVE RESPONSE IS RECEIVED THE REGION WILL BEGIN TO INITIATE PREPARATION FOR INSTALLATION OF THE PLANT AT THE LAGOON SITE.

"SPECIAL NOTE": WESTINGHOUSE HAS AGREED TO SUPPLY POTABLE WATER TO RESIDENTS SPECIFIED IN THE SUPPLEMENTAL LETTER TO THE EXISTING 106 ADMINISTRATIVE ORDER. A TOTAL OF TEN ADDITIONAL HOMES TO RECEIVE POTABLE WATER PER THE EXISTING ADMINISTRATIVE ORDER. SEVERAL INDIVIDUALS WERE DROPPED FROM THE LIST DUE TO THE POSSIBILITY OF BEING POTENTIAL RESPONSIBLE PARTIES. THIS DECISION WAS MADE BY REGIONAL ENFORCEMENT AND REGIONAL COUNSEL PERSONNEL.
II FUTURE PLANS

PUBLIC MEETING TO BE HELD 3-29-84 IN GETTYSBURG PA. EMERGENCY RESPONSE SECTION REPRESENTATIVES JUNIOR OSC DAVID WRIGHT TO ATTEND MEETING TO DISCUSS SOLELY IMMEDIATE REMOVAL CONCERNS (FUNDING). ENFORCEMENT PERSONNEL TO DISCUSS ENFORCEMENT ISSUES AND OFFICE OF PUBLIC AFFAIRS PERSONNEL TO PROVIDE OVERALL PROGRAM INFORMATION.

OSC TO MEET NEXT WEEK ON SITE WITH EMCS CONTRACTOR ASSUMING THAT POTENTIAL RESPONSIBLE PARTY (PRP) DECLINES TAKING RESPONSIBLE ACTION.

DAVID WRIGHT
JUNIOR ON-SCENE COORDINATOR
EPA REGION 3

1243 EST

EPAOHM PHA

WU INFOMASTER 4-030609S242-001F/39/04
ICS IPMBNGZ CSP
7173346715 BGH TDBN GETTYSBURG PA 300 08-29 0300F EST
TWX 7100700716 EPAONM PHA
EMERGENCY RESPONSE
4210 EPA PHA

ATTN THOMAS MASSEY AND JACK STANTON

POLREP 13
WESTINGHOUSE SITES GETTYSBURG PENNSYLVANIA

I SITUATION 82804 AT 0900 HOURS

A AS OF 0GS 8-27-84 WESTINGHOUSE HAS NOT YET CONTACTED OR BEGUN SUPPLYING POTABLE WATER TO AFFECTED RESIDENCES PER THE EXISTING 106 ADMINISTATIVE ORDER. THIS INFORMATION WAS RECEIVED AT 1630 HOURS FROM A MEMBER OF THE G.N.A.T.S. GROUP.

II ACTIONS TAKEN

A PRP FRED SHEALER (LAGOON PROPERTY OWNER) DID NOT RESPOND TO ORAL NOTICE GIVEN BY OSC MIKE ZICKLER. AT THIS POINT BOTH WESTINGHOUSE AND FRED SHEALER HAVE ESSENTIALLY DECLINED TO INSTALL THE FENCE AROUND LAGOON AREA. OSC TO MOBILIZE ERCS TO BEGIN FENCING PREPARATIONS THIS DATE.

B JUNIOR OSC DAVID WRIGHT TO MEET WITH ERCS RESPONSE MANAGER ON SITE AT 1000 HOURS 8-29-84 TO INITIATE IMMEDIATE REMOVAL ACTION FOR INSTALLATION OF THE FENCE. TAT TO ACCOMPANY THE OSC.

C JUNIOR OSC DAVID WRIGHT ADVISED ACTING ERS CHIEF, CERCLA ENFORCEMENT, REGIONAL COUNSEL AND OFFICE OF PUBLIC AFFAIRS OF THE FOLLOWING PRELIMINARY SCHEDULE

1 OSC TO MEET ERCS ON SITE 8-29-84
2 PUBLIC MEETING 8-29-84 AT 1930 HOURS
3 ERCS TO MOBILIZE 9-4-84 TO BEGIN WORK
4 9-5-84 BEGIN INSTALLATION OF FENCE

III FUTURE PLANS

A JUNIOR OSC TO MEET ERCS RESPONSE MANAGER ON SITE 8-29-84 AT 1000 HOURS TO INITIATE SITE ACTIVITIES (TARGET DATE TO START FENCE 9-4 TO 9-5-84).

B PUBLIC MEETING WITH GNATS GROUP SCHEDULED FOR 1930 HOURS ON 8-29-84. JUNIOR OSC DAVID WRIGHT TO DEAL WITH IMMEDIATE REMOVAL ACTIONS ONLY. HAROLD YATES TO PROVIDE OVERALL PROGRAM INFORMATION WHILE PHIL METALLIOU TO DISCUSS CERCLA ENFORCEMENT ISSUES.

DAVID WRIGHT
JUNIOR ON SCENE COORDINATOR
REGION 3
MIKE ZICKLER
ON SCENE COORDINATOR
REGION 3

AR100251

1400 EST

EPAONM PHA

FROM: PHA

TO INTOMACTL 4-0354600542-001 7/27/84
ICS IFMLNGZ CSF
 7173040715 DGM TGSK GLTTYSBURG PA 000 09-29 0230T EST
TJK 7130700716 EPAOIM PHA
EMERGENCY RESPONSE
ATTN EPA PHA

MULTINGÔUSE SITES (MOUNTAIN STEEL . OAD LAGOON SITE)
GETTYSBURG PA
POLREF 16

I SITUATION (1200 HOURS WED AUG 29 1984)
  A PERSONNEL ON SCENE
    EPA-1
    TAT-1
    ERCS-2
    SUBCONTRACTOR-1
  B ESTIMATED ERCS COST TO DATE DOL 8/29/
    3942.00, CEILING, $20,000.00
    NOTE THIS COST ESTIMATE REFLECTS ERCS COST DAY 1 OF DELIVERY ORDER
0040-03-014 OF THE MEDIA REMOVAL ACTIVITIES
II ACTION TAKEN
  A 0925 HOURS THIS DATE JUNIOR OSC CONTACTED TIM FERRIS, EPA CONTRACTS FOR CONFIRMATION OF $20,000.00 DELIVERY ORDER
  B 0945 HOURS THIS DATE JUNIOR OSC MET ON SITE WITH ERCS, TAT, AND SUBCONTRACTOR FOR SITE INSPECTION AND DISCUSSION ON OPTIONS FOR FUTURE FENCING OPERATIONS
  C ERCS STAKED OUT AND MEASURED AREA TO BE FENCED (APPROXIMATELY 900 LINEAR FEET)
  D TAT COLLECTED ONE BACKGROUND SAMPLE AND PERFORMED AND SURVEY OF SITE. NO READINGS ABOVE BACKGROUND WERE NOTED IN THE LAGOON AND SURROUNDING AREAS
  E FENCING SUBCONTRACTOR ON SITE TO REVIEW SCOPE OF WORK. SUBCONTRACTOR TO SUPPLY OHM WITH COST ESTIMATE LATER THIS DATE
  F OSC, ERCS RESPONSE MANAGER DECIDED DEFENSE LINE SHOULD BE CREATED TO IMPROVE AND EXPEDITE FENCE INSTALLATION. OHM TO PROVIDE NECESSARY EQUIPMENT AND MAN POWER TO PERFORM THIS TASK
III FUTURE PLANS
  A OSC; HAL YATES, EPA OTA; TAT; PHIL METALICK, EPA ENFORCEMENT; TO ATTEND PUBLIC MEETING 1930 HOURS THIS DATE.
  B OSC TO CONTACT OHM TOMORROW 8/30/84 FOR CONFIRMATION OF ERCS AND SUBCONTRACTOR ESTIMATED COSTS FOR PLANNING OF TOTAL PROPOSED PROJECT COST
  C ERCS TO MOBILIZE TUESDAY SEPT 4 1984
  D FENCE INSTALLATION TO COMMENCE WED SEPT 5 1984
  E OSC, TAT, ERCS RESPONSE MANAGER TO BE ON SCENE WED AUG 5 TO MONITOR INSTALLATION OF FENCE
  F IT IS ESTIMATED THAT ALL SITE ACTIVITIES WILL BE COMPLETED BY COB FRI SEPT 7 1984

DAVID WRIGHT
JUNIOR OSC
EPA REGION 3
PHILADELPHIA PA
  DAVID WRIGHT

MIKE ZICKLER
OSC
EPA REGION 3
PHILADELPHIA PA
  MIKE ZICKLER

AR100252

1453 EST

EPAOIM PHA

Attn: Tom Massey and Jack Stanton

POLREP #17 Westinghouse Sites Gettysburg PA

I. Situation 1800 hours 9-5-84

A. Weather clear cool 70's.

B. Personnel on scene: EPA - 1; TAT - 1; OHM - 1; Gilarde Const. - 3; A&L Fence Co. - 4; Total - 10.

C. Estimated costs to date

Contractors	$13,000
EPA	1,200
TAT	1,200
Est. Total	$15,400

D. This date is the first date of actual fence construction.

E. No ambiant air readings above background were detected in the fence area. Level D protection is being used by contractors installing the fence around the perimeter of the lagoon.

F. No media on site.

II. Actions Taken

A. On 8-29-84 at 1930 hours Junior OSC David Wright attended public meeting in Gettysburg along with Phil Retallick (SERCLA Enforcement) and Harold Yates (OPA) TAT was also present. Only issue discussed by Junior OSC David Wright was the fence being installed under the immediate removal program at the Hunterstown Road lagoon site.

B. D3 bulldozer provided through ERCS subcontractor Gilarde Construction graded perimeter of lagoon from 0800 to 1200 preparing for fence installation.

C. Fencing subcontractor A&L Fenco Co. instalmed all fence posts this date.

D. OHM placed grass seed along fence perimeter to aid in erosion prevention.

E. TAT performed continuous error monitoring this date.

F. Junior OSC David Wright briefed OSC Mike Zickler at approximately 1400 hours on 9-4-84 concerning site plans.

III. Future Plans

A. Fence installation anticipated to be complete by COB 9-7-84.

B. OSC to provide key to access road gate to property owner and PADER. PADER to also receive key to lagoon.

Signed David Wright Junior OSC EPA Region 3 Philadelphia PA and
Mike Zickler OSC EPA Region 3 Philadelphia PA

[illegible]

MS EMERGENCY 4-0411033350-001 09/30/84
ICS EMERGENCY OSC
 7173043186 DGN TCBM GETTYSBURG PA 223 09-30 0300P EST
TWX 7106700716 EPAOHM PHA
EMERGENCY RESPONSE
4616 EPA Farm

ATTN TOM MASSEY & JACK STALTON

POLREP #18 WESTINGHOUSE GETTYSBURG SITES, GETTYSBURG, PA.

I. SITUATION: 1700 HOURS 9-6-84 (MATTLESTOWN ROAD, EAGLE SITE)

A. WEATHER CLEAR, COOL, MID 60'S

B. PERSONNEL ON SCENE: EPA-1
                       TAT

C. ESTIMATED PROJECT COST TO DATE:
   CONTRACTORS
   (DELIVERY ORDER CEILING $20,000) $13,361.36
   EPA $1,000.00
   TAT $1,000.00
   TOTAL EST. PROJECT COST TO DATE $15,361.36

D. NO CONTRACTOR PERSONNEL ON SITE. FENCE POST'S CONCRETE STILL HARDENING.

II. ACTIONS TAKEN

A. OSC AND TAT ON SCENE THIS DATE PERFORMING AIR/SOIL SURVEY ON GRID COORDINATES USING HNU OVER SITE TO LOCATE HOT-SPOTS. AIR READINGS ABOVE BACKGROUND OBTAINED FROM SOIL ON SITE (0-6 INCHES DEPTH) BACKGROUND TO 30 PPM RANGE OF ORGANIC VAPORS. NO AMBIENT AIR READINGS OVER BACKGROUND WERE DETECTED ABOVE 12 INCHES FROM GROUND LEVEL.

B. 2 SAMPLES TAKEN ON SITE FOR POSSIBLE ANALYSIS.

C. TAT MEASURED FENCE LINE APPROXIMATELY 470 FEET.

D. DR. OSC DAVE WRIGHT BRIEFED EMERGENCY RESPONSE SECTION CHIEF, TOM MASSEY, THIS DATE.

E. ON MATERIALS RESPONSE MANAGER RETURNING TO FINLEY OHIO THIS DATE.

III. FUTURE PLANS
A. ANTICIPATED PROJECT COMPLETION DATE OCT 9-7-84.

B. NO ON MATERIALS PERSONNEL TO BE ON SCENE 9-7-84, ONLY FENCE CONTRACTORS.
C. TAT TO PROVIDE OSC WITH GRID COORDINATE MAP OF WORK PERFORMED THIS DATE.

DAVID WRIGHT, JUNIOR OSC, EPA, REGION 3, PHILADELPHIA, PA
CO-SIGNED, MIKE ZICKLER, OSC, EPA REGION 3, PHILADELPHIA ...

DAVID WRIGHT, JUNIOR OSC, EPA REGION 3, PHILADELPHIA, PA

AR100254

EPAORM PHA

ZC INFOMASTER 4-074943J851-001 09/07/84
ICS IPMENGZ CSP
0155460870 TSM TDEN PHILADELPHIA PA 197 09-07 0939P EST
EMERGENCY RESPONSE ORM PHA
4210 EPA PHA

ATTENTION TOM MASSEY AND JACK STATION

FOLLOW UP WESTINGHOUSE SITES, HUNTERSTOWN ROAD LAGOON

I. SITUATION, 1500 HOURS 9-7-84
A. WEATHER: CLEAR, COOL, LIGHT BREEZES

B. PERSONNEL ON SITE : EPA 1
TAT 1
A & L FENCE CO 4
TOTAL 6

C. FINAL TOTAL ESTIMATED COST TO DATE:
CONTRACTORS $10,361.36 (DELIVERY ORDER CEILING $20,000.00)
EPA $ 1,000.00
TAT $ 1,300.00
TOTAL $16,961.36

D. ALL FENCE AND SIGN WORK COMPLETE AT 1315 HOURS THIS DATE.

II. ACTIONS TAKEN

A. A AND L FENCE CO ON SCENE 0900 TO 1315 HOURS COMPLETING FENCE AROUND SITE, GATE INTO SITE, GATE ACROSS ACCESS ROAD, AND POSTING SIGNS. SIGNS POSTED: ONE ON EACH GATE; ONE ON NORTHEAST FENCE; TWO ON SOUTHEAST FENCE; TWO ON SOUTHWEST FENCE; AND THREE ON NORTHEAST FENCE.

B. LOCKS INSTALLED BY OSC/TAT AFTER COMPLETION OF FENCE AND GATE. OSC/TAT OFF SITE AT 1345 HOURS.

C. OSC AT 1500 HOURS PROVIDED PROPERTY OWNER WITH TWO KEYS TO ACCESS ROAD GATE. NO KEYS FOR LAGOON AREA PROVIDED TO PROPERTY OWNER PENDING LEGAL COUNSEL.

III. FUTURE PLANS

A. OSC AWAITS FINAL INVOICE.
DAVID WRIGHT JR OSC EPA REGION III AND WILL BECOME OSC EPA REGION III

2143 EST

EPAORM PHA

APPENDIX E

NEWS ARTICLES

MUTUAL
PRESS CLIPPING SERVICE INC.

SUNDAY PATRIOT-NEWS
HARRISBURG, PA.
S—161,036

Straban dumps' cleanup completed

York Bureau

GETTYSBURG — Westinghouse Electric Corp. has completed the federally ordered cleanup of three dumps containing hazardous waste in Straban Twp., according to Michael Zeigler, on-site coordinator for the U.S. Environmental Protection Agency.

Zeigler said an EPA inspection of the sites has shown that the completed work meets the requirements of the order.

Westinghouse was ordered to clean up the dumps in March after an investigation by the EPA and the state Department of Environental Resources determined that Frederick Shealer, an independent contractor, had hauled hazardous waste from the company's elevator plant in Cumberland Twp. and dumped it in unauthorized disposal sites.

The cleanup involved the removal of 3,000 tons of waste sludge and contaminated soil from a lagoon at 510 Hunterstown Road and 244 metal drums that had been buried or dumped on the ground at the three sites, Zeigler said.

O.H. Materials Inc., an Ohio-based hazardous materials handling firm, performed the cleanup work.

Westinghouse, which has been supplying bottled drinking water or filter systems to 13 residences with contaminated wells, also will pay for an extension of a Gettysburg Municipal Authority water line to supply water to the homes, Zeigler said.

The EPA and DER will continue to analyze water and soil samples taken from the area around the three sites, Zeigler said.

MUTUAL
PRESS CLIPPING SERVICE INC.
APR 14 84

Gettysburg Times
GETTYSBURG, PA
PM—11,387

Straban cleanup may be complete next week

EPA NE Toxics LBN

By DAVID PALFREY
Times Staff Writer

GETTYSBURG — A federally-ordered cleanup of three waste-dumping sites in Straban Township by the Westinghouse Electric Corporation may be completed by next week, company officials said Friday.

O.H. Materials Inc., an Ohio firm hired by Westinghouse to conduct the cleanup, has removed all drums from the two sites located off Shrivers Corner Road, said Gerard H. Schilling, personnel manager at Westinghouse's local plant. He said cleanup of a lagoon at a third site off Hunterstown Road may be finished by next Friday. Ash has been added to the lagoon to solidify the liquid which then will be taken to an approved hazardous waste site in Ohio, Schilling said.

Westinghouse announced March 29, one day before the acceptance deadline, that it would obey the order issued by the federal Environmental Protection Agency (EPA) to conduct a cleanup at the Straban Township sites and to supply potable water to residents with polluted wells near the company's elevator plant. Both Westinghouse and Frederick M. Shealer, former chairman of the Straban Township Board of Supervisors, have said that Shealer hauled industrial waste from the company's Cumberland Township elevator plant to the Straban sites during the 1970s.

A week before issuing the cleanup order, the EPA won approval of $690,000 from the federal Superfund to conduct the cleanup itself. But Superfund money is used only if the responsible party (as determined by the EPA) refuses to take action.

A Westinghouse-contracted groundwater study around the company's Biglerville Road elevator plant is now complete, Schilling said. The results of that study, conducted by the Middletown firm R.E. Wright Associates Inc., will be discussed at a meeting between Westinghouse and state and federal officials slated for April 26, he added.

Westinghouse presently is supplying water-filtering systems or bottled water to at least a dozen homes with contaminated wells. Since at least last September, state and federal investigators have detected solvent-type chemicals, which have been used at the Westinghouse facility, in soil or private wells at and near the elevator plant and at all three dump sites.

EPA-ordered waste dump cleanup begins

LBN EPA Tobacco

By DAVID PALFREY
Times Staff Writer

The federal Environmental Protection Agency confirmed Friday that an EPA-ordered cleanup of contaminated soil and drums of industrial waste at three Straban Township dump sites has begun.

EPA on-scene coordinator Michael Zickler said Westinghouse Electric Corporation, ordered last week to undertake the cleanup, has contracted O.H. Materials Inc. of Findley, Ohio to do the work. He said the EPA two months ago awarded the same Ohio-based company a multi-regional contract (which includes Pennsylvania) to do cleanup work for the EPA.

Following the discovery last September of solvent-type chemicals in residential wells around Westinghouse's Cumberland Township elevator plant, state and federal investigators found that industrial waste generated at the Biglerville Road facility had been hauled and dumped at the Straban Township sites during the 1970s. However, state Department of Environmental Resources records indicate that the Straban Township dumping was known to the state agency as long ago as 1976 when DER officials made at least two on-site inspections of one property now being cleaned up by Westinghouse.

The EPA's order to Westinghouse followed Washington's mid-March approval of $690,000 from the federal Superfund for an EPA cleanup. Because Westinghouse has opted to obey the order, the federal money won't need to be used. Superfund money is used only if a polluter refuses to do the cleanup work. In that case, the EPA does the cleanup and begins court action to recover the expended funds.

Zickler, who periodically will conduct on-site inspections of the cleanup work, said O.H. Materials is an experienced company which knows the standards and procedures the EPA requires. He said it is not unusual for the firm to work into the night or during inclement weather because of the cost of their services.

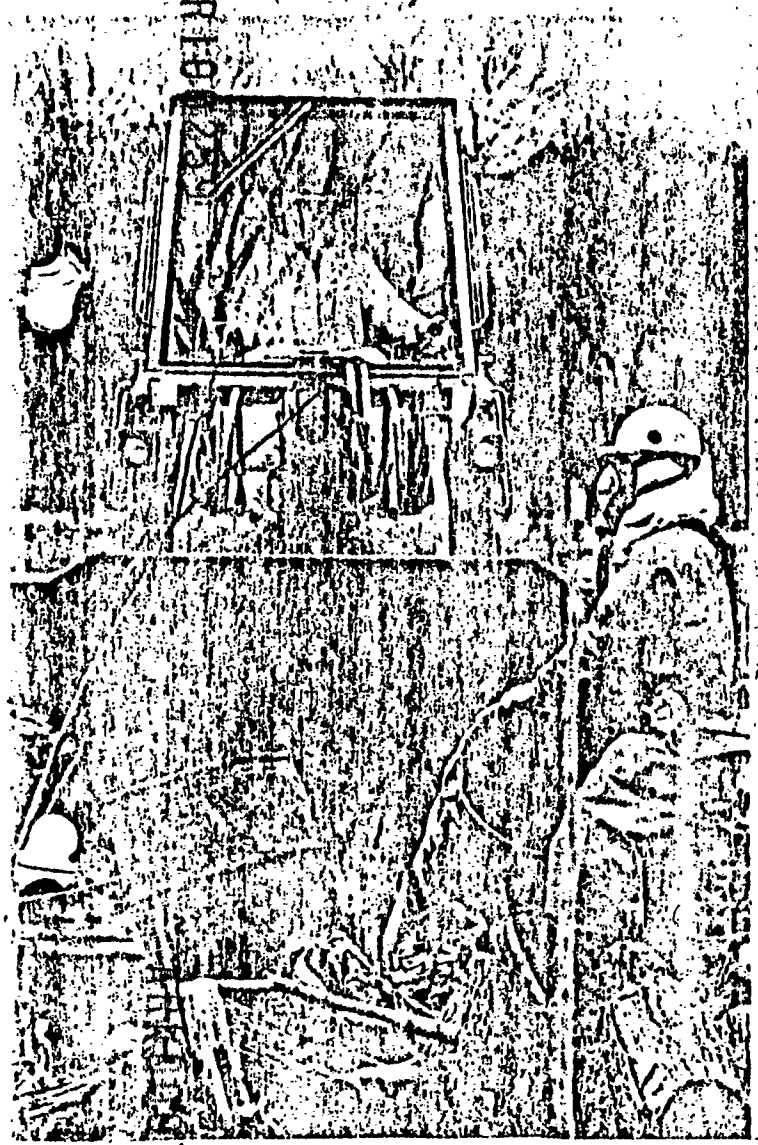
The date given by the EPA for completion of the cleanup is April 12. But Zickler said that deadline could be extended if justifiable delays interrupt work. "We (EPA) would give Westinghouse the benefit of the doubt," he said.

Several local residents have told Zickler about other possible dump sites and he said the EPA will investigate these allegations. He said the EPA is compiling a list of residents requiring alternate sources of drinking water because of polluted wells and will direct Westinghouse to supply these families with potable water supplies. Westinghouse already has supplied about a dozen homes with water filters.

Elsewhere in the county, both the EPA and the state DER plan to test water from private wells and streams in an area of Union Township at and around the Keystone Sanitation Company's Clouser Road landfill. More than a year ago, the DER found solvent-type chemicals in one of the landfill's five monitoring wells.

Mary Minor, president of the Union Township Improvement Association and a member of CURE (Citizens Urge Rescue of the Environment), said the joint state and federal testing will be done April 16 and 17. She said the EPA plans to test water from nine private wells and also will test both water and sediment from four local streams, while the DER will test water from a dozen private wells. The EPA also plans to test all five of the landfill's monitoring wells, Minor said.

The landfill's owners, Mr. and Mrs. Kenneth F. Noel, insist they do not accept hazardous waste at the Union Township facility and have said their efforts to find the source of the groundwater pollution so far has failed. The DER has said cleanup actions at the landfill should begin by summer and could involve "air-stripping" or pumping of the polluted well, allowing the solvents to evaporate. Neither state nor federal investigators have indicated a connection between the groundwater pollution at the landfill and the contaminants showing up in local private wells.



Outfitted with protective clothing and respirators, a cleanup crew hired by Westinghouse Electric Corporation uses earth-moving equipment to remove drums of industrial waste at a Straban Township dump site off Shrivers Corner Road. The property, owned by Frederick M. Shealer, is one of three sites where Shealer dumped waste from Westinghouse's Cumberland Township elevator plant during the 1970s. The federal Environmental Protection Agency last week ordered Westinghouse to clean up three Straban Township dump sites. Cost for the federally-mandated work is estimated at nearly $700,000. *(Times photo by*

MUTUAL
ESS CLIPPING SERVICE INC.
APR 2 84

Gettysburg Times
GETTYSBURG, PA
PM—11,387

Westinghouse to clean up toxic dump sites

FILE NE PSC

By DAVID PALFREY
Times Staff Writer

GETTYSBURG — Following an order from the Environmental Protection Agency, the Westinghouse Electric Corporation Thursday said it would take comprehensive action to deal with groundwater pollution at and near the company's Cumberland Township elevator plant and also would begin cleanup of three waste disposal sites in Straban Township.

Last week, the EPA approved $690,000 from the federal Superfund for cleaning up the Straban Township dump sites while the state pledged $48,000 for the work. But Superfund money is used only if the polluter refuses to complete the EPA-ordered clean up actions. With Westinghouse's plans to pay for the cleanup, that tax money need not be spent here.

The EPA "felt very strongly" that Westinghouse primarily was responsible for the Straban Township dump sites, said EPA spokeswoman Janet Luffy. She said Westinghouse had until today to answer the EPA order, now apparently a moot point.

In a press release Thursday, Roger Williams, manager of the Westinghouse plant (just north of Gettysburg off Route 34), said the company will begin discussions with the Gettysburg Municipal Authority about extending town water lines to Biglerville (Route 34) and Boyd's School roads residents whose well water is contaminated with various chemical solvents. State Department of Environmental Resources personnel began finding the pollutants in residential wells near the Westinghouse plant last fall.

Records indicate the Westinghouse facility uses solvents in its manufacturing process and during the 1970's the company hired Frederick M. Shealer to haul the chemical waste, which he then dumped at several sites in Straban Township. Until yesterday, Westinghouse would not accept any responsibility for Shealer's actions and awaited completion of a study by a company-hired consultant before addressing any blame for the groundwater pollution at the elevator plant.

While Westinghouse has been supplying water-filtering systems to about a dozen homes near its elevator plant, the company said this action was not to be taken as an admission of fault. While apparently accepting the EPA cleanup order Thursday, Westinghouse still made no mention of assuming blame for the pollution.

The company's desire to correct permanently the pollution problem for neighboring residents is clear. "We feel that the best solution is to provide municipal water to these residents," the press release quotes Williams as saying. "Westinghouse will pay for the extension of the water line if such an extension is feasible, and . . . we hope that the project can be started as soon as possible," he added.

An EPA study of extending town water to 18 homes near the Westinghouse plant estimated the project's cost at $108,000.

The Westinghouse statement goes on to identify the three Straban Township dump sites which the company will clean up as: a lagoon on property owned (at least partly) by Frederick M. Shealer off Hunterstown Road; another property owned by Shealer off Route 394 (Shrivers Corner Road) near Culp Road; and a portion of property owned by the Culp family located along Culp Road.

Williams acknowledged that Shealer hauled industrial wastes for the company during the 1970s and cites an EPA determination that Shealer dumped those wastes at the three Straban Township sites.

Westinghouse also said Thursday it will hire a contractor to remove drums from the Culp and Shealer properties, and to remove the sludge from the lagoon on the Hunterstown Road site. The company said the material will be taken to a licensed disposal facility. The EPA estimate for this work totaled $652,000, although two sludge lagoons are mentioned in the federal report.

Response from the citizen's group GNATS (Good Neighbors Against Toxic Substances), which formed last winter in response to the pollution of their wells, was positive, though with some reservations.

Merle Hankey, GNATS vice-president and a neighbor to one of the Straban Township dumps, said he still must haul water for his family to use. "It's really a big pain in the neck (hauling water)," he said.

Hankey said many families have pollutants in their water at levels below that which Westinghouse has agreed to provide filter systems (45 parts per billion of trichloroethylene or TCE). "There are a lot of families in that limbo," he said. Hankey also wants Westinghouse to periodically check the filters for effectiveness and for bacteria in addition to supplying filters to residents found to have 1,1-dichloroethylene (like TCE, a solvent and suspected cancer-causing substance) above EPA-established risk levels, which are considerably lower than those for TCE.

Franklin O. Felt, GNATS president and neighbor to the Westinghouse plant, was out of town Thursday but his wife, Janis, welcomed the news (delivered to her in person by the plant's personnel manager) of Westinghouse's planned clean up and willingness to extend town water to her and her neighbors' homes. "This fairly well covers the goals that GNATS set out to accomplish," she said, "We're all delighted. It's taken the cooperation of many people to see these goals ..nally ..eved.

Gettysburg Times
GETTYSBURG, PA
PM—11,387

GMA gives Westinghouse okay to extend a town water main

By DAVID PALFREY
Times Staff Writer

GETTYSBURG — As part of a comprehensive program addressing groundwater contamination, the Westinghouse Electric Corporation has gained approval from the Gettysburg Municipal Authority to extend a town water main to about 20 residences with polluted wells near the company's Cumberland Township elevator plant just north of the borough.

Speaking at a public meeting Monday in the Cumberland Township Municipal Building, GMA Chairman Allen A. Larson said Westinghouse plans to extend the 12-inch main (which now ends on the west side of Biglerville Road in front of the company's plant) north to and then east along Boyd's School Road to a point near Herff-Jones Yearbooks, 525 Boyd's School Road. "This work will be done by Westinghouse," he said, "we will supply the supervision." The extension's cost has been estimated at more than $108,000.

Larson said any other extensions of town water mains to other affected areas would require a funding committment and would have to be reviewed separately by the GMA to assure feasibility.

The federal Environmental Protection Agency requested Monday's public meeting to tell local residents what will be done in the coming weeks to clean up several dump sites in Straban Township and to provide potable water to people with polluted wells living near those sites and near the Westinghouse plant in neighboring Cumberland Township.

An EPA fact-sheet distributed at Monday's meeting states that during the 1970s about 2,400 drums of industrial waste generated at the Westing-

(See GMA Page 2)

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PRESS CLIPPING SERVICE INC.
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GETTYSBURG, PA
PM—11,357

GMA — *from page 1*

house plant were hauled to Straban Township and dumped at four sites there. Both Westinghouse and former Straban Township supervisor Frederick M. Shealer have said Shealer hauled waste for the company during the 1970s.

Until last week, Westinghouse would not accept responsibility for Shealer's actions, while Shealer has maintained he was not aware of the hazardous nature of the waste he hauled.

But shortly after winning approval of $690,000 from the federal Superfund for cleanup around the plant and dump sites, the EPA ordered Westinghouse, which the EPA considered the primary responsible party, to begin the work. Westinghouse last Thursday said it would comply with the EPA order.

The EPA fact-sheet states the company's cleanup will begin April 5 with removal of drums and contaminated soil from the Straban sites and continue through April 12 with the removal of sludges and liquids from a lagoon across from Shealer's residence at 518 Hunterstown Road. The other dump sites are located along Shriver's Corner Road (Route 394) on property belonging to Sarah C. Culp and on another site nearby owned by Shealer.

The EPA reports it found drums in various stages of deterioration at all the sites. The drums' contents, the report adds, failed several federally-required tests including low flash points (below 60 degrees centigrade), high lead levels, and acidity. The EPA states that the sludge lagoon on Hunterstown Road lies near a stream and that sampling analyses revealed dangerous levels of several chemicals.

EPA on-scene coordinator Michael Zickler Monday said Westinghouse has agreed to provide potable water to all households designated by the EPA. "I think they (Westinghouse) have made a complete flip-flop in their attitude . . . they can't do enough to please us now," he said.

Westinghouse last January hired R.E. Wright Associates Inc. of Middletown to study the groundwater pollution at and near the company's elevator plant. Zickler said Westinghouse now has authorized Wright to "take the next step" in its study and determine the extent of the contamination beyond the company's property. He said the EPA will oversee the Westinghouse cleanup and can amend its original order to include other pollution-related actions the federal agency later may decide are needed.

Several of the roughly 70 people at Monday's meeting questioned whether state and federal investigators had found all dump sites. "I don't think anyone has any idea of what's out there," said one person. Zickler asked anyone having information of other dump sites to let him know.

Others living near the four identified dumps or the plant said their homes and property had lost value as a result of the pollution and asked what could be done about this loss. Officials had no definite answers to offer in response.

Zickler said Westinghouse agreed to check for effectiveness of filters the company has installed in several homes every 45 days. George Coleman, who lives next to the company's plant, said his filtered water "smells like sewer water." Zickler said if Westinghouse refuses to check for bacteria buildup in the carbon filters, the EPA would do so.

Merle Hankey Jr., vice-president of GNATS (Good Neighbors Against Toxic Substances) and neighbor to one dump site, asked (as he has at several previous meetings) why the state Department of Environmental Resources failed to follow through on a complaint about dumping at one of the Straban Township sites in 1976.

DER supervisor Frank Fair acknowledged the DER had made at least one on-site inspection of the Culp property on Shriver's Corner Road in 1976 but could only point to inadequate authority, too few personnel, and lack of funding as reasons the investigation apparently tapered off. Hankey argued "even a $300 fine would have taken the incentive out of . . . dumping waste."

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PRESS CLIPPING SERVICE INC.
MAR 17 84

Gettysburg Times
GETTYSBURG, PA
PM—11,387

5 more homeowners advised not to drink their tap water

BY DAVID PALFREY
Times Staff Writer

GETTYSBURG—Pollution found in five more Gettysburg area residential water wells has prompted the state Department of Environmental Resources (DER) to advise those homeowners against drinking their tap water, a DER official confirmed Friday.

Kenneth Malick, a sanitarian with the DER's Community Environmental Control Bureau, said a downward revision of the risk level for the substance 1,1-dichloroethene required notice be given to the affected residences in Cumberland and Straban townships. He said the DER adopted the lower level after notification by the federal Environmental Protection Agency. The chemical is one of several volatile (easily evaporating) organic (containing carbon) substances turning up in area groundwater.

Three of the latest affected homes are located in the Biglerville Road area of Cumberland Township while two are along Hunterstown Road in Straban Township, Malick said. This brings to at least 17 the number of Gettysburg area homes advised by the DER not to use their well water because of pollution above established risk limits.

Since last September, the state DER and later the federal EPA have been investigating and conducting soil and water tests at five waste dumping sites north and east of Gettysburg in Cumberland and Straban townships, including the Westinghouse Electric Corporation's elevator plant off the Biglerville Road (Route 34).

Malick said the drinking water risk level for 1,1-dichloroethene now is .034 parts per billion (ppb). According to DER lab personnel, this comparatively low level is near the limit of current measuring devices, some of which can measure substances to parts per trillion. Malick said the DER is advising residents not to drink their water if lab tests indicate a 1,1-dichloroethene level of less than 1 ppb because of the "good possibility" that the contamination might exceed the lower level (.034 ppb).

Research indicates that an adult drinking two quarts of water containing 1,1-dichloroethene at a level of .034 ppb or more over a period of 70 years is exposed to an additional cancer risk of one in a million, Malick said.

The EPA in February revised downward from 35 ppb to 3.5 ppb the skin contact risk level for this same substance. Above 3.5 ppb, both the DER and the EPA advise against using such polluted water for drinking, bathing, or cooking, without first subjecting the water to an approved treatment such as an activated-carbon filter.

Both the DER and the EPA are investigating three Straban Township waste dumping sites located along Shrivers Corner and Hunterstown roads. Malick said he plans on taking at least 12 more water samples from wells along Hunterstown Road but DER's laboratory in Harrisburg allots him fewer than 10 samples per month, considerably slowing his progress in determining the extent of the contamination. For this reason, Malick has recommended that concerned homeowners near the affected sites have their well water tested by private firms. He asks residents getting the private testing to notify him of the results and he said this independent testing would have no effect on whether the DER would test these same wells.

The EPA now is awaiting final approval from its Washington headquarters for a $480,000 Superfund grant to begin testing and clean-up of the local dump sites. The state already has pledged to contribute $48,000 toward the proposed clean-up.

