United States
Environmental Protection
Agency

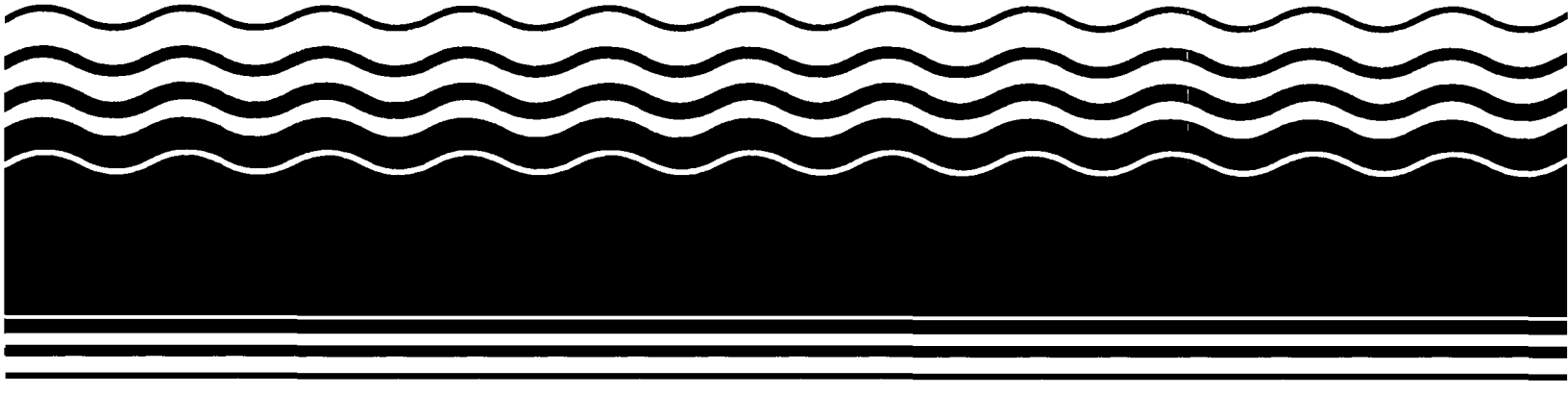
Office of
Emergency and
Remedial Response

EPA/ROD/R02-93/198
March 1993
PB94-963825

EPA

Superfund Record of Decision:

Robintech/National Pipe, NY



50272-101

REPORT DOCUMENTATION PAGE	1. REPORT NO. EPA/ROD/R02-93/198	2.	3. Recipient's Accession No.

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SUPERFUND RECORD OF DECISION
Robintech/National Pipe, NY
Second Remedial Action - Final

5. Report Date
03/30/93

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7. Author(s)

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9. Performing Organization Name and Address

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12. Sponsoring Organization Name and Address
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

13. Type of Report & Period Covered
800/800

14.

15. Supplementary Notes
PB94-963825

16. Abstract (Limit: 200 words)

The 12.7-acre Robintech/National Pipe site is a light industrial facility located in Vestal, Broome County, New York. Land use in the area is predominantly industrial, residential, and recreational with an estimated 5,350 people living within a one mile radius of the site. The facility is situated in a regionally important industrial center adjacent to Binghampton, NY in the Susquehanna River basin. The Susquehanna River is located one-half mile north and west of the site; however, the site does not contain or impact any ecologically significant areas. The site overlies two aquifers that are used as water supplies, however there are no private water wells in the vicinity of the site. In 1966, Robintech Inc., constructed the main building that currently exists onsite. The first floor of the building was used to manufacture aircraft engine mounts and automobile accelerator cables, while the second floor housed an assembly area for electronic cable. In 1970, the first floor activities were replaced with polyvinyl chloride (PVC) pipe extrusion operations. Since that time, and until 1991, successive owners of the site have used the facility for PVC pipe extrusion operations. Prior to 1983, municipal water was used as cooling water. After 1983, when 10 production wells were installed onsite, ground water was used as cooling water during the extrusion operations. Wastewater from the process was released onsite under

(See Attached Page)

17. Document Analysis a. Descriptors
Record of Decision - Robintech/National Pipe, NY
Second Remedial Action - Final
Contaminated Medium: None
Key Contaminants: None

b. Identifiers/Open-Ended Terms

c. COSATI Field/Group

18. Availability Statement	19. Security Class (This Report) None	21. No. of Pages 132
	20. Security Class (This Page) None	22. Price

Abstract (Continued)

a discharge permit issued by the State. In 1984, the State detected organic constituents at levels above permitted standards in a wastewater effluent sample. Further investigation indicated that onsite ground water used in the extrusion process was the source of the contamination in the effluent. In 1987, EPA required a detailed site investigation, which confirmed the presence of organic contaminants in ground water and indicated the presence of lead at levels above Federal cleanup standards in soil and sediment. However, because of inconsistencies in the data associated with lead levels in soil and sediment, the site was separated into two OUs. A 1992 ROD addressed the ground water, surface water, and air, as OU1. This ROD addresses the soil and sediment, as OU2. Soil and sediment sampling conducted by EPA prior to 1987, as well as confirmatory sampling conducted after the detailed site investigation, indicated that onsite levels of lead were not above Federal cleanup standards, and that the data set containing the elevated levels of lead was erroneous. Based on the results of the confirmatory sampling and the subsequent evaluation of the potential threats to human health and the environment, previous activities at the site have not impacted onsite soil or sediment; therefore, there are no contaminants of concern affecting this site.

The selected remedial action for this site is no action. EPA has determined that the levels of lead at the site are below the Federal cleanup level of 500 mg/kg and the potential human health risk for exposure to soil and sediment are within EPA's acceptable limits.

PERFORMANCE STANDARDS OR GOALS:

Not applicable.

ROD FACT SHEET

SITE

Name:	Robintech, Operable Unit 2
Location/State:	Vestal, Broome Co., New York
EPA Region:	II
HRS Score (date):	30.76 (6/86)
NPL Rank (date):	Not Applicable

ROD for OU-2

Date Signed:	March 30, 1993

Selected Remedy for OU-2

Soil and Sediment:	No Action
Capital Cost:	N/A
O & M:	N/A
Present Worth:	N/A

LEAD

Enforcement, PRP Lead
Primary Contact (phone): Mark Granger (212-264-9588)
Secondary Contact (phone): Melvin Hauptman (212-264-7681)

WASTE (OU-2)

Type:	Lead (Suspected).
Medium:	Soil and Sediments.
Origin:	Unknown, suspected erroneous data: of 200 samples collected to verify elevated concentrations none of Site-related data was elevated

RECORD OF DECISION

ROBINTECH, INC./NATIONAL PIPE CO. SITE
OPERABLE UNIT 2
TOWN OF VESTAL
BROOME COUNTY, NEW YORK

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II

NEW YORK

DECLARATION FOR THE RECORD OF DECISION

Site Name and Location

Robintech, Inc./National Pipe Co. Site, Town of Vestal, Broome County, New York.

Statement of Basis and Purpose

This decision document presents the selected remedial action for the Robintech, Inc./National Pipe Co. Site (hereinafter, the "Site" or the "Robintech Site"), Operable Unit Two (OU-2), located in the Town of Vestal, Broome County, New York, which was chosen in accordance with the requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. §§ 9601-9675, as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300. This decision document explains the factual and legal basis for selecting the no action remedy for OU-2 of the Site.

The New York State Department of Environmental Conservation ("NYSDEC") concurs with the selected no action remedy. A letter of concurrence from NYSDEC is attached as Appendix III to this document.

The information supporting this no action decision is contained in the Administrative Record file for the Site. The Administrative Record file index is attached as Appendix V.