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PRESS CLIPPING SERVICE INC
MAR 30 84

THE PATRIOT
HARRISBURG, PA.
AM—46,300

Water Cleanup Announced in Adams

EPA PCB Tobacco LBN-waste

By DICK SARGE Haz.waste
Staff Writer NE A

GETTYSBURG — The Westinghouse Electric Corp. yesterday announced a "comprehensive" program to remove contaminants from the groundwater and dump sites at and near its elevator-components plant in Cumberland Twp., two miles north of here.

James Daley, company spokesman, said from Pittsburgh the work will begin "as soon as possible" and should clear up the contamination that has affected at least 12 and perhaps as many as 35 private wells in Cumberland as well as Straban Twp. to the east.

The plan also includes laying public-water lines to the affected households after a feasibility study is conducted in cooperation with the Gettysburg Municipal Authority. Westinghouse would pay for the extension of the system, as well as the individual hookups, Daley said.

The announcement follows completion of a study for Westinghouse by R.E. Wright Associates Inc. of Middletown. The firm previously had declined publicly to accept responsibility for the contamination pinpointed by the state Department of Environmental Resources after receiving complaints from residents.

A battle for pure water has been strenuously waged for months by the Good Neighbors Against Toxic Substances. The federal Environmental Protection Agency had joined with DER in testing the area and seeking a solution. A House Select Committee on Groundwater Contamination held a special hearing here on the problem in late February.

The principal contaminant had been identified as trichloroethylene, an industrial solvent suspected as a cancer-inducing agent. Operating under a consent agreement with DER, Westinghouse has supplied filtration systems to householders to remove the TCE and initially had supplied them with bottled water.

The cleanup program that will be submitted to DER for approval includes removing contaminants from the groundwater at the plant site itself, as well as in the area of the private wells in Straban and Cumberland townships.

In addition, Daley said, Westinghouse will remove drums of chemical wastes and clean up contamination at three disposal sites used in the 1970s by a local hauler contracted to the company. This will include removing the sludge from a lagoon on the Frederick Shealer property on Hunterstown Road and cleaning two other sites, one on the Shealer property along Route 394, near Culp Road, and another dump site on property owned by the Culp family on Culp Road.

The water-line extensions are projected to be laid out on Biglerville and Boyd School roads. Two households on Hunterstown Road that cannot be served by the water line, Daley said, would be supplied with filtration systems.

MUTUAL
PRESS CLIPPING SERVICE INC.
MAR 13 84

Gettysburg Times
GETTYSBURG, PA
PM—11,387

EPA looks into extending town water lines

EPA Tobacco NE

BY DAVID PALFREY
Times Staff Writer

3 GETTYSBURG — About 50 people, many of them owners of polluted wells, came to the Cumberland Township Municipal Building Monday to hear assurances from a quartet of state and federal officials that their agencies will continue to pursue a complete evaluation and clean-up of hazardous waste pollution at four separate sites around Gettysburg in Straban and Cumberland townships.

Organized by GNATS (Good Neighbors Against Toxic Substances), the meeting was the fourth such monthly gathering held to give local residents a chance to hear progress reports from, and ask questions of, those responsible for cleaning up hazardous waste in the environment, on both the state and federal levels.

Thomas Voltaggio, chief of the Superfund branch of the Environmental Protection Agency (EPA), confirmed that his agency has estimated the cost of extending Gettysburg Municipal Authority water lines to affected homeowners along Biglerville and Boyd's School roads. He said the estimate was done by EPA's consultant and was just "one thing we would look at very carefully." Reports indicate the water line extension includes 18 homes and would cost $108,000.

Frank Fair, operations supervisor for the DER's Bureau of Solid Waste Management, called the ongoing Westinghouse hydrogeological study "a very good one," although he said that when he first saw the study's plan, "I thought it was inadequate." He said the results from the company's study so far indicate higher levels of contamination than the DER expected.

Voltaggio said that although the federal funding proposal does not include money for a water line extension, the EPA would use some of the money to test Cumberland Township wells and to evaluate the effectiveness of any filtering systems installed by Westinghouse. He agreed that the EPA cannot take short-term actions at the Westinghouse plant site because so far the company has agreed to supply water or filters to the residents with polluted water. "They (Westinghouse) have done nothing about the lagoon and drum sites (in Straban Township)," he added, to justify the EPA's proposed clean-up actions at those sites.

Franklin O. Felt, GNATS president and a neighbor of the Westinghouse plant, urged members and citizens to press for action from officials and politicians. He said he traveled to Washington late last week to talk with EPA officials and told them of GNATS' concerns about not being allowed an observer at EPA-Westinghouse meetings. "I still feel that's the fair way to go," he said. Felt said GNATS have been approached by three environmentally-oriented law firms offering to take the pollution problem to court. "The GNATS have wanted to avoid legal action (but) . . . could be forced to do it," he said. "We would like a better dialogue with Westinghouse," Felt said, noting the company's absence from all of the public meetings.

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PM—11,387

"Different perspective" in negotiations

EPA NE

By DAVID PALFREY
Times Staff Writer

GETTYSBURG — The disclosure Thursday by Westinghouse Electric Corporation that its Cumberland Township elevator plant appears to be the source of nearby groundwater pollution "puts a different perspective" on any future order or agreement with the company that may be sought by the state or federal government, a state Department of Environmental Resources supervisor said Friday.

Frank Fair, an operations supervisor with the DER's Bureau of Solid Waste, said the completion of the study by Westinghouse's consultant, Middletown-based R.E. Wright Associates Inc., requires inclusion of clean-up actions in any future negotiations with the DER or the federal Environmental Protection Agency.

Although the EPA had drafted a consent agreement and order after talks with Westinghouse, an EPA spokeswoman reported Wednesday that reservations by all involved parties, including both the company and the DER, required reconsideration of the initially proposed accord.

"Most of the items in the first agreement are by the boards now," Fair said, adding that many of those items, such as the nearly-completed hydrogeological study by Westinghouse's consultant, have been fulfilled or addressed. He said there were no provisions for clean-up actions in that first EPA document.

With the indication Thursday by Westinghouse that it will accept the DER's conclusion that the company's plant is indeed a source of nearby groundwater pollution, Fair said his bureau will be less visible in the months-old investigation. Instead, the DER's Bureaus of Community

(More WATER on pge 2)

Water

(WATER from page 1)

Environmental Control and Water Quality Management will assume primary roles in the approaching clean-up phase of the Cumberland Township site.

In a related matter, Thomas Voltaggio, chief of the EPA's Superfund Branch, said Friday that he expects action "any day" on the EPA's more than $500,000 funding request by EPA headquarters in Washington for cleaning up three Straban Township waste sites. Both Voltaggio and Fair said a needed 10-percent share commitment by the state for certain aspects of any future clean-up actions is not a prerequisite for an initial go-ahead from Washington.

The local citizens' group, GNATS (Good Neighbors Against Toxic Substances), composed of local residents whose wells have been found to be polluted, will meet Monday at 7:30 p.m. in the Cumberland Township Municipal Building to discuss the latest developments in the ongoing federal and state investigations.

THE PATRIOT
HARRISBURG, PA.
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—Patriot-News photo

Touring landfill. Bill Bryant, right, general manager of Keystone Sanitation Co. Inc. landfill, yesterday gives state officials a tour of the landfill. With him, from left, are U.S. Rep. William Gooding, R-Jacobus; state Department of Environmental Resources Secretary Nicholas DeBenedictis; and state Sen. William J. Moore, R-New Bloomfield.

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Hazardous Dumps Inspected

By JERRY L. GLEASON
York Bureau

GETTYSBURG — Donald H. Waddell stood in his backyard yesterday, pointing out an unauthorized industrial waste dump for state Department of Environmental Resources Secretary Nicholas DeBenedictis and other state and federal officials.

The dump, which consists of a lagoon measuring 60 feet by 120 feet, is the source of industrial solvents and other chemicals that are contaminating Waddell's well water.

He said he and his family didn't know the waste site existed until they read about it in area newspapers. The Waddells built a new home at the intersection of Shealer Road and Hunterstown Road about 18 months ago.

"ALL WE want is safe drinking water," Waddell told DeBenedictis and the other officials.

DeBenedictis; Ed Skernolis, chief of site investigation for the U.S. Environmental Protection Agency's Superfund program; state Sen. William J. Moore, R-New Bloomfield; and other DER and EPA officials were in the group that visited Waddell's home yesterday afternoon while on a tour of hazardous waste sites and areas with contaminated wells.

U.S. Rep. Bill Goodling, R-Jacobus; state Rep. Kenneth J. Cole, D-Gettysburg; and state Rep. Donald Dorr, R-Hanover, joined the group at the Union Twp. Building for a visit to the Keystone Sanitation Co. Inc.'s sanitary landfill on Clouser Road.

Private tests have indicated that more than 20 residential wells near the landfill have some level of contamination, but the contaminants have not been traced to the landfill itself.

The lagoon, which is in Straban Twp., is one of three sites where DER officials say hazardous waste products from the Westinghouse Electric Corp.'s plants were dumped by Frederick M. Shaler, a former Straban Twp. supervisor who hauled waste from the company's elevator plant in Cumberland Twp.

THE SITES are the source of trichloroethlene, a suspected cancer-causing substance, and other industrial solvents that are contaminating residential wells, according to DER officials.

The three waste sites will be cleaned up in a project funded by a $480,000 EPA Superfund grant.

Twenty-four families in Straban and Cumberland townships cannot use their wells and are getting water from the Cumberland Twp. municipal building.

"Our well is contaminated with four different chemicals," Waddell said. "The levels are high enough that it is unsafe for drinking purposes and we're close to the cutoff point for using it for bathing purposes."

Waddell drives about six miles twice a week to get fresh water for his wife and two children.

"We don't have any known health problems from using the water," Waddell said. "We're fortunate that we haven't lived here any longer. What I hear about these chemicals scares me a little."

THE WADDELL home is less than a quarter mile from a Gettysburg Municipal Authority water line and he would like to see the line extended to serve him and other families with contaminated wells.

DeBenedictis said he was "impressed" with his brief meeting with Waddell. "He was very calm and indicated a lot of trust in our ability to solve his problem despite hearing a lot of false promises in the past," he said.

Moore said he and Cole, who represent Adams County, put yesterday's tour together so "the top people in the DER and EPA can see the sites and become familiar with them."

"The main purpose of this informal gathering was to bring together the people who have the power to make the policy decisions needed to solve this serious problem," Moore said.

DeBenedictis said he participated in the tour to familiarize himself with the situation and to demonstrate to Adams County residents that he is as concerned as they are about the problem.

DeBenedictis said samples taken at the Keystone landfill have shown some degradation of the groundwater. Keystone Sanitation has hired consultants to conduct further tests and recommend a solution to the problem, he said.

"Private samples taken off site have indicated there is a groundwater contamination problem and we will do our own samples to confirm those findings," DeBenedictis said.

He said he would suggest that an independent testing firm selected by local residents and DER officials take water samples from the same wells at the same time.

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Gettysburg Times
GETTYSBURG, PA
PM—11,387

Water line extensions to begin

FBN EPA

By DAVID PALFREY
Times Staff Writer

Work on extending town water lines to 23 Cumberland Township residences along Biglerville and Boyd's School roads could begin next week, said a local spokesman this week for Westinghouse Electric Corporation, which is funding the project.

Gerard H. Schilling, personnel manager at the company's Biglerville Road elevator plant, said Conewago Contractors could start excavating by Tuesday. He said Westinghouse hoped to hire a plumbing contractor this week to install the laterals connecting each residence to the extension. The cost of the laterals also will be paid by Westinghouse, he said.

Westinghouse is funding the extension of the Gettysburg Municipal Water Authority line as part of a comprehensive cleanup of groundwater contamination at and around the company's plant site.

Beginning in late summer, solvent-type chemicals like those used at the the rural factory began turning up in tests made by state and later, federal environmental officials after an adjacent property owner complained of suspicious materials in a nearby Rock Creek tributary.

Subsequent government investigations and a company-sponsored study indicated the Westinghouse plant was a source of the volatile organics, commonly called solvents, among them suspected cancer-causing substances.

The estimated $108,000 water line extension will run north from the elevator plant (where the 12-inch line now ends) to the Boyd's School Road intersection and then east to a point near Herff-Jones Yearbooks. Schilling said all residences will be offered hookup on the line whether or not their wells have been found contaminated.

Schilling said each property owner accepting the company's offer will be asked to sign a document giving Westinghouse: permission to enter the properties to do the necessary plumbing work; assuring the company the homeowners will not use their wells until after the cleanup is completed; and allowing Westinghouse periodically to test the well water for contamination.

The testing will allow Westinghouse to measure the effectiveness of its cleanup, Schilling explained, while the agreement not to use the wells will enhance the company's cleanup process by decreasing water movement away from the cleaning apparatus to be located on the plant site. "We're not going to go in and disable the well," he said.

Schilling described the cleaning device, called a "stripping tower," as a cylinder about 30 feet high and two feet in diameter. He said the contaminated water will be pumped from a well on the plant site into the tower (expected to be in place sometime in June), which is designed to hasten evaporation of the volatile (easily evaporating) chemicals.

R.E. Wright Associates Inc., a Middletown firm hired by Westinghouse to study the water pollution, now is conducting a survey of private wells around the plant as part of a continuing groundwater investigation, Schilling said. The consultant's personnel will ask questions about well characteristics such as depth and output in addition to taking samples of water for analysis, he said.

Westinghouse recently completed a federally-ordered cleanup of three dump sites in nearby Straban Township which the Environmental Protection Agency had slated for Superfund action at a cost of $690,000. The company's compliance made EPA action unnecessary.

Schilling repeated that Westinghouse plans no futher cleanup action at or around the Straban Township dumps. Some property owners living near the dump sites whose wells show levels of solvent chemicals now are seeking help in getting potable water supplies. Under the EPA order, Westinghouse is supplying water to two Straban Township property owners.

Officials of both the EPA and the state Department of Environmental Resources say they plan to monitor the Westinghouse cleanup and to continue tests to determine the need for long-term cleanup actions. Results of these studies are not expected before summer.

DER links Westinghouse to Straban dumping

EPA Transcript 2

By DAVID PALFREY
Times Staff Writer

Waste at two possibly hazardous dump sites near Shriver's Corner in Straban Township were hauled there from the Westinghouse Electric Corporation's elevator plant in neighboring Cumberland Township, a state Department of Environmental Resources official said Tuesday.

Edward Simmons, manager of DER's Solid Waste Bureau, said the owner of one site off Route 394, Frederick M. Shealer, told DER officials he hauled the waste from the Westinghouse facility to Straban Township for several years before 1980. "That has been verified by Westinghouse," Simmons said.

DER officials identified the second site as the Culp property along Culp Road, near the Shealer site off Route 394. Simmons said the DER notified both property owners last May about the waste problem and investigation.

Metal drums, some marked with the names Westinghouse and Dupont, are plainly visible on both properties. "They've not been removed because neither property owner has the resources to move them," Simmons said. He said the two Straban sites are "not an imminent hazard."

The state's Solid Waste Management Act 97 took effect in 1980. Although the dumping at the Straban Township sites may have occurred before 1980, Simmons said the 1980 law would apply to any action that might be taken now to remove the waste there. Any such action would need approval from the DER and would have to comply with regulations as spelled out in Act 97, Simmons said.

Tests made on water taken from shallow holes on both the Shealer and Culp sites revealed high levels of the solvents TCE (trichloroethylene) and 1,1,1 TCE (trichloroethane), Simmons said. He said water taken from a 10-inch deep hole on the Culp site revealed a level of 4,100 parts per billion (ppb) of 1,1,1 TCE and 1,500 ppb TCE. Similar tests made by the DER on "oily water" from the southern part of the Shealer site yielded a level of 19 parts per million (ppm), which equals 19,000 ppb. Some of these tests were done as early as last May, Simmons said.

The DER last April tested well water on the property of Merle Hankey, 615 Shriver's Corner Road (next to the Shealer site), found 4.8 ppb of 1,1,1 TCE, and told him not to use it for drinking.

District DER sanitarian Kenneth Malick said eight more properties near the Straban Township sites are scheduled for tests Jan. 3.

Hankey said he had a private company test his water for hardness last March but tests indicated there might be other problems. He then called the DER. After DER tests found solvent-type pollutants in one of Hankey's drinking water wells, the state agency began looking for the source of the contaminants.

Through Shealer and the printing on the drums at both Straban Township sites, the DER identified Westinghouse as a source of the waste, Simmons said.

ALL IN A ROW — Metal drums on the Culp property along Culp Road in Straban Township, one of two sites identified by state investigators as possible hazardous waste dump sites. (Times photo by Paul Kuehnel)

DER inspections of the Westinghouse plant indicate compliance with present regulations, Simmons said. He said the facility presently uses the degreasers trichloroethylene (TCE), trichloroethane (1,1,1 TCE), zylene and toluene in its production processes.

Sondra Dimond, DER spokeswoman, said the spent solvents, waste paint, and xylene solids from the Westinghouse plant are shipped to companies in York Haven, Baltimore, and Niagara Falls, according to quarterly reports from the company to the DER.

When reached by telephone, Frederick M. Shealer would neither confirm nor deny whether the DER had notified him about the waste site on his property off Shriver's Corner Road. Asked whether he knew about the drums or where they came from, Shealer said "I can't say."

Leon Oberdick, DER Water Quality Bureau manager, said the DER notified the Straban Township Board of Supervisors of the possibly hazardous waste sites Dec. 5 because of proposed subdivision plans in the area. Oberdick said the DER wanted local officials to be aware of possible groundwater contamination in any new wells that might be dug for these subdivisions beforehand. Shealer is the chairman of the Straban Township Board of Supervisors.

The owners of the Culp site could not be reached for comment.

The DER's federal counterpart, the Environmental Protection Agency (EPA), is now reviewing preliminary assessments of both Straban Township sites.

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HANOVER, PA.
PM—26,000

Citizens concerned about contaminants

GETTYSBURG — Westinghouse Corporation would not admit or deny any connection with chemical contamination of Cumberland Township wells at a special meeting Monday night called by the board of supervisors.

Westinghouse did not send a representative to the meeting that drew about 120 township residents, state Department of Environmental Resources officials and local, state and federal officials. Instead, they sent a press release.

Frank Felt, township resident and owner of one of the wells with the highest concentration of TCE, a chemical contaminant, organized the meeting to stop rumors circulating in the township. He said he would like to see a citizen's group established to monitor the situation.

Felt read the press release issued by Roger Williams, manager of the Gettysburg elevator plant. The release said that Westinghouse plans to engage an environmental consultant to evaluate surface and sub-surface conditions at the The release said Westinghouse had received water test data provided by DER that showed levels of TCE concentration in private wells near the plant.

"We believe that additional data is required to determine whether our plant is a source of contamination. We are therefore undertaking an evaluation to determine the extent, if any, of our plant's involvement," Williams said in the release.

The letter said they believe the process of analyzing and collecting more data would take at least six months. Williams said Westinghouse plans to cooperate with DER and as "a neighbor" in the township, would offer assistance in bringing in other water supplies. The release did not say when other water would be brought in, only as soon as possible.

A good part of the meeting focused on TCE as a carcinogenic material and gave the residents the facts on how much contamination and over how long a period of time it would take them to be affected.

Frank Fair, supervior of the Bureau of Solid Wastes for DER, said tests indicate the contamination is traveling east and south. There were also two dump sites located in Straban Township at Shriver's Corner that Fair said would probably also draw action form the Envirnomental Protection Ateney.

Alternatives to the water problems were discussed, including the possibility of extending the Gettysburg Municipal Authority's water line to serve affected resisents.

All residents in the area were urged to have their water tested.

Westinghouse, EPA get consent agreement and order

By DAVID PALFREY
Times Staff Writer

GETTYSBURG — Westinghouse Electric Corporation and the federal Environmental Protection Agency have agreed tentatively to a "consent agreement and order" spelling out initial actions the company will undertake to resolve groundwater pollution at and near its elevator plant just north of Gettysburg, an EPA official said Thursday.

Speaking from EPA regional headquarters in Philadelphia, Michael Zickler, EPA on-scene coordinator for the Westinghouse site, said his agency and Westinghouse have been discussing the pollution problem for the past two weeks. He said Westinghouse employees from both local and corporate levels met in Philadelphia with EPA officials Jan. 24. "We are at a point where we (EPA and Westinghouse) are in agreement," Zickler said.

State investigators have found solvent polutants at levels requiring treatment before use in at least a dozen residential wells in Cumberland Township near the Westinghouse elevator plant, on the Biglerville Road here.

Zickler said the proposed EPA-Westinghouse agreement specifies which residents will get alternative water supplies and filtering systems from Westinghouse. "That is definitely settled," Zickler said.

Westinghouse already is supplying either bottled water or filtering systems to four Biglerville Road homes and offered the same services to eight more homes Jan. 20. At that time, Westinghouse spokesman James Daley said the company would provide the service to homes with drinking water containing levels of 45 parts per billion (ppb) or more of the solvent trichloroethylene (TCE), as indicated by state tests.

On Jan. 25, Westinghouse announced it had hired a consultant, R.E. Wright Associates of Middletown, to conduct a four-part study of the groundwater pollution around its plant. Daley said the study would take about three months to complete.

Zickler said more immediate action still could be taken by the EPA at either the Westinghouse site or the other four possibly harzardous waste dump sites around Gettysburg in Straban Township. He said the EPA had not received test results on samples taken from the Westinghouse site by EPA consultants in late January.

The EPA will monitor the Westinghouse study to assure proper methods are followed, Zickler said. He said the EPA also would continue its own samtinghouse's consultants.

The proposed agreement must be approved by EPA's Office of Environmental and Remedial Response in Washington before formal adoption, Zickler said. He said the EPA soon would submit funding requests for possible clean ups at the other four sites. In those four cases, Zickler said there may be several responsible parties, in which case the EPA would take a different approach to clean up. The "consent agreement and order" approach being sought with Westinghouse normally is used where "there seems to be a single potentially responsible party," Zickler said.

Zickler said all funds requested would be drawn from the federal "superfund," an industrial tax-based fund set aside for toxic waste clean ups.

Last Tuesday in Missouri, in the first trial involving "superfund" legislation, a federal judge ruled that a defunct chemical company must help pay for a clean up done by the EPA.

In a related matter, Zickler said that after recently revising downward the revised upward "risk levels" for 1,1-dichloroethene, another solvent and suspected carcinogen which has been found by state officials in some private and public wells in Cumberland, Straban, and Union townships and in the borough of Littlestown. He said EPA guidelines now advised against skin contact with water containing 35 parts per billion or more of 1,1-dichloroethene, thus requiring removal treatment before using the water for drinking, cooking, or bathing. The previous level was 3.5 parts per billion.

Spokesmen for both the EPA and the state Department of Environmental Resources (DER) confirmed Thursday that several officials involved in the local waste sites investigations will attend the public meeting scheduled for 7:30 p.m. Monday, Feb. 6, in the Cumberland Township municipal building. The meeting was organized by the citizens group GNATS (Good Neighbors Against Toxic Substances), which was formed last year by residents living near the Westinghouse plant in Cumberland Township.

THE Gettysburg
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VOL. 82, NO. 31 2/7/84 GETTYSBURG, PA., TUES

Public told of stumbling blocks to contamination clean up here

By DAVID PALFREY
Times Staff Writer

GETTYSBURG — About 70 people att[illegible] the third GNATS (Good Neigh[illegible]gainst Toxic Substances) public [illegible] Monday in Cumberland Tow[illegible] municipal building heard state and federal officials cite broken equipment and lack of funds as stumbling blocks toward the clean up of five possible hazardous waste dumps near Gettysburg, in Cumberland and Straban townships.

"I think they've (state Department of Environmental Resources) got antiquated equipment," said state Representative Kenneth J. Cole. He called attention to the special state House investigating committee slated to hear testimony at the Cumberland Township building Feb. 27. "Maybe this (the local groundwater pollution problem) will be the example we'll use in Pennsylvania," Cole said.

None of the three DER officials present could explain why state water samples could not be sent to private labs for testing while the damaged gear is repaired or replaced.

The DER testing machine has been out of commission since early last month, said DER sanitarian Kenneth Malick. Without the gear, Malick said he cannot continue his testing of area well water. He said he has at least 24 sites scheduled for testing.

Michael Zickler, the on-scene coordinator for the federal Environmental Protection Agency, said the "consent agreement and order" worked out between the EPA and Westinghouse Electric Corporation was sent to the company for signing Monday. "I think in this case we (EPA) are making out better than we could have on our own," Zickler said. However, he added that "most of the give was on our part."

Zickler said that the proposed agreement requires only that Westinghouse supply alternate water supplies to homes with TCE levels at or above 45 parts per billion, and that the company conduct an evaluation "to determine if they (Westinghouse) are the most likely source of the contamination," something Westinghouse is already doing.

Both the state DER and the federal EPA already have said Westinghouse is a source of the solvents turning up in residential wells near the company's Biglerville Road elevator plant.

Frank Fair, who heads the DER investigation, said the Westinghouse study is progressing. He said the company's consultant, R.E. Wright of Middletown, Monday drilled a 200-foot we[illegible] on the plant site, one of four wells to [illegible] used in monitoring local groundwate[illegible] Fair said his agency had requested that Westinghouse expand its area of sampling and he said the DER would monitor the company's study by splitting samples and comparing data. "We're (DER) still here and still active in this investigation," Fair said.

However, Malick said the broken test equipment had created a backlog of regional testing requests and that it "could be a while" before the DER is again able to test water samples fully. Zickler offered to handle some state testing at EPA's Annapolis lab.

Zickler said Westinghouse refused to accept responsibility for any of the other four dump sites in Straban Township. "I know we're (EPA) not going to negotiate with them (Westinghouse) on any other sites," he said.

Two citizens asked why the EPA or DER could not take immediate action to clean up the waste at the five sites. "I'm really tired hearing about levels," said Straban Township resident and GNATS vice-president Merle Hankey, Jr.

Until the EPA approves funds for cleaning up the waste sites, Zickler said his agency cannot take further action. He said a lawsuit by the affected residents "might be more successful than we (EPA) could be."

GNATS president Franklin O. Fe[illegible] said the group had gotten some legal advice to the effect that they would be very naive to believe that Westinghouse would do a study proving themselves responsible for the pollution.

Felt said he was disappointed by the officials' statements. "The clean up

QUESTIONS — Michael Zickler (right), on scene coordinator for the EPA, is open for questions during a meeting Monday night of Good Neighbors Against Toxic Substances (GNATS). Charles Marass (below) asks the panel a question. (Times photo by Paul Knehnel).

no doorbe[illegible]rbage, pigeons, roach infestation[illegible]nd padlocks on fire escapes.

"We are totally disgusted," said Marjorie Smith. "It's their attitude I'm very much concerned about," she said.

Another tenant, Melissa Klick, asked the council what recourse the building's residents have against the owners. John Lawver Jr., borough code enforcement officer, said he would look into the garage and padlocked door complaints.

Ed Kilck, chief shareholder of The Retreat, a business which leased space in the annex building prior to the

EPA looks into extending town water line

By DAVID PALFREY 3/13/94
Times Staff Writer

GETTYSBURG — About 50 people, many of them owners of polluted wells, came to the Cumberland Township Municipal Building Monday to hear assurances from a quartet of state and federal officials that their agencies will continue to pursue a complete evaluation and clean-up of hazardous waste pollution at four separate sites around Gettysburg in Straban and Cumberland townships.

Organized by GNATS (Good Neighbors Against Toxic Substances), the meeting was the fourth such monthly gathering held to give local residents a chance to hear progress reports from, and ask questions of, those responsible for cleaning up hazardous waste in the environment on both the state and federal levels.

Thomas Voltaggio, chief of the Superfund branch of the Environmental Protection Agency (EPA), confirmed that his agency has estimated the cost of extending Gettysburg Municipal Authority water lines to affected homeowners along Biglerville and Boyd's School roads. He said the estimate was done by EPA's consultant and was just "one thing we would look at very carefully." Reports indicate the water line extension includes 18 homes and would cost $108,000.

Frank Fair, operations supervisor for the DER's Bureau of Solid Waste Management, called the ongoing Westinghouse hydrogeological study "a very good one," although he said that when he first saw the study's plan, "I thought it was inadequate." He said the results from the company's study so far indicate higher levels of contamination than the DER expected.

Voltaggio said that although the federal funding proposal does not include money for a water line extension, the EPA would use some of the money to test Cumberland Township wells and to evaluate the effectiveness of any filtering systems installed by Westinghouse. He agreed that the EPA cannot take short-term the Westinghouse plant site far the company has agreed water or filters to the resi polluted water. "They (West have done nothing about and drum sites (in Township)," he added, to EPA's proposed clean-up those sites.

Franklin O. Felt, GNATS and a neighbor of the We plant, urged members and press for action from off politicians. He said he t Washington late last week EPA officials and told them concerns about not being observer at EPA-Westingh ings. "I still feel that's the go," he said. Felt said GN been approached by thre mentally-oriented law firm to take the pollution proble "The GNATS have wante legal action (but) . . . coul to do it," he said. "We w better dialogue with West Felt said, noting the comp ence from all of the public

State would pay $48,000 to join Superfund in Straban clean-up

Pennsylvania is ready to contribute $48,000 for the state's 10-percent share of a proposed $480,000 federal Superfund clean-up of three hazardous waste sites near Gettysburg in Straban Township, said Department of Environmental Resources Secretary Nicholas DeBenedictis Monday.

"Pennsylvania is ready to do its part to remove the wastes from this lagoon and prevent further damage to the environment," DeBenedictis said. "We are hopeful the federal government will also recognize the need to perform this work quickly and provide the remaining $432,000 needed for this planned removal action."

The DER secretary said the nearly $500,000 project would involve removal of sludge in a lagoon measuring 120 feet by 60 feet and eight feet in depth off a Hunterstown Road property and the subsequent covering of the site with topsoil.

Frank Fair, operations supervisor of the DER's Bureau of Solid Waste Management, said the lagoon is part of one site along Hunterstown Road on property owned partly by Frederick M. Shealer, a former Straban Township supervisor who has said he hauled waste from the Westinghouse Electric Corporation's Cumberland Township elevator plant.

Both the DER and the federal Environmental Protection Agency have identified and now are evaluating four sites in Straban and Cumberland townships including the Westinghouse plant site. The DER concluded months ago that the Biglerville Road plant is a source of the solvent pollutants turning up in many nearby residential wells. Based on initial tests, an ongoing study by a Westinghouse consultant supports the DER finding.

DeBenedictis noted that under the Superfund program, the federal EPA provides 90 percent of the clean-up funds. He said the EPA would spend $179,000 at the Cumberland Township site. At a Cumberland Township public meeting Monday organized by GNATS (Good Neighbors Against Toxic Substances), Thomas Voltaggio, EPA's Superfund branch chief, said the federal fund request still had not been approved.

DeBenedictis said the governor's budget request this year increases by 70 percent the state's contributions toward Superfund site clean-ups to $5.1 million, corresponding to $45 million in federal matching funds.

THE PATRIOT
HARRISBURG, PA.
AM—46,300

2 Adams Townships Face Water-Well Cleanup Wait

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GETTYSBURG — Residents of Cumberland and Straban townships in Adams County, irate about contamination of their well water, have learned that finding its sources and eliminating the problem will take time and money.

At a public meeting sponsored Monday by Good Neighbors Against Toxic Substances, the property owners found plenty of concern by governmental agencies and elected officials, and plenty of information, but little assurance that a remedy will be applied in the immediate future.

However, Westinghouse Electric Corp., whose elevator-components plant north of here is a suspected source of the contamination, is supplying bottled water and filtration systems to the 12 families identified by the state Department of Environmental Resources as most severely affected.

Michael Zickler of the U.S. Environmental Protection Agency's Emergency Response unit at Philadelphia told the group of 65 to 70 residents that $250,000 is available in the short term for testing the groundwater and locating the sources of contamination.

But, once the sources are pinpointed, EPA officials in Washington must decide how much will be available in Superfund money to clean up the sources.

Testing crews have been assigned to the search from DER, EPA and Westinghouse, which has contracted with R.E. Wright Associates of Middletown to perform an evaluation. Final results are not expected from any of them for several months.

Tests have identified as many as seven chemical contaminants in 50 wells near the Westinghouse plant and in the area of four suspected dumping sites. The principal contaminants that have been found are trichloroethylene and 1,1,1-trichloroethane.

The water and filtering systems provided by Westinghouse to dwellers in the plant area are part of a consent agreement between the company and EPA. However, the company has not acknowledged responsibility for contaminated wells beyond the plant area.

Westinghouse has taken the view that, while some of the toxic wastes may have originated at the plant, they were hauled to disposal sites by a private contractor.

In addition, a Westinghouse spokesman reported, several contaminants found in Straban Twp. never were used by Westinghouse here. Currently, the plant's toxic wastes are hauled to approved sites in Alabama or New York.

Charles Marass, GNATS spokesman, said the meeting was called "to find out what's happening; to be able to defend ourselves against pollution."

He said residents affected by the problem are "looking to EPA to represent us. We want to know what they're doing in our interest."

Satisfied that extensive testing and probing for sources is under way, Marass said, "We know where we stand."

However, he said, the residents are concerned that the initial $250,000 allocation may be spent within the six-month limit for its use and that the balance of funding required for the cleanup may not become available.

"I hope it doesn't hit that quagmire down there [in Washington]," he said.

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EVENING NEWS
HARRISBURG, PA.
PM—75,000

Adams well-water woes to take time and money

GETTYSBURG — Residents of Cumberland and Straban townships in Adams County, irate about contamination of their well water, have learned that finding its sources and eliminating the problem will take time and money.

At a public meeting sponsored Monday by Good Neighbors Against Toxic Substances, the property owners found plenty of concern by governmental agencies and elected officials, and plenty of information, but little assurance of a remedy soon.

However, Westinghouse Electric Corp., whose elevator-components plant north of here is a suspected source of the contamination, is supplying bottled water and filtration systems to the 12 families identified by the state Department of Environmental Resources as most severely affected.

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But, once the sources are pinpointed, EPA officials in Washington must decide how much will be available in Superfund money to clean up the sources.

Testing crews have been assigned to the search from DER, EPA and Westinghouse, which has contracted with R.E. Wright Associates of Middletown to perform an evaluation. Final results are not expected from any of them for several months.

Tests have identified as many as seven chemical contaminants in 50 wells near the Westinghouse plant and in the area of four suspected dumping sites. The principal contaminants that have been found are trichloroethylene and 1,1,1-trichloroethane.

The water and filtering systems provided by Westinghouse to dwellers in the plant area are part of a consent agreement between the company and EPA. However, the company has not acknowledged responsibility for contaminated wells beyond the plant area.

Westinghouse has taken the view that, while some of the toxic wastes may have originated at the plant, they were hauled to disposal sites by a private contractor.

In addition, a Westinghouse spokesman reported, several contaminants found in Straban Twp. never were used by Westinghouse here. Currently, the plant's toxic wastes are hauled to approved sites in Alabama and New York.

THE PATRIOT
HARRISBURG, PA.
AM—46,300

Firm Hires Consultants To Probe Bad Water

GETTYSBURG — Independent environmental consultants from Middletown have been retained by Westinghouse Electric Corp. to determine if the company's elevator components plant here is the source of groundwater contamination.

"The study will start Monday and is scheduled to take about 12 weeks," said James Daley, manager of public relations.

The assessment, ordered Wednesday by company officials, is part of a continuing effort by Westinghouse, state and federal authorities to determine the scope and cause of contamination in wells in nearby Straban and Cumberland townships.

Tests of 50 wells in the two townships show the presence of contaminants, including trichloroethylene, or TCE, and 1,1,1-trichloroethane. Both chemicals are used as industrial solvents. TCE is a suspected carcinogen that has been shown to cause cancer in laboratory animals.

The state Department of Environmental Resources and the federal Environmental Protection Agency have conducted the tests near the Westinghouse plant and on several farms where waste from the plant allegedly has been dumped.

Dave Mashek, DER deputy press secretary, said the contamination was high enough in five of the wells to warrant issuing warnings to residents to purify the water. Those wells were in the vicinity of the Westinghouse plant, Mashek said.

Since the contamination was found, Westinghouse has been supplying bottled water and filtration systems to a dozen households near the plant. Company officials decided to aid four families last month and two weeks ago began giving water to eight more households.

Daley said that company officials decided to supply water to homes near the plant "because we're assuming a responsible attitude toward our neighbors in the community until it is determined just what the extent of the problem is and who's responsible for it."

Daley said seven contaminants have been identified by tests of the wells. "Some of them have been used in our plant and some have not," he said.

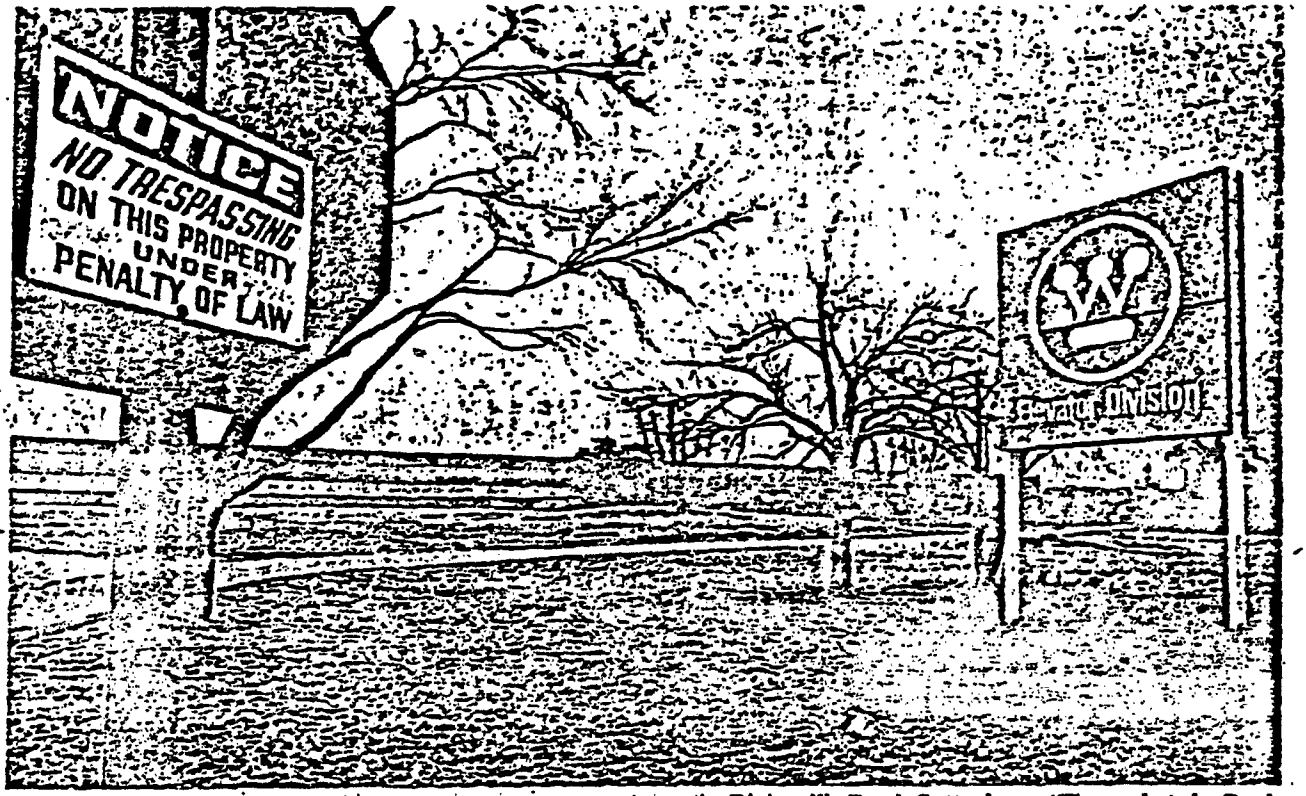
He said the company has invited DER and EPA to participate in the study, which will be done by R.E. Wright Associates Inc., a company which specializes in groundwater and pollution studies.

Daley said the investigation will consist of a review of existing data, a definition of the hydrogeologic environment to determine possible pathways of contaminant migration, a study of plant operations to identify possible contaminant sources and independent analyses of soil and water samples.

The company, which began operation in Adams County in 1969, manufactures components for elevators. Industrial waste from the plant is disposed of by Frontier Chemical Waste Process Inc. of Niagara Falls, N.Y., which takes the waste to federally authorized landfills in Alabama and New York, Daley said.

Gettysburg Times

GETTYSBURG, PA., TUESDAY, FEBRUARY 21, 1984



AT WESTINGHOUSE — A No Trespassing sign is evident at the entrance of Westinghouse Elevator Division on the Biglerville Road, Gettysburg. *(Times photo by Paul Kuehnel)*

DER pollution probes continue

By DAVID PALFREY
Times Staff Writer

GETTYSBURG — Despite delays ranging from damaged equipment to personnel reorganization, both state and federal officials said Friday their agencies remain committed to the cleaning up of several possible hazardous waste sites near Gettysburg in Cumberland and Straban townships.

Neil Swanson, an engineer with the federal Environmental Protection Agency (EPA), said the EPA still seeks to get a "consent agreement and order" with Westinghouse Electric Corporation. "We're not stopping on that aspect," he said.

A recent internal reorganization of the EPA has put both Swanson, who works on long-term clean up strategies, and Michael Zickler, EPA's on-scene coordinator for short-term responses, together in a revamped Hazardous Waste Division of the agency's "superfund" branch.

"Superfund" refers to a 1980 law called the Comprehensive Environmental Response, Compensation, and Liability Act, which established a fund now estimated at $1.6 billion for cleaning up waste sites.

Swanson said the EPA's consultant is continuing its investigation of both the Westinghouse plant site in Cumberland Township and the four other dumps in Straban Township.

The EPA is preparing a 10-point justification document to submit to Washington as the next step in beginning a clean-up of the Straban sites, Swanson said. Samples collected by EPA consultants will be evaluated by both toxicologists at EPA and at the Centers for Disease Control in Atlanta, Georgia, to determine if an imminent threat to public health exists, thus clearing the way for clean-up actions, he said.

Earlier in the week, James Williams of C.E. Williams Sons Inc., which operates a landfill identified by state and federal officials as one of five possibly hazardous waste sites, said an EPA consultant told him the tests done on water taken from the landfill's monitoring well proved negative.

Frank Fair, one of several state Department of Environmental Resources (DER) supervisors overseeing the state's investigation, also said his agency is continuing its investigation. He said both DER and EPA personnel are sharing representative samples being taken from the Cumberland site by Westinghouse's consultant, R.E Wright Associates Inc. of Middletown. Fair said to date R.E. Wright has drilled four monitoring wells at the plant site along the Biglerville Road, making six monitoring points including an existing well and a spring.

Asked if the DER still contends Westinghouse is a source of the solvent pollutants contaminating nearby residential wells, Fair said, "I have seen nothing that would change my position."

A machine used at DER's Harrisburg lab to check water samples for the volatile organics or solvents turning up in local wells was damaged earlier in the year, Fair said. A new device has been ordered at a cost of about $350,000.

Fairfield school names clerk of works

Gettysburg Times
GETTYSBURG, PA
PM—11,337

Public told of stumbling blocks to contamination clean up here

By DAVID PALFREY
Times Staff Writer

GETTYSBURG — About 70 people attending the third GNATS (Good Neighbors Against Toxic Substances) public meeting Monday in Cumberland Township's municipal building heard state and federal officials cite broken equipment and lack of funds as stumbling blocks toward the clean up of five possible hazardous waste dumps near Gettysburg in Cumberland and Straban townships.

"I think they've (state Department of Environmental Resources) got antiquated equipment," said state Representative Kenneth J. Cole. He called attention to the special state House investigating committee slated to hear testimony at the Cumberland Township building Feb. 27. "Maybe this (the local groundwater pollution problem) will be the example we'll use in Pennsylvania," Cole said.

None of the three DER officials present could explain why state water samples could not be sent to private labs for testing while the damaged gear is repaired or replaced.

The DER testing machine has been out of commission since early last month, said DER sanitarian Kenneth Malick. Without the gear, Malick said he cannot continue his testing of area well water. He said he has at least 24 sites scheduled for testing.

Michael Zickler, the on-scene coordinator for the federal Environmental Protection Agency, said the "consent agreement and order" worked out between the EPA and Westinghouse Electric Corporation was sent to the company for signing Monday. "I think in this case we (EPA) are making out better than we could have on our own," Zickler said. However, he added that "most of the give was on our part."

Zickler said that the proposed agreement requires only that Westinghouse supply alternate water supplies to homes with TCE levels at or above 45 parts per billion, and that the company conduct an evaluation "to determine if they (Westinghouse) are the most likely source of the contamination," something Westinghouse is already doing.

Both the state DER and the federal EPA already have said Westinghouse is a source of the solvents turning up in residential wells near the company's Biglerville Road elevator plant.

Frank Fair, who heads the DER investigation, said the Westinghouse study is progressing. He said the company's consultant, R.E. Wright of Middletown, Monday drilled a 200-foot well on the plant site, one of four wells to be used in monitoring local groundwater. Fair said his agency had requested that Westinghouse expand its area of sampling and he said the DER would monitor the company's study by splitting samples and comparing data. "We're (DER) still here and still active in this investigation," Fair said.

However, Malick said the broken test equipment had created a backlog of regional testing requests and that it "could be a while" before the DER is again able to test water samples fully. Zickler offered to handle some state testing at EPA's Annapolis lab.

Zickler said Westinghouse refused to accept responsibility for any of the other four dump sites in Straban Township. "I know we're (EPA) not going to negotiate with them (Westinghouse) on any other sites," he said.

Two citizens asked why the EPA or DER could not take immediate action to clean up the waste at the five sites. "I'm really tired hearing about levels," said Straban Township resident and GNATS vice-president Merle Hankey, Jr.

Until the EPA approves funds for cleaning up the waste sites, Zickler said his agency cannot take further action. He said a lawsuit by the affected residents "might be more successful than we (EPA) would be."

GNATS president Franklin O. Felt said the group had gotten some legal advice to the effect that they would be very naive to believe that Westinghouse would do a study proving themselves responsible for the pollution.

Felt said he was disappointed by the officials' statements. "The clean up seems to be further in the future," he said. Felt said he had invited Westinghouse by both phone and letter to attend Monday's meeting, but the company never answered the offer.

QUESTIONS — Michael Zickler (right), on scene coordinator for the EPA, is open for questions during a meeting Monday night of Good Neighbors Against Toxic Substances (GNATS). Charles Marass (below) asks the panel a question. *(Times photo by Paul Kuehnel)*

MUTUAL
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MAR 8 84

Gettysburg Times
GETTYSBURG, PA
PH—11,387

Residents in 2 more homes told by DER not to drink water

GETTYSBURG — The state Department of Environmental Resources has notified residents of two homes along the Hunterstown Road in Straban Township not to drink their well water, bringing to more than a dozen the number of area homes found to have well water which presents risks to health.

In a press release dated March 5, the DER said it found solvent-type chemicals in the well water of two homes located near the Hunterstown and Shealer roads intersection. Chemicals found by DER personnel included the suspected carcinogen trichloroethylene (TCE), trichloroethane (1,1,1-TCE), 1,1-dichloroethylene (1,1-DCE), and another suspected carcinogen, tetrachloroethylene (PCE). These same or similar chemicals have also been found in wells in Cumberland and Union townships and in Gettysburg and Littlestown boroughs.

The DER advises against drinking polluted water if the levels of contaminants exceed limits set by the National Academy of Sciences, which uses lab tests on animals and bacteria in computing the levels. These levels are different for each substance and water use, such as drinking, cooking, and bathing (skin contact). The NAS has not set advisory levels for all substances.

The DER stated Monday that it plans more testing in the Hunterstown Road area following a hydrogeological survey (a study of the groundwater).

The DER has identified four sites in Straban Township where industrial and/or hazardous wastes, including paint sludges and solvents, were dumped sometime before July, 1980.

At one Hunterstown Road site, the DER found drums of waste, two impoundments or lagoons, and contamination leaching into a nearby stream.

Straban Township and Hunterstown Road resident Frederick M. Shealer has said that he hauled wastes for the Westinghouse Electric Corporation's Cumberland Township elevator plant during the 1970s.

Gettysburg Times
GETTYSBURG, PA
D&S—11,387

EPA, Westinghouse talks fail

EPA Furnishes Waste Tobacco

By DAVID PALFREY
Times Staff Writer

GETTYSBURG — Negotiations between the Westinghouse Electric Corporation and the federal Environmental Protection Agency concerning pollution at and around the company's Cumberland Township elevator plant have been suspended, an EPA spokeswoman confirmed Wednesday.

Speaking from EPA's regional headquarters in Philadelphia, press officer Janet Luffy said one aim of the talks was to get Westinghouse to sign a consent agreement and order pledging continued assistance for homeowners with polluted wells near the company's Biglerville Road facility, where state and federal investigators have found solvent-type chemicals in both soil and water.

Luffy said the EPA planned to resume talks with Westinghouse after a re-evaluation of the order's provisions by agency personnel and after consideration of DER recommendations. "We (EPA) would like to have something in writing," she said, adding that Westinghouse had objected to some points of the proposed document.

Westinghouse already is supplying water-filtering systems to about a dozen homes near the plant, located west of Route 34 (Biglerville Road) just north of Gettysburg. But some area residents getting the help fear that without a written guarantee, Westinghouse may stop the service, particularly if an ongoing study by a Westinghouse-hired consultant finds the company free of blame for the pollution.

The state Department of Environmental Resources (DER) concluded last November that the Westinghouse plant was a source of the groundwater pollution in the Biglerville Road area. At that time, Edward Simmons, DER's Solid Waste Bureau manager, said at least two of the chemicals found in nearby residential wells were used at the Westinghouse plant and may have gotten into the groundwater by spillage through improper storage and handling.

Franklin O. Felt, a neighbor of the plant and president of the citizens group GNATS (Good Neighbors Against Toxic Substances), said Tuesday that his group wanted to at least observe any future negotiations between Westinghouse and the EPA and/or the DER. He criticized the EPA's recently submitted request for more than $500,000 for clean-up of Straban Township waste sites, pointing out that none of the money could be used for the Cumberland Township pollution problem.

Luffy agreed that the EPA fund request now awaiting Washington's approval could not be used for a long-term solution such as extending town water lines to affected homeowners.

APPENDIX F

PHOTOGRAPHIC DOCUMENTATION

PHOTOGRAPH 1. Sludge lagoon located across from Fred Shealer's 510 Hunterstown Road residence.

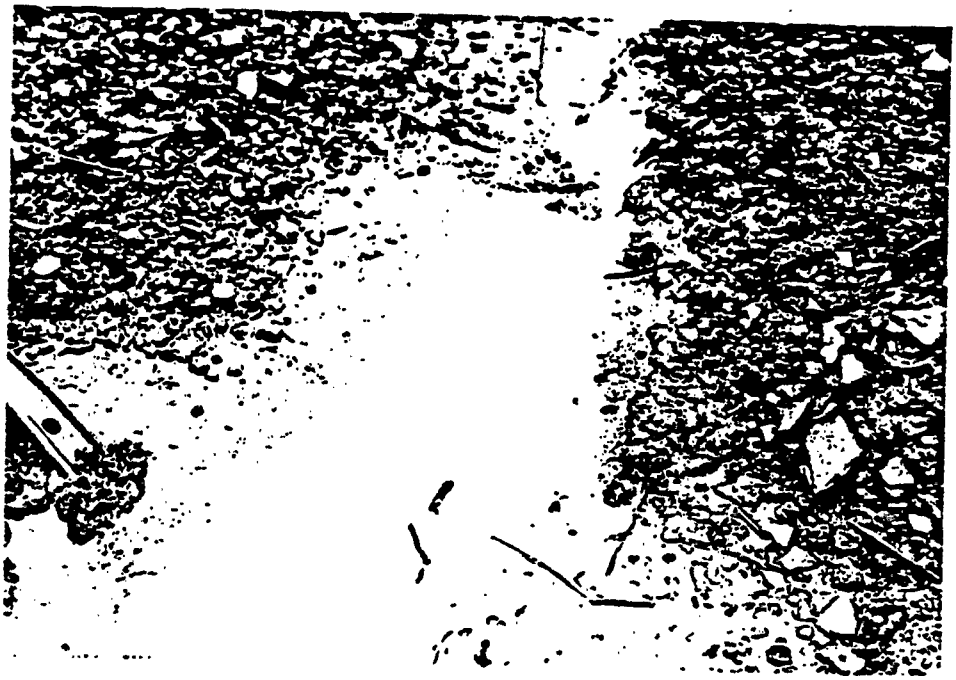
PHOTOGRAPH 2. Sludge lagoon located across from Fred Shealer's 510 Hunterstown Road residence.

PHOTOGRAPH 3. Sludge on the grass next to the sludge lagoon.

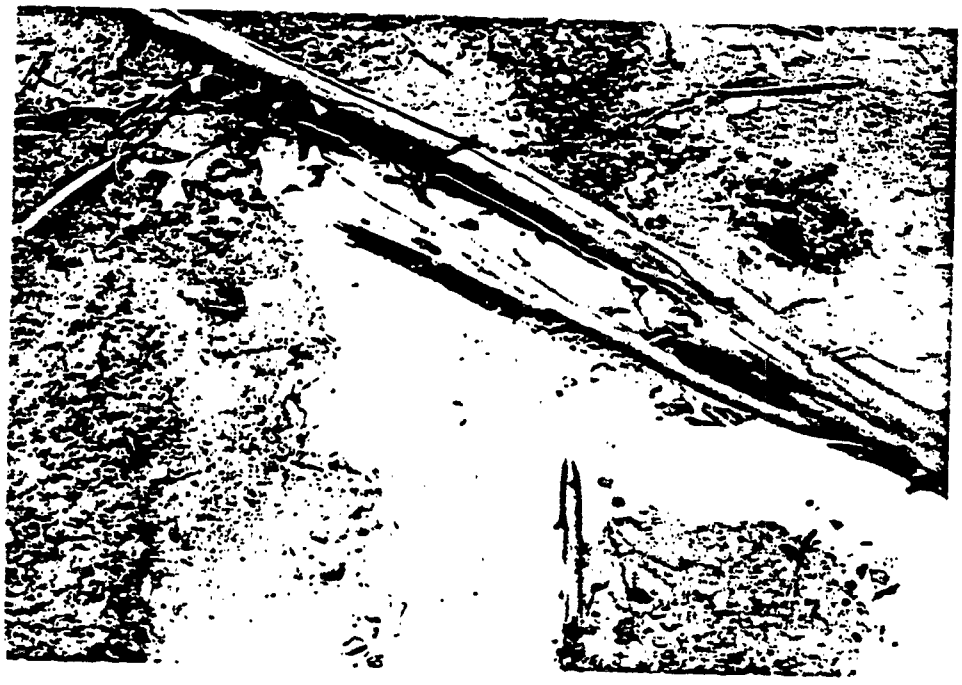
PHOTOGRAPH 4. Bicycle tire tracks in the mud on the road next to the sludge lagoon.

PHOTOGRAPH 5. Impacted creek located below the sludge lagoon.

PHOTOGRAPH 6. Sheen on the stream located below the sludge lagoon.



PHOTOGRAPH 7. Oily sheen on the water located below the sludge lagoon.



PHOTOGRAPH 8. Oily sheen on the water located below the sludge lagoon.

PHOTOGRAPH 9. Drums located behind the Tom Shealer residence.

PHOTOGRAPH 10. Drums located behind the Tom Shealer residence.

PHOTOGRAPH 11. Labelled drums located on the Culp property.

PHOTOGRAPH 12. Labelled drums located on the Culp property.

PHOTOGRAPH 13. Bleach bottles located on the Culp property.

PHOTOGRAPH 14. TATM samples full drum located on the Culp property.

PHOTOGRAPH 15. C.E. Williams landfill located on Gettysburg National Military Park property.

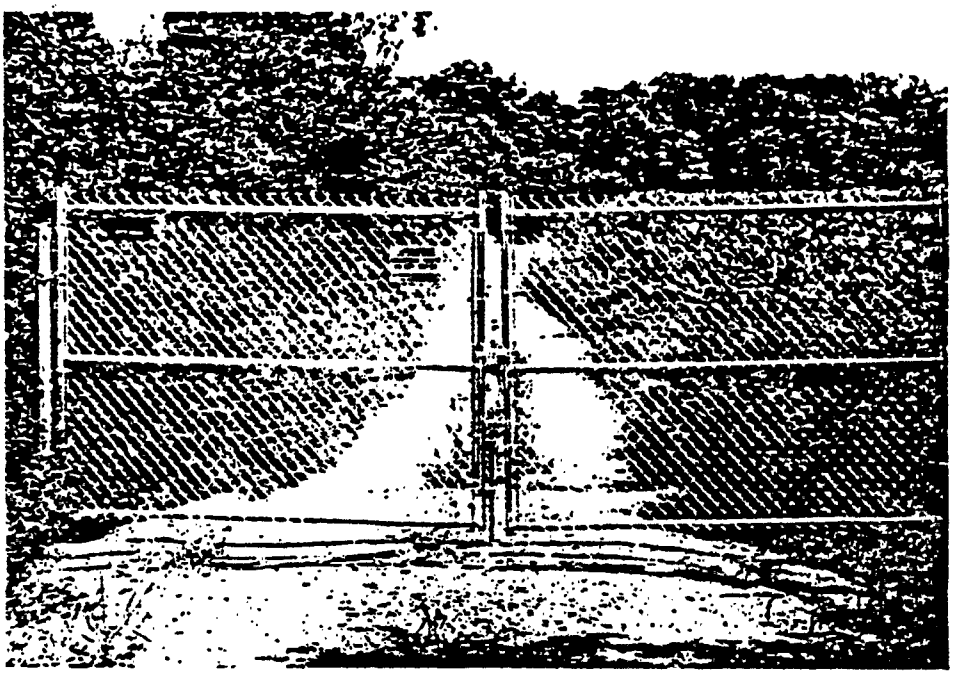
PHOTOGRAPH 16. Entrance to the Westinghouse Electric Corporation Elevator Plant located on Biglersville Road.

PHOTOGRAPH 17. T. Currey of R.E. Wright Associates collects soil samples around the Elevator Plant.

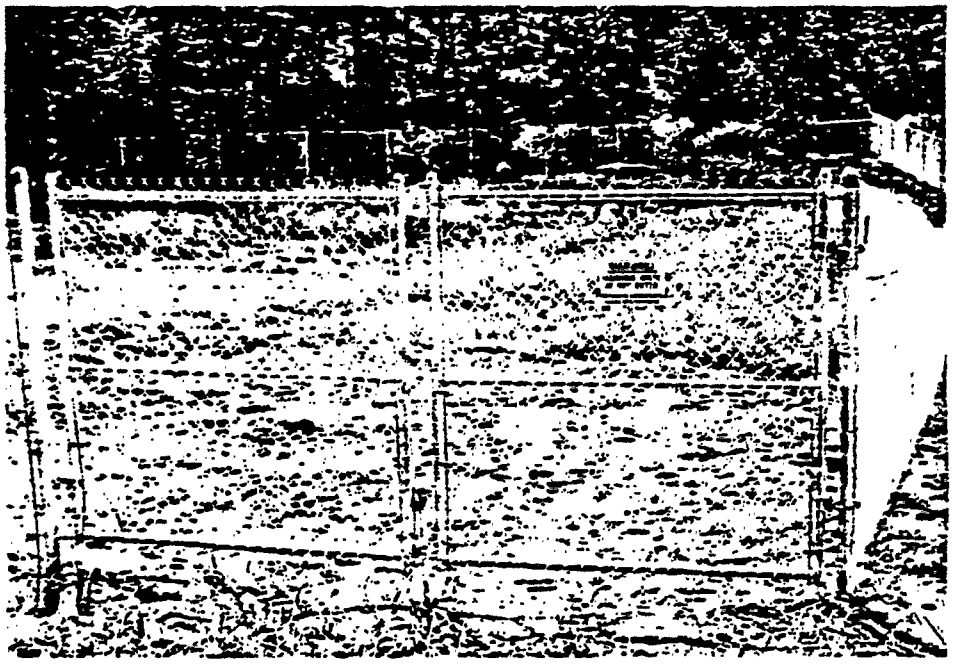
PHOTOGRAPH 18. T. Currey of R.E. Wright Associates collects soil samples around the Elevator Plant.

PHOTOGRAPH 19. TATM samples the buried spring in front of the Elevator Plant.

PHOTOGRAPH 20. Personnel from R.E. Wright Associates install a monitoring well near the Elevator Plant.



PHOTOGRAPH 21. Gate constructed across the access road to the Hunterstown Road lagoon site.



PHOTOGRAPH 22. Gate to the fence constructed around the Hunterstown Road lagoon site.

PHOTOGRAPH 23. Panorama of the fence constructed around the Hunterstown Road lagoon site.

APPENDIX G

CONTRACTOR DAILIES

US ENVIRONMENTAL PROTECTION AGENCY
HAZARDOUS SUBSTANCE RESPONSE FUND
CONTRACTOR COST REPORT

CONTRACTOR: OH MATERIALS
CONTRACT NUM: 60-01[redacted]893
ASSIGNMENT NUMBER: 1756-ES
DATE: [redacted]

CONTRACTOR PERSONNEL REPORT

1. EMPLOYEES ASSIGNED	2. WORK CLASSIFICATION	3. HOURLY LABOR RATE		4. HOURS EMPLOYED		5.	6. TOTAL HOURS		7. TRAVEL AND SUBSISTENCE COSTS	8. TOTAL PERSONNEL COSTS
		REGULAR	OVERTIME	FROM	TO	BREAK TIME	REGULAR	OVERTIME		
D Teopfe	Response Manager	50	61	1630	2400			7.5	60	517.50
T Price	Field Clerk / TYPIST	18	26	1630	2400			7.5	60	255
M Alliman	Lab Tech - Level 2	25	33	1630	2400			7.5	60	307.50
D Conley	Lab Tech - Level 2	25	33	1630	2400			7.5	60	307.50
J Gay	Lab Tech - Level 2	25	33	1630	2400			7.5	60	307.50

ARI00295

TOTAL PERSONNEL COSTS: 1695.00

EPA Form 1900-55 (1-82).

Original — On-Scene Coordinator
Copy 1 — Contractor

CONTRACTOR–OWNED EQUIPMENT/MATERIALS REPORT

CONTRACTOR: OH MATERIALS
CONTRACT NUMBER: 60-01-6893
ASSIGNMENT NUMBER: 1256-E5
DATE: 03-26-84

9. EQUIPMENT USED	DAY	10. HOURS USED FROM	10. HOURS USED TO	11. COST PER HOUR	12. TOTAL HOURS	13. TOTAL COST
Van #44	1					70
+mileage 450 mi		x.15				51.50
OTR TRACTOR #200						220
+mileage 450 mi		x.80				360
Decon trailer #166						200
14. TOTAL EQUIPMENT COSTS						$ 901.50

15. MATERIALS USED	16. QUANTITY	17. TOTAL COST
STOCK		-0-
Field Purchase		-0-
18. TOTAL MATERIAL COSTS	$ -0-	

AR100293

EPA F[illegible]00-55 (1-82)

Original — On-Scene Coordinator
Copy [illegible]

SUBCONTRACTOR REPORT

UH MATERIALS	60[illegible]-6873
ASSIGNMENT NUMBER: 1756 - E5	DATE: 03-26-84

19. SUBCONTRACTOR NAME	20. WORK DESCRIPTION	21. SUBCONTRACT AMOUNT
22. TOTAL SUBCONTRACT COSTS		$ -0-

ARI00297

23. REMARKS

24. CONTRACT CEILING AMOUNT	$ 50,000
25. TOTAL ESTIMATED CONTRACT COSTS TO DATE	$ 2596
26. TOTAL ESTIMATED COSTS TO COMPLETE CONTRACT	$ 47403.5

I certify that this report is a true and complete record of the labor, supervision, travel, equipment, materials, and subcontractors which I ordered and authorized from the contractor in the performance of the above-cited contract.

Signature of OSC Representative: Michael Zabetakis OSC

Time Arrived on Scene:

Time Departed:

I certify that this report is a true and complete record of the labor, supervision, travel, equipment, materials, and subcontractors provided by the contractor in the performance of the above-cited contract.

Signature of Contractor's Authorized Representative:

Date:

EPA Form 1900-55 (1-82)

Original — On-Scene Coordinator
Copy 1 — Contractor
Copy 2 — Procurement

US ENVIRONMENTAL PROTECTION AGENCY
HAZARDOUS SUBSTANCE RESPONSE FUND
CONTRACTOR COST REPORT

CONTRACTOR PERSONNEL REPORT

CONTRACTOR: OH MATERIALS
CONTRACT NUMBER: 68-01-6823
ASSIGNMENT NUMBER: 1756-ES
DATE: 03-27-84

1. EMPLOYEES ASSIGNED	2. WORK CLASSIFICATION	3. HOURLY LABOR RATE		4. HOURS EMPLOYED		5.	6. TOTAL HOURS		7. TRAVEL AND SUBSISTENCE COSTS	8. TOTAL PERSONNEL COSTS
		REGULAR	OVERTIME	FROM	TO	BREAK TIME	REGULAR	OVERTIME		
D Toppee	Response Manager	50	61	0000 1200	0400 1800		8	2	60	582
T Price	Field Clerk / TYPIST	18	26	0000 1200	0230 1806		8	.5	60	217
N Alliman	Lab Tech Level 2	25	33	0000 1200	0230 1800		8	.5	60	276.50
D Conley	" " " "	25	33	0000 1200	0400 1800		8	2	60	326
W Gay	" " " "	25	33	0000 1200	0230 1800		8	.5	60	276.50

TOTALS 1178

AR100298

CONTR[redacted]OR–OWNED EQUIPMENT/MATERIALS REPORT

ASSIGNMENT NUMBER	DATE
OH MATERIALS 1756-ES	6.0-0[redacted]C893 03-27-84

9. EQUIPMENT USED	DLY	10. HOURS USED FROM	10. HOURS USED TO	11. COST PER HOUR	12. TOTAL HOURS	13. TOTAL COST DAY	13. TOTAL COST TMC	15. MATERIALS USED	16. QUANTITY	17. TOTAL COST
Van #44	2				8	70	140	STOCK		
OTR TANKER #200						220	*	20 pint sample jars	20 x .65	13
Decon Trailer #166	2					200	400			
Level C Personal Protective	D		3 x 2 mo x 12/hr			72				

AR100299

14. TOTAL EQUIPMENT COSTS	$ 562	18. TOTAL MATERIAL COSTS	$ 13

EPA Form 1900-65 (1-82)

Original – On-Scene Coordinator
Copy 1 – Contractor

SUBCONTRACTOR REPORT

CONTRACTOR	CONTRACT NUMBER
O H MATERIALS	60-01-6893
ASSIGNMENT NUMBER	**DATE**
1756-ES	03-27-84

19. SUBCONTRACTOR NAME	20. WORK DESCRIPTION	21. SUBCONTRACT AMOUNT
Est to Daily Total	2253	
22. TOTAL SUBCONTRACT COSTS		$

23. REMARKS

1 2253

24. CONTRACT CEILING AMOUNT	$ 50,000
25. TOTAL ESTIMATED CONTRACT COSTS TO DATE	$ 4849
26. TOTAL ESTIMATED COSTS TO COMPLETE CONTRACT	$ 45150

I certify that this report is a true and complete record of the labor, supervision, travel, equipment, [redacted], and subcontractors [redacted] ordered and authorized from the contractor in the performance of th[redacted] w[redacted] tion.

I certify that this report is a true and complete record of [redacted] or revisio[redacted] is [redacted]pment, [redacted]ials, [redacted] bcon[redacted]s pr[redacted] by th[redacted]ractor in the performance of the above-cited contract.

AR100300

US ENVIRONMENTAL PROTECTION AGENCY
HAZARDOUS SUBSTANCE RESPONSE FUND
CONTRACTOR COST REPORT

CONTRACTOR PERSONNEL REPORT

CONTRACTOR: OH MATERIALS
CONTRACT NUMBER: 60-01-6893
ASSIGNMENT NUMBER: 1756-E5
DATE: 03-28-84

1. EMPLOYEES ASSIGNED	2. WORK CLASSIFICATION	3. HOURLY LABOR RATE		4. HOURS EMPLOYED		5.	6. TOTAL HOURS		7. TRAVEL AND SUBSISTENCE COSTS	8. TOTAL PERSONNEL COSTS
		REGULAR	OVERTIME	FROM	TO	BREAK TIME	REGULAR	OVERTIME		
Tappe	Response Manager	50	61	0700	1830		8	3.5	60	673.50
Price	Field Clerk/Typist	18	26	0700	1830		8	3.5	60	295
Alliman	Lab Tech Level 2	25	33	0700	2100		8	6	60	458
Conley 1	" " " "	25	33	0700	1830		8	3.5	60	375.50
Gay	" " " "	25	33	0700	1830		8	3.5	60	375.50

TOTAL PERSONNEL COSTS: 2177.50

AR100301

CONTRACTOR–OWNED EQUIPMENT/MATERIALS REPORT

MATERIALS

ASSIGNMENT NUMBER: 1256-ES

DATE: 03-28-84

9. EQUIPMENT USED	DAY	10. HOURS USED FROM	10. HOURS USED TO	11. COST PER HOUR	12. TOTAL HOURS	13. TOTAL COST DAY	15. MATERIALS USED	16. QUANTITY	17. TOTAL COST
Van #44	3					70	From STOCK:		
OTR TRACTOR #200	*					220	29 pint sample jars	29 x .65	18.85
Decon Tractor #166	3					200			
Protective Clothing Level B		2 men 0900	1200	2 x 25	3	150			
Protective Clothing Level B		0900	1700	~~12 x~~ day		65	1		
Protective Clothing Level C		1200	1700	2 x 5 x	12	120			
additional Air bottles			13	x 6 bottles		78			

AR100302

14. TOTAL EQUIPMENT COSTS: $ 903

18. TOTAL MATERIAL COSTS: $ 18.85

LPA ... 190... (1-82)

Original — On-Site ... Copy 1 — Contractor

SUBCONTRACTOR REPORT

ASSIGNMENT NUMBER	DATE
OH MATERIALS Project 1756 - E 5	6C -6893 03-28-84

19. SUBCONTRACTOR NAME	20. WORK DESCRIPTION	21. SUBCONTRACT AMOUNT
ARI00303	Est Daily Total	3098.05

23. REMARKS

Note
M.Z

Last entered this date
K Mus total

24. CONTRACT CEILING AMOUNT	$ 50000
25. TOTAL ESTIMATED CONTRACT COSTS TO DATE	$ 5694.05
26. TOTAL ESTIMATED COSTS TO COMPLETE CONTRACT	$ 44305.45

22. TOTAL SUBCONTRACT COSTS $ -0-

I certify that this report is a true and complete record of the labor, supervision, travel, equipment, materials, and subcontractors which I ordered and authorized from the contractor in the performance of the above-cited contract.

Signature of OSC Representative: M. Zielen OSC

Time Arrived on Scene:

Time Departed:

I certify that this report is a true and complete record of the labor, supervision, travel, equipment, materials, and subcontractors provided by the contractor in the performance of the above-cited contract.

Signature of Contractor's Authorized Representative:

Date:

EPA Form 1900-55 (1-82)

Original — On-Scene Coordinator
Copy 1 — Contractor

HAZARDOUS SUBSTANCE RESPONSE FUND
CONTRACTOR COST REPORT

CONTRACTOR PERSONNEL REPORT

OH MATERIALS
ASSIGNMENT NUMBER
1756 -ES

60-01-6893
DATE
03-29-84

1. EMPLOYEES ASSIGNED	2. WORK CLASSIFICATION	3. HOURLY LABOR RATE		4. HOURS EMPLOYED		5.	6. TOTAL HOURS		7. TRAVEL AND SUBSISTENCE COSTS	8. TOTAL PERSONNEL COSTS
		REGULAR	OVERTIME	FROM	TO	BREAK TIME	REGULAR	OVERTIME		
) Toeppe	Response Manager	50	61	0700	1400		8	2	30	552
- PRICE	Field Clerk / typist	18	26	0800	0800		4		-	72
) Illman	Lab Tech Level 2	25	33	1000	2000		8	2	30	296
) Conley	" " " "	25	33	1000	2000		8	2	30	296
) Gay.	" " " "	25	33	0400	0800	•	4		-	100

AR100304

T PER VEL [illegible] 1,50

CONTR[redacted]OR–OWNED EQUIPMENT/MATERIALS REPORT

OH MATERIALS | 60-0[redacted]5893

ASSIGNMENT NUMBER: 1756-85 | DATE: 03-29-84

9. EQUIPMENT USED	DAY	10. HOURS USED FROM	10. HOURS USED TO	11. COST PER HOUR	12. TOTAL HOURS	13. TOTAL COST	15. MATERIALS USED	16. QUANTITY	17. TOTAL COST
Van #44	4					70	From Stock		-0-
OTR TRACTOR #200						220			
mileage #200 450mi x .80						360			
mileage on Van 450mi x .15						67.50	Field Purchase		-0-
Decon trailer #186						200	1		

AR100305

14. TOTAL EQUIPMENT COSTS	$ 917.50	18. TOTAL MATERIAL COSTS	$ -0-

EPA Form 1900-55 (1-82)

Original – On-Scene Coordinator
Copy 1 – Contractor

SUBCONTRACTOR REPORT

OH MATERIALS | 60-01-6893
ASSIGNMENT NUMBER 1756 - E5 | DATE 03-29-84

19. SUBCONTRACTOR NAME	20. WORK DESCRIPTION	21. SUBCONTRACT AMOUNT	23. REMARKS
Stablex - Router lab	run project samples,	25500	=30 samples @ 850.00/sample
	+8%	2040	
	TOTAL SUB	27540.00	

ARI00306

Note corrected total 38857.05 ← AZ

Est Daily Total 30,909.50

22. TOTAL SUBCONTRACT COSTS	$ 27540	24. CONTRACT CEILING AMOUNT	$ 50000
		25. TOTAL ESTIMATED CONTRACT COSTS TO DATE	$ 36604.05
		26. TOTAL ESTIMATED COSTS TO COMPLETE CONTRACT	$ 13,395.45

I certify that this report is a true and complete record of the labor, supervision, travel, equipment, materials, and subcontractors which I ordered and authorized from the contractor in the performance of the above-cited contract.