Description of the Selected Remedy: No Action

The United States Environmental Protection Agency (EPA) has determined that no action is necessary for the suspected lead contamination of Site-related soil and sediment at the Robintech Site. EPA bases this decision, in part, on the Remedial Investigation (RI) report dated September 1991; Appendices A and D of EPA's 1987 RI Work Plan; as well as the EPA reports entitled "Skate Estate Soil Sampling Investigation" dated March 1992; "Report on Suspected Lead Contamination in Surface Soils, Subsurface Soils, and Sediments" dated December 1992; and "Soil Sampling Investigation, Robintech Site" dated December 1992. Confirmatory sampling of the suspected Site-related lead contamination of soil and sediment was conducted in both February and September 1992. The concentrations of lead in Site-related soil and sediment were found to be acceptable for protection of human health and the environment. Thus, "No Action" is the selected remedy for the second operable unit for the Site.

Declaration Statement

In accordance with the requirements of CERCLA, as amended, and the NCP, EPA, in consultation with the State of New York, has determined that the suspected lead contamination of soil and sediment at the Robintech, Inc./National Pipe Co. Site does not pose a significant threat to human health or the environment and, therefore, remediation of the Site-related soil and sediment is not necessary.

The alternative selected for the first operable unit of the Site will result in contaminants remaining on-site above health based limits until the contaminant levels in the aquifer are reduced below MCLs. CERCLA requires that this action be reviewed at least once every five years after commencement of the remedial action, and every five years thereafter, to ensure that the remedy continues to provide adequate protection of human health and the environment.

William J. Muszynski, P.E.
Acting Regional Administrator

March 30, 1993
Date

TABLE OF CONTENTS

ATTACHMENTS

I. SITE NAME, LOCATION AND DESCRIPTION

The Robintech Inc./National Pipe Co. Site (hereinafter, the "Site" or the "Robintech Site") is located at 3421 Old Vestal Road in the Town of Vestal, Broome County, New York (see Figure 1). Vestal, with a population of 27,238 (U.S. Census, 1980), is located within a regionally important industrial center adjacent to Binghamton, N.Y. in the Susquehanna River basin. An estimated 5,350 people live within a one mile radius of the Site. A Site location map is included in Appendix I as Figure 1.

The Site occupies 12.7 acres, and is bordered by Commerce Road and several warehouses and light industrial buildings to the east; Old Vestal Road and several residences to the south; an amusement facility (known as the Skate Estate) and fuel storage tanks (Mobil Tank Farm) to the west; and by Conrail railroad tracks and Parkway Vending Inc. to the north. The Site is located approximately half-way down the westerly face of a hill that slopes gently toward the Susquehanna River. Consistent with this, EPA field observations and examination of topographic contours indicate that the superficial (overland) flow of surface water across the Site is to the west, controlled by a series of conduits and drainage ditches which direct the flow to the river, located approximately a half mile to the north and west. A Site layout map is included in Appendix I as Figure 2.

The area has two distinct aquifers which are sources of water supply. The upper aquifer is comprised of the overburden material above bedrock. This material consists mainly of gray and brown till which becomes harder with depth. In addition, fill material associated with extensive grading on-site for parking spaces and storage ranges from 0-6 feet. Groundwater was encountered within the upper aquifer unit 6-20 feet below the ground surface. The lower aquifer is shale bedrock with a weathered zone 7-10 feet thick. The primary permeability of this material is low but the secondary permeability is much higher. Fractures along the horizontal bedding planes and vertical joints in the shale allow for groundwater flow. Groundwater was encountered in this zone 10-60 feet below the ground surface.

Groundwater flow in the study area is primarily toward the west, with minor components trending to the northwest and southwest, and is recharged from rainfall. There are no private drinking water wells in the vicinity of the Site. All residents are supplied with drinking water by the Vestal public water supply system.

The area where the Site is located is not known to contain any ecologically significant habitat, wetlands, agricultural land, or historic or landmark sites which are impacted by the Site.

II. SITE HISTORY AND ENFORCEMENT ACTIVITIES

In 1966, Robinson Technical Products, Inc. constructed the main building that currently exists at the Site. The first floor of the building was used for the manufacture of aircraft engine mounts and automobile accelerator control cables. The second floor was used for the assembly of electronic cable. In 1970, Robinson Technical Products was renamed Robintech, Inc., and first floor production activities were replaced with PVC pipe extrusion operations. Between 1966 and 1979 the present pipe staging area was paved in four successive stages to the north. The warehouse was constructed in 1974. Ten production wells were installed on-site in 1983 to supply cooling water for the PVC pipe extrusion process. Pipe production had previously relied on municipal water for this purpose.

The Site was bought by Buffton Corporation, the current owner, in 1982, and was occupied by its subsidiaries National Pipe Company (National Pipe) and Electro-Mech, Incorporated (Electro-Mech). Electro-Mech has continued the assembly of electronic cable on the second floor of the facility located at the Site. National Pipe continued the PVC pipe extrusion operations until 1991, when substantially all of National Pipe's assets were sold to LCP National Plastics, Inc. (LCP). LCP is currently occupying that portion of the plant at the Site that previously was used by National Pipe.

An effluent sample collected in 1984 by The New York State Department of Environmental Conservation ("NYSDEC") to verify discharge permit compliance found certain organic constituents above standards that were not covered under the existing permit. Further investigation resulted in the conclusion that the source of contamination was coming from the groundwater beneath the Site. This groundwater was being pumped from the newly installed on-site production wells, used as cooling water in the PVC pipe extrusion process, and then discharged at the permitted effluent point. The Robintech Site was placed on EPA's National Priorities List (NPL) in 1986. An Administrative Order on Consent (AOC) for a Remedial Investigation and Feasibility Study (RI/FS) was issued in 1987 to General Indicator Group, Inc. (a successor of Robintech), Buffton, Buffton Electronics (subsequently renamed Electro-Mech, Inc.), and National Pipe Company. McLaren/Hart, retained by Buffton, implemented the EPA approved work plan. The RI Report was approved by EPA in October 1991. The FS Report was approved by EPA in March 1992.

In response to inconsistencies of data associated with levels of lead in soils and sediments, the Site was separated into two operable units (OUs), or phases, on February 12, 1992. The first OU (OU-1) addressed groundwater, surface water and air; the second OU (OU-2), which is the subject of this ROD, addresses Site-related soils and sediments suspected to be contaminated

with lead. Only groundwater was found to be of concern for OU-1. A Record of Decision (ROD) was issued on March 30, 1992 which calls for the pumping of groundwater from three on-site locations to an air stripper and discharge of the treated groundwater to the facility's permitted outfall. Treated groundwater may be used in the facility's production process before being discharged to the outfall, if so desired. Depending on contaminant load, air pollution controls may be added to the treatment system. EPA issued a Unilateral Administrative Order (UAO) to Buffton Corporation and Electro-Mech, Inc. on September 29, 1992, requiring those companies to conduct the groundwater remedial design and remedial action (RD/RA). The RD is expected to be completed in the Fall of 1994.

III. HIGHLIGHTS OF COMMUNITY PARTICIPATION

EPA is basing the no action decision for suspected lead contamination of Site-related soils and sediments, in part, on the Remedial Investigation (RI) report dated September 1991; Appendices A and D of EPA's 1987 RI Work Plan; as well as the EPA reports entitled "Skate Estate Soil Sampling Investigation" dated March 1992; "Report on Suspected Lead Contamination in Surface Soils, Subsurface Soils, and Sediments" dated December 1992; and "Soil Sampling Investigation, Robintech Site" dated December 1992. These and other significant documents, as well as the OU-2 Proposed Plan for the Site were released to the public for comment on December 31, 1992. These documents were made available to the public in both the OU-2 Administrative Record file and information repositories maintained at the EPA Docket Room in the Region II New York City office and at the Town of Vestal Public Library located at 320 Vestal Parkway East, Vestal, New York. The notices of availability for these documents were published in the Binghamton Press & Sun Bulletin on December 31, 1992. A public comment period was held from December 31, 1992 through January 30, 1993. A public meeting was held on January 12, 1993 at the George F. Johnson Memorial Library in Endicott, New York. At this meeting, representatives from EPA presented the findings of the comprehensive analysis of all data collected since 1985 as it relates to lead in Site-related soils and sediments and answered questions from the public about the Site and the no action remedy under consideration. Responses to the comments received during this comment period are included in the Responsiveness Summary, which is attached to this ROD as Appendix IV.