I certify that this report is a true and complete record of the labor, supervision, travel, equipment, materials, and subcontractors provided by the contractor in the performance of the above-cited contract.

Signature of OSC Representative	Time Arrived on Scene	Time Departed	Signature of Contractor's Authorized Representative	Date
Michael Zaccilli, ORC				

EPA Form 1900-5

Origin — On-[illegible] Coord[illegible]
Copy 1 — Contractor

US ENVIRONMENTAL PROTECTION AGENCY
HAZARDOUS SUBSTANCE RESPONSE FUND
CONTRACTOR COST REPORT

CONTRACTOR PERSONNEL REPORT *

CONTRACTOR: O. H. Materials Co.
CONTRACT NO.: 68-01-6893
ASSIGNMENT NUMBER: 6893-03-.014
DATE: Tuesday 09/28/84

1. EMPLOYEES ASSIGNED	2. WORK CLASSIFICATION Level	3. HOURLY LABOR RATE		4. HOURS EMPLOYED		5.	6. TOTAL HOURS		7. TRAVEL AND SUBSISTENCE COSTS	8. TOTAL PERSONNEL COSTS
		REGULAR	OVERTIME	FROM	TO	BREAK TIME	REGULAR	OVERTIME		
Richard Toeppe	Response Manager	50.00	61.00	1000	1900		6.0	3.0	60.00	541.00
Robert Seela	Clean-up Technician I	21.00	29.00	1000	1900		6.0	3.0	60.00	213.00

AR100307

* Mobilization to site

Total Personnel Costs to Date 814.00 Per Diems 120.00 — TOTAL PERSONNEL COSTS 814.00

EPA Form 1900-55 (1-82)

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CONTRACTOR–OWNED EQUIPMENT/MATERIALS REPORT

CONTRACTOR	CONTRACT NUMBER
O.H. Materials Co.	68-01-6893
ASSIGNMENT NUMBER	**DATE**
6893-03-014	Tuesday 8/28/84

9. EQUIPMENT USED	10. HOURS USED FROM	10. HOURS USED TO	11. COST PER HOUR	12. TOTAL HOURS	13. TOTAL COST	15. MATERIALS USED	16. QUANTITY	17. TOTAL COST
Pk Truck, Vehicle #242 + 451 miles @ .15/mi	1000	1900	8.00	9.0	60.00 67.65			

AR100308

14. TOTAL EQUIPMENT COSTS	To date 127.65	$ 127.65	15. TOTAL MATERIAL COSTS	$

EPA F 1900 ...

Original — On-Scene Coordinator
Copy — Con'
Copy 2 — Procurement

SUBCONTRACTOR REPORT

CONTRACTOR	CONTRACT NUMBER
O.H. Materials Co	68-01 93
ASSIGNMENT NUMBER	**DATE**
6893-03-014	Tuesday 8/28/84

19. SUBCONTRACTOR NAME	20. WORK DESCRIPTION	21. SUBCONTRACT AMOUNT	23. REMARKS

ARI 00309

ARI-0

24. CONTRACT CEILING AMOUNT	$ 20,000
25. TOTAL ESTIMATED CONTRACT COSTS TO DATE	$ 941.65
26. TOTAL ESTIMATED COSTS TO COMPLETE CONTRACT	$ 19,058.35

22. TOTAL SUBCONTRACT COSTS	$

I certify that this report is a true and complete record of the labor, supervision, travel, equipment, materials, and subcontractors which I ordered and authorized from the contractor in the performance of the above-cited contract.

I certify that this report is a true and complete record of the labor, supervision, travel, equipment, materials, and subcontractors provided by the contractor in the performance of the above-cited contract.

Signature of OSC Representative	Time Arrived on Scene	Time Departed	Signature of Contractor's Authorized Representative	Date
8/29/84			Robert A. Seelig	8-29-84

EPA Form 1900-55 (1-82)

Original — On-Scene Coordinator
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US ENVIRONMENTAL PROTECTION AGENCY
HAZARDOUS SUBSTANCE RESPONSE FUND
CONTRACTOR COST REPORT

CONTRACTOR PERSONNEL REPORT

CONTRACTOR: O.H. Materials Co
CONTRACT NUMBER: 68-01-6893
ASSIGNMENT NUMBER: 6893-03-014
DATE: Wednesday 8-29-84

1. EMPLOYEES ASSIGNED	2. WORK CLASSIFICATION	3. HOURLY LABOR RATE		4. HOURS EMPLOYED		5.	6. TOTAL HOURS		7. TRAVEL AND SUBSISTENCE COSTS	8. TOTAL PERSONNEL COSTS
		REGULAR	OVERTIME	FROM	TO	BREAK TIME	REGULAR	OVERTIME		
01010 Richard Toeppe	Response Manager	50.00	61.00	0800	1600		8.0		60.00	460.00
01090 Robert Saela	Clean up Technician I	21.00	29.00	0800	1600		8.0		60.00	228.00

ARI00310

Total Personnel Costs To Date: Personnel 1262.00 Per Diem 240 Total 1502.00 TOTAL PERSONNEL COSTS 688.00

F 900-6

Copy 1 — Contractor

CONTRACTOR–OWNED EQUIPMENT/MATERIALS REPORT

CONTRACTOR: O.H. Materials Co.
CONTRACT NUMBER: 68-01-[redacted]3
ASSIGNMENT NUMBER: 6893-03-014
DATE: Wednesday 8-29-84

9. EQUIPMENT USED	10. HOURS USED FROM	10. HOURS USED TO	11. COST PER HOUR	12. TOTAL HOURS	13. TOTAL COST	15. MATERIALS USED	16. QUANTITY	17. TOTAL COST
01080								
1- PU Truck, Vehicle #242	0800	1600	8.00	8.0	60.00	Field Purchases		
						1 - 100 ft Tape Measure	1	~~16.32~~
						60999/60899 Wooden Stakes	10	4.14
						Sub-Total		20.46
						+ 8% Handling		1.64
						Total Field Purchases		22.10

INVOICE WILL REFLECT THIS NO CHARGE DPW

AR100311

TOTAL EQUIPMENT COSTS	To Date: 187.65	$ 60.00	18. TOTAL MATERIAL COSTS	$ 22.10

55 (1-82)

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SUBCONTRACTOR REPORT

CONTRACTOR	CONTRACT NUMBER
O.H. Materials Co.	68-01-6893
ASSIGNMENT NUMBER	**DATE**
6893-03-014	Wednesday 8-29-84

19. SUBCONTRACTOR NAME	20. WORK DESCRIPTION	21. SUBCONTRACT AMOUNT	23. REMARKS

ARI00312

24. CONTRACT CEILING AMOUNT	$ 20,000
25. TOTAL ESTIMATED CONTRACT COSTS TO DATE	$ 1711.75
26. TOTAL ESTIMATED COSTS TO COMPLETE CONTRACT	$ 18,288.25

22. TOTAL SUBC ACT COSTS $

I certify that this report is a true and complete record of the labor, supervision, travel, equipment, materials, and subcontractors which I ordered and authorized from the contractor in the performance of the above cited contract.

I certify that this report is a true and complete record of the labor, supervision, travel, equipment, materials, and subcontractors provided by the contractor in the performance of the above-cited contract.

Signature of OSC Representative	Time Arrived on Scene	Time Departed	Signature of Contractor's Authorized Representative	Date
9/5/84			Richard Torgo	9-5-84

EP m 19

Original — On-Scene Coordinator
Cop — Contractor

Pa. 1 of 4

U.S. ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS SUBSTANCE RESPONSE FUND
CONTRACTOR COST REPORT

CONTRACTOR PERSONNEL REPORT

O.H. Materials Co	68-01-[illegible]3
ASSIGNMENT NUMBER 6893-03-014	DATE Thursday 8-30-84

1. EMPLOYEES ASSIGNED	2. WORK CLASSIFICATION	3. HOURLY LABOR RATE		4. HOURS EMPLOYED		5.	6. TOTAL HOURS		7. TRAVEL AND SUBSISTENCE COSTS	8. TOTAL PERSONNEL COSTS
		REGULAR	OVERTIME	FROM	TO	BREAK TIME	REGULAR	OVERTIME	08999	
01010 Richard Toeppe	Response Manager	50.00	61.00	0800	1700		8.0	1.0	30.00	491.00
01090 Robert Seela	Cleanup Technician I	21.00	29.00	0800	1700		8.0	1.0	30.00	227.00

AR100313

Total Personnel Cost to Date Personnel 1920.00 Per Diems 300.00

TOTAL PERSONNEL COSTS 718.00

EPA Form 1900-55 (1-82)

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CONTRACTOR–OWNED EQUIPMENT/MATERIALS REPORT

CONTRACTOR	CONTRACT NUMBER
O.H. Materials Co.	68-01-6893
ASSIGNMENT NUMBER	**DATE**
6893-03-014	Thursday 8-30-84

9. EQUIPMENT USED	10. HOURS USED FROM	10. HOURS USED TO	11. COST PER HOUR	12. TOTAL HOURS	13. TOTAL COST	15. MATERIALS USED	16. QUANTITY	17. TOTAL COST
0810								
1 - PU Truck, Vehicle # 242 49998	0800	1700	8.00	9.0	60.00			
+ 451 mi @ .15/mi					67.65			

AR100314

14. TOTAL EQUIPMENT COSTS	To Date 315.30	$ 127.65	18. TOTAL MATERIAL COSTS	$

EPA 1900

Original — On-Scene Coordinator
Copy — Cont
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SUBCONTRACTOR REPORT

CONTRACTOR	CONTRACT NUMBER
O.H. Materials Co	68-01-[redacted]3
ASSIGNMENT NUMBER	**DATE**
6893-63-014	Thursday 8-30-84

19. SUBCONTRACTOR NAME	20. WORK DESCRIPTION	21. SUBCONTRACT AMOUNT	23. REMARKS

ARI00315

24. CONTRACT CEILING AMOUNT	$ 20,000
25. TOTAL ESTIMATED CONTRACT COSTS TO DATE	$ 2557.40
22. TOTAL SUBCONTRACT COSTS $	26. TOTAL ESTIMATED COSTS TO COMPLETE CONTRACT $ 17,442,60

I certify that this report is a true and complete record of the labor, supervision, travel, equipment, materials, and subcontractors which I ordered and authorized from the contractor in the performance of the above-cited contract.

I certify that this report is a true and complete record of the labor, supervision, travel, equipment, materials, and subcontractors provided by the contractor in the performance of the above-cited contract.

Signature of OSC Representative	Time Arrived on Scene	Time Departed	Signature of Contractor's Authorized Representative	Date
[signature] 9/5/84			Richard Tosso OHM	9/5/84

EPA Form 1900-55 (1-82)

Original — On-Scene Coordinator
Copy 1 — Contractor
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US ENVIRONMENTAL PROTECTION AGENCY
HAZARDOUS SUBSTANCE RESPONSE FUND
CONTRACTOR COST REPORT 2188-E-23 | O.H. MATERIALS | 68 | 01-6893

CONTRACTOR PERSONNEL REPORT | ASSIGNMENT NUMBER 68-93-014 | DATE TUE 9-4-84

1. EMPLOYEES ASSIGNED	2. WORK CLASSIFICATION	3. HOURLY LABOR RATE		4. HOURS EMPLOYED		5. BREAK TIME	6. TOTAL HOURS		7. TRAVEL AND SUBSISTENCE COSTS	8. TOTAL PERSONNEL COSTS
		REGULAR	OVERTIME	FROM	TO		REGULAR	OVERTIME		
Richard Toeppe	Response Manager	13.50	20.25	1000	1930		6	3½	$60.00	$173.50

AR100316

TOTAL PERSONNEL COST/$ DATE PERSONNEL $ 173.50 PER DIEM $ 360.00 TOTAL PERSONNEL COST $ 173.50

EPA 1 1900-

Copy 1 -- Contractor

Page 4

CONTRACTOR—OWNED EQUIPMENT/MATERIALS REPORT

2088-E23

CONTRACTOR	CONTRACT NUMBER
O.H. MATERALS	68-0[illegible]893
ASSIGNMENT NUMBER	**DATE**
68-93-014	TUE 9-4-84

9. EQUIPMENT USED	10. HOURS USED FROM	10. HOURS USED TO	11. COST PER HOUR	12. TOTAL HOURS	13. TOTAL COST	15. MATERIALS USED	16. QUANTITY	17. TOTAL COST
1 PU TRUCK # 242	1000	1930	$8.00	9½	$76.00			
+ 451 mi @ $0.15					67.65			
14 TOTAL EQUIPMENT COSTS T/DATE $459.60					$ 144.30	18. TOTAL MATERIAL COSTS	$	

SHOULD BE 143.65 DPW

$.65 Difference

AR100317

EPA Form 1900-55 (1-82)

Original — On-Scene Coordinator
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SUBCONTRACTOR REPORT

2088-F-23

CONTRACTOR	CONTRACT NUMBER
OH Materials	68-01-6293
ASSIGNMENT NUMBER	**DATE**
68-93-014	TUE 9-4-84

19. SUBCONTRACTOR NAME	20. WORK DESCRIPTION	21. SUBCONTRACT AMOUNT	23. REMARKS

ARI00318

24. CONTRACT CEILING AMOUNT	$ 20,000
25. TOTAL ESTIMATED CONTRACT COSTS TO DATE	$3275.20
26. TOTAL ESTIMATED COSTS TO COMPLETE CONTRACT	$16,724.80

22. TOTAL SUBCONTRACT COSTS	$

I certify that this report is a true and complete record of the labor, supervision, travel, equipment, materials, and subcontractors which I ordered and authorized from the contractor in the performance of the above-cited contract.

I certify that this report is a true and complete record of the labor, supervision, travel, equipment, materials, and subcontractors provided by the contractor in the performance of the above-cited contract.

Signature of OSC Representative		Time Arrived on Scene	Time Departed	Signature of Contractor's Authorized Representative	Date
R. Smith	9/5/84			Richard Tarpe OHM	9/5/84

E orm 1

Original — On-Scene Coordinator
Co — ctor
Copy 2 — Procurement

1 of

US ENVIRONMENTAL PROTECTION AGENCY
HAZARDOUS SUBSTANCE RESPONSE FUND
CONTRACTOR COST REPORT

CONTRACTOR PERSONNEL REPORT

CONTRACTOR: OH MATERIALS
CONTRACT NUMBER: 68-01-[illegible]23
ASSIGNMENT NUMBER: 68-93-014
DATE: WED 5-84

1. EMPLOYEES ASSIGNED	2. WORK CLASSIFICATION	3. HOURLY LABOR RATE		4. HOURS EMPLOYED		5.	6. TOTAL HOURS		7. TRAVEL AND SUBSISTENCE COSTS	8. TOTAL PERSONNEL COSTS
		REGULAR	OVERTIME	FROM	TO	BREAK TIME	REGULAR	OVERTIME		
Richard Taggart	Response Manager	$ 50.00	$ 61.00	0800	1600		8		$ 60.00	$ 460.00
Robert Miller	Equip Operator II	$ 30.00	$ 39.00	0400	1700		8	5	$ 30.00	$ 465.00
Bill Major	Truck Driver	19.00	27.00	0400 1200	0800 1700		4	5	30.00	$ 241.00

Total Personnel Cost To Date Personnel $ 3479.50 Per Diem 480

TOTAL PERSONNEL COSTS $ 1166.00

Form 1900-55 (1-82)

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SUBCONTRACTOR REPORT

20PP-G23

CONTRACTOR	CONTRACT NUMBER
OH Materials	68-01-6893
ASSIGNMENT NUMBER	DATE
68-93-014	9-6-94

19. SUBCONTRACTOR NAME	20. WORK DESCRIPTION	21. SUBCONTRACT AMOUNT

23. REMARKS

ARI00320

24. CONTRACT CEILING AMOUNT	$2000.00
25. TOTAL ESTIMATED CONTRACT COSTS TO DATE	$13,361.3
26. TOTAL ESTIMATED COSTS TO COMPLETE CONTRACT	$663.86

22. TOTAL SUBCONTRACT COSTS $

I certify that this report is a true and complete record of the labor, supervision, travel, equipment, materials, and subcontractors which I ordered and authorized from the contractor in the performance of the above-cited contract.

I certify that this report is a true and complete record of the labor, supervision, travel, equipment, materials, and subcontractors provided by the contractor in the performance of the above-cited contract.

Signature of OSC Representative	Time Arrived on Scene	Time Departed	Signature of Contractor's Authorized Representative	Date
9/5/94			Richard Zorgo	9-6-94

E ...rm F ...

O... — C... ...ator
Co... — C...ractor

...of ...
Page ... of ...

APPENDIX H

ANALYTICAL INFORMATION

Explanation of sample locations from the Westinghouse Gettysburg Sites. Samples collected by TAT personnel on January 12, 1984.

STATION NUMBER	STATION DESCRIPTION	STATION LOCATION
01	side of sludge lagoon	across from F. Shealer's 510 Hunterstown Rd. residence in the sludge lagoon.
02	12" to 18" into the sludge lagoon	Across from F. Shealer's 510 Hunterstown Rd. residence in the sludge lagoon.
03	sediment from stream below sludge pile	Across from F. Shealer's 510 Hunterstown Rd. residence in the sludge lagoon.
04	surface of sludge lagoon	Across from F. Shealer's 510 Hunterstown Rd. residence in the sludge lagoon.
05	Drum #1 black oily liquid	Drum from upper section of F. Culp's residence off Rt. 394.
06	Drum #2 green solvent liquid	Drum from near fence on upper section of F. Culp's residence off Rt. 394.
08	Drum #4 clear vicious liquid	Drum from lower part of F. Culp's property on Rt. 394.
09	Bleach bottle with orange liquid	Drum from lower part of F. Culp's property on Rt. 394.
10	Drum #6 black heavy oily liquid	Drum from lower section of F. Culp's property on Rt. 394.
11	Drum #7 light oily liquid	Drum from lower section of F. Culp's property on Rt. 394.
12	Black sludge on the ground	Drum from lower section of F. Culp's property on Rt. 394.
13	Green powder in plastic bags on ground	Drum from lowere section of F. Culp's property on Rt. 394.

Results of the Resource Conservation and Recovery Act (RCRA) Analysis, concentration in mg/l

contaminant	maximum RCRA conc. (ppm)	station 01	station 02	station 03	station 04	station 05	station 06	station 08	station 09
Arsenic	5.0	*0.002	*0.002	*0.002	*0.002	*0.002	0.031	*0.002	0.26
Barium	100.0	*0.1	*0.1	*0.1	*0.1	0.3	0.2	0.9	0.2
Cadmium	1.0	*0.01	*0.01	0.08	*0.01	*0.01	*0.01	*0.01	0.15
Chromium	5.0	*0.01	0.2	*0.01	*0.01	*0.01	3.69	*0.01	13800.0@
Lead	5.0	2.42	4.08	*0.05	1.0	*0.05	8.14@	0.12	2.16
Mercury	0.2	*0.0002	*0.0002	*0.0002	*0.0002	*0.0002	¢	*0.0002	*0.0002
Selenium	1.0	*0.005	*0.005	*0.005	*0.005	*0.005	*0.005	*0.005	0.74
Silver	5.0	*0.01	*0.01	*0.01	*0.01	*0.01	*0.01	*0.01	0.32
Endrin	0.02	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001
Lindane	0.4	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001
Methoxychlor	10.0	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001
Toxaphere	0.5	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001
2,4-D	10.0	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001
2,4,5-TP (Silvex)	1.0	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001
PCB	50	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001
pH	*2.0 ***12.5	5.6	5.1	7.2	5.7	3.4	3.1	1.5@	¢
Flash Point	*60C	***90C	57C@	56C@	48C@	28C@	30C@	54C@	50C@
Corrosiveness									
Reactivity (HCN)		*5mg/l	*5mg/l	*5mg/l	*5mg/l	*5mg/l	*5mg/l	*5mg/l	¢
Reactivity (H_2S)		*5mg/l	*5mg/l	*5mg/l	*5mg/l	*5mg/l	*5mg/l	*5mg/l	¢

*** greater than
* less than
@ fails the RCRA test
¢ could not analyze due to sample matrix

Results of the Resource Conservation and Recovery Act (RCRA) Analysis (continued)

contaminant	maximum RCRA conc. (ppm)	station 10	station 11	station 12	station 13
Arsenic	5.0	*0.002	*0.002	*0.002	*0.002
Barium	100.0	*0.1	0.6	*0.1	*0.1
Cadmium	1.0	*0.01	*0.01	*0.01	4.2@
Chromium	5.0	0.03	*0.01	*0.02	0.4
Lead	5.0	*0.05	*0.05	*0.05	0.11
Mercury	0.2	*0.0002	*0.0002	*0.0002	*0.0002
Selenium	1.0	*0.005	*0.005	*0.005	*0.005
Silver	5.0	*0.01	*0.01	*0.01	*0.01
Endrin	0.02	*0.001	*0.001	*0.001	*0.001
Lindane	0.4	*0.001	*0.001	*0.001	*0.001
Methoxychlor	10.0	*0.001	*0.001	*0.001	*0.001
Toxaphere	0.5	*0.001	*0.001	*0.001	*0.001
2,4-D	10.0	*0.001	*0.001	*0.001	*0.001
2,4,5-TP (Silvex	1.0	*0.001	*0.001	*0.001	*0.001
PCB	50.0	*0.001	*0.001	*0.001	*0.001
pH	*2.0 ***12.5	2.4	4.8	3.6	4.8
Flash Point	*60C	23C@	46C@	30C@	***90C
Corrosiveness					
Reactivity (HCN)		*5mg/l	*5mg/l	*5mg/l	*5.6mg/l
Reactivity (H_2S)		*5mg/l	*5mg/l	*5mg/l	*5mg/l

*** greater than
*less than
@ fails the RCRA test
¢ could not analyze due to sample matrix

Results of the organic compounds from priority pollutant scan, Gettysburg Data (all results in ppm)

Sta. No.	Station Description	1,2 d chloro-ethan.	1,4 di-chloro-benzene	d-n-butyl-phthalate	4,4, ddt	trichloro fluoro-methane	naph-thalene	ace-napthene	toulene	ethyl-benzene	1,1 di-chloro-ethene	1,1,1 tri-chloro-ethane	chloro-ethane	tri-chloro-ethene	benzene
02	12 to 18" into sludge pile.	N.D.	91.0	10.0	34.0	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
03	Sediment from stream downstream of sludge pile	N.D.	39.0	38.0	16.0	1.0	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	1.0	N.D.
05	Drum No. 1 black oily liquid	N.D.	N.D.	N.D.	N.D.	N.D.	19,000	217	700	1600	N.D.	N.D.	N.D.	N.D.	N.D.
06	Drum No. 2 green solv. liquid	N.D.	N.D.	N.D.	N.D.	N.D.	30,000	N.D.	780	2200	220	2400	N.D.	N.D.	N.D.
08	Drum No. 4 clear viscous liquid	N.D.	N.D.	N.D.	N.D.	1.0	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
09	Bleach bottle with orange liquid	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
10	Drum No. 6 black heavy oily liquid	3.2	N.D.	N.D.	N.D.	8.2	N.D.	N.D.	N.D.	180	N.D.	N.D.	8.4	N.D.	N.D.
11	Drum No. 7 light oily liquid	N.D.	N.D.	N.D.	N.D.	N.D.	1,100	N.D.	135	650	N.D.	N.D.	N.D.	N.D.	22
12	Black sludge on the ground	N.D.	N.D.	N.D.	N.D.	N.D.	385	N.D.	24	85	N.D.	N.D.	N.D.	N.D.	N.D.

N.D. Not Detected

OPERTY	DATE	TEST	COLLECTED BY	WELL DEPTH	TRICHLOROETHYLENE TCE	1,1,1 TRICHLOROETHANE TCA	1,1 DICHLOROETHYLENE	TETRACHLOROETHYLENE PCE	1,2 DICHLOROETHYLENE	1,1 DICHLOROETHANE	TETRACHLOROMETHANE Carbon Tetrachloride	1,2 DICHLOROPROPANE	TRICHLOROFLUOROMETHANE Chloroform	METHYLENE CHLORIDE	CHLOROETHANE Ethyl Chloride	TRICHLOROFLUOROMETHANE	BROMOFORM
ge Coleman	9-7 '83	TCE Scan	D. Little	120'	650.-	81.											
allatin	9-7 '83	TCE Scan	D. Little	?	45.-	32.											
inghouse well	9-13 '83	TCE Scan	E.F. Shaw		260.-	28.		1.-									
les Moraes	9-27 '83	TCE Scan	K Malick	53'	2.-												
rist Church	9-27 '83	TCE Scan	K. Malick	?	17.-												
reg Hess	9-27	TCE Scan	Malick	?													
Kriel	9-27	TCE Scan	Malick	?	259-	29.-											
Bridendolph	9-27	TCE Scan	Malick	[illegible] 11'-water ? deep	27.-	19.-											
inghouse well ESAMPLE	10-3	VOA Color	MALICK		est. 760.-	est. 260.-	68.-	1.7	5.1	17.-					1.-		
Sollenberger	11-1	VOA	MALICK	?	<1.-												
. Nickels	11-1	VOA	MALICK	?		3.3	<1.-										
rank Felt	11-1	VOA	MALICK	66' 100'	EST 500.-	EST 160.-	20.-		1.5	<1.-							
Harold Hess	11-1	VOA	MALICK	[illegible] 15'-water 90' deep	1.2												
(Jones Bakery) Inghouse Rest.	11-1	VOA	MALICK	60' ?	<1.-												
da Spahr	11-1	VOA	MALICK	?	<1.-												
n.F. Coleman	11-1	VOA	MALICK	55'	3.8	<1.-											
. McGough	11-1	VOA	MALICK	[illegible] 47'-water 53' deep	<1.-	1.4	<1.-										
orge Coleman ESAMPLE	11-30	TCE Scan	D. Little	120'	810.-	125.-	(after treatment)										
im Poland	11-30	TCE Scan	Malick	?													
retta Gillette	11-30	TCE Scan	Malick	?													
harles Arendt	11-30	TCE Scan	Malick	110'													
ist Church offices	11-30	TCE Scan	Malick	?													
merfield Farm	12-2	VOA	"	35'	<1.-												
Paul C. Plank	12-2	VOA	"	?				<1.-									
Pat O'brien	12-2	VOA	"	100-120'	<1.-	3.-	1.-		1.1								
P. Breighner	12-2	VOA	"	?	54.-	2.5	1.-										
(Tedder & Tedder) imie Carey	12-2	VOA	"	200-220	1.6	<1.-											

AR100326

PROPERTY	DATE	TEST	FOOTAGE OR METER	WELL DEPTH	TRICHLOROETHYLENE TCE	1,1,1 TRICHLOROETHANE METHYL CHLOROFORM	1,1 DICHLOROETHYLENE	1,2 TRANS-DICHLOROETHYLENE	1,2 DICHLOROETHANE	1,1 DICHLOROETHANE	TETRACHLOROETHYLENE PCE	1,2 DICHLOROPROPANE	TRICHLOROMETHANE CHLOROFORM	DICHLOROMETHANE METHYLENE CHLORIDE	CHLOROETHANE	CHLOROFORM ETHYL CHLORIDE	TRICHLOROFLUOROMETHANE FREON 11	UNITS
[redacted] Colgan	12-2	VOA	"	38'				<1.-										
. Coleman	12-2	VOA	"	?	1.7	<1.-											<1.-	
ss. Potter	12-5	VOA	"	?	>120-	7.2	2.2											
n. Walter	12-5	VOA	"	~45'	79.-	120-	18.-		1.2	1.1	<1.-	<1.-						
. Olszfski	12-5	VOA	"	?	>120-	19.-	5.7	<1.-			<1.-							
l. Redding	12-5	VOA	"	95'	>120-	60-	10.-	<1.-	<1.-									
on Carver Sr.	12-5	VOA	"	120'	3.7													
ann Wyant	12-5	VOA	"	?	<1.-													
[redacted] Colori	12-5	VOA	"	69' 53' deep	<1.-													
R. Pompa	12-1[redacted]	VOA	"	?		<1.-												
. Mundy	12-14	VOA	"	10' 65' deep	214.-	16.5	55		<1.-				1.-					
Ken Hess	12-14	VOA	"	?	est ~40.-													
[redacted] Cassatt	12-14	VOA	"	?														
J.E. Todd[redacted]	12-14	VOA	"	160'	<1.-									5.5				
Barry Barbour	12-14	VOA	"	60'				<1.-										
Jeff Jones Book	12-19	VOA	MALICK	270'	4.5	<1.-												
. Claude Rudisill	12-19	VOA	"	?														
Wm. Schultz	12-19	VOA	MALICK	?														
J. Gilman	12-19	VOA	MALICK	?	7.-	67.-	27.-		2.3	24.-					1.2			
Westinghouse well RESAMPLE	12-19	VOA	MALICK		14.-	<1.-	<1.-	<1.-			~~[redacted]~~							
Ralph Arendt	12-19	VOA	"	50'														
Wm. Coston	12-19	VOA	"	~65'	4.3													
Roland Hankey	12-19			72'		<1.-												
[redacted] Punchard	12-7	TCE scan	MALICK		1.-													
Lewis Frank	12-13	TCE scan	MALICK	179'-190'		poss. trace <1.-												
Mary Haddon	12-14	TCE scan	MALICK															
E. Geyer	12-21	TCE scan	MALICK		results not back yet (1-84)													

AR100327

Explanation of sample locations from the Westinghouse Gettysburg Sites. Samples collected by TAT personnel on January 12, 1984.

STATION NUMBER	STATION DESCRIPTION	STATION LOCATION
01	side of sludge lagoon	across from F. Shealer's 510 Hunterstown Rd. residence in the sludge lagoon.
02	12" to 18" into the sludge lagoon	Across from F. Shealer's 510 Hunterstown Rd. residence in the sludge lagoon.
03	sediment from stream below sludge pile	Across from F. Shealer's 510 Hunterstown Rd. residence in the sludge lagoon.
04	surface of sludge lagoon	Across from F. Shealer's 510 Hunterstown Rd. residence in the sludge lagoon.
05	Drum #1 black oily liquid	Drum from upper section of F. Culp's residence off Rt. 394.
06	Drum #2 green solvent liquid	Drum from near fence on upper section of F. Culp's residence off Rt. 394.
08	Drum #4 clear vicious liquid	Drum from lower part of F. Culp's property on Rt. 394.
09	Bleach bottle with orange liquid	Drum from lower part of F. Culp's property on Rt. 394.
10	Drum #6 black heavy oily liquid	Drum from lower section of F. Culp's property on Rt. 394.
11	Drum #7 light oily liquid	Drum from lower section of F. Culp's property on Rt. 394.
12	Black sludge on the ground	Drum from lower section of F. Culp's property on Rt. 394.
13	Green powder in plastic bags on ground	Drum from lowere section of F. Culp's property on Rt. 394.

Results of the Resource Conservation and Recovery Act (RCRA) Analysis, concentration in mg/l

contaminant	maximum RCRA conc. (ppm)	station 01	station 02	station 03	station 04	station 05	station 06	station 08	station 09
Arsenic	5.0	*0.002	*0.002	*0.002	*0.002	*0.002	0.031	*0.002	0.26
Barium	100.0	*0.1	*0.1	*0.1	*0.1	0.3	0.2	0.9	0.2
Cadmium	1.0	*0.01	*0.01	0.08	*0.01	*0.01	*0.01	*0.01	0.15
Chromium	5.0	*0.01	0.2	*0.01	*0.01	*0.01	3.69	*0.01	13800.0@
Lead	5.0	2.42	4.08	*0.05	1.0	*0.05	8.14@	0.12	2.16
Mercury	0.2	*0.0002	*0.0002	*0.0002	*0.0002	*0.0002	¢	*0.0002	*0.0002
Selenium	1.0	*0.005	*0.005	*0.005	*0.005	*0.005	*0.005	*0.005	0.74
Silver	5.0	*0.01	*0.01	*0.01	*0.01	*0.01	*0.01	*0.01	0.32
Endrin	0.02	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001
Lindane	0.4	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001
Methoxychlor	10.0	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001
Toxaphere	0.5	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001
2,4-D	10.0	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001
2,4,5-TP (Silvex)	1.0	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001
PCB	50	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001
pH	*2.0 ***12.5	5.6	5.1	7.2	5.7	3.4	3.1	1.5@	¢
Flash Point	*60C	***90C	57C@	56C@	48C@	28C@	30C@	54C@	50C@
Corrosiveness									
Reactivity (HCN)		*5mg/l	*5mg/l	*5mg/l	*5mg/l	*5mg/l	*5mg/l	*5mg/l	¢
Reactivity (H_2S)		*5mg/l	*5mg/l	*5mg/l	*5mg/l	*5mg/l	*5mg/l	*5mg/l	¢

*** greater than
* less than
@ fails the RCRA test
¢ could not analyze due to sample matrix

Results of the Resource Conservation and Recovery Act (RCRA) Analysis (continued)

contaminant	maximum RCRA conc. (ppm)	station 10	station 11	station 12	station 13
Arsenic	5.0	*0.002	*0.002	*0.002	*0.002
Barium	100.0	*0.1	0.6	*0.1	*0.1
Cadmium	1.0	*0.01	*0.01	*0.01	4.2@
Chromium	5.0	0.03	*0.01	*0.02	0.4
Lead	5.0	*0.05	*0.05	*0.05	0.11
Mercury	0.2	*0.0002	*0.0002	*0.0002	*0.0002
Selenium	1.0	*0.005	*0.005	*0.005	*0.005
Silver	5.0	*0.01	*0.01	*0.01	*0.01
Endrin	0.02	*0.001	*0.001	*0.001	*0.001
Lindane	0.4	*0.001	*0.001	*0.001	*0.001
Methoxychlor	10.0	*0.001	*0.001	*0.001	*0.001
Toxaphere	0.5	*0.001	*0.001	*0.001	*0.001
2,4-D	10.0	*0.001	*0.001	*0.001	*0.001
2,4,5-TP (Silvex	1.0	*0.001	*0.001	*0.001	*0.001
PCB	50.0	*0.001	*0.001	*0.001	*0.001
pH	*2.0 ***12.5	2.4	4.8	3.6	4.8
Flash Point	*60C	23C@	46C@	30C@	***90C
Corrosiveness					
Reactivity (HCN)		*5mg/l	*5mg/l	*5mg/l	*5.6mg/l
Reactivity (H_2S)		*5mg/l	*5mg/l	*5mg/l	*5mg/l

***greater than
*less than
@fails the RCRA test
¢ could not analyze due to sample matrix

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Barium	100.0	*0.1	*0.1	*0.1	*0.1	0.3	0.2	0.9	0.2
Cadmium	1.0	*0.01	*0.01	0.08	*0.01	*0.01	*0.01	*0.01	0.15
Chromium	5.0	*0.01	0.2	*0.01	*0.01	*0.01	3.69	*0.01	13800.0@
Lead	5.0	2.42	4.08	*0.05	1.0	*0.05	8.14@	0.12	2.16
Mercury	0.2	*0.0002	*0.0002	*0.0002	*0.0002	*0.0002	¢	*0.0002	*0.0002
Selenium	1.0	*0.005	*0.005	*0.005	*0.005	*0.005	*0.005	*0.005	0.74
Silver	5.0	*0.01	*0.01	*0.01	*0.01	*0.01	*0.01	*0.01	0.32
Endrin	0.02	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001
Lindane	0.4	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001
Methoxychlor	10.0	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001
Toxaphere	0.5	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001
2,4-D	10.0	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001
2,4,5-TP (Silvex)	1.0	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001
PCB	50	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001	*0.001
pH	*2.0 ***12.5	5.6	5.1	7.2	5.7	3.4	3.1	1.5@	¢
Flash Point	*60C	***90C	57C@	56C@	48C@	28C@	30C@	54C@	50C@
Corrosiveness									
Reactivity (HCN)		*5mg/l	*5mg/l	*5mg/l	*5mg/l	*5mg/l	*5mg/l	*5mg/l	¢
Reactivity (H_2S)		*5mg/l	*5mg/l	*5mg/l	*5mg/l	*5mg/l	*5mg/l	*5mg/l	¢

*** greater than
* less than
@ fails the RCRA test
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Results of the Resource Conservation and Recovery Act (RCRA) Analysis (continued)

contaminant	maximum RCRA conc. (ppm)	station 10	station 11	station 12	station 13
Arsenic	5.0	*0.002	*0.002	*0.002	*0.002
Barium	100.0	*0.1	0.6	*0.1	*0.1
Cadmium	1.0	*0.01	*0.01	*0.01	4.2@
Chromium	5.0	0.03	*0.01	*0.02	0.4
Lead	5.0	*0.05	*0.05	*0.05	0.11
Mercury	0.2	*0.0002	*0.0002	*0.0002	*0.0002
Selenium	1.0	*0.005	*0.005	*0.005	*0.005
Silver	5.0	*0.01	*0.01	*0.01	*0.01
Endrin	0.02	*0.001	*0.001	*0.001	*0.001
Lindane	0.4	*0.001	*0.001	*0.001	*0.001
Methoxychlor	10.0	*0.001	*0.001	*0.001	*0.001
Toxaphere	0.5	*0.001	*0.001	*0.001	*0.001
2,4-D	10.0	*0.001	*0.001	*0.001	*0.001
2,4,5-TP (Silvex	1.0	*0.001	*0.001	*0.001	*0.001
PCB	50.0	*0.001	*0.001	*0.001	*0.001
pH	*2.0 ***12.5	2.4	4.8	3.6	4.8
Flash Point	*60C	23C@	46C@	30C@	***90C
Corrosiveness					
Reactivity (HCN)		*5mg/l	*5mg/l	*5mg/l	*5.6mg/l
Reactivity (H_2S)		*5mg/l	*5mg/l	*5mg/l	*5mg/l

*** greater than
*less than
@ fails the RCRA test
# could not analyze due to sample matrix

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
Post Office Box 2063
Harrisburg, Pennsylvania 17120
January 10, 1984

(717) 787-7383

Mr. Thomas Voltaggio, Chief
Air Compliance Branch
U.S. Environmental Protection Agency
Region III
Sixth & Walnut Streets
Philadelphia, PA 19106

Dear Mr. Voltaggio:

The Department has recently been investigating five (5) disposal sites located in Straban and Cumberland Townships, Adams County. All five sites are located within a 10-mile radius of the Borough of Gettysburg, and all five have received wastes generated at the Westinghouse Elevator Plant at Gettysburg. The waste consists of paint, paint sludges, and solvents used to clean paint lines, including TCE and 1,1,1,-TCE.