IV. SCOPE AND ROLE OF RESPONSE ACTION

This ROD focuses on EPA's selection of a no action decision for the Site-related soils and sediments. As noted previously, a ROD was issued on March 30, 1992 for OU-1. The OU-1 ROD calls for

the pumping of groundwater from three on-site locations to an air stripper and discharge of the treated groundwater to the facility's permitted outfall. Treated groundwater may be used in the facility's production process before being discharged to the outfall, if so desired. Depending on contaminant load, air pollution controls may be added to the treatment system. EPA issued a Unilateral Administrative Order (UAO) to Buffton Corporation and Electro-Mech, Inc. on September 29, 1992, requiring those companies to conduct the groundwater remedial design and remedial action (RD/RA). The RD is expected to be completed in the Fall of 1994. This action will reduce the threat to the environment by removing contaminated groundwater from the aquifer and reducing or eliminating the threat to human health and the environment of groundwater contaminant migration from the Site.

Based on EPA's analysis of data generated as relevant to OU-2, and on EPA's Risk Assessment and other supporting documentation, the Site-related soils and sediments do not pose a threat to human health or the environment.

V. SUMMARY OF SITE CHARACTERISTICS

RI Summary of Soil and Sediment Data as Related to OU-2:

Under the supervision of EPA, sampling of sediment, surface and subsurface soils, air, surface water and groundwater was conducted by McLaren/Hart during the RI. As mentioned previously, groundwater, air and surface water were addressed as part of the OU-1 ROD and, as such, are not addressed in the OU-2 ROD. Further information related to OU-1 may be found in the OU-1 Administrative Record file.

The topography in the vicinity of the Site slopes primarily to the west and to a lesser extent to the north. Surficial soils that were suspected of being disturbed or reworked during construction activities were classified as fill. Typically, these materials were encountered to a maximum depth of 6 feet below ground surface. The composition of the fill is similar to other surficial soils encountered on-site.

Several volatile organic compounds (VOCs) were detected in soil in the northern portion of the paved pipe staging area of the Site at levels below concern. Levels of semi-volatile contaminants in this area are associated with the asphalt paving. The only VOC detected in on-site sediment samples was 1,1,1-trichloroethane ("1,1,1-TCA"). Reported values ranged from 14 to 28 parts per billion ("ppb"). No Federal or State standards exist for contaminants in sediment.

Based upon the McLaren/Hart data set from the RI report, lead in

on-site and downgradient soil and sediment was the sole contaminant of concern. Soil and sediment samples analyzed by McLaren-Hart showed lead levels exceeding the EPA interim lead cleanup level of 500-1000 ppm in 24 of 64 samples collected down to a depth of 10 feet. Elevated concentrations ranged from 2,000 to 56,000 ppm. In addition, a small off-site area located on the Skate Estate property displayed elevated lead levels in surface soil. All other reported lead values from this data set were below 100 ppm. EPA conducted confirmatory split sampling at several locations at the time these samples were collected. The EPA split samples failed to confirm the elevated lead concentrations. Concentrations for the EPA split samples ranged from 12-61 ppm. RI data summary tables are included in Appendix II (see Tables 1 thru 3). EPA's split sample data summary tables are included as Tables 4 and 5. In addition, a map of split sample and RI sampling locations can be found in Appendix I as Figures 3 and 4.

Summary of Other Soil and Sediment Data as Related to OU-2:

Two other sets of data, one before the McLaren/Hart RI and one after, were collected by EPA and included over 250 samples analyzed for lead and other compounds.

EPA initiated sampling events in July 1985 as part of developing an RI/FS Work Plan for the Site. These events are summarized (including maps of sampling locations) in Appendices A and D of the 2/10/87 RI/FS Work Plan developed for EPA by CDM-FPC, an EPA contractor. This document is included in the Administrative Record file for the Site. A total of five sediment samples at four locations were collected as part of this investigation. McLaren/Hart split three of these samples with EPA. All eight analyses were below 80 ppm for lead. Of 58 subsurface and surface soil samples collected both on- and off-site, all were below 50 ppm for lead, with the exception of one reported value of 143 ppm from a sample collected from a drainage ditch located in the extreme northern portion of the Site between the paved pipe-staging area and the gravel lot area. Maps of sampling locations associated with these events can be found in Appendix I (see Figures 5 thru 7). Data summary tables can be found in Appendix II (see Table 6).

In response to the elevated detections of lead in the Skate Estate surface soils reported in the McLaren/Hart RI data, EPA tasked its Environmental Response Team (ERT) to determine if the property qualified for a removal action. The assessment, initiated in February 1992, analyzed 155 surface soil, subsurface soil and sediment samples associated with the Skate Estate property and, to a lesser extent, the western perimeter of the Site. Three background samples were collected at nearby locations unassociated with either the Skate Estate or Robintech properties. Analysis was by portable X-Ray Florescence (XRF)

methodology. XRF methodology is a truck mounted field screening analytical method which generates real-time data. In addition, 21 split samples were lab-analyzed using Contract Lab Program (CLP) methodology to provide confirmation of XRF sampling data. The McLaren/Hart soil and sediment sampling locations associated with elevated lead detections were duplicated as closely as possible. Results indicated 120 samples below 50 ppm, 26 samples within 50-100 ppm, 4 samples within 100-150 ppm, and 3 samples within 200-250 ppm (or 153 out of 155 samples below 250 ppm). One detection was recorded at 344 ppm, well below the EPA interim cleanup level of 500 ppm for lead in soil. A single detection of 2,550 ppm was recorded in the off-site background location and is considered anomalous. This detection was recorded in a location described by ERT as being characterized by "historical disposal of household debris and automotive waste materials, including oil cans and used oil filters." The split samples, analyzed by CLP methodologies, confirmed the accuracy of the XRF samples.

In September 1992 a second sampling event was initiated by ERT to reanalyze areas where elevated detections of lead had been indicated by the McLaren/Hart data set in an effort to confirm the validity of that data. The original locations were checked against known landmarks and confirmed by the EPA Project Manager for the Site. In the case of the McLaren/Hart subsurface soil borings, the original bore holes had been grouted to grade with concrete and were especially easy to locate. A total of 39 samples were collected from 16 relevant surface soil, subsurface soil, and sediment RI-related locations. Analysis was by portable XRF methodology. Where an elevated detection had been made during the course of the McLaren/Hart sampling rounds in a particular horizon, samples were collected down to that horizon using a drill rig. All but 2 of the 39 samples collected were below 50 ppm and all samples recorded lead values below 100 ppm. Split samples analyzed in the lab using CLP methodologies confirmed the accuracy of the XRF sampling results. All 10 of these lab samples were below 50 ppm.

A more detailed discussion of these sampling events, including maps of sampling locations, can be found in Appendices A and D of EPA's 1987 RI Work Plan, as well as in the EPA reports entitled "Skate Estate Soil Sampling Investigation" dated March 1992; "Report on Suspected Lead Contamination in Surface Soils, Subsurface Soils, and Sediments" dated December 1992; and "Soil Sampling Investigation, Robintech Site" dated December 1992. Data summary tables can be found in Appendix II (see Tables 7 thru 9). Maps of sampling locations associated with these events can be found in the EPA reports entitled "Skate Estate Soil Sampling Investigation" dated March 1992 and "Soil Sampling Investigation, Robintech Site" dated December 1992. These documents may be found in the Administrative Record file for the Site.

Although the exact reason is not apparent, a comprehensive analysis of all sampling data collected since 1985 for the Site indicates that the McLaren/Hart data set is erroneous and inaccurate as it relates to reported lead values in soil and sediment.

VI. SUMMARY OF SITE RISKS

EPA conducted a Risk Assessment to estimate the health and environmental risks of all potentially affected media at the Site. The Risk Assessment began by selecting indicator chemicals which would be representative of Site risks. These chemicals were identified based on factors such as potential for exposure to receptors, toxicity, concentration and frequency of occurrence. These contaminants included VOCs, semi-volatiles, and metals in various media.

The Risk Assessment evaluated the health effects which could result from exposure to contaminated or potentially contaminated media including groundwater, surface water, air, surface and subsurface soils, and sediment. Risks associated with groundwater, surface water and air are the subject of OU-1 and as such are not addressed as part of this ROD.

The results of the Baseline Risk Assessment are contained in the Draft Final Risk Assessment, Robintech, Inc./National Pipe Co. Site dated February 1992 and prepared by Alliance Technologies Corporation under contract to EPA. This document is included in the Administrative Record file for the Site.

Current federal guidelines for acceptable exposures are a maximum health Hazard Index (HI) equal to 1.0 and an individual lifetime excess carcinogenic risk in the range of 10^{-4} to 10^{-6} (or $\approx$ 1:10,000 to 1:1,000,000). The Hazard Index reflects noncarcinogenic health effects for an exposed population and is calculated by dividing the chronic daily intake of a chemical by the daily dose believed to be protective of human health including sensitive sub-populations. If the HI exceeds one (1.0), there is a possibility of adverse health effects.

For soil and sediment, the exposure pathway demonstrating the greatest risk was ingestion of on-site soils by a trespasser. This risk value (1.0×10^{-5}) is, however, within the target carcinogenic risk range of 10^{-4} to 10^{-6} discussed above and in the NCP. Risk for this scenario was due primarily to PAHs which were detected in a single sample underlying the pavement. None of the HIs exceeded 1.0 for soils or sediments. Quantifiable risks, therefore, have been determined to be insignificant.

It should be noted that EPA has temporarily withdrawn the toxicity values used to quantitatively evaluate risks associated with lead exposure in soil and sediment. In the meantime EPA has set an interim cleanup level of 500 to 1,000 ppm for the maximum allowable concentration of lead in soil in residential areas. This range is designed to protect sensitive sub-populations (i.e., children). While the Site and most of the surrounding area is zoned for industrial use, this range has at times provided a basis for remedial action at industrial sites as well. For the Robintech, Inc./National Pipe Co. Site, the lower and more protective value of 500 ppm is considered the threshold value. Employing this value at the Site affords an added layer of safety.

The 500 ppm threshold value was significantly exceeded in Site-related soils and sediments from one of the three data sets collected for the Site (i.e., the data set collected as part of the McLaren/Hart RI). As summarized previously (see "RI Summary of Soil and Sediment Data as Related to OU-2" and "Summary of Other Soil and Sediment Data as Related to OU-2" sections, above), data collected before the McLaren/Hart data set, split samples collected concurrently with the McLaren/Hart data set, and data collected in response to the McLaren/Hart data set have failed to detect even a single elevated concentration of lead in Site-related soil or sediment. The 2,550 ppm value reported in a background sample and discussed on Page 6 of this ROD was not collected from soil or sediment related to the Site. A comprehensive analysis of all sampling data collected since 1985 for the Site indicates that the McLaren/Hart data set is erroneous and inaccurate as it relates to reported lead values in soils and sediments. Therefore, based on the data sets relied on by EPA in evaluating Site conditions, there is no significant human health hazard due to Site-related lead levels in soils and sediments.

In terms of environmental risk, it is important to consider that the area where the Site is located is not known to contain any ecologically significant habitat, plant and animal species, or wetlands. Though no measurable evaluation criteria are available to quantify and assess potential environmental risk, it should be noted that, from a qualitative perspective, the threshold value, designed to be protective of children (who are extremely sensitive to lead exposure), by extension would be protective of most environmental receptors. Thus, children as an indicator species combined with the absence of sensitive ecological factors leads to the conclusion that there are no significant environmental risks due to Site-related lead levels in soils and sediments.

Areas of Uncertainties

The procedures and inputs used to assess risks in this evaluation, as in all such assessments, are subject to a wide variety of uncertainties. In general, the main sources of uncertainty include:

- environmental chemistry sampling and analysis
- environmental parameter measurement
- fate and transport modeling
- exposure parameter estimation
- toxicological data

Uncertainty in environmental sampling arises in part from the potentially uneven distribution of chemicals in the media sampled. Consequently, there is significant uncertainty as to the actual levels present. Environmental chemistry analysis uncertainty can stem from several sources including the errors inherent in the analytical methods and characteristics of the matrix being sampled.

Uncertainties in the exposure assessment are related to estimates of how often an individual would actually come in contact with the chemicals of concern, the period of time over which such exposure would occur, and in the models used to estimate the concentrations of the chemicals of concern at the point of exposure.

Uncertainties in toxicological data occur in extrapolating both from animals to humans and from high to low doses of exposure, as well as from the difficulties in assessing the toxicity of a mixture of chemicals. These uncertainties are addressed by making conservative assumptions concerning risk and exposure parameters throughout the assessment. As mentioned previously, lead is currently undergoing a toxicological reevaluation. While issues of toxicological uncertainty are being resolved, EPA has established an interim soil cleanup level (500-1,000 ppm) as protective of the most sensitive sub-population, that being children.

VII. STATE ACCEPTANCE

The State of New York concurs with EPA's selected no action remedy. Their letter of concurrence is attached as Appendix III.

VIII. COMMUNITY ACCEPTANCE

The community had a few questions about the no action remedy. Inquiries generally regarded lead concentrations present in Site-related soils and sediments. EPA addressed these questions at

the public meeting and assured those present that the low lead concentrations in Site-related soils and sediments did not require action. In general, the community appeared satisfied with the no action remedy. All comments that were received from the public during the public comment period, including all questions and comments raised during the public meeting, are addressed in the Responsiveness Summary attached as Appendix IV.

IX. DESCRIPTION OF THE "NO ACTION" REMEDY

Based upon the review of all available data and the findings of the RI conducted at the Site, a no action decision for OU-2 of the Site is protective of human health and the environment. The no action decision complies with Federal and State requirements that are legally applicable or relevant and appropriate to the remedial action and is cost effective.

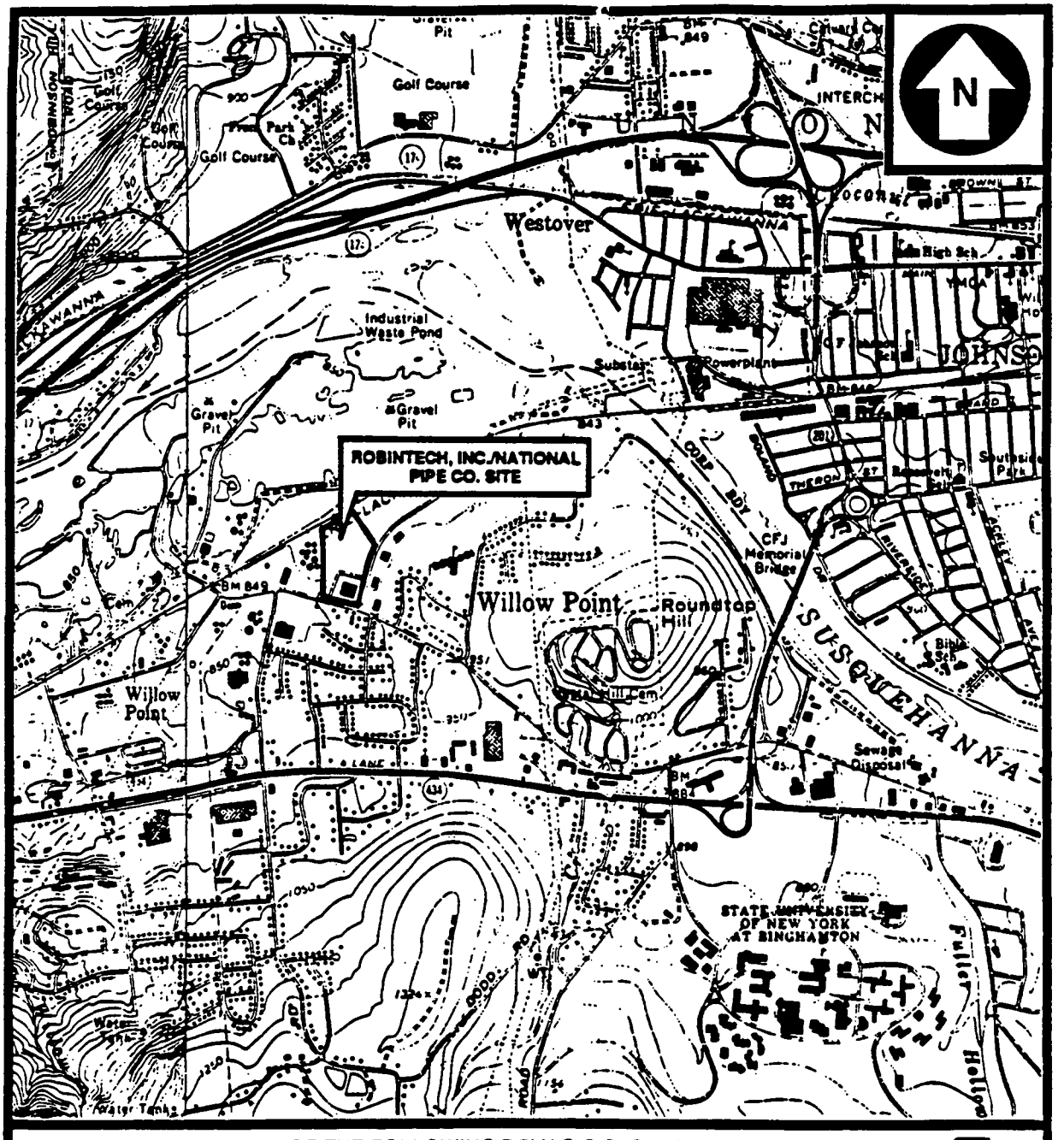
A comprehensive review of all data collected at the Site indicates that there are no concentrations of lead in Site-related soils and sediments above the 500 ppm threshold value. As such, there is no significant threat to human health or the environment due to Site-related lead levels in soils and sediments.