Three of the sites have waste in drums exposed on the surface of the ground. One site has waste in two lagoons. Soil and groundwater contamination with halogenated solvents has been documented at four of the sites. Four of the sites are on private property. One site is located on property owned by the National Park Service.

The Department is requesting the assistance of EPA in investigating these sites and, if necessary, implementing any Immediate Removal or Remedial Responses which may be appropriate. DER staff in our Harrisburg Regional Office have already been in communication with Neil Swanson in regard to this matter, and some preliminary preparations have been made.

Enclosed for your information is some sample analysis data taken from one of the sites.

If you have any questions concerning this matter, please do not hesitate to contact me.

Sincerely,

Michael R. Steiner, Chief
Emergency and Remedial Response Section
Division of Operations
Bureau of Solid Waste Management

Enclosures

Ed Skennerlis
Peter Schaul
Neil Swanson

PROPERTY	DATE	TEST	SAMPLE-ER	WELL DEPTH	TRICHLOROETHYLENE TCE	1,1,1 TRICHLOROETHANE TCA	1,1 DICHLOROETHYLENE DCE	TETRACHLOROETHYLENE PCE	1,2 DICHLOROETHYLENE	1,1 DICHLOROETHANE	TETRACHLOROMETHANE Carbon Tet.	1,2 DICHLOROPROPANE	TRICHLOROFLUOROMETHANE Freon 11	DICHLOROMETHANE	CHLOROFORM	CHLOROETHENE Vinyl Chloride	TRICHLOROFLUOROETHANE Freon 113	UNKNOWN #1
[redacted]rge Coleman	9-7 '83	TCE scan	D. Little	120'	650.-	est.												
[redacted]. Gallatin	9-7 '83	TCE scan	D. Little	?	45.-	32.												
Westinghouse Well	9-13 '83	TCE scan	E.F. Straw		260.-	28.		1.-										
Charles Morass	9-27 '83	TCE scan	K Malick	53'	2.-													
Baptist Church	9-27 '83	TCE scan	K. Malick	?	17.-													
Greg Hess	9-27	TCE scan	Malick	?														
D. Kriel	9-27	TCE scan	Malick	?	250-	20.-												
[redacted]. Bridendolph	9-27	TCE scan	Malick	[illegible] 11'-water ? deep	27.-	19.-												
Westinghouse Well RESAMPLE	10-3	VOA	MALICK		est. 760-	est. 260-	68.-	1.7	5.1	17.-						1.-		
R. Sollenberger	11-1	VOA	MALICK	?	<1.-													
W. Nickels	11-1	VOA	MALICK	?		33	<1.-											
Frank Felt	11-1	VOA	MALICK	66' 100'	est 500-	est 160-	20.-		1.5	<1.-								
[redacted]arold Hess	11-1	VOA	MALICK	[illegible] 75'-water 90' deep	1.2													
School House Rest. (Orange Balloon)	11-1	VOA	MALICK	80' ?	<1.-													
Ada Spahr	11-1	VOA	MALICK	?	<1.-													
Wm. F. Coleman	11-1	VOA	MALICK	55'	3.8	<1.-												
R. McGough	11-1	VOA	MALICK	[illegible] 47'-water 53' deep	<1.-	1.4	<1.-											
George Coleman RESAMPLE	11-30	TCE Scan	D. Little	120'	810.-	125.-	(After treatment)											
Jim Poland	11-30	TCE scan	Malick	?														
Barretta Gillelan	11-30	TCE scan	Malick	?														
Charles Arendt	11-30	TCE scan	Malick	110'														
Baptist Church Offices	11-30	TCE Scan	Malick	?														
Butterfield Farm	12-2	VOA	"	35'	<1.-													
Paul C. Plank	12-2	VOA	"	?				<1.-										
[redacted]tte O'brien	12-2	VOA	"	120'-125'	<1.-	3.-	1.-		1.1									X
P. Breighner	12-2	VOA	"	?	54.-	2.5	1.-											
(Edna E. Tadder) Linda Carey	12-2	VOA	"	200'-220'	1.6	<1.-												
[illegible]	[illegible]	[illegible]	"	[illegible]	[illegible]	[illegible]												

PROPERTY	DATE	TEST	CASING/SCREEN	WELL DEPTH	TRICHLOROETHYLENE TCE	1,1,1 TRICHLOROETHANE 1,1,1 TCA	1,1 DICHLOROETHYLENE 1,1 DCE	TETRACHLOROETHYLENE PCE	1,2 DICHLOROETHYLENE TRANS	1,1 DICHLOROETHANE	TETRACHLOROETHANE	1,2 DICHLOROPROPANE	TRICHLOROMETHANE CHLOROFORM	DICHLOROMETHANE METHYLENE CHLORIDE	CHLOROETHANE	CHLOROETHENE VINYL CHLORIDE	TRICHLOROFLUOROMETHANE FREON 11	BROMOMETHANE METHYL BROMIDE
Hugh Colgan	12-2	VOA	"	38'				<1.-										
J. Coleman	12-2	VOA	"	?	1.7	<1.-											<1.-	
Russ. Potter	12-5	VOA	"	?	>120.-	7.2	2.2											
Gen. Walter	12-5	VOA	"	~45'	79.-	120.-	18.-		1.2	1.1	<1.-	<1.-						
V. Olszefski	12-5	VOA	"	?	>120.-	19.-	5.7	<1.-			<1.-							
H. Redding	12-5	VOA	"	95'	>120.-	60.-	10.-	<1.-	<1.-									
Don Carver Sr.	12-5	VOA	"	120'	3.7													
John Wright	12-5	VOA	"	?	<1.-													
James Colvin	12-5	VOA	"	approx 60' water 55' deep	<1.-													
R. Pompa	12-14	VOA	"	?		<1.-												
C. Mundy	12-14	VOA	"	approx 70' water 66' deep	214.-	16.5	5.5		<1.-				1.-					
Ken Hess	12-14	VOA	"	?	est 440.-													
Gary Cossart	12-14	VOA	"	?														
W.E. Toddes	12-14	VOA	"	160'	<1.-									5.5				
Barry Barbour	12-14	VOA	"	60'				<1.-										
Herff Jones Book	12-19	VOA	MALICK	270'	4.5	<1.-												
J. Claude Rudisill	12-19	VOA	"	?														
Wm. Schultz	12-19	VOA	MALICK	?														
V. Gilman	12-19	VOA	MALICK	?	7.-	67.-	27.-		2.3	24.-					1.2			
Westinghouse well RESAMPLE	12-19	VOA	MALICK		14.-	<1.-	<1.-	<1.-		~~Retest Sample~~								
Ralph Arendt	12-19	VOA	"	50'														
Wm. Coston	12-19	VOA	"	~65'	4.3													
Roland Hankey	12-19			72'		<1.-												
M. Punchard	12-7	TCE scan	MALICK		1.-													
Lewis Frank	12-13	TCE scan	MALICK	179-190'		poss. trace <1.-												
Mary Haddon	12-14	TCE scan	MALICK															
E. Geyer	12-21	TCE scan	MALICK		results not back yet (1-5-84)													

Stablex-Reutter Inc.

Ninth and Cooper Streets
P.O. Box 499
Camden, New Jersey 08101

Phone: 609-541-6700
Telex: 834477

"...UTIONS START HERE"

April 4, 1984

OH Materials Company
P. O. Box 551
Findlay, OH 9401

Attention: James S. Walker, Vice President

Reference: Test Report No. SR9401P

This report covers the analysis of one (1) aqueous and forty-two (42) non-aqueous samples submitted to Stablex-Reutter, Inc. (S-R) on March 29, 1984. The following priority pollutant analysis was requested:

- Organic
  - Acid Extractable Organics
  - Base/Neutral Extractable Organics
  - Purgeable Organics
  - Pesticides and Polychlorinated Biphenyls (PCBs)
- Inorganic
  - Heavy Metals
  - Cyanide
  - Phenol

In addition, the following RCRA testing was performed on selected samples:

- Corrosivity (pH)
- Ignitability (Flashpoint)
- Reactivity
- EP Toxicity

This test report is organized in the following manner:

- Sample Designations
- Preparation and Analysis
- Analytical Results
- Quality Assurance Data

I. Sample Designation

Upon arrival at S-R, four (4) composites were made at the client's request. These are designated below, along with the analysis performed.

S-R No.	O.H. Designation	Analysis Performed
SR9401-1	001	None Requested
SR9401-2	002	None Requested
SR9401-3	003	None Requested
SR9401-4	004	None Requested
SR9401-5	005	None Requested
SR9401-6	006	None Requested
SR9401-7	007	None Requested
SR0401-8	008	None Requested
SR9401-9	009	None Requested
SR9401-10	010	None Requested
SR9401-11	011	None Requested
SR9401-12	012	None Requested
SR9401-13	013	None Requested
SR9401-14	014	None Requested
SR9401-15	015	None Requested
SR9401-16	016	None Requested
SR9401-17	017	None Requested
SR9401-18	018	Priority Pollutants
SR9401-19	019	RCRA and Priority Pollutants
SR9401-20	020	RCRA and Priority Pollutants
SR9401-21	021	Priority Pollutants
SR9401-22	022	Priority Pollutants
SR9401-23	023	RCRA and Priority Pollutants
SR9401-24	024	Priority Pollutants
SR9401-25	025	RCRA and Priority Pollutants
SR9401-26	026	RCRA and Priority Pollutants
SR9401-27	027	Priority Pollutants
SR9401-28	028	RCRA and Priority Pollutants
SR9401-29	029	Priority Pollutants
SR9401-30	030	RCRA and Priority Pollutants
SR9401-31	031	RCRA and Priority Pollutants
SR9401-32	032	RCRA and Priority Pollutants
SR9401-33	033	RCRA and Priority Pollutants
SR9401-34	034	RCRA and Priority Pollutants
SR9401-35	035	RCRA and Priority Pollutants
SR9401-36	036	RCRA and Priority Pollutants
SR9401-37	037	RCRA and Priority Pollutants
SR9401-38	038	RCRA and Priority Pollutants
SR9401-39	039	RCRA and Priority Pollutants
SR9401-40	040	RCRA and Priority Pollutants
SR9401-41	041	RCRA and Priority Pollutants
SR9401-42	042	Priority Pollutants
SR9401-43	043	RCRA and Priority Pollutants

I. Sample Designation (Continued)

S-R No.	O.H. Designation	Analysis Performed
SR9401-44	Composite (No. 1) of sample nos. 001, 005, 009, 013, 016	RCRA and Priority Pollutants
SR9401-45	Composite (No. 2) of sample nos. 002, 006, 010, 014, 017	RCRA and Priority Pollutants
SR9401-46	Composite (No. 3) of sample nos. 003, 007, 011	RCRA and Priority Pollutants
SR9401-47	Composite (No. 4) of sample nos. 004, 008, 012, 015	RCRA and Priority Pollutants

Due to insufficient sample size RCRA analysis could not be performed on all the samples.

II. Preparation and Analysis

A brief description of the analytical method and preparation steps, where applicable, are delineated below:

A. RCRA Analysis

Corrosivity (pH)

Preparation: 5.0 grams of sample were leached with 50 milliliters of deionized water. This water leachate was then analyzed.

Analytical Reference:
- EPA Test Methods for Evaluation Solid Wastes - Physical/Chemical Methods - SW846, 1982.
- Federal Register, Vol. 45, No. 98, May 19, 1980. Section 261.24 (Characteristic of Corrosivity).

Ignitability (Flashpoint)

Analytical Reference:
- Federal Register, Vol. 45, No. 98, May 19, 1980. Section 261.21 (Characteristic of Ignitability).
- ASTM Method D93, Test for Flash Point by Pensky-Martens Closed Tester.

Reactivity

Analytical Reference:
- Federal Register, Vol. 45, No. 98, May 19, 1980, Section 261.23 (Characteristic of Reactivity).
- EPA Test Methods for Evaluating Solid Wastes - Physical/Chemical Methods - SW846, 1982.

EP Toxicity

Analytical Reference:
- Federal Register, Vol. 45, No. 98, May 19, 1980, Section 261.24 (Characteristic of Corrosivity).
- EPA Test Methods for Evaluating Solid Wastes - Physical/Chemical Methods - SW846, 1982.

B. Priority Pollutant Analysis

Acid Extractable and Base/Neutral Extractable Organics

Preparation: The oil samples were prepared by diluting a known weight of sample in methylene chloride.

Analytical Reference:
- Method 625 Federal Register, Vol. 44, No. 233, December 3, 1979. (Columns and GC/MS conditions for acid extractables and base/neutrals)

Purgeable Organics

Preparation: The solid, soil and organic samples were prepared by adding 1.00 ± 0.05 grams of sample to a test tube with 10 milliliters of pesticide-grade methanol. The test tube is sealed and thoroughly agitated. A 10.0 microliter aliquot is then transferred to a purge vessel with 25 milliliters water and an internal reference standard added for recovery purposes.

Analytical Reference:
- Method 624 Federal register, Vol. 44, No. 233 December 3, 1979. (Columns and GC/MS conditions for purgeable organic compounds)

Pesticides and Polychlorinated Biphenyls (PCBs)

Preparation: The non-aqueous samples were prepared as follows:

A known weight of sample (1.00 ± 0.10 grams) is eluted through a 20 gram florisil column with 250 ml of 50% petroleum ether in diethyl ether. The eluent is collected in a Kuderna-Danish apparatus and evaporated on a hot water bath to a final volume of 10.0 milliliters.

The instrumental conditions of analysis were as follows:

- Detector: Pulse-linearized nickel 63 electron-capture detector.
- Column: A glass colum 8 feet long by 4 millimeter (internal diameter) packed with 10% SP-2100 on 100/120 mesh Supelcoport. Column temperature was maintained at 240°C throughout the analysis. Column was designed for "off-column" injection.
- Flow Rate: 30 + 40 milliliters per minute of 5% Methane in Argon.

Analytical Reference: . EPA Method 608, Organochlorine Pesticides and PCB's Federal Register, Vol. 44, No. 233, December 3, 1979.

Inorganic Parameters

- EPA Test Methods for Evaluating Solid Wastes - Physical/Chemical Methods - SW846, 1982.

III. Analytical Results (Continued)

B. RCRA Analysis

1. Corrosivity (pH) and Ignitability (flashpoint)

Sample Designation	pH, units	Flashpoint, closed cup, °F
018	NA	NA
019	4.03	83; 85*
020	7.25	>180
021	NA	NA
022	4.06	<70; <70*
023	2.80	>180
024	NA	NA
025	9.58	>180
026	6.81	>180
027	6.69	>180
028	5.18	115
029	5.23	110 (top layer)
030	6.45	>180
031	6.46	>180
032	6.68	>180
033	7.22	155
034	7.10	>180
035	6.59	>180
036	6.45	>180
037	6.60	>180
038	6.19	>180
039	6.06	>180
040	5.86; 5.51*	>180
041	6.86	>180
042	6.55	>180
043	7.18	>180
Composite No. 1	5.10	>180
Composite No. 2	6.00	>180
Composite No. 3	5.89	>180
Composite No. 4	5.45	>180

NA - Not Available due to insufficient quantity of sample submitted.

* Duplicate Analysis

2. Reactivity

The observations for Reactivity were as follows:

- The samples did not undergo violent changes under normal conditions.
- The samples did not react violently or form a potentially explosive mixture with water.
- The samples did not appear readily capable of detonation or explosive decomposition or reaction at standard temperature or pressure.
- The determinations of reactive cyanide and sulfide were as follows:

	Parameter	
Sample Designation	Cyanide, ug/g	Sulfide, ug/g
018	NA	NA
019	<5	<10
020	<5	<10
021	NA	NA
022	<5	<10
023	<5	<10
024	NA	NA
025	<5	<10
026	<5	<10
027	<5	<10
028	<5	<10
029	<5	<10
030	<5	<10
031	<5	<10
032	<5	<10
033	<5	<10
034	<5	<10
035	<5	<10
036	<5	<10
037	<5	<10
038	<5	<10
039	<5	<10
041	<5	<10
042	<5	<10
043	<5	<10
Composite No. 1	<5	<10
Composite No. 2	<5	<10
Composite No. 3	<5	<10
Composite No. 4	<5	<10

NA - Not Available due to insufficient quantity of sample submitted.

3. EP Toxicity

Constituent	Sample Designation 019	020	023	025	EP Toxicity Limit
Arsenic	<0.5	<0.5	<0.5	<0.5	5.0
Barium	<0.1	0.12	0.12	0.12	100
Cadmium	<0.05	<0.05	<0.05	<0.05	1.0
Chromium	<0.05	<0.05	<0.05	<0.05	5.0
Lead	<0.1	<0.1	<0.1	<0.1	5.0
Mercury	<0.05	<0.05	<0.05	<0.05	0.2
Selenium	<0.5	<0.5	<0.5	<0.5	1.0
Silver	<0.1	<0.1	<0.1	<0.1	5.0
Endrin	<0.002	<0.002	<0.002	<0.002	0.02
Lindane	<0.04	<0.04	<0.04	<0.4	0.4
Methoxychlor	<1.0	<1.0	<1.0	<1.0	10.0
Toxaphene	<0.05	<0.05	<0.05	<0.05	0.5
2,4-D	<1.0	<1.0	<1.0	<1.0	10.0
2,4,5-TP (Silvex)	<0.1	<0.1	<0.1	<0.1	1.0

Constituent	Sample Designation 026	028	030	031	EP Toxicity Limit
Arsenic	<0.5	<0.5	<0.5	<0.5	5.0
Barium	<0.1	<0.1	<0.1	<0.1	100
Cadmium	<0.05	<0.005	<0.05	<0.05	1.0
Chromium	0.16	<0.1	5.5	<0.1	5.0
Lead	<0.1	<0.1	<0.1	<0.1	5.0
Mercury	<0.05	<0.05	<0.05	<0.05	0.2
Selenium	<0.5	<0.5	<0.5	<0.5	1.0
Silver	<0.1	<0.1	<0.1	<0.1	5.0
Endrin	<0.002	<0.002	<0.002	<0.002	0.02
Lindane	<0.04	<0.04	<0.04	<0.04	0.4
Methoxychlor	<1.0	<1.0	<1.0	<1.0	10.0
Toxaphene	<0.05	<0.05	<0.05	<0.05	0.5
2,4-D	<1.0	<1.0	<1.0	<1.0	10.0
2,4,5-TP (Silvex)	<0.1	<0.1	<0.1	<0.1	1.0

Above results are expressed as micrograms of constituent per milliliter of EP extract (ppm).

EP Toxicity (Continued)

Sample Designation

Constituent	032	033	034	035	EP Toxicity Limit
Arsenic	<0.5	<0.5	<0.5	<0.5	5.0
Barium	<0.1	0.25	0.50	0.13	100
Cadmium	<0.05	<0.05	<0.05	<0.05	1.0
Chromium	0.10	<0.05	0.09	0.06	5.0
Lead	95	1.2	<0.1	<0.1	5.0
Mercury	<0.05	<0.05	<0.05	<0.05	0.2
Selenium	<0.5	<0.5	<0.5	<0.5	1.0
Silver	<0.1	<0.1	<0.1	<0.1	5.0
Endrin	<0.002	<0.002	<0.002	<0.002	0.02
Lindane	<0.04	<0.04	<0.04	<0.04	0.4
Methoxychlor	<1.0	<1.0	<1.0	<1.0	10.0
Toxaphene	<0.05	<0.05	<0.05	<0.05	0.5
2,4-D	<1.0	<1.0	<1.0	<1.0	10.0
2,4,5-TP (Silvex)	<0.1	<0.1	<0.1	<0.1	1.0

Sample Designation

Constituent	036	037	038	039	EP Toxicity Limit
Arsenic	<0.5	<0.5	<0.5	<0.5	5.0
Barium	<0.1	<0.1	0.10	0.10	100
Cadmium	<0.05	<0.05	<0.05	<0.05	1.0
Chromium	<0.05	0.05	<0.05	3.0	5.0
Lead	<0.1	40	0.33	<0.1	5.0
Mercury	<0.05	<0.05	<0.05	<0.05	0.2
Selenium	<0.5	<0.5	<0.5	<0.5	1.0
Silver	<0.1	<0.1	<0.1	<0.1	5.0
Endrin	<0.002	<0.002	<0.002	<0.002	0.02
Lindane	<0.04	<0.04	<0.04	<0.04	0.4
Methoxychlor	<1.0	<1.0	<1.0	<1.0	10.0
Toxaphene	<0.05	<0.05	<0.05	<0.05	0.5
2,4-D	<1.0	<1.0	<1.0	<1.0	10.0
2,4,5-TP (Silvex)	<0.1	<0.1	<0.1	<0.1	1.0

Above results are expressed as micrograms of constituent per milliliter of EP extract (ppm).

EP Toxicity (Continued)

Sample Designation

Constituent	040	041	043	Comp. No. 1	EP Toxicity Limit
Arsenic	<0.5	<0.5	<0.5	<0.5	5.0
Barium	<0.1	<0.1	0.10	<0.1	100
Cadmium	<0.05	<0.05	<0.05	<0.05	1.0
Chromium	<0.5	2.9	44	0.95	5.0
Lead	<0.1	<0.1	<0.1	<0.1	5.0
Mercury	<0.05	<0.05	<0.05	<0.05	0.2
Selenium	<0.5	<0.5	<0.5	<0.5	1.0
Silver	<0.1	<0.1	<0.1	<0.1	5.0
Endrin	<0.002	<0.002	<0.002	<0.002	0.02
Lindane	<0.04	<0.04	<0.04	<0.04	0.4
Methoxychlor	<1.0	<1.0	<1.0	<1.0	10.0
Toxaphene	<0.05	<0.05	<0.05	<0.05	0.5
2,4-D	<1.0	<1.0	<1.0	<1.0	10.0
2,4,5-TP (Silvex)	<0.1	<0.1	<0.1	<0.1	1.0

Sample Designation

Constituent	Comp. No. 2	Comp. No. 3	Comp. No. 4	EP Toxicity Limit
Arsenic	<0.5	<0.5	<0.5	5.0
Barium	<0.1	<0.1	<0.1	100
Cadmium	<0.05	<0.05	<0.05	1.0
Chromium	0.55	1.0	0.85	5.0
Lead	49	13	19	5.0
Mercury	<0.05	<0.05	<0.05	0.2
Selenium	<0.5	<0.5	<0.5	1.0
Silver	<0.1	<0.1	<0.1	5.0
Endrin	<0.002	<0.002	<0.002	0.02
Lindane	<0.04	<0.04	<0.04	0.4
Methoxychlor	<1.0	<1.0	<1.0	10.0
Toxaphene	<0.05	<0.05	<0.05	0.5
2,4-D	<1.0	<1.0	<1.0	10.0
2,4,5-TP (Silvex)	<0.1	<0.1	<0.1	1.0

AR100346

Above results are expressed as micrograms of constituent per milliliter of EP extract (ppm).

B. Priority Pollutant Analysis

1. Acid Extractable Organics (Method 625 by GC/MS)

	Sample Designation					
Constituent	018	019	020	021	022	023
Phenol	<25	<25	<25	<25	<25	<25
2-Nitrophenol	<25	<25	<25	<25	<25	<25
4-Nitrophenol	<25	<25	<25	<25	<25	<25
2,4-Dinitrophenol	<25	<25	<25	<25	<25	<25
2,6-Dinitro-o-cresol	<25	<25	<25	<25	<25	<25
Pentachlorophenol	<25	<25	<25	<25	<25	<25
4-Chloro-3-Methyl-Phenol	<25	<25	<25	<25	<25	<25
2-Chlorophenol	<25	<25	<25	<25	<25	<25
2,4-Dichlorophenol	<25	<25	<25	<25	<25	<25
2,4,6-Trichlorophenol	<25	<25	<25	<25	<25	<25
2,4-Dimethylphenol	<25	<25	<25	<25	<25	<25

	Sample Designation					
Constituent	024	025	026	027	028	029
Phenol	<25	<25	<25	<25	<25	<25
2-Nitrophenol	<25	<25	<25	<25	<25	<25
4-Nitrophenol	<25	<25	<25	<25	<25	<25
2,4-Dinitrophenol	<25	<25	<25	<25	<25	<25
2,6-Dinitro-o-cresol	<25	<25	<25	<25	<25	<25
Pentachlorophenol	<25	<25	<25	<25	<25	<25
4-Chloro-3-Methyl-Phenol	<25	<25	<25	<25	<25	<25
2-Chlorophenol	<25	<25	<25	<25	<25	<25
2,4-Dichlorophenol	<25	<25	<25	<25	<25	<25
2,4,6-Trichlorophenol	<25	<25	<25	<25	<25	<25
2,4-Dimethylphenol	<25	<25	<25	<25	<25	<25

Results are expressed in micrograms of constituent per gram of sample (ppm).

B. Priority Pollutant Analysis (Continued)

1. Acid Extractable Organics (Method 625 by GC/MS)

	Sample Designation				
Constituent	030	031	032	033	034
Phenol	<25	<25	<25	<25	<25
2-Nitrophenol	<25	<25	<25	<25	<25
4-Nitrophenol	<25	<25	<25	<25	<25
2,4-Dinitrophenol	<25	<25	<25	<25	<25
2,6-Dinitro-o-cresol	<25	<25	<25	<25	<25
Pentachlorophenol	<25	<25	<25	<25	<25
4-Chloro-3-Methyl-Phenol	<25	<25	<25	<25	<25
2-Chlorophenol	<25	<25	<25	<25	<25
2,4-Dichlorophenol	<25	<25	<25	<25	<25
2,4,6-Trichlorophenol	<25	<25	<25	<25	<25
2,4-Dimethylphenol	<25	<25	<25	<25	<25

	Sample Designation				
Constituent	035	036	037	038	039
Phenol	<25	<25	<25	<25	<25
2-Nitrophenol	<25	<25	<25	<25	<25
4-Nitrophenol	<25	<25	<25	<25	<25
2,4-Dinitrophenol	<25	<25	<25	<25	<25
2,6-Dinitro-o-cresol	<25	<25	<25	<25	<25
Pentachlorophenol	<25	<25	<25	<25	<25
4-Chloro-3-Methyl-Phenol	<25	<25	<25	<25	<25
2-Chlorophenol	<25	<25	<25	<25	<25
2,4-Dichlorophenol	<25	<25	<25	<25	<25
2,4,6-Trichlorophenol	<25	<25	<25	<25	<25
2,4-Dimethylphenol	<25	<25	<25	<25	<25

Results are expressed in micrograms of constituent per gram of sample (ppm).

B. Priority Pollutant Analysis (Continued)

1. Acid Extractable Organics (Method 625 by GC/MS)

	Sample Designation				
Constituent	040	041	042	043	Comp. No. 1
Phenol	<25	<25	<25	<25	<25
2-Nitrophenol	<25	<25	<25	<25	<25
4-Nitrophenol	<25	<25	<25	<25	<25
2,4-Dinitrophenol	<25	<25	<25	<25	<25
2,6-Dinitro-o-cresol	<25	<25	<25	<25	<25
Pentachlorophenol	<25	<25	<25	<25	<25
4-Chloro-3-Methyl-Phenol	<25	<25	<25	<25	<25
2-Chlorophenol	<25	<25	<25	<25	<25
2,4-Dichlorophenol	<25	<25	<25	<25	<25
2,4,6-Trichlorophenol	<25	<25	<25	<25	<25
2,4-Dimethylphenol	<25	<25	<25	<25	<25

	Sample Designation		
Constituent	Comp. No. 2	Comp. No. 3	Comp. No. 4
Phenol	<25	<25	<25
2-Nitrophenol	<25	<25	<25
4-Nitrophenol	<25	<25	<25
2,4-Dinitrophenol	<25	<25	<25
2,6-Dinitro-o-cresol	<25	<25	<25
Pentachlorophenol	<25	<25	<25
4-Chloro-3-Methyl-Phenol	<25	<25	<25
2-Chlorophenol	<25	<25	<25
2,4-Dichlorophenol	<25	<25	<25
2,4,6-Trichlorophenol	<25	<25	<25
2,4-Dimethylphenol	<25	<25	<25

Results are expressed in micrograms of constituent per gram of sample (ppm).

2. Base/Neutral Extractable Organics (Method 625 by GC/MS)

	Sample Designation				
Constituent	018	019	020	021	022
1,2-Dichlorobenzene	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10	<10
Hexachloroethane	<10	<10	<10	<10	<10
Hexachlorobutadiene	<10	<10	<10	<10	<10
Hexachlorobenzene	<10	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<10	<10
bis (2-Chloroethoxy) methane	<10	<10	<10	<10	<10
Naphthalene	<10	<10	<10	<10	1,700
2-Chloronapthalene	<10	<10	<10	<10	<10
Isophorone	<10	<10	<10	<10	<10
Nitrobenzene	<10	<10	<10	<10	<10
2,4-Dinitrotoluene	<10	<10	<10	<10	<10
2,6-Dinitrotoluene	<10	<10	<10	<10	<10
4-Bromophenyl phenyl ether	<10	<10	<10	<10	<10
bis (2-Ethylhexyl) phthalate	290	<10	<10	<10	<10
Di-n-octyl phthalate	<10	<10	<10	<10	<10
Dimethyl phthalate	<10	<10	<10	<10	<10
Diethyl phthalate	<10	<10	<10	<10	<10
Di-n-butyl phthalate	<10	<10	<10	<10	<10
Acenaphthylene	<10	<10	<10	<10	<10
Acenaphthene	<10	<10	<10	<10	<10
Butyl benzyl phthalate	<10	<10	<10	<10	<10
Fluorene	<10	<10	<10	<10	<10
Fluoranthene	<10	<10	<10	<10	<10
Chrysene	<10	<10	<10	<10	<10
Pyrene	<10	<10	<10	<10	<10
Phenanthracene	<10	<10	<10	<10	<10
Anthracene	<10	<10	<10	<10	<10
Benzo(a)anthracene	<10	<10	<10	<10	<10
Benzo(b)fluoranthene	<10	<10	<10	<10	<10
Benzo(k)fluoranthene	<10	<10	<10	<10	<10
Benzo(a)pyrene	<10	<10	<10	<10	<10
Indeno(1,2,3-c,d)pyrene	<10	<10	<10	<10	<10
Dibenzo(a,h)anthracene	<10	<10	<10	<10	<10
Benzo(g,h,i)perylene	<10	<10	<10	<10	<10
4-Chlorophenyl-phenyl ether	<10	<10	<10	<10	<10
3,3'-Dichlorobenzidine	<10	<10	<10	<10	<10
Benzidine	<10	<10	<10	<10	<10
bis(2-Chloroethyl)ether	<10	<10	<10	<10	<10
1,2-Diphenylhydrazine	<10	<10	<10	<10	<10
Hexachlorocyclopentadiene	<10	<10	<10	<10	<10
N-Nitrosodiphenyl amine	<10	<10	<10	<10	<10
N-Nitrosodimethyl amine	<10	<10	<10	<10	<10
N-Nitrosodi-n-propylamine	<10	<10	<10	<10	<10
bis(2-Chloroisopropyl)ether	<10	<10	<10	<10	<10

Results are expressed in micrograms of constituent per gram of sample (ppm).

2. Base/Neutral Extractable Organics (Method 625 by GC/MS)

	Sample Designation				
Constituent	023	024	025	026	027
1,2-Dichlorobenzene	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10	<10
Hexachloroethane	<10	<10	<10	<10	<10
Hexachlorobutadiene	<10	<10	<10	<10	<10
Hexachlorobenzene	<10	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<10	<10
bis (2-Chloroethoxy) methane	<10	<10	<10	<10	<10
Naphthalene	<10	<10	<10	<10	<10
2-Chloronapthalene	<10	<10	<10	<10	<10
Isophorone	<10	<10	<10	<10	<10
Nitrobenzene	<10	<10	<10	<10	<10
2,4-Dinitrotoluene	<10	<10	<10	<10	<10
2,6-Dinitrotoluene	<10	<10	<10	<10	<10
4-Bromophenyl phenyl ether	<10	<10	<10	<10	<10
bis (2-Ethylhexyl) phthalate	<10	<10	<10	<10	<10
Di-n-octyl phthalate	<10	<10	<10	<10	<10
Dimethyl phthalate	<10	<10	<10	<10	<10
Diethyl phthalate	<10	<10	<10	<10	<10
Di-n-butyl phthalate	<10	<10	<10	<10	<10
Acenaphthylene	<10	<10	<10	<10	<10
Acenaphthene	<10	<10	<10	<10	<10
Butyl benzyl phthalate	<10	<10	<10	<10	<10
Fluorene	<10	<10	<10	<10	<10
Fluoranthene	<10	<10	<10	<10	<10
Chrysene	<10	<10	<10	<10	<10
Pyrene	<10	<10	<10	<10	<10
Phenanthracene	<10	<10	<10	<10	<10
Anthracene	<10	<10	<10	<10	<10
Benzo(a)anthracene	<10	<10	<10	<10	<10
Benzo(b)fluoranthene	<10	<10	<10	<10	<10
Benzo(k)fluoranthene	<10	<10	<10	<10	<10
Benzo(a)pyrene	<10	<10	<10	<10	<10
Indeno(1,2,3-c,d)pyrene	<10	<10	<10	<10	<10
Dibenzo(a,h)anthracene	<10	<10	<10	<10	<10
Benzo(g,h,i)perylene	<10	<10	<10	<10	<10
4-Chlorophenyl-phenyl ether	<10	<10	<10	<10	<10
3,3'-Dichlorobenzidine	<10	<10	<10	<10	<10
Benzidine	<10	<10	<10	<10	<10
bis(2-Chloroethyl)ether	<10	<10	<10	<10	<10
1,2-Diphenylhydrazine	<10	<10	<10	<10	<10
Hexachlorocyclopentadiene	<10	<10	<10	<10	<10
N-Nitrosodiphenyl amine	<10	<10	<10	<10	<10
N-Nitrosodimethyl amine	<10	<10	<10	<10	<10
N-Nitrosodi-n-propylamine	<10	<10	<10	<10	<10
bis(2-Chloroisopropyl)ether	<10	<10	<10	<10	<10

Results are expressed in micrograms of constituent per gram of sample (p

2. Base/Neutral Extractable Organics (Method 625 by GC/MS)

	Sample Designation			
Constituent	028	029	030	031
1,2-Dichlorobenzene	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10
Hexachloroethane	<10	<10	<10	<10
Hexachlorobutadiene	<10	<10	<10	<10
Hexachlorobenzene	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<10
bis (2-Chloroethoxy) methane	<10	<10	<10	<10
Naphthalene	<10	<10	<10	<10
2-Chloronapthalenen	<10	<10	<10	<10
Isophorone	<10	<10	<10	<10
Nitrobenzene	<10	<10	<10	<10
2,4-Dinitrotoluene	<10	<10	<10	<10
2,6-Dinitrotoluene	<10	<10	<10	<10
4-Bromophenyl phenyl ether	<10	<10	<10	<10
bis (2-Ethylhexyl) phthalate	<10	<10	<10	<10
Di-n-octyl phthalate	<10	<10	<10	<10
Dimethyl phthalatet	<10	<10	<10	<10
Diethyl phthalate	<10	<10	<10	<10
Di-n-butyl phthalate	<10	<10	<10	<10
Acenaphthylene	<10	<10	<10	<10
Acenaphthene	<10	<10	<10	<10
Butyl benzyl phthalate	<10	<10	<10	<10
Fluorene	<10	<10	<10	<10
Fluoranthene	<10	<10	<10	<10
Chrysene	<10	<10	<10	<10
Pyrene	<10	<10	<10	<10
Phenanthracene	<10	<10	<10	<10
Anthracene	<10	<10	<10	<10
Benzo(a)anthracene	<10	<10	<10	<10
Benzo(b)fluoranthene	<10	<10	<10	<10
Benzo(k)fluoranthene	<10	<10	<10	<10
Benzo(a)pyrene	<10	<10	<10	<10
Indeno(1,2,3-c,d)pyrene	<10	<10	<10	<10
Dibenzo(a,h)anthracene	<10	<10	<10	<10
Benzo(g,h,i)perylene	<10	<10	<10	<10
4-Chlorophenyl-phenyl ether	<10	<10	<10	<10
3,3'-Dichlorobenzidine	<10	<10	<10	<10
Benzidine	<10	<10	<10	<10
bis(2-Chloroethyl)ether	<10	<10	<10	<10
1,2-Diphenylhydrazine	<10	<10	<10	<10
Hexachlorocyclopentadiene	<10	<10	<10	<10
N-Nitrosodiphenyl amine	<10	<10	<10	<10
N-Nitrosodimethyl amine	<10	<10	<10	<10
N-Nitrosodi-n-propylamine	<10	<10	<10	<10
bis(2-Chloroisopropyl)ether	<10	<10	<10	<10

Results are expressed in micrograms of constituent per gram of sample (ppm).