X. DOCUMENTATION OF SIGNIFICANT CHANGES

There are no significant changes from the preferred alternative presented in the Proposed Plan.

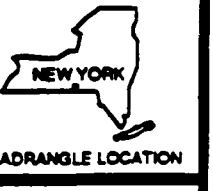
APPENDIX I

FIGURES



BASE MAP IS A PORTION OF THE FOLLOWING 7.5' U.S.G.S. QUADRANGLES:
ENDICOTT, NY, 1969; BINGHAMTON WEST, NY, 1976

0 1000 2000 3000 feet



QUADRANGLE LOCATION

LOCATION MAP

LOCATION OF THE ROBINTECH, INC./NATIONAL PIPE CO. SITE
VESTAL, NEW YORK

Figure 1.

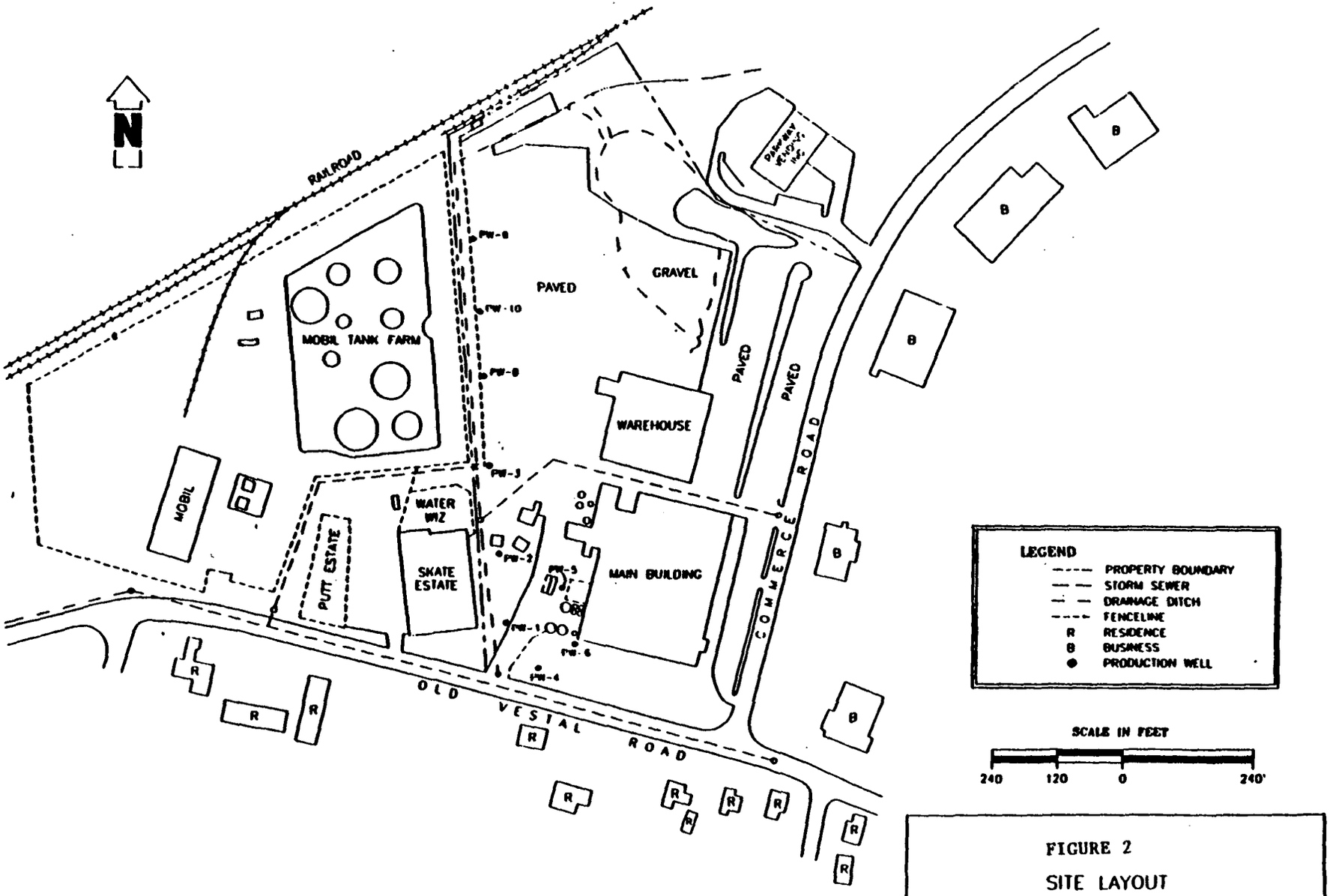
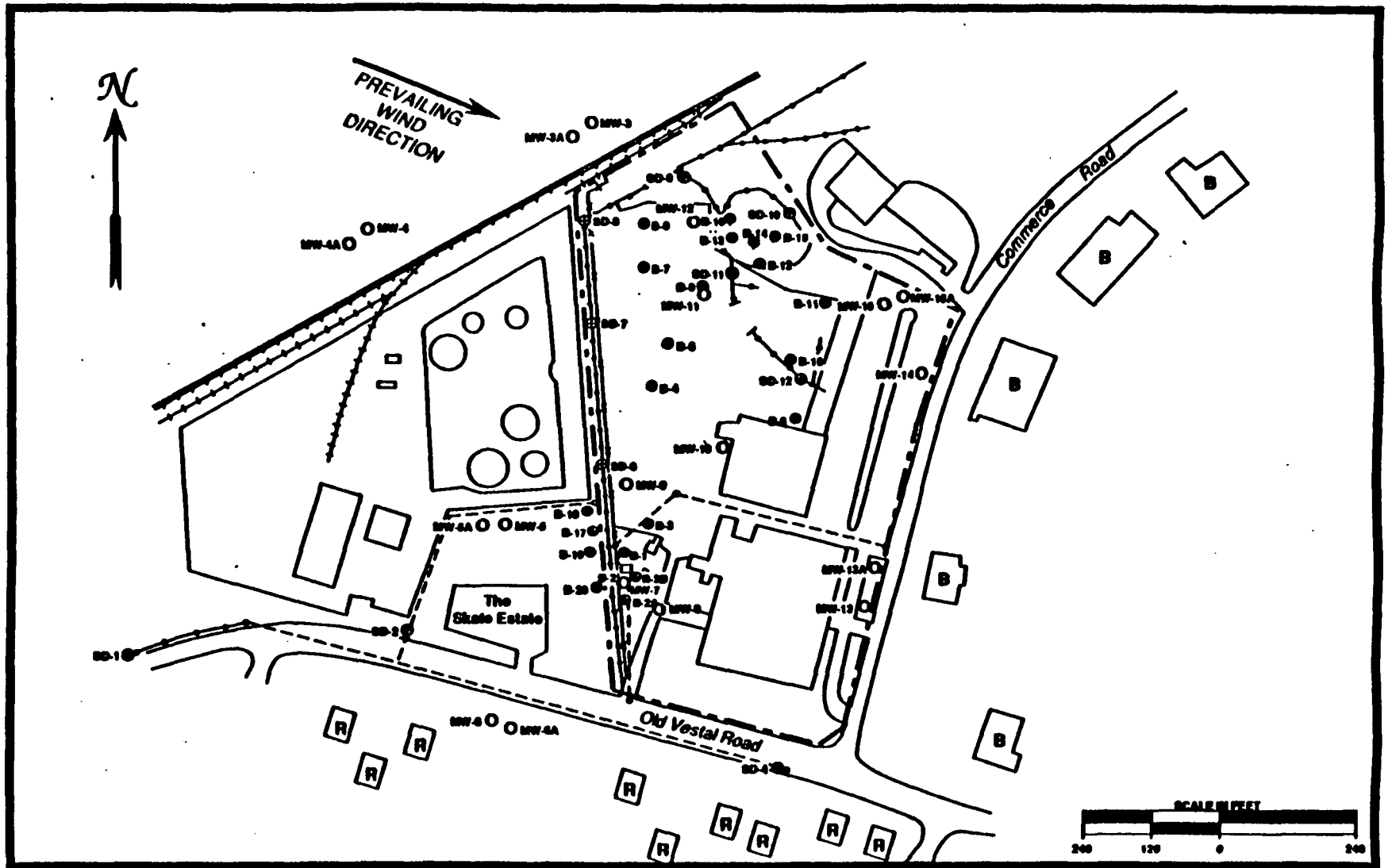


FIGURE 2

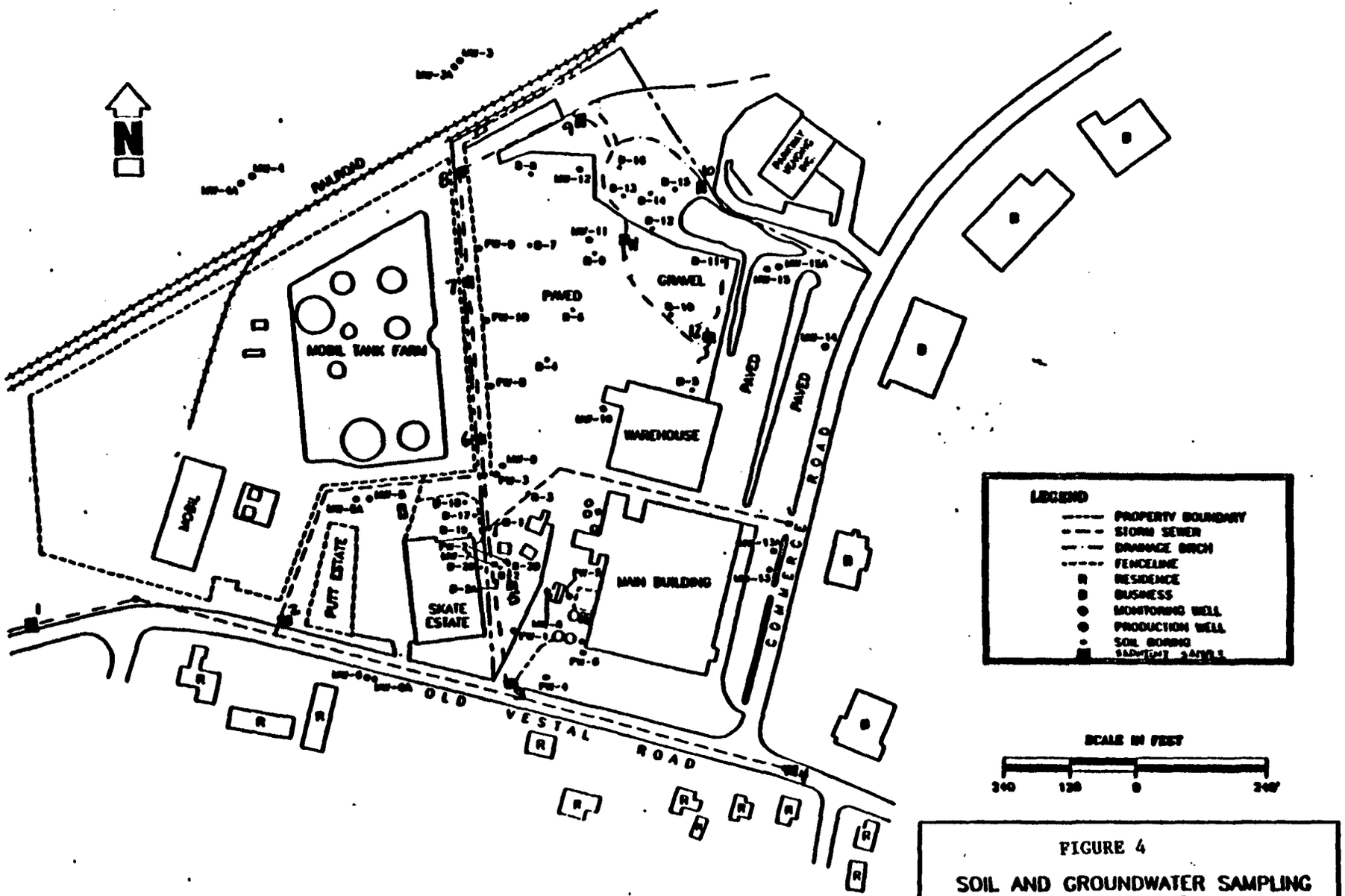
SITE LAYOUT
NATIONAL PIPE, VESTAL, NY



SITE LAYOUT INCLUDING SOIL BORING, SEDIMENT SAMPLING, AND MONITORING WELL LOCATIONS

ROBINTECH, INC./NATIONAL PIPE CO. SITE
VESTAL, NEW YORK

Figure 3



NOTES:

BEDROCK WELLS ARE DESIGNATED BY "A" FOLLOWING THE WELL NUMBER.

ALL PRODUCTION WELLS WITH THE EXCEPTION OF PW-10 ARE BEDROCK WELLS.