2. Base/Neutral Extractable Organics (Method 625 by GC/MS)

	Sample Designation			
Constituent	032	033	034	035
1,2-Dichlorobenzene	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10
Hexachloroethane	<10	<10	<10	<10
Hexachlorobutadiene	<10	<10	<10	<10
Hexachlorobenzene	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<10
bis (2-Chloroethoxy) methane	<10	<10	<10	<10
Naphthalene	<10	<10	<10	<10
2-Chloronapthalene	<10	<10	<10	<10
Isophorone	<10	<10	<10	<10
Nitrobenzene	<10	<10	<10	<10
2,4-Dinitrotoluene	<10	<10	<10	<10
2,6-Dinitrotoluene	<10	<10	<10	<10
4-Bromophenyl phenyl ether	<10	<10	<10	<10
bis (2-Ethylhexyl) phthalate	<10	<10	<10	<10
Di-n-octyl phthalate	<10	<10	<10	<10
Dimethyl phthalate	<10	<10	<10	<10
Diethyl phthalate	<10	<10	<10	<10
Di-n-butyl phthalate	<10	<10	<10	<10
Acenaphthylene	<10	<10	<10	<10
Acenaphthene	<10	<10	<10	<10
Butyl benzyl phthalate	<10	<10	<10	<10
Fluorene	<10	<10	<10	<10
Fluoranthene	<10	<10	<10	<10
Chrysene	<10	<10	<10	<10
Pyrene	<10	<10	<10	<10
Phenanthracene	<10	<10	<10	<10
Anthracene	<10	<10	<10	<10
Benzo(a)anthracene	<10	<10	<10	<10
Benzo(b)fluoranthene	<10	<10	<10	<10
Benzo(k)fluoranthene	<10	<10	<10	<10
Benzo(a)pyrene	<10	<10	<10	<10
Indeno(1,2,3-c,d)pyrene	<10	<10	<10	<10
Dibenzo(a,h)anthracene	<10	<10	<10	<10
Benzo(g,h,i)perylene	<10	<10	<10	<10
4-Chlorophenyl-phenyl ether	<10	<10	<10	<10
3,3'-Dichlorobenzidine	<10	<10	<10	<10
Benzidine	<10	<10	<10	<10
bis(2-Chloroethyl)ether	<10	<10	<10	<10
1,2-Diphenylhydrazine	<10	<10	<10	<10
Hexachlorocyclopentadiene	<10	<10	<10	<10
N-Nitrosodiphenyl amine	<10	<10	<10	<10
N-Nitrosodimethyl amine	<10	<10	<10	<10
N-Nitrosodi-n-propylamine	<10	<10	<10	<10
bis(2-Chloroisopropyl)ether	<10	<10	<10	<10

Results are expressed in micrograms of constituent per gram of sample (ppm).

2. Base/Neutral Extractable Organics (Method 625 by GC/MS)

Constituent	Sample Designation 036	037	038	039
1,2-Dichlorobenzene	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10
Hexachloroethane	<10	<10	<10	<10
Hexachlorobutadiene	<10	<10	<10	<10
Hexachlorobenzene	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<10
bis (2-Chloroethoxy) methane	<10	<10	<10	<10
Naphthalene	<10	<10	<10	<10
2-Chloronapthalene	<10	<10	<10	<10
Isophorone	<10	<10	<10	<10
Nitrobenzene	<10	<10	<10	<10
2,4-Dinitrotoluene	<10	<10	<10	<10
2,6-Dinitrotoluene	<10	<10	<10	<10
4-Bromophenyl phenyl ether	<10	<10	<10	<10
bis (2-Ethylhexyl) phthalate	<10	<10	<10	<10
Di-n-octyl phthalate	<10	<10	<10	<10
Dimethyl phthalate	<10	<10	<10	<10
Diethyl phthalate	<10	<10	<10	<10
Di-n-butyl phthalate	<10	<10	<10	<10
Acenaphthylene	<10	<10	<10	<10
Acenaphthene	<10	<10	<10	<10
Butyl benzyl phthalate	<10	<10	<10	<10
Fluorene	<10	<10	<10	<10
Fluoranthene	<10	<10	<10	<10
Chrysene	<10	<10	<10	<10
Pyrene	<10	<10	<10	<10
Phenanthracene	<10	<10	<10	<10
Anthracene	<10	<10	<10	<10
Benzo(a)anthracene	<10	<10	<10	<10
Benzo(b)fluoranthene	<10	<10	<10	<10
Benzo(k)fluoranthene	<10	<10	<10	<10
Benzo(a)pyrene	<10	<10	<10	<10
Indeno(1,2,3-c,d)pyrene	<10	<10	<10	<10
Dibenzo(a,h)anthracene	<10	<10	<10	<10
Benzo(g,h,i)perylene	<10	<10	<10	<10
4-Chlorophenyl-phenyl ether	<10	<10	<10	<10
3,3'-Dichlorobenzidine	<10	<10	<10	<10
Benzidine	<10	<10	<10	<10
bis(2-Chloroethyl)ether	<10	<10	<10	<10
1,2-Diphenylhydrazine	<10	<10	<10	<10
Hexachlorocyclopentadiene	<10	<10	<10	<10
N-Nitrosodiphenyl amine	<10	<10	<10	<10
N-Nitrosodimethyl amine	<10	<10	<10	<10
N-Nitrosodi-n-propylamine	<10	<10	<10	<10
bis(2-Chloroisopropyl)ether	<10	<10	<10	<10

Results are expressed in micrograms of constituent per gram of sample (ppm).

2. Base/Neutral Extractable Organics (Method 625 by GC/MS)

Constituent	Sample Designation 040	041	042	043
1,2-Dichlorobenzene	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10
Hexachloroethane	<10	<10	<10	<10
Hexachlorobutadiene	<10	<10	<10	<10
Hexachlorobenzene	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<10
bis (2-Chloroethoxy) methane	<10	<10	<10	<10
Naphthalene	<10	<10	<10	<10
2-Chloronapthalene	<10	<10	<10	<10
Isophorone	<10	<10	<10	<10
Nitrobenzene	<10	<10	<10	<10
2,4-Dinitrotoluene	<10	<10	<10	<10
2,6-Dinitrotoluene	<10	<10	<10	<10
4-Bromophenyl phenyl ether	<10	<10	<10	<10
bis (2-Ethylhexyl) phthalate	<10	<10	<10	<10
Di-n-octyl phthalate	<10	<10	<10	<10
Dimethyl phthalate	<10	<10	<10	<10
Diethyl phthalate	<10	<10	<10	<10
Di-n-butyl phthalate	<10	<10	<10	<10
Acenaphthylene	<10	<10	<10	<10
Acenaphthene	<10	<10	<10	<10
Butyl benzyl phthalate	<10	<10	<10	<10
Fluorene	<10	<10	<10	<10
Fluoranthene	<10	<10	<10	<10
Chrysene	<10	<10	<10	<10
Pyrene	<10	<10	<10	<10
Phenanthracene	<10	<10	<10	<10
Anthracene	<10	<10	<10	<10
Benzo(a)anthracene	<10	<10	<10	<10
Benzo(b)fluoranthene	<10	<10	<10	<10
Benzo(k)fluoranthene	<10	<10	<10	<10
Benzo(a)pyrene	<10	<10	<10	<10
Indeno(1,2,3-c,d)pyrene	<10	<10	<10	<10
Dibenzo(a,h)anthracene	<10	<10	<10	<10
Benzo(g,h,i)perylene	<10	<10	<10	<10
4-Chlorophenyl-phenyl ether	<10	<10	<10	<10
3,3'-Dichlorobenzidine	<10	<10	<10	<10
Benzidine	<10	<10	<10	<10
bis(2-Chloroethyl)ether	<10	<10	<10	<10
1,2-Diphenylhydrazine	<10	<10	<10	<10
Hexachlorocyclopentadiene	<10	<10	<10	<10
N-Nitrosodiphenyl amine	<10	<10	<10	<10
N-Nitrosodimethyl amine	<10	<10	<10	<10
N-Nitrosodi-n-propylamine	<10	<10	<10	<10
bis(2-Chloroisopropyl)ether	<10	<10	<10	<10

Results are expressed in micrograms of constituent per gram of sample (ppm).

2. Base/Neutral Extractable Organics (Method 625 by GC/MS)

	Sample Designation			
Constituent	Comp. No.1	Comp. No. 2	Comp. No. 3	Comp. No. 4
1,2-Dichlorobenzene	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10
Hexachloroethane	<10	<10	<10	<10
Hexachlorobutadiene	<10	<10	<10	<10
Hexachlorobenzene	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<10
bis (2-Chloroethoxy) methane	<10	<10	<10	<10
Naphthalene	<10	<10	<10	<10
2-Chloronapthalene	<10	<10	<10	<10
Isophorone	<10	<10	<10	<10
Nitrobenzene	<10	<10	<10	<10
2,4-Dinitrotoluene	<10	<10	<10	<10
2,6-Dinitrotoluene	<10	<10	<10	<10
4-Bromophenyl phenyl ether	<10	<10	<10	<10
bis (2-Ethylhexyl) phthalate	<10	<10	<10	<10
Di-n-octyl phthalate	<10	<10	<10	<10
Dimethyl phthalate	<10	<10	<10	<10
Diethyl phthalate	<10	<10	<10	<10
Di-n-butyl phthalate	<10	<10	<10	<10
Acenaphthylene	<10	<10	<10	<10
Acenaphthene	<10	<10	<10	<10
Butyl benzyl phthalate	<10	<10	<10	<10
Fluorene	<10	<10	<10	<10
Fluoranthene	<10	<10	<10	<10
Chrysene	<10	<10	<10	<10
Pyrene	<10	<10	<10	<10
Phenanthracene	<10	<10	<10	<10
Anthracene	<10	<10	<10	<10
Benzo(a)anthracene	<10	<10	<10	<10
Benzo(b)fluoranthene	<10	<10	<10	<10
Benzo(k)fluoranthene	<10	<10	<10	<10
Benzo(a)pyrene	<10	<10	<10	<10
Indeno(1,2,3-c,d)pyrene	<10	<10	<10	<10
Dibenzo(a,h)anthracene	<10	<10	<10	<10
Benzo(g,h,i)perylene	<10	<10	<10	<10
4-Chlorophenyl-phenyl ether	<10	<10	<10	<10
3,3'-Dichlorobenzidine	<10	<10	<10	<10
Benzidine	<10	<10	<10	<10
bis(2-Chloroethyl)ether	<10	<10	<10	<10
1,2-Diphenylhydrazine	<10	<10	<10	<10
Hexachlorocyclopentadiene	<10	<10	<10	<10
N-Nitrosodiphenyl amine	<10	<10	<10	<10
N-Nitrosodimethyl amine	<10	<10	<10	<10
N-Nitrosodi-n-propylamine	<10	<10	<10	<10
bis(2-Chloroisopropyl)ether	<10	<10	<10	<10

Results are expressed in micrograms of constituent per gram of sample (ppm).

3. Purgeable Organic Compounds (Method 624)

	Sample and Designation				
Constituent	018	019	020	021	022
Chloromethane	<10	<10	<10	<10	<10
Bromomethane	<10	<10	<10	<10	<10
Vinyl chloride	<10	<10	<10	<10	<10
Chloroethane	<10	<10	<10	<10	<10
Methylene chloride	<10	<10	<10	<10	<10
1,1-Dichloroethylene	<10	<10	<10	<10	360
1,1-Dichloroethane	<10	<10	<10	<10	890
trans-1,2-Dichloroethylene	<10	<10	<10	<10	<10
Chloroform	<10	<10	<10	51	<10
1,2-Dichloroethane	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	<10	3,800	<10	1,500	56,000
Carbon tetrachloride	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10	<10	<10
trans-1,3-Dichloropropene	<10	<10	<10	<10	<10
Trichloroethylene	<10	<10	<10	<10	<10
Dibromochloromethane	<10	<10	<10	<10	<10
Benzene	<10	<10	<10	87	<10
1,1,2-Trichloroethane	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<10	<10	<10	<10	<10
2-Chloroethylvinyl ether	<10	<10	<10	<10	<10
Bromoform	<10	<10	<10	<10	<10
1,1,2,2-tetrachloroethane	<10	<10	<10	<10	<10
Tetrachloroethylene	<10	<10	<10	<10	<10
Toluene	280	17,000	<10	8,700	11,000
Chlorobenzene	<10	<10	<10	<10	<10
Ethyl Benzene	110	57,000	<10	23,000	100,000

Above results are expressed in micrograms of constituent per gram of sample (ppm).

3. Purgeable Organic Compounds (Method 624) (Continued)

	Sample and Designation				
Constituent	023	024	025	026	027
Chloromethane	<10	<10	<10	<10	<10
Bromomethane	<10	<10	<10	<10	<10
Vinyl chloride	<10	<10	<10	<10	<10
Chloroethane	<10	<10	<10	<10	<10
Methylene chloride	<10	<10	<10	79	<10
1,1-Dichloroethylene	25	53	<10	<10	20
1,1-Dichloroethane	<10	150	<10	<10	<10
trans-1,2-Dichloroethylene	<10	<10	<10	<10	<10
Chloroform	17	<10	<10	<10	18
1,2-Dichloroethane	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	<10	5,500	<10	<10	<10
Carbon tetrachloride	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10	<10	<10
trans-1,3-Dichloropropene	<10	<10	<10	<10	<10
Trichloroethylene	<10	190	<10	<10	<10
Dibromochloromethane	<10	<10	<10	<10	<10
Benzene	<10	<10	<10	<10	<10
1,1,2-Trichloroethane	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<10	<10	<10	<10	<10
2-Chloroethylvinyl ether	<10	<10	<10	<10	<10
Bromoform	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<10
Tetrachloroethylene	<10	<10	<10	<10	<10
Toluene	<10	1,700	<10	<10	<10
Chlorobenzene	<10	<10	<10	<10	<10
Ethyl Benzene	<10	1,200	<10	<10	<10

Above results are expressed in micrograms of constituent per gram of sample (ppm).

3. Purgeable Organic Compounds (Method 624)

	Sample and Designation				
Constituent	028	029	030	031	032
Chloromethane	<10	<10	<10	<10	<10
Bromomethane	<10	<10	<10	<10	<10
Vinyl chloride	<10	<10	<10	<10	<10
Chloroethane	<10	<10	<10	<10	<10
Methylene chloride	<10	90	29	65	140
1,1-Dichloroethylene	<10	<10	<10	<10	<10
1,1-Dichloroethane	<10	<10	<10	<10	<10
trans-1,2-Dichloroethylene	<10	<10	<10	<10	<10
Chloroform	18	<10	<10	<10	<10
1,2-Dichloroethane	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	<10	<10	29	41	<10
Carbon tetrachloride	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10	<10	<10
trans-1,3-Dichloropropene	<10	<10	<10	<10	<10
Trichloroethylene	<10	<10	<10	<10	<10
Dibromochloromethane	<10	<10	<10	<10	<10
Benzene	<10	<10	<10	<10	<10
1,1,2-Trichloroethane	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<10	<10	<10	<10	<10
2-Chloroethylvinyl ether	<10	<10	<10	<10	<10
Bromoform	<10	<10	<10	<10	<10
1,1,2,2-tetrachloroethane	<10	<10	<10	<10	<10
Tetrachloroethylene	<10	<10	<10	<10	<10
Toluene	8,000	<10	<10	<10	<10
Chlorobenzene	<10	<10	<10	<10	<10
Ethyl Benzene	22,000	<10	<10	<10	<10

Above results are expressed in micrograms of constituent per gram of sample (ppm).

3. Purgeable Organic Compounds (Method 624)

	Sample and Designation				
Constituent	033	034	034	036	037
Chloromethane	<10	<10	<10	<10	<10
Bromomethane	<10	<10	<10	<10	<10
Vinyl chloride	<10	<10	<10	<10	<10
Chloroethane	<10	<10	<10	<10	<10
Methylene chloride	<10	<10	<10	<10	59
1,1-Dichloroethylene	100	16,000	<10	79	<10
1,1-Dichloroethane	<10	<10	<10	<10	<10
trans-1,2-Dichloroethylene	<10	<10	<10	<10	<10
Chloroform	130	33	77	130	<10
1,2-Dichloroethane	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	180	>900,000	<10	290	<10
Carbon tetrachloride	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10	<10	<10
trans-1,3-Dichloropropene	<10	<10	<10	<10	<10
Trichloroethylene	<10	<10	<10	<10	<10
Dibromochloromethane	<10	<10	<10	<10	<10
Benzene	<10	39	38	<10	<10
1,1,2-Trichloroethane	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<10	<10	<10	<10	<10
2-Chloroethylvinyl ether	<10	<10	<10	<10	<10
Bromoform	<10	<10	<10	<10	<10
1,1,2,2-tetrachloroethane	<10	<10	<10	<10	<10
Tetrachloroethylene	<10	<10	<10	<10	<10
Toluene	<10	140	13	<10	20
Chlorobenzene	<10	<10	<10	<10	<10
Ethyl Benzene	<10	940	380	<10	<10

Above results are expressed in micrograms of constituent per gram of sample (ppm).

3. Purgeable Organic Compounds (Method 624)

	Sample and Designation				
Constituent	038	039	040	041	042
Chloromethane	<10	<10	<10	<10	<10
Bromomethane	<10	<10	<10	<10	<10
Vinyl chloride	<10	<10	<10	<10	<10
Chloroethane	<10	<10	<10	<10	<10
Methylene chloride	<10	<10	39	130	230
1,1-Dichloroethylene	<10	16	<10	<10	280
1,1-Dichloroethane	<10	<10	<10	<10	<10
trans-1,2-Dichloroethylene	<10	<10	<10	<10	<10
Chloroform	130	48	<10	<10	<10
1,2-Dichloroethane	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	230	160	<10	110	28,000
Carbon tetrachloride	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10	<10	<10
trans-1,3-Dichloropropene	<10	<10	<10	<10	<10
Trichloroethylene	<10	<10	<10	<10	<10
Dibromochloromethane	<10	<10	<10	<10	<10
Benzene	<10	<10	<10	<10	<10
1,1,2-Trichloroethane	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<10	<10	<10	<10	<10
2-Chloroethylvinyl ether	<10	<10	<10	<10	<10
Bromoform	<10	<10	<10	<10	<10
1,1,2,2-tetrachloroethane	<10	<10	<10	<10	<10
Tetrachloroethylene	<10	<10	<10	<10	<10
Toluene	<10	<10	11	<10	5,800
Chlorobenzene	<10	<10	<10	<10	<10
Ethyl Benzene	<10	<10	<10	<10	<10

Above results are expressed in micrograms of constituent per gram of sample (ppm).

3. Purgeable Organic Compounds (Method 624)

Constituent	Sample and Designation 043	Comp. No. 1	Comp. No. 2	Comp. No. 3	Comp. No. 4
Chloromethane	<10	<10	<10	<10	<10
Bromomethane	<10	<10	<10	<10	<10
Vinyl chloride	<10	<10	<10	<10	<10
Chloroethane	<10	<10	<10	<10	<10
Methylene chloride	<10	<10	<10	<10	<10
1,1-Dichloroethylene	<10	51	17	25	100
1,1-Dichloroethane	<10	<10	<10	<10	<10
trans-1,2-Dichloroethylene	<10	<10	<10	<10	<10
Chloroform	<10	24	<10	34	61
1,2-Dichloroethane	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	430	<10	<10	41	1,400
Carbon tetrachloride	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10	<10	<10
trans-1,3-Dichloropropene	<10	<10	<10	<10	<10
Trichloroethylene	<10	<10	89	<10	410
Dibromochloromethane	<10	<10	<10	<10	<10
Benzene	110	<10	<10	<10	<10
1,1,2-Trichloroethane	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<10	<10	<10	<10	<10
2-Chloroethylvinyl ether	1,800	<10	<10	<10	<10
Bromoform	<10	<10	<10	<10	<10
1,1,2,2-tetrachloroethane	<10	<10	<10	<10	<10
Tetrachloroethylene	<10	<10	<10	<10	<10
Toluene	47	<10	<10	<10	<10
Chlorobenzene	<10	<10	<10	<10	<10
Ethyl Benzene	220	<10	<10	<10	<10

Above results are expressed in micrograms of constituent per gram of sample (ppm).

Pesticidal Compounds and Polychlorinated Biphenyls

Constituent	018	019	020	021	022
Aldrin	<10	<10	<10	<10	<10
alpha BHC	<10	<10	<10	<10	<10
beta BHC	<10	<10	<10	<10	<10
delta BHC	<10	<10	<10	<10	<10
gamma BHC	<10	<10	<10	<10	<10
Chlordane	<10	<10	<10	<10	<10
Dieldrin	<10	<10	<10	<10	<10
p,p'-DDE	<10	<10	<10	<10	<10
p,p'-DDD	<10	<10	<10	<10	<10
p,p'-DDT	<10	<10	<10	<10	<10
Endosulfan I	<10	<10	<10	<10	<10
Endosulfan II	<10	<10	<10	<10	<10
Endosulfan Sulfate	<10	<10	<10	<10	<10
Endrin	<10	<10	<10	<10	<10
Endrin Aldehyde	<10	<10	<10	<10	<10
Heptachlor	<10	<10	<10	<10	<10
Heptachlor Epoxide	<10	<10	<10	<10	<10
Polychlorinated Biphenyls, total, as Aroclor 1260	<10	<10	<10	<10	<10

Constituent	023	024	025	026	027
Aldrin	<10	<10	<10	<10	<10
alpha BHC	<10	<10	<10	<10	<10
beta BHC	<10	<10	<10	<10	<10
delta BHC	<10	<10	<10	<10	<10
gamma BHC	<10	<10	<10	<10	<10
Chlordane	<10	<10	<10	<10	<10
Dieldrin	<10	<10	<10	<10	<10
p,p'-DDE	<10	<10	<10	<10	<10
p,p'-DDD	<10	<10	<10	<10	<10
p,p'-DDT	<10	<10	<10	<10	<10
Endosulfan I	<10	<10	<10	<10	<10
Endosulfan II	<10	<10	<10	<10	<10
Endosulfan Sulfate	<10	<10	<10	<10	<10
Endrin	<10	<10	<10	<10	<10
Endrin Aldehyde	<10	<10	<10	<10	<10
Heptachlor	<10	<10	<10	<10	<10
Heptachlor Epoxide	<10	<10	<10	<10	<10
Polychlorinated Biphenyls, total, as Aroclor 1260	<10	<10	<10	<10	<10

Above results are expressed as micrograms of constituent per gram of sample (ppm).

Pesticidal Compounds and Polychlorinated Biphenyls

Constituent	028	029	030	031	032
Aldrin	<10	<10	<10	<10	<10
alpha BHC	<10	<10	<10	<10	<10
beta BHC	<10	<10	<10	<10	<10
delta BHC	<10	<10	<10	<10	<10
gamma BHC	<10	<10	<10	<10	<10
Chlordane	<10	<10	<10	<10	<10
Dieldrin	<10	<10	<10	<10	<10
p,p'-DDE	<10	<10	<10	<10	<10
p,p'-DDD	<10	<10	<10	<10	<10
p,p'-DDT	<10	<10	<10	<10	<10
Endosulfan I	<10	<10	<10	<10	<10
Endosulfan II	<10	<10	<10	<10	<10
Endosulfan Sulfate	<10	<10	<10	<10	<10
Endrin	<10	<10	<10	<10	<10
Endrin Aldehyde	<10	<10	<10	<10	<10
Heptachlor	<10	<10	<10	<10	<10
Heptachlor Epoxide	<10	<10	<10	<10	<10
Polychlorinated Biphenyls, total, as Aroclor 1260	<10	<10	<10	<10	<10

Constituent	033	034	035	036	037
Aldrin	<10	<10	<10	<10	<10
alpha BHC	<10	<10	<10	<10	<10
beta BHC	<10	<10	<10	<10	<10
delta BHC	<10	<10	<10	<10	<10
gamma BHC	<10	<10	<10	<10	<10
Chlordane	<10	<10	<10	<10	<10
Dieldrin	<10	<10	<10	<10	<10
p,p'-DDE	<10	<10	<10	<10	<10
p,p'-DDD	<10	<10	<10	<10	<10
p,p'-DDT	<10	<10	<10	<10	<10
Endosulfan I	<10	<10	<10	<10	<10
Endosulfan II	<10	<10	<10	<10	<10
Endosulfan Sulfate	<10	<10	<10	<10	<10
Endrin	<10	<10	<10	<10	<10
Endrin Aldehyde	<10	<10	<10	<10	<10
Heptachlor	<10	<10	<10	<10	<10
Heptachlor Epoxide	<10	<10	<10	<10	<10
Polychlorinated Biphenyls, total, as Aroclor 1260	<10	<10	<10	<10	<10

Above results are expressed as micrograms of constituent per gram of sample (ppm).

Pesticidal Compounds and Polychlorinated Biphenyls

Constituent	038	039	040	041	042
Aldrin	<10	<10	<10	<10	<10
alpha BHC	<10	<10	<10	<10	<10
beta BHC	<10	<10	<10	<10	<10
delta BHC	<10	<10	<10	<10	<10
gamma BHC	<10	<10	<10	<10	<10
Chlordane	<10	<10	<10	<10	<10
Dieldrin	<10	<10	<10	<10	<10
p,p'-DDE	<10	<10	<10	<10	<10
p,p'-DDD	<10	<10	<10	<10	<10
p,p'-DDT	<10	<10	<10	<10	<10
Endosulfan I	<10	<10	<10	<10	<10
Endosulfan II	<10	<10	<10	<10	<10
Endosulfan Sulfate	<10	<10	<10	<10	<10
Endrin	<10	<10	<10	<10	<10
Endrin Aldehyde	<10	<10	<10	<10	<10
Heptachlor	<10	<10	<10	<10	<10
Heptachlor Epoxide	<10	<10	<10	<10	<10
Polychlorinated Biphenyls, total, as Aroclor 1260	<10	<10	<10	<10	<10

Constituent	043	Comp. No. 1	Comp. No. 2	Comp. No. 3	Comp. No. 4
Aldrin	<10	<10	<10	<10	<10
alpha BHC	<10	<10	<10	<10	<10
beta BHC	<10	<10	<10	<10	<10
delta BHC	<10	<10	<10	<10	<10
gamma BHC	<10	<10	<10	<10	<10
Chlordane	<10	<10	<10	<10	<10
Dieldrin	<10	<10	<10	<10	<10
p,p'-DDE	<10	<10	<10	<10	<10
p,p'-DDD	<10	<10	<10	<10	<10
p,p'-DDT	<10	<10	<10	<10	<10
Endosulfan I	<10	<10	<10	<10	<10
Endosulfan II	<10	<10	<10	<10	<10
Endosulfan Sulfate	<10	<10	<10	<10	<10
Endrin	<10	<10	<10	<10	<10
Endrin Aldehyde	<10	<10	<10	<10	<10
Heptachlor	<10	<10	<10	<10	<10
Heptachlor Epoxide	<10	<10	<10	<10	<10
Polychlorinated Biphenyls, total, as Aroclor 1260	<10	<10	<10	<10	<10

Above results are expressed as micrograms of constituent per gram of sample (ppm).

6. Inorganic Parameters

Constituent	Sample and Designation 018	019	020	021	022
Antimony, total	8.8	<5.0	<5.0	<5.0	<5.0
Arsenic, total	<5.0	<5.0	28	<5.0	<5.0
Beryllium, total	<2.0	<2.0	<2.0	<2.0	<2.0
Cadmium, total	<2.0	<2.0	<2.0	<2.0	<2.0
Chromium, total	980	11	18	230	68
Copper, total	290	5.2	68	<5.0	<5.0
Lead, total	200	64	6.1	<20	150
Mercury, total	<0.1	<0.1	0.89	<0.1	<0.1
Nickel, total	160	12	27	35	<5.0
Selenium, total	<5.0	<5.0	<5.0	<5.0	<5.0
Silver, total	<10	<10	<10	<10	<10
Thallium, total	<100	<100	<100	<100	<100
Zinc, total	360	8.4	19	60	34
Cyanide, total	<5.0	<5.0	<5.0	<5.0	<5.0
Phenol, total	<50	<50	<50	<50	<50

Constituent	Sample Designation 023	024	025	026	027
Antimony, total	<5.0	93	<5.0	<5.0	<5.0
Arsenic, total	22	<5.0	<5.0	<5.0	23
Beryllium, total	<2.0	<2.0	<2.0	<2.0	<2.0
Cadmium, total	<2.0	<10	<2.0	<2.0	<2.0
Chromium, total	400	4,200	<1.0	160	62
Copper, total	400	33	2.1	1,900	170
Lead, total	5.8	420	<0.05	340	<5.0
Mercury, total	<0.1	3.4	<0.1	<0.1	<0.1
Nickel, total	120	14	1.1	62	40
Selenium, total	<5.0	<5.0	<5.0	<5.0	<5.0
Silver, total	<10	<10	<10	<10	<10
Thallium, total	<100	<100	<100	<100	<100
Zinc, total	150	520	0.68	5,000	460
Cyanide, total	<5.0	<5.0	<5.0	<5.0	<5.0
Phenol, total	<50	<50	<50	<50	<50

Results are expressed in micrograms of constituent per gram of sample (ppm).

NR - Not Requested

6. Inorganic Parameters (Continued)

	Sample and Designation				
Constituent	028	029	030	031	032
Antimony, total	<5.0	<5.0	<5.0	<5.0	<5.0
Arsenic, total	<5.0	<5.0	<5.0	12	<5.0
Beryllium, total	<2.0	<2.0	<2.0	<2.0	<2.0
Cadmium, total	<2.0	<2.0	<2.0	<2.0	<2.0
Chromium, total	<5.0	<5.0	1,800	42	1,900
Copper, total	<5.0	<5.0	290	260	120
Lead, total	<20	<20	30,000	<5.0	14,000
Mercury, total	<0.1	0.64	<0.1	<0.1	<0.1
Nickel, total	<5.0	<5.0	21	42	<5.0
Selenium, total	<5.0	<5.0	<5.0	<5.0	<5.0
Silver, total	<10	<10	<10	<10	<10
Thallium, total	<100	<100	<100	<100	<100
Zinc, total	5.2	4.7	75,000	210	55,000
Cyanide, total	13	<5.0	<5.0	<5.0	<5.0
Phenol, total	<50	<50	<50	<50	<50

	Sample Designation				
Constituent	033	034	035	036	037
Antimony, total	<5.0	<5.0	<5.0	<5.0	<5.0
Arsenic, total	12	<5.0	15	49	<5.0
Beryllium, total	2.6	<2.0	<2.0	<2.0	<2.0
Cadmium, total	<2.0	<2.0	<2.0	<2.0	3.2
Chromium, total	170	89	2,800	120	200
Copper, total	150	<5.0	91	240	180
Lead, total	18	<20	240	<5.0	22,000
Mercury, total	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel, total	8.4	<5.0	44	92	<5.0
Selenium, total	<5.0	<5.0	<5.0	<5.0	<5.0
Silver, total	<10	<10	<10	<10	<10
Thallium, total	<100	<100	<100	<100	<100
Zinc, total	290	140	4,800	210	76,000
Cyanide, total	<5.0	<5.0	<5.0	<5.0	<5.0
Phenol, total	<50	<50	<50	<50	<50

Results are expressed in micrograms of constituent per gram of sample (ppm).

NR - Not Requested

6. Inorganic Parameters (Continued)

Constituent	Sample and Designation 038	039	040	041	042
Antimony, total	<5.0	<5.0	<5.0	<5.0	<5.0
Arsenic, total	<5.0	<5.0	<5.0	<5.0	<5.0
Beryllium, total	<2.0	<2.0	<2.0	<2.0	<2.0
Cadmium, total	<2.0	<2.0	<2.0	<2.0	2.6
Chromium, total	660	100	210	35	8.4
Copper, total	270	68	390	72	81
Lead, total	<5.0	2,300	<5.0	1,100	44
Mercury, total	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel, total	270	<50	200	<20	<5.0
Selenium, total	<5.0	<5.0	<5.0	<5.0	<5.0
Silver, total	<10	<10	<10	<10	<10
Thallium, total	<100	<100	<100	<100	<100
Zinc, total	720	24,000	740	430	290
Cyanide, total	<5.0	<5.0	<5.0	<5.0	<5.0
Phenol, total	<50	<50	<50	<50	<50

Constituent	Sample Designation 043	Comp. No. 1	Comp. No. 2	Comp. No. 3	Comp. No. 4
Antimony, total	<5.0	<5.0	<5.0	7.3	5.4
Arsenic, total	<5.0	<5.0	<5.0	<5.0	<5.0
Beryllium, total	<2.0	<2.0	<2.0	<2.0	<2.0
Cadmium, total	8.0	<2.0	<2.0	<2.0	<2.0
Chromium, total	210	3,300	3,900	4,600	41
Copper, total	12	2,600	4,000	6,800	9,900
Lead, total	200	14,000	15,000	25,000	25,000
Mercury, total	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel, total	35	<5.0	<5.0	<5.0	<5.0
Selenium, total	<5.0	<5.0	<5.0	<5.0	<5.0
Silver, total	<10	62	<10	<10	<10
Thallium, total	<100	<100	<100	<100	<100
Zinc, total	41,000	520	840	840	,100
Cyanide, total	<5.0	<5.0	<5.0	<5.0	<5.0
Phenol, total	<50	<50	<50	<50	<50

Results are expressed in micrograms of constituent per gram of sample (ppm).