FIGURE 4

SOIL AND GROUNDWATER SAMPLING LOCATIONS
NATIONAL PIPE, VESTAL, NY

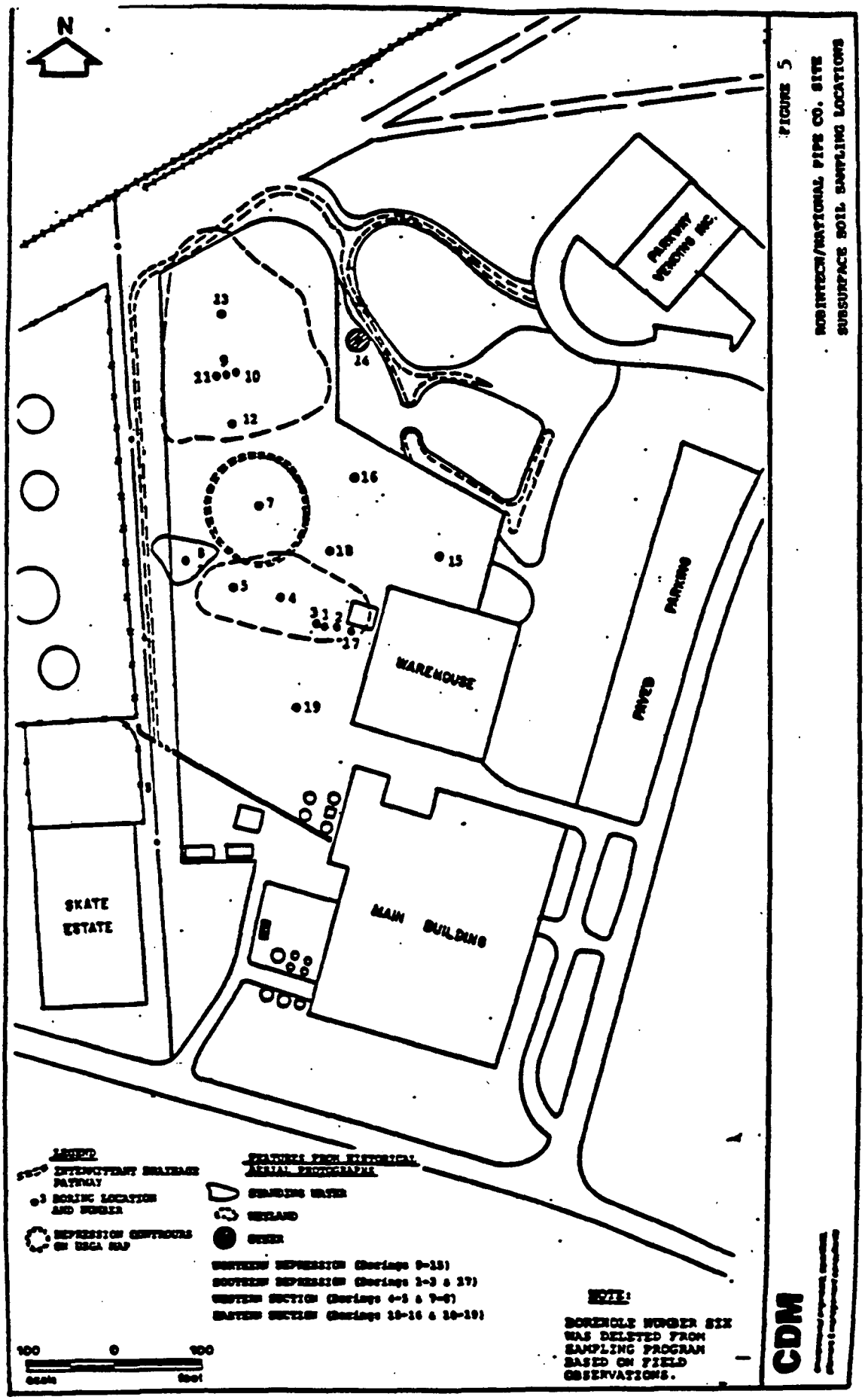
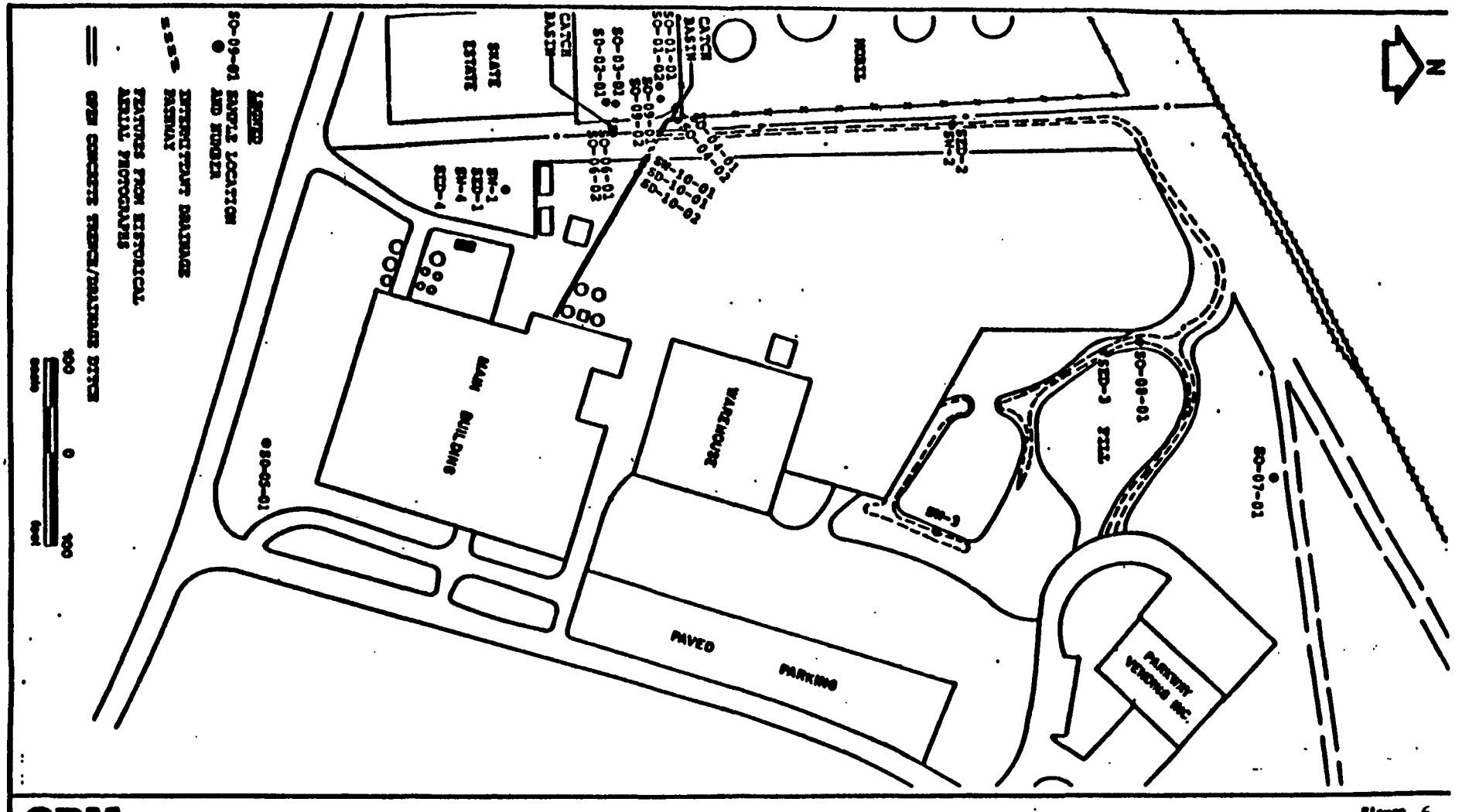