AR100368

IV. Quality Assurance Data

A. RCRA Analysis

Parameter	Sample	QA Measure	Result
pH	040	Duplicate Analysis	5.51 units
Flashpoint	019	Duplicate Analysis	85 °F units
	022	Duplicate Analysis	<70 °F units
EP Toxicity:			
Arsenic	019	Duplicate Analysis	<0.5 ug/ml
Barium	019	Duplicate Analysis	0.10 ug/ml
	033	1.0 ppm Spike	114% Recovery
Cadmium	019	Duplicate Analysis	<0.02 ug/ml
	033	1.0 ppm Spike	94% Recovery
Chromium	019	Duplicate Analysis	<0.05 ug/ml
	033	1.0 ppm Spike	130% Recovery
Lead	019	Duplicate Analysis	<0.1 ug/ml
Mercury	034	0.5 ppm Spike	83% Recovery
	045	0.5 ppm Spike	94% Recovery
Selenium	019	Duplicate Analysis	<0.5 ug/ml
	034	1.0 ppm Spike	116% Recovery
Silver	019	Duplicate Analysis	<0.05 ug/ml
Endrin	035	Duplicate Analysis	<0.002 ug/ml
	040	Duplicate Analysis	<0.002 ug/ml
	045	Duplicate Analysis	<0.002 ug/ml
Lindane	035	Duplicate Analysis	<0.04 ug/ml
	040	Duplicate Analysis	<0.04 ug/ml
	045	Duplicate Analysis	<0.04 ug/ml
Methoxychlor	035	Duplicate Analysis	<1.0 ug/ml
	040	Duplicate Analysis	<1.0 ug/ml
	045	Duplicate Analysis	<1.0 ug/ml

A. RCRA Analysis (Continued)

Parameter	Sample	QA Measure	Result
EP Toxicity:			
Toxaphene	035	Duplicate Analysis	<0.05 ug/ml
	040	Duplicate Analysis	<0.05 ug/ml
	045	Duplicate Analysis	<0.05 ug/ml
2,4-D	035	Duplicate Analysis	<1.0 ug/ml
	040	Duplicate Analysis	<1.0 ug/ml
	045	Duplicate Analysis	<1.0 ug/ml
	Deionized Water	2.0 ppm Spike	78% Recovery
2,4,5-TP(Silvex)	035	Duplicate Analysis	<0.1 ug/ml
	040	Duplicate Analysis	<0.1 ug/ml
	045	Duplicate Analysis	<0.1 ug/ml
	Deionized Water	0.2 ppm Spike	70% Recovery
	Deionized Water	0.2 ppm Spike	69% Recovery

B. Priority Pollutant Analysis

Acid Extractable Organics:

Duplicate Analysis

Constituent	019	031	040
Phenol	<25	<25	<25
2-Nitrophenol	<25	<25	<25
4-Nitrophenol	<25	<25	<25
2,4-Dinitrophenol	<25	<25	<25
2,6-Dinitro-o-cresol	<25	<25	<25
2-Chloro-3-Methyl-Phenol	<25	<25	<25
2,4-Dichlorophenol	<25	<25	<25
2,4,6-Trichlorophenol	<25	<25	<25
2,4-Dimethylphenol	<25	<25	<25

Above results are expressed in micrograms of constituent per gram of sample (ppm).

Acid Extractable Organics:

Spike Analysis

Constituent	Amount of Spike, ug	034 % Recovery	035 % Recovery	Comp. No. 2 % Recovery
Phenol	58	118	128	71
2-Chlorophenol	49	132	47	60
2,4-Dimethylphenol	50	125	85	92
4-chloro-3-methylphenol	50	74	50	30
2,4,6-Trichlorophenol	50	87	---	60
Pentachlorophenol	51	82	---	104

B. Priority Pollutant Analysis (Continued)

Base/Neutral Extractable Organics:

	Duplicate Analysis		
Constituent	019	031	040
1,2-Dichlorobenzene	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10
Hexachloroethane	<10	<10	<10
Hexachlorobutadiene	<10	<10	<10
Hexachlorobenzene	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10
bis (2-Chloroethoxy) methane	<10	<10	<10
Naphthalene	<10	<10	<10
2-Chloronapthalene	<10	<10	<10
Isophorone	<10	<10	<10
Nitrobenzene	<10	<10	<10
2,4-Dinitrotoluene	<10	<10	<10
2,6-Dinitrotoluene	<10	<10	<10
4-Bromophenyl phenyl ether	<10	<10	<10
bis (2-Ethylhexyl) phthalate	<10	<10	<10
Di-n-octyl phthalate	<10	<10	<10
Dimethyl phthalate	<10	<10	<10
Diethyl phthalate	<10	<10	<10
Di-n-butyl phthalate	<10	<10	<10
Acenaphthylene	<10	<10	<10
Acenaphthene	<10	<10	<10
Butyl benzyl phthalate	<10	<10	<10
Fluorene	<10	<10	<10
Fluoranthene	<10	<10	<10
Chrysene	<10	<10	<10
Pyrene	<10	<10	<10
Phenanthracene	<10	<10	<10
Anthracene	<10	<10	<10
Benzo(a)anthracene	<10	<10	<10
Benzo(b)fluoranthene	<10	<10	<10
Benzo(k)fluoranthene	<10	<10	<10
Benzo(a)pyrene	<10	<10	<10
Indeno(1,2,3-c,d)pyrene	<10	<10	<10
Dibenzo(a,h)anthracene	<10	<10	<10
Benzo(g,h,i)perylene	<10	<10	<10
4-Chlorophenyl-phenyl ether	<10	<10	<10
3,3'-Dichlorobenzidine	<10	<10	<10
Benzidine	<10	<10	<10
bis(2-Chloroethyl)ether	<10	<10	<10
1,2-Diphenylhydrazine	<10	<10	<10
Hexachlorocyclopentadiene	<10	<10	<10
N-Nitrosodiphenyl amine	<10	<10	<10
N-Nitrosodimethyl amine	<10	<10	<10
N-Nitrosodi-n-propylamine	<10	<10	<10
bis(2-Chloroisopropyl)ether	<10	<10	<10

Results are expressed in micrograms of constituent per gram of sample (ppm).

B. Priority Pollutant Analysis (Continued)

Base/Neutral Extractable Organics:

Constituent	Amount of Spike, ppm	Spike Analysis 035 % Recovery	035 % Recovery	Comp. No. 2 % Recovery
Bis (2-chloroethyl) ether	50	60	118	92
1,4-Dichlorobenzene	50	134	66	89
Bis (2-chloroisopropyl) ether	50	121	105	110
Nitrobenzene	50	116	122	68
Acenapthylene	50	127	68	46
Dimethylphthalate	50	126	60	70
2,6-Dinitrotoluene	50	---	35	---
4-Bromophenylphenyl ether	50	100	42	40
Dibutylphthalate	50	111	---	150
Bis (2-ethylhexyl) phthalate	50	81	47	97
Benzo (B) Fluoranthene	50	---	70	---

Purgeable Organic Compounds:

Constituent	Duplicate Analysis 019	026	040
Bromomethane	<10	<10	<10
Vinyl chloride	<10	<10	<10
Chloroethane	<10	<10	<10
Methylene chloride	<10	33	12
1,1-Dichloroethylene	<10	<10	<10
1,1-Dichloroethane	<10	<10	<10
trans-1,2-Dichloroethylene	<10	<10	<10
Chloroform	<10	<10	<10
1,2-Dichloroethane	<10	<10	<10
1,1,1-Trichloroethane	3,500	<10	<10
Carbon tetrachloride	<10	<10	<10
Bromodichloromethane	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10
trans-1,3-Dichloropropene	<10	<10	<10
Trichloroethylene	<10	<10	<10
Dibromochloromethane	<10	<10	<10
Benzene	<10	<10	<10
1,1,2-Trichloroethane	<10	<10	<10
cis-1,3-Dichloropropene	<10	<10	<10
2-Chloroethylvinyl ether	<10	<10	<10
Bromoform	<10	<10	<10
1,1,2,2-tetrachloroethane	<10	<10	<10
Tetrachloroethylene	<10	<10	<10
Toluene	14,000	11	<10
Chlorobenzene	<10	<10	<10
Ethyl Benzene	49,000	<10	<10

B. Priority Pollutant Analysis (Continued)

Purgeable Organic Compounds:

Constituent	Spike Analysis: Amount of Spike, ug	Spike Analysis: 035 % Recovery	Spike Analysis: Comp. No. 2 % Recovery
Chloromethane	1.0	96	162
Bromomethane	1.0	89	130
Vinyl chloride	1.0	107	130
Chloroethane	1.0	130	138
Methylene chloride	1.0	115	94
1,1-Dichloroethylene	1.0	114	89
1,1-Dichloroethane	1.0	123	92
trans-1,2-Dichloroethylene	1.0	122	92
Chloroform	1.0	141	92
1,2-Dichloroethane	1.0	110	87
1,1,1-Trichloroethane	1.0	121	93
Carbon tetrachloride	1.0	129	103
Bromodichloromethane	1.0	118	97
1,2-Dichloropropane	1.0	106	80
trans-1,3-Dichloropropene	1.0	104	85
Trichloroethylene	1.0	119	91
Dibromochloromethane	1.0	112	84
Benzene	1.0	117	85
1,1,2-Trichloroethane	1.0	118	80
cis-1,3-Dichloropropene	1.0	108	91
2-Chloroethylvinyl ether	1.0	95	86
Bromoform	1.0	118	96
1,1,2,2-tetrachloroethane	1.0	125	97
Tetrachloroethylene	1.0	129	90
Toluene	1.0	116	81
Chlorobenzene	1.0	136	92
Ethyl Benzene	1.0	112	89

Pesticidal Compounds and Polychlorinated Biphenyls

Duplicate Analysis

Constituent	031	019	040
Aldrin	<10	<10	<10
alpha BHC	<10	<10	<10
beta BHC	<10	<10	<10
delta BHC	<10	<10	<10
gamma BHC	<10	<10	<10
Chlordane	<10	<10	<10
Dieldrin	<10	<10	<10
p,p'-DDE	<10	<10	<10
p,p'-DDD	<10	<10	<10
p,p'-DDT	<10	<10	<10
Endosulfan I	<10	<10	<10
Endosulfan II	<10	<10	<10
Endosulfan Sulfate	<10	<10	<10
Endrin	<10	<10	<10
Endrin Aldehyde	<10	<10	<10
Heptachlor	<10	<10	<10
Heptachlor Epoxide	<10	<10	<10
Polychlorinated Biphenyls, total, as Aroclor 1260	<10	<10	<10

Above results are expressed micrograms of constituent per gram of sample (ppm).

B. Priority Pollutant Analysis (Continued)

Pesticidal Compoiunds and PCBs:

Constituent	Spike Analysis Amount of Spike, ppm	Comp. No. 2 % Recovery
Aldrin	1.37	122
alpha BHC	0.68	80
beta BHC	3.19	93
gamma BHC	0.72	91
Dieldrin	3.23	114
p,p'-DDE	3.27	93
p,p'-DDT	3.23	152
p,p'-DDD	3.25	165
Endrin	3.27	132
Heptachlor	0.69	155
Heptachlor Epoxide	1.27	95
Polychlorinated Biphenyls, total, as Aroclor 1260	52.5	121

B. Priority Pollutant Analysis (Continued)

Heavy Metals, Cyanide and Phenol:

Duplicate Analysis

Parameter	019	026	040
Arsenic	<5.0	<5.0	<5.0
Beryllium	<2.0	<2.0	<2.0
Cadmium	<2.0	<2.0	<2.0
Chromium	8.4	200	200
Copper	<5.0	8,500	---
Lead	64	290	<5.0
Mercury	<0.5	<0.5	<0.5
Nickel	86	---	200
Selenium	<5.0	<5.0	<5.0
Silver	<10	<10	<10
Thallium	<100	<100	<100
Zinc	6.0	5,100	880
Cyanide	<5.0	---	<5.0
Phenol	---	<50	<50

Above results are expressed in micrograms of constituent per gram of sample (ppm).

Spike Analysis

Parameter	Amount of Spike, ppm	034 % Recovery	035 % Recovery
Antimony	1.0	110	107
Arsenic	1.0	91	75
Beryllium	10	96	96
Cadmium	1.0	91	68
Chromium	1.0	94	---
Copper	1.0	81	---
Lead	1.0	68	---
Mercury	0.10	104	103
Nickel	1.0	85	76
Selenium	10	98	99
Thallium	1.0	112	101
Zinc	1.0	79	---
Cyanide	10	77	77
Phenol	10	151	123

Should you have any questions concerning this analysis, please don't hesitate to contact me.

Respectfully submitted,

STABLEX-REUTTER, INC.

Ian Lambert

Ian C. Lambert
Laboratory Manager

ICL/dk

Stablex-Reutter Inc.

Ninth and Cooper Streets
P.O. Box 499
Camden, New Jersey 08101

Phone: 609-541-6700
Telex: 834477

Doc.# D2E087-6-001-1820E15

RECEIVED
MAY 23 1984
O. H. MATERIALS CO
BY D. Ohneck

May 15, 1984

OHM PROJ. 1820-E15

EPA DEL. ORD. NO. 6893-03-006

O.H. Materials Company
P.O. Box 551
16406 U.S. Route 224 East
Findlay, Ohio 45840

Attention: Robert Ohneck

Reference: Test Report No. SR9567

This report covers the analysis of forty-three (43) aqueous samples submitted to Stablex-Reutter, Inc. (S-R) on May 3, 1984. The following analysis was requested:

- Acid Extractable Organics
- Base/Neutral Extractable Organics
- Purgeable Organics
- Pesticides and Polychlorinated Biphenyls
- pH
- Standard Plate Count

This report is organized in the following manner:

- Sample Designations
- Preparation and Analysis
- Analytical Results
- Quality Assurance Data

AR100379

I. Sample Designations

The sample disignations are outlined as follows:

S-R No.	Station No.	Designation
SR9567-1	Sta. 00	Sample Blank
SR9567-2	Sta. 01	Hess Well (pre)
SR9567-3	Sta. 02	Hess Well (post)
SR9567-4	Sta. 03	Bridendolph Well
SR9567-5	Sta. 04	Redding Well (between)
SR9567-6	Sta. 05	Redding Well (after)
SR9567-7	Sta. 06	Redding Well (before)
SR9567-8	Sta. 07	Redding Well (after)
SR9567-9	Sta. 08	Potter Well (after)
SR9567-10	Sta. 09	Potter Well (between)
SR9567-11	Sta. 10	Potter Well (before)
SR9567-12	Sta. 11	Felt Well (before)
SR9567-13	Sta. 12	Felt Well (between)
SR9567-14	Sta. 13	Felt Well (after)
SR9567-15	Sta. 14	Walter Well (after)
SR9567-16	Sta. 15	Walter Well (between)
SR9567-17	Sta. 16	Walter Well (before)
SR9567-18	Sta. 17	Olswfski Well (after)
SR9567-19	Sta. 18	Olswfski Well (between)
SR9567-20	Sta. 19	Olswfski Well (before)
SR9567-21	Sta. 20	Kriel Well (after)
SR9567-22	Sta. 21	Kriel Well (between)
SR9567-23	Sta. 22	Kriel Well (before)
SR9567-24	Sta. 23	Coleman Well (after)
SR9567-25	Sta. 24	Coleman Well (between)
SR9567-26	Sta. 25	Coleman Well (before)
SR9567-27	Sta. 26	Mundy Well (after)
SR9567-28	Sta. 27	Mundy Well (between)
SR9567-29	Sta. 28	Mundy Well (before)
SR9567-30	Sta. 29	Breighner Well (after)
SR9567-31	Sta. 30	Breighner Well (between)
SR9567-32	Sta. 31	Breighner Well (before)
SR9567-33	Sta. 32	Gallatin Well (after)
SR9567-34	Sta. 33	Gallatin Well (between)
SR9567-35	Sta. 34	Gallatin Well (before)
SR9567-36	Sta. 35	Gilman Well (after)
SR9567-37	Sta. 36	Gilman Well (between)
SR9567-38	Sta. 37	Gilman Well (before)
SR9567-39	Sta. 38	Waddell Well
SR9567-40	Sta. 39	Shealer Well
SR9567-41	Sta. 40	Hanky Well
SR9567-42	Sta. 41	Filus Well
SR9567-43	Sta. 42	Liddane Well

II. Preparation and Analysis

A brief description of the analytical methods and preparation steps, where applicable, are delineated below:

Acid Extractable and Base/Neutral Extractable Organics

Preparation and Analytical Reference: . Method 625 Federal Register, Vol. 44, No. 233, December 3, 1979. (Columns and GC/MS conditions for acid extractables and base/neutrals)

Purgeable Oraganics

Preparation and Analytical Reference: . Method 624 Federal Register, Vol. 44, No. 233, December 3, 1979. (Columns and GC/MS conditions for purgeable organic compounds)

Pesticides and Polychlorinated Biphenyls (PCBs)

Preparation and Analytical Reference: . EPA Method 608, Organochlorine Pesticides and PCB's Federal Register, Vol. 44, No. 233, December 3, 1979.

The instrumental conditions of analysis were as follows:

. Dectector: Pulse-linearized nickel 63 electron-capture detector.

. Column: A glass column 8 feet long 4 milliliter (intermal diameter) packed with 10% SP-2100 on 100/120°C throughout the analysis. Column was designed for "off-column" injection.

. Flow Rate: 30 + 40 milliliters per minute of 5% Methane in Argon.

pH and Standard Plate Count

Preparation and Analytical Reference: . Standard Methods for the Examination of Water and Wastewater, 15th edition.

III. Analytical Results

A. pH

	Sample Designation
	95670-41 Sta. 40
pH units	7.31

B. Standard Plate Count

Sample Designation		Standard Plate Count, colonies/ml
SR9567-2	Sta. 01	240
SR9567-3	Sta. 02	1,600
SR9567-7	Sta. 06	10
SR9567-8	Sta. 07	7,900
SR9567-9	Sta. 08	2,200
SR9567-11	Sta. 10	0
SR9567-12	Sta. 11	230
SR9567-14	Sta. 13	370
SR9567-15	Sta. 14	14,000
SR9567-17	Sta. 16	0
SR9567-18	Sta. 17	20
SR9567-20	Sta. 19	330
SR9567-21	Sta. 20	350
SR9567-23	Sta. 22	10
SR9567-24	Sta. 23	440
SR9567-26	Sta. 25	10
SR9567-27	Sta. 26	1,400
SR9567-29	Sta. 28	0
SR9567-30	Sta. 29	180
SR9567-32	Sta. 31	20
SR9567-33	Sta. 32	30
SR9567-35	Sta. 34	10
SR9567-36	Sta. 35	0
SR9567-38	Sta. 37	0

C. Acid Extractable Organics (Method 625 be GC/MS

Constituent	Sample Designation SR9567-1 Sta. 00	SR9567-12 Sta. 11	SR9567-26 Sta. 25	SR9567-39 Sta. 38	SR9567-40 Sta. 39
Phenol	<5.0	<5.0	<5.0	<5.0	<5.0
2-Nitrophenol	<5.0	<5.0	<5.0	<5.0	<5.0
4-Nitrophenol	<5.0	<5.0	<5.0	<5.0	<5.0
2,4-Dinitrophenol	<5.0	<5.0	<5.0	<5.0	<5.0
2,6-Dinitro-o-cresol	<5.0	<5.0	<5.0	<5.0	<5.0
Pentachlorophenol	<5.0	<5.0	<5.0	<5.0	<5.0
4-Chloro-3-Methyl-Phenol	<5.0	<5.0	<5.0	<5.0	<5.0
2-Chlorophenol	<5.0	<5.0	<5.0	<5.0	<5.0
2,4-Dichlorophenol	<5.0	<5.0	<5.0	<5.0	<5.0
2,4,6-Trichlorophenol	<5.0	<5.0	<5.0	<5.0	<5.0
2,4-Dimethylphenol	<5.0	<5.0	<5.0	<5.0	<5.0

Constituent	Sample Designation SR9567-40 Duplicate	SR9567-41 Sta. 40	SR9567-42 Sta. 41	SR9567-43 Sta. 42
Phenol	<5.0	<5.0	<5.0	<5.0
2-Nitrophenol	<5.0	<5.0	<5.0	<5.0
4-Nitrophenol	<5.0	<5.0	<5.0	<5.0
2,4-Dinitrophenol	<5.0	<5.0	<5.0	<5.0
2,6-Dinitro-o-cresol	<5.0	<5.0	<5.0	<5.0
Pentachlorophenol	<5.0	<5.0	<5.0	<5.0
4-Chloro-3-Methyl-Phenol	<5.0	<5.0	<5.0	<5.0
2-Chlorophenol	<5.0	<5.0	<5.0	<5.0
2,4-Dichlorophenol	<5.0	<5.0	<5.0	<5.0
2,4,6-Trichlorophenol	<5.0	<5.0	<5.0	<5.0
2,4-Dimethylphenol	<5.0	<5.0	<5.0	<5.0

Results are expressed in micrograms of constituent per liter of sample (ppb).

D. Base/Neutral Extractable Organics (Method 625 by GC/MS)

Constituent	Sample Designation SR9567-1 Sta. 00	SR9567-12 Sta. 11	SR9567-26 Sta. 25	SR9567-39 Sta. 38
1,2-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0
Hexachloroethane	<1.0	<1.0	<1.0	<1.0
Hexachlorobutadiene	<1.0	<1.0	<1.0	<1.0
Hexachlorobenzene	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0
bis (2-Chloroethoxy) methane	<1.0	<1.0	<1.0	<1.0
Naphthalene	<1.0	<1.0	<1.0	<1.0
2-Chloronapthalene	<1.0	<1.0	<1.0	<1.0
Isophorone	<1.0	<1.0	<1.0	<1.0
Nitrobenzene	<1.0	<1.0	<1.0	<1.0
2,4-Dinitrotoluene	<1.0	<1.0	<1.0	<1.0
2,6-Dinitrotoluene	<1.0	<1.0	<1.0	<1.0
4-Bromophenyl phenyl ether	<1.0	<1.0	<1.0	<1.0
bis (2-Ethylhexyl) phthalate	<1.0	<1.0	<1.0	<1.0
Di-n-octyl phthalate	<1.0	<1.0	<1.0	<1.0
Dimethyl phthalate	<1.0	<1.0	<1.0	<1.0
Diethyl phthalate	<1.0	<1.0	<1.0	<1.0
Di-n-butyl phthalate	<1.0	<1.0	<1.0	<1.0
Acenaphthylene	<1.0	<1.0	<1.0	<1.0
Acenaphthene	<1.0	<1.0	<1.0	<1.0
Butyl benzyl phthalate	<1.0	<1.0	<1.0	<1.0
Fluorene	<1.0	<1.0	<1.0	<1.0
Fluoranthene	<1.0	<1.0	<1.0	<1.0
Chrysene	<1.0	<1.0	<1.0	<1.0
Pyrene	<1.0	<1.0	<1.0	<1.0
Phenanthracene	<1.0	<1.0	<1.0	<1.0
Anthracene	<1.0	<1.0	<1.0	<1.0
Benzo(a)anthracene	<1.0	<1.0	<1.0	<1.0
Benzo(b)fluoranthene	<1.0	<1.0	<1.0	<1.0
Benzo(k)fluoranthene	<1.0	<1.0	<1.0	<1.0
Benzo(a)pyrene	<1.0	<1.0	<1.0	<1.0
Indeno(1,2,3-c,d)pyrene	<1.0	<1.0	<1.0	<1.0
Dibenzo(a,h)anthracene	<1.0	<1.0	<1.0	<1.0
Benzo(g,h,i)perylene	<1.0	<1.0	<1.0	<1.0
4-Chlorophenyl-phenyl ether	<1.0	<1.0	<1.0	<1.0
3,3'-Dichlorobenzidine	<1.0	<1.0	<1.0	<1.0
Benzidine	<1.0	<1.0	<1.0	<1.0
bis(2-Chloroethyl)ether	<1.0	<1.0	<1.0	<1.0
1,2-Diphenylhydrazine	<1.0	<1.0	<1.0	<1.0
Hexachlorocyclopentadiene	<1.0	<1.0	<1.0	<1.0
N-Nitrosodiphenyl amine	<1.0	<1.0	<1.0	<1.0
N-Nitrosodimethyl amine	<1.0	<1.0	<1.0	<1.0
N-Nitrosodi-n-propylamine	<1.0	<1.0	<1.0	<1.0
bis(2-Chloroisopropyl)ether	<1.0	<1.0	<1.0	<1.0

Results are expressed in micrograms of constituent per liter of sample (ppb).

D. Base/Neutral Extractable Organics (Method 625 by GC/MS) (Continued)

Constituent	Sample Designation SR9567-40 Sta. 39	SR9567-40 Duplicate	SR9567-41 Sta. 40	SR9567-42 Sta. 41	SR9567-43 Sta. 42
1,2-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0
Hexachloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
Hexachlorobutadiene	<1.0	<1.0	<1.0	<1.0	<1.0
Hexachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0
bis (2-Chloroethoxy) methane	<1.0	<1.0	<1.0	<1.0	<1.0
Naphthalene	<1.0	<1.0	<1.0	<1.0	<1.0
2-Chloronapthalene	<1.0	<1.0	<1.0	<1.0	<1.0
Isophorone	<1.0	<1.0	<1.0	<1.0	<1.0
Nitrobenzene	<1.0	<1.0	<1.0	<1.0	<1.0
2,4-Dinitrotoluene	<1.0	<1.0	<1.0	<1.0	<1.0
2,6-Dinitrotoluene	<1.0	<1.0	<1.0	<1.0	<1.0
4-Bromophenyl phenyl ether	<1.0	<1.0	<1.0	<1.0	<1.0
bis (2-Ethylhexyl) phthalate	<1.0	<1.0	<1.0	<1.0	<1.0
Di-n-octyl phthalate	<1.0	<1.0	<1.0	<1.0	<1.0
Dimethyl phthalate	<1.0	<1.0	<1.0	<1.0	<1.0
Diethyl phthalate	<1.0	<1.0	<1.0	<1.0	<1.0
Di-n-butyl phthalate	<1.0	<1.0	<1.0	<1.0	<1.0
Acenaphthylene	<1.0	<1.0	<1.0	<1.0	<1.0
Acenaphthene	<1.0	<1.0	<1.0	<1.0	<1.0
Butyl benzyl phthalate	<1.0	<1.0	<1.0	<1.0	<1.0
Fluorene	<1.0	<1.0	<1.0	<1.0	<1.0
Fluoranthene	<1.0	<1.0	<1.0	<1.0	<1.0
Chrysene	<1.0	<1.0	<1.0	<1.0	<1.0
Pyrene	<1.0	<1.0	<1.0	<1.0	<1.0
Phenanthracene	<1.0	<1.0	<1.0	<1.0	<1.0
Anthracene	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)anthracene	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(b)fluoranthene	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(k)fluoranthene	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)pyrene	<1.0	<1.0	<1.0	<1.0	<1.0
Indeno(1,2,3-c,d)pyrene	<1.0	<1.0	<1.0	<1.0	<1.0
Dibenzo(a,h)anthracene	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(g,h,i)perylene	<1.0	<1.0	<1.0	<1.0	<1.0
4-Chlorophenyl-phenyl ether	<1.0	<1.0	<1.0	<1.0	<1.0
3,3'-Dichlorobenzidine	<1.0	<1.0	<1.0	<1.0	<1.0
Benzidine	<1.0	<1.0	<1.0	<1.0	<1.0
bis(2-Chloroethyl)ether	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Diphenylhydrazine	<1.0	<1.0	<1.0	<1.0	<1.0
Hexachlorocyclopentadiene	<1.0	<1.0	<1.0	<1.0	<1.0
N-Nitrosodiphenyl amine	<1.0	<1.0	<1.0	<1.0	<1.0
N-Nitrosodimethyl amine	<1.0	<1.0	<1.0	<1.0	<1.0
N-Nitrosodi-n-propylamine	<1.0	<1.0	<1.0	<1.0	<1.0
bis(2-Chloroisopropyl)ether	<1.0	<1.0	<1.0	<1.0	<1.0

Results are expressed in micrograms of constituent per liter of sample (ppb).

E. Pesticidal and Polychlorinated Biphenyls

Constituent	Sample Designation SR9567-1 Sta. 00	SR9567-12 Sta. 11	SR9567-26 Sta. 25	SR9567-39 Sta. 38	SR9567-40 Sta. 39
Aldrin	<1.0	<1.0	<1.0	<1.0	<1.0
alpha BHC	<1.0	<1.0	<1.0	<1.0	<1.0
beta BHC	<5.0	<5.0	<5.0	<5.0	<5.0
gamma BHC	<5.0	<5.0	<5.0	<5.0	<5.0
delta BHC	<5.0	<5.0	<5.0	<5.0	<5.0
Chlordane	<10	<10	<10	<10	<10
Dieldrin	<5.0	<5.0	<5.0	<5.0	<5.0
p,p'-DDE	<5.0	<5.0	<5.0	<5.0	<5.0
p,p'-DDT	<5.0	<5.0	<5.0	<5.0	<5.0
p,p'-DDD	<5.0	<5.0	<5.0	<5.0	<5.0
Endosulfan I	<10	<10	<10	<10	<10
Endosulfan II	<10	<10	<10	<10	<10
Endosulfan Sulfate	<10	<10	<10	<10	<10
Endrin	<5.0	<5.0	<5.0	<5.0	<5.0
Endrin Aldehyde	<10	<10	<10	<10	<10
Heptachlor	<1.0	<1.0	<1.0	<1.0	<1.0
Heptachlor Epoxide	<5.0	<5.0	<5.0	<5.0	<5.0
Toxaphene	<10	<10	<10	<10	<10
Polychlorinated Biphenyls, total, as Aroclor 1260	<5.0	<5.0	<5.0	<5.0	<5.0

Above results are expressed as micrograms of constituent per liter of sample (ppb).

E. Pesticidal and Polychlorinated Biphenyls (Continued)

Constituent	Sample Designation SR9567-40 Duplicate	SR9567-41 Sta. 40	SR9567-42 Sta. 41	SR9567-43 Sta. 42
Aldrin	<1.0	<1.0	<1.0	<1.0
alpha BHC	<1.0	<1.0	<1.0	<1.0
beta BHC	<5.0	<5.0	<5.0	<5.0
gamma BHC	<5.0	<5.0	<5.0	<5.0
delta BHC	<5.0	<5.0	<5.0	<5.0
Chlordane	<10	<10	<10	<10
Dieldrin	<5.0	<5.0	<5.0	<5.0
p,p'-DDE	<5.0	<5.0	<5.0	<5.0
p,p'-DDT	<5.0	<5.0	<5.0	<5.0
p,p'-DDD	<5.0	<5.0	<5.0	<5.0
Endosulfan I	<10	<10	<10	<10
Endosulfan II	<10	<10	<10	<10
Endosulfan Sulfate	<10	<10	<10	<10
Endrin	<5.0	<5.0	<5.0	<5.0
Endrin Aldehyde	<10	<10	<10	<10
Heptachlor	<1.0	<1.0	<1.0	<1.0
Heptachlor Epoxide	<5.0	<5.0	<5.0	<5.0
Toxaphene	<10	<10	<10	<10
Polychlorinated Biphenyls, total, as Aroclor 1260	<5.0	<5.0	<5.0	<5.0

Above results are expressed as micrograms of constituent per liter of sample (ppb)

F. Purgeable Organic Compounds (Method 624)

	Sample and Designation				
Constituent	SR9567-1 Sta. 00	SR9567-2 Sta. 01	SR9567-3 Sta. 02	SR9567-3 Duplicate	SR9567-4 Sta. 03
Chloromethane	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene chloride	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	<1.0	18	<1.0	<1.0	<1.0
Carbon tetrachloride	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethylene	<1.0	250	<1.0	<1.0	39
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	<1.0	<1.0	<1.0	<1.0	<1.0
2-Chloroethylvinyl ether	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-tetrachloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0
Ethyl Benzene	<1.0	<1.0	<1.0	<1.0	<1.0

Results are expressed in micrograms of constituent per liter of sample (ppb).

F. Purgeable Organic Compounds (Method 624) (Continued)

Constituent	Sample and Designation SR9567-5 Sta. 04	SR9567-6 Sta. 05	SR9567-7 Sta. 06	SR9567-7 Duplicate	SR9567-9 Sta. 08
Chloromethane	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene chloride	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	<1.0	<1.0	60	51	<1.0
Carbon tetrachloride	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethylene	<1.0	<1.0	190	200	<1.0
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	<1.0	<1.0	<1.0	<1.0	<1.0
2-Chloroethylvinyl ether	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-tetrachloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0
Ethyl Benzene	<1.0	<1.0	<1.0	<1.0	<1.0

Results are expressed in micrograms of constituent per liter of sample (ppb).

F. Purgeable Organic Compounds (Method 624) (Continued)

Constituent	Sample and Designation SR9567-10 Sta. 09	SR9567-13 Sta. 12	SR9567-14 Sta. 13	SR9567-15 Sta. 14	SR9567-16 Sta. 15
Chloromethane	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene chloride	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon tetrachloride	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	<1.0	<1.0	<1.0	<1.0	<1.0
2-Chloroethylvinyl ether	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-tetrachloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0
Ethyl Benzene	<1.0	<1.0	<1.0	<1.0	<1.0

Results are expressed in micrograms of constituent per liter of sample (ppb).

F. Purgeable Organic Compounds (Method 624) (Continued)

Constituent	Sample and Designation SR9567-18 Sta. 17	SR9567-19 Sta. 18	SR9567-21 Sta. 20	SR9567-22 Sta. 21	SR9567-24 Sta. 23
Chloromethane	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene chloride	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon tetrachloride	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	<1.0	<1.0	<1.0	<1.0	<1.0
2-Chloroethylvinyl ether	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-tetrachloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0
Ethyl Benzene	<1.0	<1.0	<1.0	<1.0	<1.0

Results are expressed in micrograms of constituent per liter of sample (ppb).

F. Purgeable Organic Compounds (Method 624) (Continued)

Constituent	Sample and Designation SR9567-25 Sta. 24	SR9567-27 Sta. 26	SR9567-27 Duplicate	SR9567-28 Sta. 27	SR9567-30 Sta. 29
Chloromethane	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene chloride	<1.0	<1.0	<1.0	<1.0	6.8
1,1-Dichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon tetrachloride	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	<1.0	<1.0	<1.0	<1.0	<1.0
2-Chloroethylvinyl ether	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-tetrachloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0
Ethyl Benzene	<1.0	<1.0	<1.0	<1.0	<1.0

Results are expressed in micrograms of constituent per liter of sample (ppb).

F. Purgeable Organic Compounds (Method 624) (Continued)

Constituent	Sample and Designation SR9567-31 Sta. 30	SR9567-33 Sta. 32	SR9567-34 Sta. 33	SR9567-36 Sta. 35	SR9567-3 Sta. 36
Chloromethane	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene chloride	<1.0	1.5	<1.0	<1.0	1.2
1,1-Dichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon tetrachloride	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	<1.0	<1.0	<1.0	<1.0	<1.0
2-Chloroethylvinyl ether	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-tetrachloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0
Ethyl Benzene	<1.0	<1.0	<1.0	<1.0	<1.0

Results are expressed in micrograms of constituent per liter of sample (ppb).

F. Purgeable Organic Compounds (Method 624) (Continued)

Constituent	Sample and Designation SR9567-39 Sta. 38	SR9567-40 Sta. 39	SR9567-41 Sta. 40	SR9567-42 Sta. 41	SR9567-4 Sta. 42
Chloromethane	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene chloride	140	<1.0	1.0	1.3	<1.0
1,1-Dichloroethylene	10	<1.0	<1.0	<1.0	<1
1,1-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1
trans-1,2-Dichloroethylene	33	120	<1.0	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	57	60	<1.0	45	<1.0
Carbon tetrachloride	10	<1.0	<1.0	8.4	<1.0
Bromodichloromethane	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethylene	57	<1.0	<1.0	<1.0	<1.0
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	<1.0	<1.0	<1.0	<1.0	<1.0
2-Chloroethylvinyl ether	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-tetrachloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	2.1	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0
Ethyl Benzene	<1.0	<1.0	<1.0	<1.0	<1.0

Results are expressed in micrograms of constituent per liter of sample (ppb).

IV. Quality Assurance Data

A. Acid Extractable Organics

SR9567-42 plus Spike

Constituent	Amount of Spike, ppb	% Recovery
Phenol	50	61
2-Nitrophenol	50	11
2,6-Dinitro-o-cresol	50	120
2-Chlorophenol	50	28
2,4,6-Trichlorophenol	50	24
2,4-Dinitrophenol	50	78
4-Nitrophenol	50	20

B. Base/Neutral Extractable Organics

SR9567-42 plus Spike

Constituent	Amount of Spike, ppb	% Recovery
1,4-Dichlorobenzene	50	172
Bis (2-chloroisopropyl) ether	50	179
Nitrobenzene	50	105
Acenaphthylene	50	129
2,6-Dinitrotoluene	50	83
4-Bromophenylphenyl ether	50	90
Dibutylphthalate	50	89
Bis (2-ethylhexyl) phthalate	50	91
Benzo (B) Fluoranthene	50	80
3,3'-Dichlorobenzidene	50	61
Dimethylphthalate	50	89

C. Pesticidal Compounds and Polychlorinated Biphenyls

	SR9542 plus Spike*	
Constituent	Amount of Spike, ppm	% Recovery
Aldrin	1.4	107
alpha BHC	0.68	89
beta BHC	3.2	40
gamma BHC	0.72	111
Dieldrin	3.2	112
p,p'-DDE	3.3	118
p,p'-DDD	3.25	122
Endrin	3.3	94
Heptachlor	0.68	128
Heptachlor Epoxide	1.3	107
Polychlorinated Biphenyls, total as Arochlor 1254	0.055	84

* This spiked sample was analyzed simultaneously with the samples in this Test Report.

Stablex-Reutter Inc.

D. Purgeable Organic Compounds (Method 624 by GC/MS)

Constituent	Amount of Spike, ug	SR9567-2 plus Spike % Recovery	SR9567-10 plus Spike % Recovery	SR9567-2 plus Spi % Recove
Chloromethane	1.0	171	103	247
Bromomethane	1.0	95	94	120
Vinyl chloride	1.0	215	105	272
Chloroethane	1.0	103	90	124
Methylene chloride	1.0	107	99	102
1,1-Dichloroethylene	1.0	117	103	124
1,1-Dichloroethane	1.0	115	106	112
trans-1,2-Dichloroethylene	1.0	125	104	124
Chloroform	1.0	107	94	99
1,2-Dichloroethane	1.0	115	101	96
1,1,1-Trichloroethane	1.0	128	106	127
Carbon tetrachloride	1.0	118	102	122
Bromodichloromethane	1.0	115	105	101
1,2-Dichloropropane	1.0	98	102	97
trans-1,3-Dichloropropene	1.0	105	101	94
Trichloroethylene	1.0	121	100	108
Benzene	1.0	114	91	110
Dibromochloromethane	1.0	98	97	79
1,1,2-Trichloroethane	1.0	95	102	81
cis-1,3-Dichloropropene	1.0	102	95	87
2-Chloroethylvinyl ether	1.0	95	98	73
Bromoform	1.0	99	99	70
1,1,2,2-tetrachloroethane	1.0	98	99	79
Tetrachloroethylene	1.0	100	105	109
Toluene	1.0	114	100	120
Chlorobenzene	1.0	105	102	106
Ethyl Benzene	1.0	115	102	121

Should you have any questions concerning this analysis, please don't hesitate to contact me.

Respectfully submitted,

AR100397

STABLEX-REUTTER, INC.

Ian C. Lambert
Laboratory Manager

TCT/AK

APPENDIX I

EPA ADMINISTRATIVE ORDER

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

In the Matter of Westinghouse Electric Corporation, Respondent PROCEEDING UNDER SECTION 106(a) OF THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT OF 1980 (42 U.S.C. §9606(a))	DOCKET NUMBER III-84-10-DC

ORDER

The following Order is issued pursuant to the authority vested in the Administrator of the United States Environmental Protection Agency (EPA) by Section 106(a) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 ("CERCLA"), 42 U.S.C. § 9606(a). The Administrator has redelegated this authority to the Regional Administrator, EPA Region III. Notice of the Issuance of this Order has been given to the Commonwealth of Pennsylvania.

FINDINGS

1. Westinghouse Electric Corporation ("Westinghouse"), a Delaware Corporation registered to do business in Pennsylvania, is engaged in the business of manufacturing elevators. Westinghouse is a "person" as defined by Section 101(21) of CERCLA, 42 U.S.C.

2. Westinghouse since 1968 has owned and operated an elevator manufacturing plant ("the Plant") in Gettysburg, Pennsylvania, the location of which is Route 34, Gettysburg, Pennsylvania, 17325.

3. Documents supplied to EPA by Westinghouse in response to a request made in accordance with Section 104(e) of CERCLA, 42 U.S.C. § 9604(e), indicate that during the period from 1969 to 1980 Westinghouse arranged with Frederick Shealer ("Shealer") for the transportation for disposal of all hazardous wastes generated by the Plant during that period. In accordance with this arrangement Shealer pumped out degreaser and phosphatizer tanks and transported the contents, together with drums of liquid and sludge wastes for disposal.

4. Documents supplied to EPA by Westinghouse in response to a request made in accordance with Section 104(e) of CERCLA, 42 U.S.C. § 9604(e), indicate that materials used by Westinghouse at the Plant include, but are not limited to, the following chemical substances: 1) trichloroethylene (TCE); 2) 1,1,1-trichloroethane (1,1,1-TCE); 3) chloroethane VG; 4) chloroethene VG; and 5) xylene.

5. Westinghouse has conducted analyses of the wastes generated by the Plant which indicate that these wastes include paints, paint solids, paint solvents, other industrial solvents and oils. Specifically, these analyses indicate the presence of the following substances: 1,1,1-TCE, phenol, toluene, ethyl-benzene, cadmium, chromium, lead, selenium, silver, mercury, copper, nickel, and zinc. These analyses indicate that much of the waste produced by the Plant can be, and Westinghouse has itself classified much of such waste as, hazardous waste for the purposes of the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. § 6901. The analyses also indicated that these wastes have a flash point between 25°C and 50°C.

6. Shealer has stated that all materials transferred to him by Westinghouse for transportation for disposal were disposed of at the following locations:

   a) A property owned by Shealer located at 510 Hunterstown Road, Adams County, PA;

   b) A lagoon on a property owned by Shealer located across Hunterstown Road from number 510, Hunterstown Road, Adams County, PA (the "lagoon");

   c) A property owned by Shealer on Route 394 near Culp Road in Adams County, PA, occupied by his son, Thomas Shealer; and

   d) A portion of a property owned by Mr. William Culp located on Culp Road, Adams County, PA (the "Culp property").

The location of these sites is shown in Appendix A.

7. On January 12-13, 1984, authorized representatives of EPA and the Pennsylvania Department of Environmental Resources (PADER) conducted inspections and sampling and analytical activities at the disposal sites described in Paragraph 6.

8. During these inspections representatives of EPA and PADER observed large numbers of drums on the portion of the Culp property shown in Appendix B. This portion shall herein be referred to as the "upper" portion. Many of these drums were not secure and in various stages of deterioration. Many had deteriorated to the point where the contents had leaked or were leaking onto the soil. Extensive soil contamination was observed in the vicinity of the drums.

9. Analysis of samples of drums and soils in the vicinity of the drums at the upper portion of the Culp property revealed the substances listed, at the concentrations indicated, in Appendix C. These substances include the following substances used by, or generated as waste by, Westinghouse during the period between 1969 and 1980, as described in Paragraphs 4 and 5: 1,1,1-TCE, toluene, ethyl-benzene, phenol, cadmium, chromium, lead, selenium, and zinc.

10. During the inspections described in Paragraph 7 the lagoon was observed to contain sludges and liquid by-products. The lagoon discharges into a adjacent stream as indicated in Appendix D. Analysis of samples of the lagoon and sediments of the adjacent stream revealed the presence of the substances listed, at the concentrations indicated, in Appendix C. These substances include the following substances used by, or generated as waste by, Westinghouse during the period from 1969 until 1980, as described in Paragraphs 4 and 5: TCE, phenol, cadmium, chromium, lead, selenium, silver, mercury, zinc, copper, and nickel.

11. Analysis of samples of the lagoon and the drums in the upper portion of the Culp property revealed that the contents had flash points of between 28°C and 30°C.

12. On December 14 and 23, 1983 authorized representatives of PADER sampled drinking water wells used by residents in the vicinity the lagoon located across from the Shealer residence at 510 Hunterstown Road. Analysis of these samples revealed the presence of the indicated organic compounds at the locations and concentrations listed below:

Concentration Found (ppb)

Location	TCE	1,1,1-TCE	1,1-dichloroethylene	1,2-dichloroethylene
William Vaughn	<1	<1	<1	
Richard Phiel	1.2	1.7	<1	
Vince Kennedy		2.5	2.1	
Don Woddell	66	82	26	9.7

The Shealer property at 510 Hunterstown Road is the only known source of these contaminants in the area of these households.

13. The substances listed in Paragraphs 4, 5, 9, 10 and 12 are hazardous substances as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14). TCE and 1,1-dichloroethylene are known animal and suspected human carcinogens. 1,1,1-TCE and 1,2-dichloroethylene are known to affect the central nervous system of humans.

14. Wastes having a flash point below 60°C are defined by 40 C.F.R. § 261.21 and Section 3001 of RCRA, 42 U.S.C. § 6921, to be hazardous wastes for the purposes of RCRA. Section 101(14) of CERCLA defines hazardous substances to include any wastes having the characteristics of hazardous wastes as identified under Section 3001 of RCRA.

15. The upper portion of the Culp property as shown in Appendix B and the lagoon as shown in Appendices A and D are facilities as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(a).

16. Releases of hazardous substances from the upper portion of the Culp property have occurred, are occurring and threaten to occur as a result of the deteriorating condition of the drums, leaking of the contents of the drums onto the soil, leaching of such substances through the soil and into the groundwater, and the possible ignition and explosion of such substances.

17. Releases of hazardous substances from the lagoon located on the property owned by Shealer described in Paragraph 6 have occurred, are occurring and threaten to occur as a result of the dumping of such substances into the lagoon, their leaching through the underlying soil and their discharge into the adjacent stream and groundwater and the ignition and explosion of such substances, due to their low flash point.

18. An imminent and substantial endangerment to the public health or welfare and the environment may exist because of the release of hazardous substances from both the upper portion of the Culp property, as described in Paragraph 16, and the lagoon located on property owned by Shealer, as described in Paragraph 17.

19. In order to protect the public health, welfare and the environment, it is necessary that actions be taken to respond to and abate the endangerment caused by the release and threatened release of hazardous substances from the upper portion of the Culp property and the lagoon located on property owned by Shealer as described in Paragraph 7, above.

DETERMINATION

20. Based on the above Findings, the Regional Administrator, Region III, has determined that there may be an imminent and substantial endangerment to the public health or welfare or the environment due to the release and threatened release of hazardous substances from the upper portion of the Culp property and the lagoon located on property owned by Frederick Shealer, both of which are facilities located near Gettysburg in Adams County, P

Pennsylvania, at which hazardous substances owned by the Westinghouse Electric Corporation were disposed by Frederick Shealer. The transportation for disposal of such hazardous substances by Frederick Shealer was arranged for by Westinghouse. The Regional Administrator has determined that the actions ordered below are necessary to protect the public health and welfare and the environment.

ORDER

21. In accordance with Section 106(a) of CERCLA, 42 U.S.C. §9606(a), Respondent, Westinghouse is hereby ordered to perform the following actions by the dates specified:

(a) Within three days of the effective date of this Order, Respondent shall meet with the Federal On-Scene Coordinator to discuss the measures which must be undertaken to comply with this Order, and Respondent's willingness to undertake them.

(b) Within seven days of the effective date of this Order, Respondent shall commence provision of sufficient temporary potable water to all households for which the EPA On-Scene Coordinator makes a determination that the present supply of water is not fit for domestic use due to contamination which is attributable to wastes from the upper portion of the Culp property as shown in Appendix A or the lagoon shown in Appendices A and D. The households to be provided with water shall include, but not be limited to, the Kennedy and Woddell households listed in paragraph 12 above, which shall be considered to be hereby so designated upon the effective date of

Order. Westinghouse shall also supply sufficient potable water to any additional households for which the EPA On-Scene Coordinator makes such a determination in the future. Provision of potable water supplies shall continue until water in the wells ordinarily used by these households is restored to a condition determined by EPA to be acceptable or a permanent alternative source of sufficient potable water is provided. Potable water can be supplied either in the form of bottled water or water adequately filtered by activated carbon filtraton units or both. If filtration units are provided, Westinghouse shall sample and analyze influent and effluent at sufficient intervals, as determined by EPA and manufacturers recommendations, to insure that the filter design and operation are performing satisfactorily.

(c) Within seven days of the effective date of this Order, Respondent shall remove all drums containing hazardous substances and soil contaminated with hazardous substances in the vicinity of such drums, located on the upper portions of the Culp property, as indicated in Appendix B, as directed by the Federal On-Scene Coordinator, and dispose of the contents of such drums and such soil in accordance with all applicable statutes and regulations.

(d) Within fourteen days of the effective date of this Order, Respondent shall remove all sludges and liquid materials from the lagoon located on property owned by Shealer, as indicated in Appendix D, and dispose of such materials in accordance with all applicable statutes and regulations.

22. EPA will arrange for access to the properties owned by William Culp and Frederick Shealer necessary for the performance of the actions ordered herein.

23. Notwithstanding any other provisions set forth herein, EPA reserves the right to take appropriate enforcement action, including the right to seek monetary penalties, for any violation of law or this Order, including, but not limited to, bringing a civil action in accordance with Section 106(a) and 107(a) of CERCLA, 42 U.S.C. §§ 9606(a) and 9607(a). EPA also reserves the right, should Respondent not comply with this Order, to perform the actions required by Paragraph 21 above in accordance with Section 104 of CERCLA, 42 U.S.C. § 9604.

24. Respondent's obligation to perform the actions required by Paragraph 21 above shall continue until such time as the Federal On-Scene Coordinator issues a written determination to Respondent that such actions have been satisfactorily completed.

25. Neither the United States Government nor any agency thereof shall be liable for any injuries or damages to persons or property resulting from acts or omissions of Respondent, its officers, directors, employees, agents, servants, receivers, trustees, successors, or assignees in carrying out activities pursuant to this Order, nor shall the United States Government or any agency thereof be held out as a party to any contract entered into by Respondent in carrying out activities pursuant to this Order.

26. This Order shall apply to and be binding upon Respondent and Respondent's officers, directors, employees, agents, servants, receivers, trustees, successors and assignees, and upon all persons, including but not limited to firms, corporations, subsidiaries, contractors and consultants, acting on behalf of Respondent.

27. This Order shall become effective five (5) business days after signature by the Regional Administrator, Region III.

PENALTIES FOR NON-COMPLIANCE

28. Respondents are advised that willful violation or failure or refusal to comply with this Order, or any portion thereof, may subject the Respondent to a civil penalty of not more than $5,000 for each day in which such violation occurs or such failure to comply continues in accordance with Section 106(b) of CERCLA, 42 U.S.C. § 9606(b). Failure to comply with this Order, or any portion thereof, without sufficient cause, may also subject Respondent to liability for punitive damages in an amount up to three times the amount of any costs incurred by the Fund, as defined in Section 101(11) of CERCLA, 42 U.S.C. § 9601(11), as a result of such failure to take proper action, in accordance with Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3).

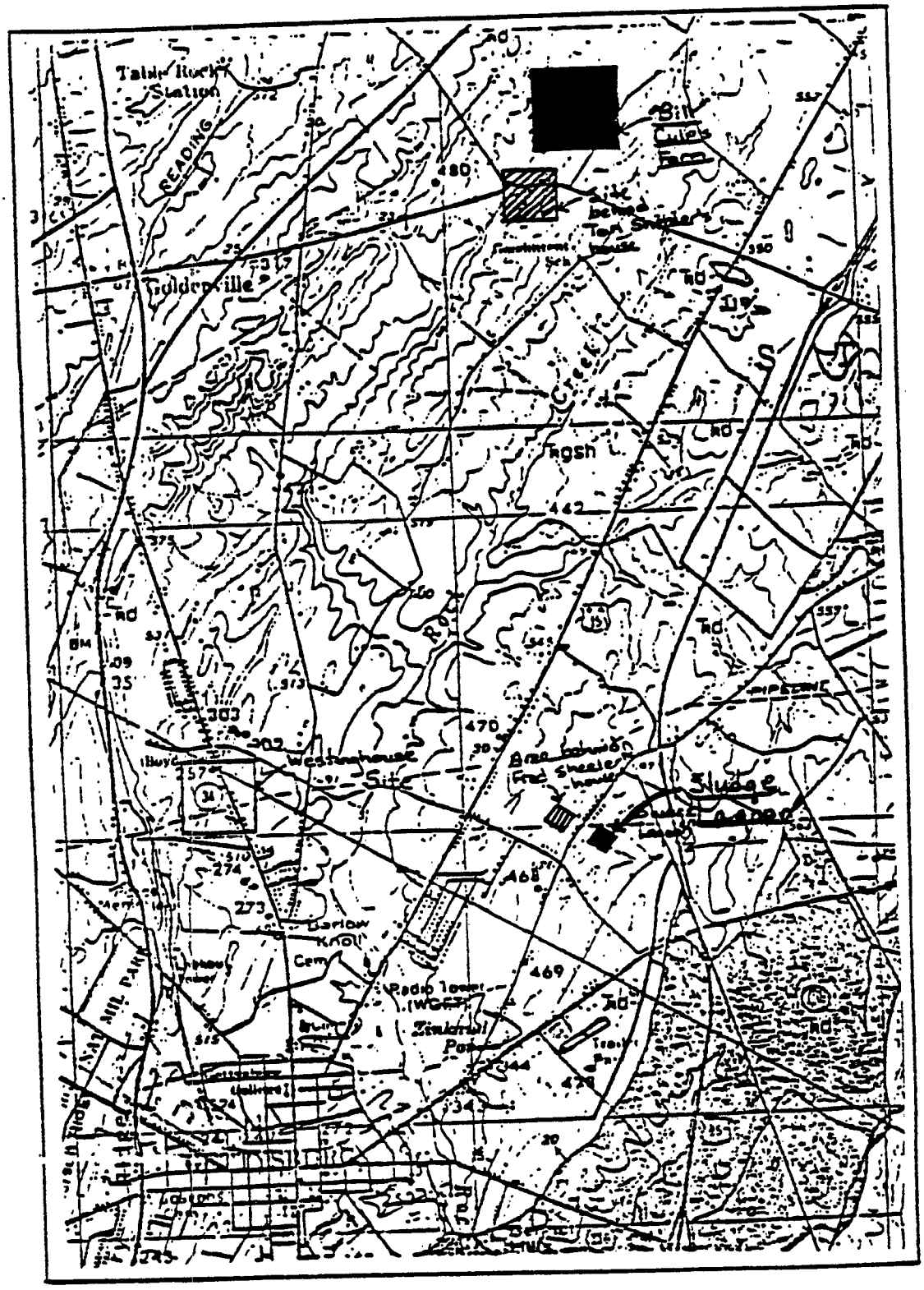
OPPORTUNITY TO CONFER

29. The Respondent may request within two (2) business days after receipt of this Order a conference to be held within four (4) business days of the date of issuance of this Order to discuss the Order, including its applicability, the factual determinations upon which the Order is based, the appropriateness of any action which you are hereby ordered to take, or any other relevant matter. If you request a conference you may appear in person and you may be represented by an attorney or other representatives for the purpose of presenting any objections, defenses or contention which you may have regarding this Order. If you desire such a conference please contact Kermit Rader, Esquire, Office of Regional Counsel, US Environmental Protection Agency, Region III, Curtis Building, 6th & Walnut Streets, Philadelphia, Pennsylvania 19106, (215) 597-0376, within the time set forth above for requesting a conference.

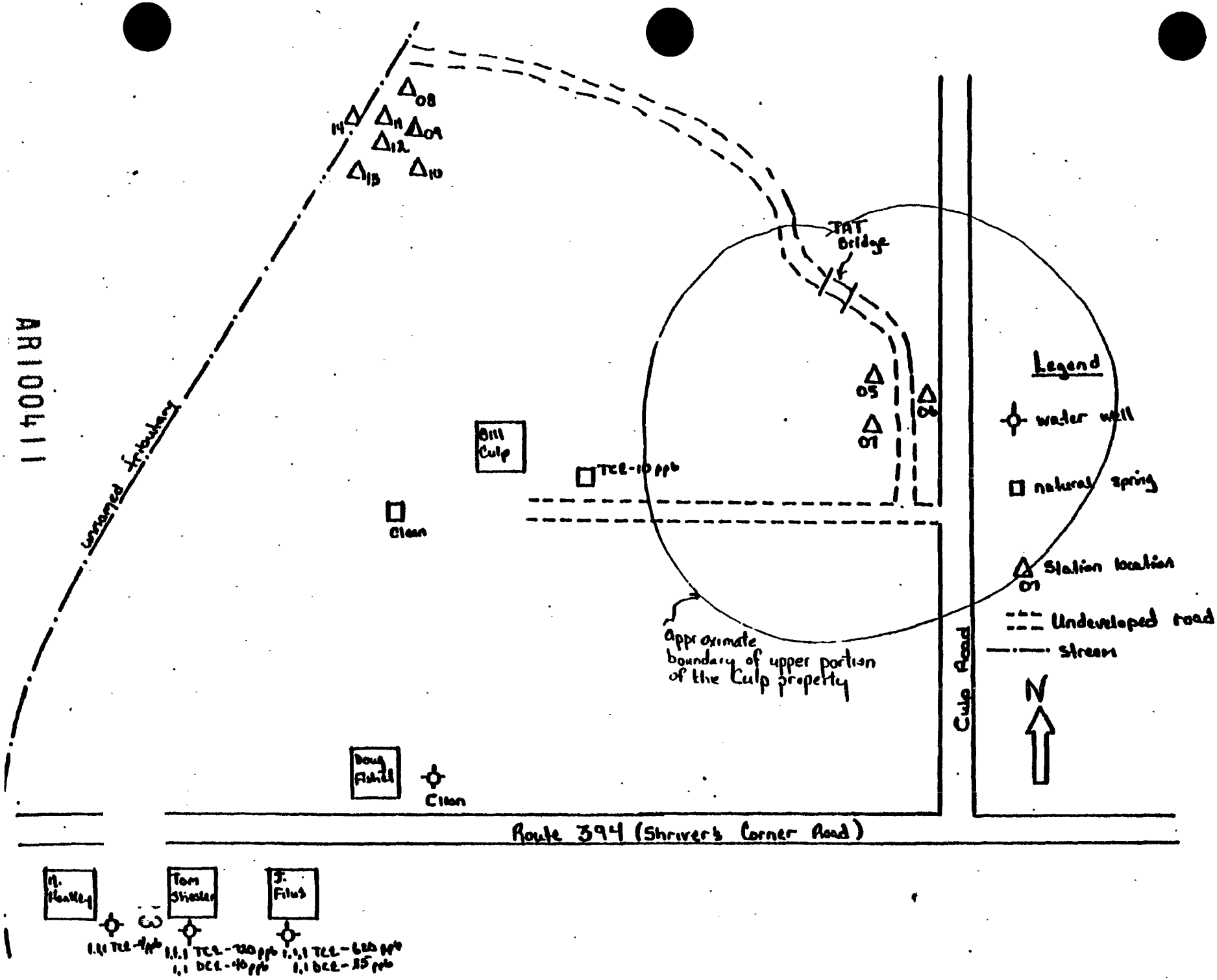
Dated, and entered as of this 22nd day of March, 1984.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

by: _____
THOMAS P. EICHLER
Regional Administrator
EPA Region III



APPENDIX A - Location of the William Culp and Shealer lagoon sites.



APPENDIX B - Site map of the William Culp property

Explanation of the sample locations from the Westinghouse (Gettysburg) sites taken on January 12, 1984.

STATION NO.	STATION DESCRIPTION	STATION LOCATION
01	Side of sludge lagoon	Across from Fred Shealer's 510 Hunterstown Rd. residence in the sludge lagoon.
02	12" to 18" into the sludge lagoon	Across from Fred Shealer's 510 Hunterstown Rd. residence in the sludge lagoon.
03	Sediment from stream below sludge pile	Across from Fred Shealer's 510 Hunterstown Rd. residence in the sludge lagoon.
04	Surface of sludge lagoon	Across from Fred Shealer's 510 Hunterstown Rd. residence in the sludge lagoon.
05	Drum No. 1 – black, oily liquid	Drum from upper section of Fred Culp's residence off Rt. 394
06	Drum No. 2 – green solvent liquid	Drum from near fence on upper section of Fred Culp's property on Rt. 394

Results of the Resource Conservation and Recovery Act (RCRA) Analysis concentrations in mg/l)

Contaminant	Max. RCRA Conc.(ppm)	Sta 01	Sta 02	Sta 03	Sta 04	Sta 05	Sta 06
Arsenic	5.0	<0.002	<0.002	<0.002	<0.002	<0.002	.03
Barium	100.00	<0.1	<0.1	<0.1	<0.1	.3	.2
Cadmium	1.0	<0.01	<0.01	.08	<0.01	<0.01	<0.01
Chromium	5.0	<0.01	.2	<0.01	<0.01	<0.01	3.69
Lead	5.0	2.42	4.08	<0.05	1.0	<0.05	8.14
Mercury	0.2	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	†
Selenium	1.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.00
Silver	5.0	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Endrin	0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Lindane	0.4	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00
Methoxychlor	10.0	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00
Toxaphere	0.5	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2,4-D	10.0	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00
2,4,5-TP(Silvex)	1.0	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0
PCB	50.0	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
pH	<2.0 >12.5	5.6	5.1	7.2	5.7	3.4	3.1
Flash Point	<60°C	>90°C	57°C*	56°C*	48°C*	28°C*	30°C*
Corrosiveness							
Reactivity(HCN)		<5mg/l	<5mg/l	<5mg/l	<5mg/l	<5mg/l	<5mg
Reactivity(H_2S)		<5mg/l	<5mg/l	<5mg/l	<5mg/l	<5mg/l	<5

* Fails the RCRA test

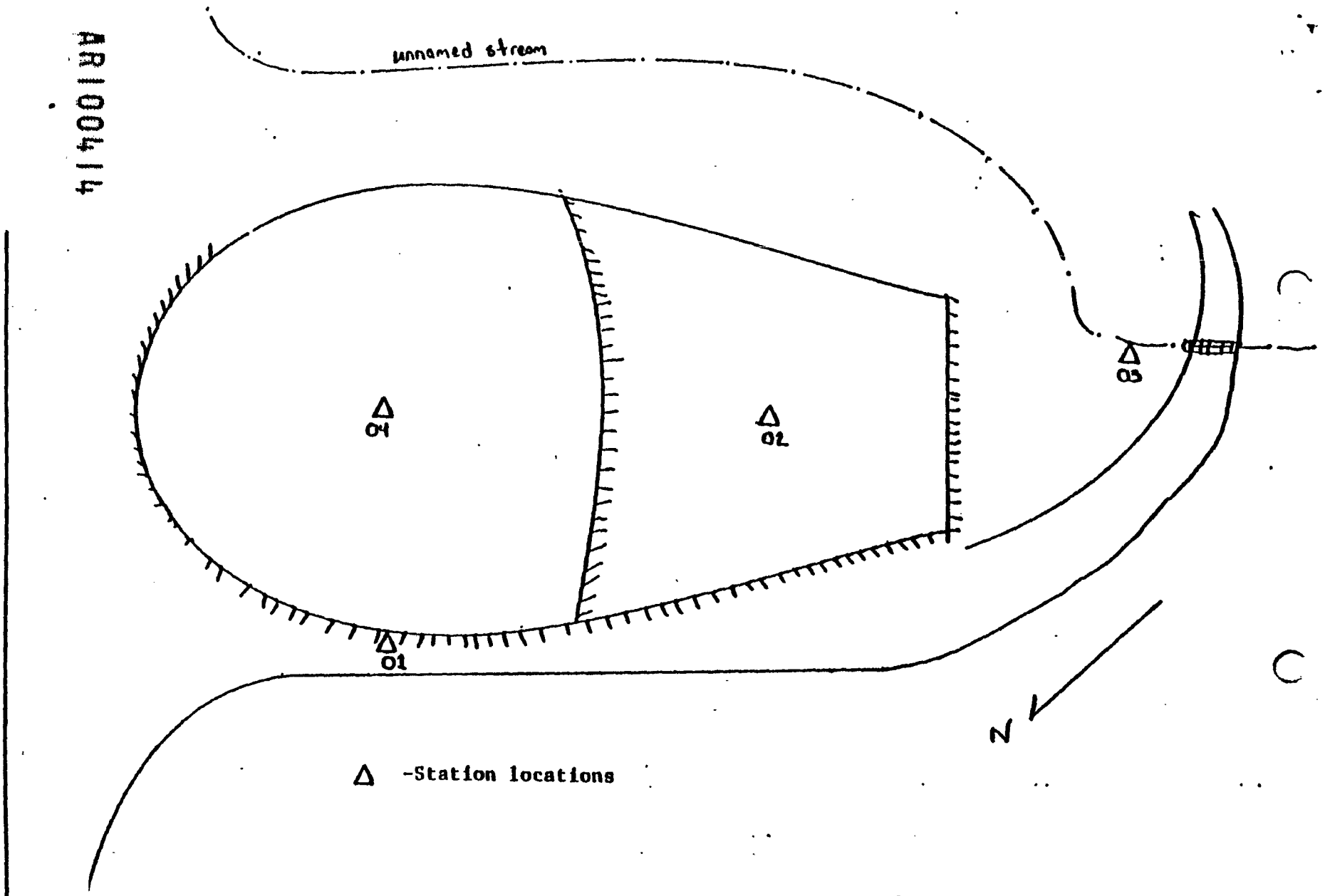
† Could not analyze due to sample matrix

Results of the Organic compounds from priority pollutant Scan, Gettysburg Data (all results in ppm or mg/kg

Sta. No.	Station Description	1,2 dichloroethane	1,4 dichlorobenzene	d-n-butylphthalate	4,4, ddt	trichlorofluoromethane	naphthalene	acenapthene	toulene	ethylbenzene	1,1 dichloroethane	1,1,1 trichloroethane	chloroethane	trichloroethane	benzene
02	12 to 18" into sludge pile.	N.D.	91.0	10.0	34.0	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
03	Sediment from stream downstream of sludge pile	N.D.	39.0	30.0	16.0	1.0	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	1.0	N.D.
05	Drum No. 1 black oily liquid	N.D.	N.D.	N.D.	N.D.	N.D.	19,000	217	700	1600	N.D.	N.D.	N.D.	N.D.	N.D.
06	Drum No. 2 green solv. liquid	N.D.	N.D.	N.D.	N.D.	N.D.	30,000	N.D.	760	2200	220	2400	N.D.	N.D.	N.D.

Results of the Cyanide, Phenol, and Metal Analysis from Priority Pollutant Scan, Gettysburg, PA (all results mg/kg or ppm)

Station No.	Station Description	Cyanide	Phenol	Antimony	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
02	12 to 18" into sludge pile.	5.5	48	5.8	9.1	---	.5	168	1630	12,600	.2	7.1	2.0	1.5	---	284
03	Sediment from stream downstream of sludge pile	.86	2.6	23.2	2.9	---	84,400	.8	206	5.1	---	1.4	4.4	---	---	531000
05	Drum No. 1 black oily liquid	1.7	5.1	.2	---	---	.9	2.7	1.1	1.1	---	---	.8	---	---	216
06	Drum No. 2 green solv. liquid	.67	11.0	.13	.031	---	---	1.69	.14	0.14	---	---	---	---	---	.18



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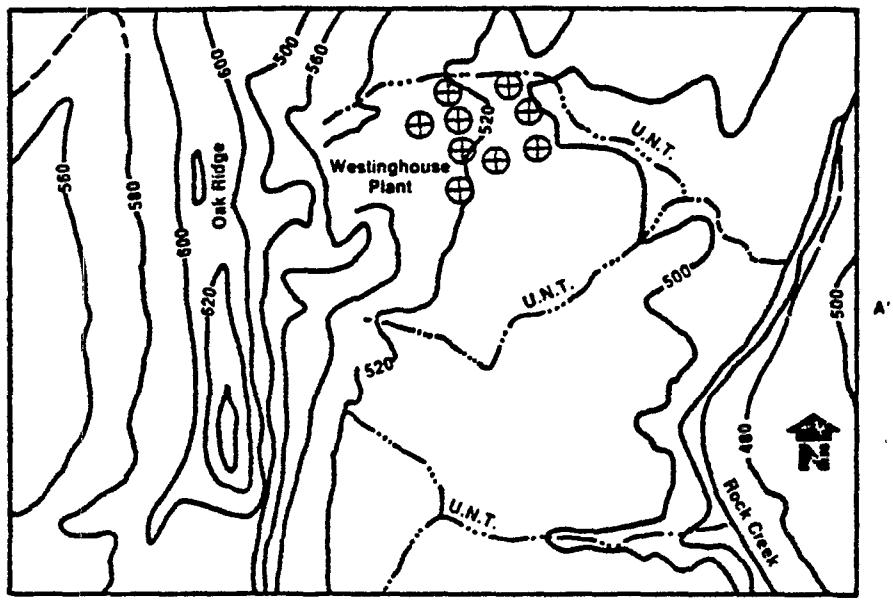
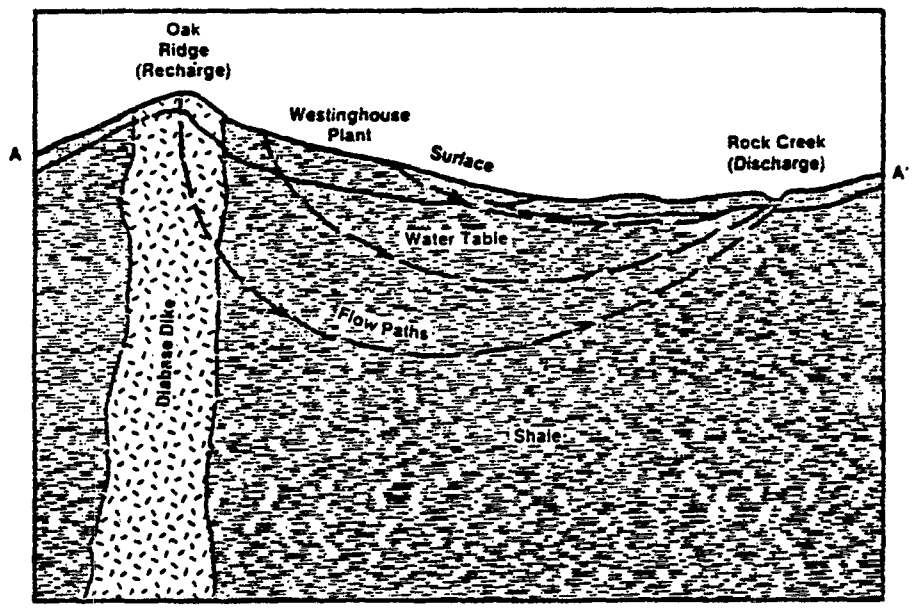
APPENDIX J

HYDROGEOLOGIC ASSESSMENT



Topographic map outlines the contaminated area at Gettysburg.



The cross-section diagram illustrates the flow patterns in the recharge area.

Figure 2. CERCLA - removal activities, Westinghouse Gettysburg sites. *Hydrogeologic assessment.*

Hydrogeologic Assessment of the Groundwater Contamination at the Westinghouse Elevator.

Groundwater contamination was discovered in August of 1983 when a local resident requested that the Pennsylvania Department of Environmental Resources (PADER) sample a stream adjacent to his property. The resident wanted to use water from the stream to irrigate his garden; however, in the past he had noticed discoloration of the water and sediments in the stream. The analysis of the water revealed the presence of two species of chlorinated organic solvents. These results prompted PADER to conduct a comprehensive well sampling program in the surrounding houses. The results of this study showed that 28 wells contained varied amounts of five different chlorinated organic compounds. The purpose of this is to examine the hydrogeologic characteristics of the site and use them to define, or limit, the possible sources of contamination.

Before a source of the groundwater contamination can be addressed, it is first necessary to review the basic principles of groundwater flow. Groundwater is directed from a recharge area to a discharge area. Recharge areas are located in topographic high places; discharge areas are in topographic low areas. In recharge areas there is often a deep, unsaturated zone between the water table and the land surface. Conversely, the water table is found either close to or at the land surface in discharge areas, and will manifest themselves as surface seeps or streams. Lastly, in areas with moderate to high levels of precipitation such as Gettysburg, the water table usually follows the same general contours of the surface topography.

The topographic map presented in Figure 2 outlines the area with the contaminated groundwater wells. This area is situated in a hydrologic subbasin that is drained by Rock Creek, hence Rock Creek is the local discharge area. Oak Ridge is the local topographic high, and thus represents the recharge area for the subbasin.

Oak Ridge is also the groundwater divide which separates the subbasin drained by Rock Creek and the adjacent subbasin trained by Marsh Creek. The topographic map also shows that the site area is bounded to the north and south by unnamed tributaries (U.N.T.) The three surface streams and the position of Oak Ridge provide natural boundaries of this small drainage basin. These boundaries limit the area of investigation and confine the contamination plume from further migration.

As previously discussed, groundwater flows down gradient from a recharge area to a discharge area. After examination of the height of the water table in the existing domestic and non-domestic wells, it was concluded that the water table mimics the topography and the dominant flow path is from Oak Ridge to Rock Creek. The cross section diagram shown in Figure 2 indicates the position of the water table relative to the topography. The diagram also illustrates the projected flow paths of the groundwater in the study area.

The character of the aquifer is a poorly bedded red shale with interbeds of a medium-grained red sandstone. This lithology permits down gradient flow patterns along bedding and joint planes and through the porous sandstone interbeds.

Since groundwater does not flow up gradient, the source of contamination is limited to the area bounded by the contamination wells to the east, Oak Ridge to the west, and the unnamed tributaries to the north and south.

The Westinghouse Elevetor Plant is within these boundaries, thus it is a possible source of contamination. Witness have stated that Westinghouse has had a history of widespread misuse of chlorinated organic solvents during equipment cleaning behind and adjacent to the building. Furthermore, PADER discovered that Westinghouse removed contaminated soil from these areas and sent it to a hazardous materials land fill in New York State.

After reviewing all the information provided by PADER and studying the hydrogeological characteristics of the site, it was concluded that the Westinghouse Plant is the most probable source of the chlorinated organic solvents in the wells down gradient of the plant. At this time there appears to be no other likely source of contaminants in the vicinity of the affected domestic and non-domestic wells.