FIGURE 5

ROBINTECH/NATIONAL PIPE CO. SITE

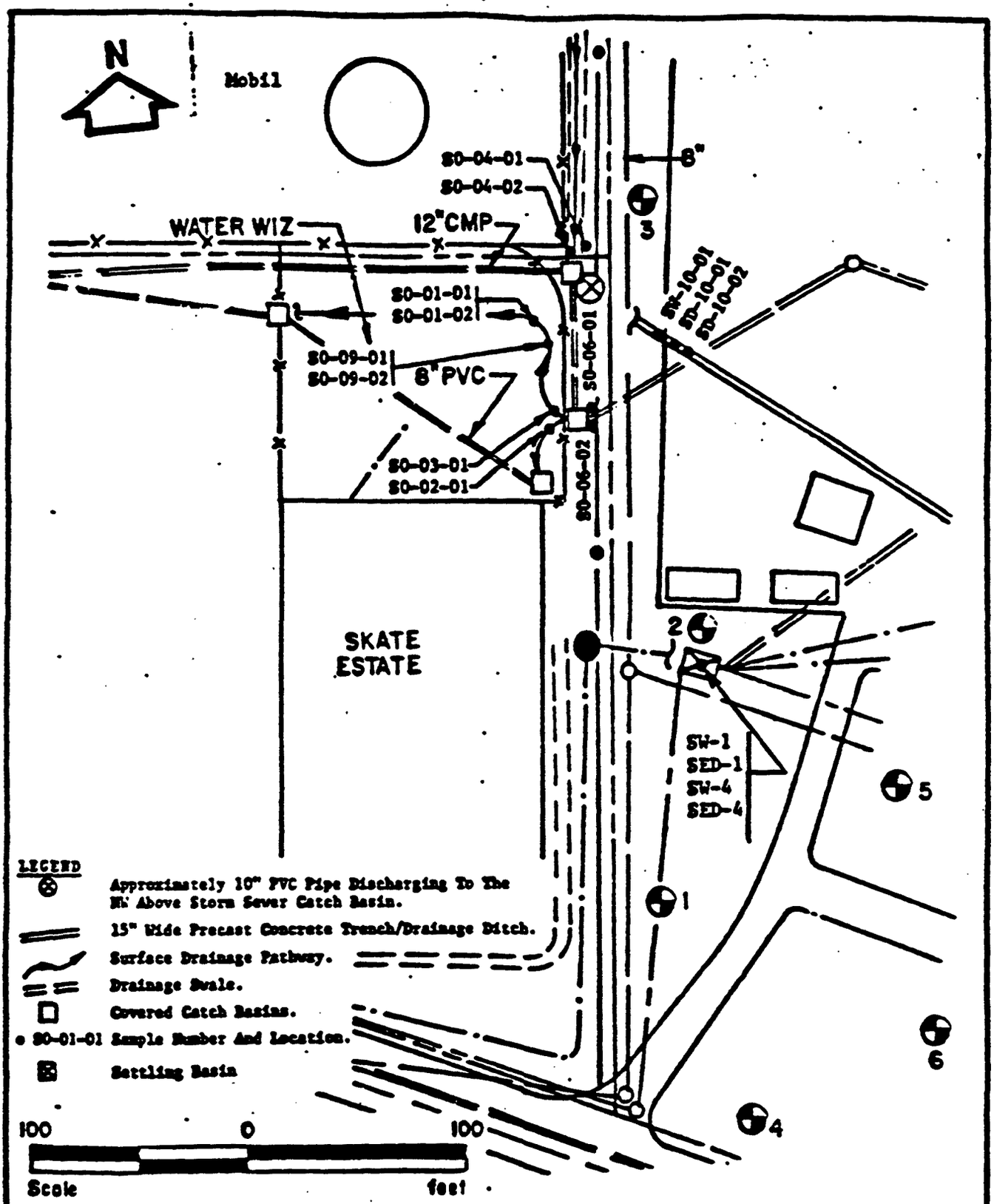
SUBSURFACE SOIL SAMPLING LOCATIONS



CDM

Figure 6

ROBINTECH/NATIONAL PIPE CO. SITE
SURFACE SOIL, SEDIMENT AND WATER SAMPLING LOCATIONS



CDM

environmental engineers, scientists, planners & management consultants

Figure 7

ROBINTECH/NATIONAL PIPE CO. SITE
ENLARGEMENT OF SURFACE SOIL, SEDIMENT AND WATER SAMPLING LOCATIONS IN SW SITE AREA

APPENDIX II

TABLES

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
METALS AND CYANIDE
NATIONAL PIPE, VESTAL, NY

BORING NUMBER	B1	B1-D	B1	B2	B2	B2	B2A	B2A-D	B2A	B2B	B2B
DEPTH (FT)	2-4	2-4	8-10	2-4	4-6	8-10	4-6	4-6	8-10	2-4	6-8
DATE	4-20-88	4-20-88	4-20-88	4-21-88	4-21-88	4-21-88	4-21-88	4-21-88	4-21-88	4-21-88	4-21-88
METALS (mg/kg)											
Aluminum	15,719	11,925	5,515	NA	7,110	6,692	8,080	6,692	6,944	6,860	10,205
Antimony	-	-	-	NA	-	-	-	-	-	-	-
Arsenic	-	-	-	NA	-	-	-	-	-	-	-
Barium	28.3Q	-	-	NA	29.9Q	-	42.7	36Q	32.7Q	-	-
Beryllium	-	0.52Q	-	NA	-	-	-	-	-	-	-
Cadmium	-	-	-	NA	-	-	-	-	-	-	-
Calcium	3,434	148	21,839	NA	2,297	129Q	2,345	1,719	1,711	13,263	354Q
Chromium	-	-	-	NA	-	-	-	-	-	-	-
Cobalt	19.4	-	27.1	NA	-	-	-	-	-	-	-
Copper	26.4	20.3	19.8	NA	12.1	11.6	20.4	14.3	17.5	77.2	19.3
Iron	26,764	22,184	13,982	NA	15,838	14,940	16,881	12,514	16,611	10,869	16,038
Lead	29	25	10.4J	NA	21.4J	12,800	31J	26J	24	15,600	7,270
Magnesium	4,091	3,162	2,617	NA	1,800	1,693	1,831	1,526	2,060	3,187	3,280
Manganese	788	435	672	NA	425	286	534	451	872	461	405
Mercury	0.10J	0.08J	0.26J	NA	0.24J	0.05Q	0.16J	0.18J	0.50J	0.08Q	0.05Q
Nickel	24.3	41.7	16.6	NA	12.8	15.0	16.1	11.4	16.2	13.7	22.1
Potassium	923Q	472Q	383Q	NA	271Q	237Q	441Q	301Q	391Q	295Q	156
Selenium	-	-	-	NA	-	-	-	-	-	-	0.44
Silver	2.4	1.2Q	1.2Q	NA	-	-	-	-	-	2.2Q	1.5Q
Sodium	133Q	93.1Q	50Q	NA	60.7Q	67.1Q	116Q	89.6Q	58.1Q	93.3Q	67.3Q
Thallium	-	1.9Q	-	NA	-	-	-	-	-	-	-
Vanadium	-	-	18.9	NA	-	-	-	19.7	-	-	-
Zinc	66.0	61.8	45.2	NA	50.4	33.9	48.1	37.1	47.4	77.5	67.7
CYANIDE (mg/kg)	-	-	-	NA	-	-	-	-	-	-	-

- Not detected
D Duplicate
Q Estimated semi-quantitative value because concentration is below contract required quantitation limit
J Value is a semi-quantitative estimate based on QA/QC review
R Data failed to meet QA/QC requirements
NA Parameter not analyzed

TABLE 1 (continued)
SUMMARY OF SOIL ANALYTICAL RESULTS
METALS AND CYANIDE
NATIONAL PIPE, VESTAL, NY

BORING NUMBER	B2B	B3	B3	B4	B4	B5	B5	B5	B5	B6	B6
DEPTH (FT)	8-10	2-4	4-6	2-4	8-10	0-2	4-6	6-8	8-10	0-2	4-6
DATE	4-21-88	4-20-88	4-20-88	4-14-88	4-14-88	4-14-88	4-14-88	4-14-88	4-14-88	4-14-88	4-14-88
METALS (mg/kg)											
Aluminum	NA	12,192	31,034	NA	10,300	13,000	10,900	NA	NA	13800	NA
Antimony	NA	-	-	NA	-	-	-	NA	NA	-	NA
Arsenic	NA	-	-	NA	13.00	-	2.07	NA	NA	-	NA
Barium	NA	22.4Q	137.5	NA	42.8	22.6Q	42.9	NA	NA	68.4	NA
Beryllium	NA	-	-	NA	0.02	-	-	NA	NA	-	NA
Cadmium	NA	-	-	NA	18.3	0.08Q	3.49J	NA	NA	11.5	NA
Calcium	NA	9,206	6,960	NA	2,190	54,500	1,600	NA	NA	4870	NA
Chromium	NA	-	-	NA	-	-	-	NA	NA	-	NA
Cobalt	NA	-	-	NA	-	-	-	NA	NA	-	NA
Copper	NA	15.9	20.4	NA	12.2	18.7	17.9	NA	NA	15.6	NA
Iron	NA	24,224	20,795	NA	28,300	29,100	26,800	NA	NA	26,800	NA
Lead	NA	31.2J	28J	NA	8,620	13.4J	10,700	NA	NA	37	NA
Magnesium	NA	4,664	1,752	NA	3,300	5,680	3,240	NA	NA	3,400	NA
Manganese	NA	771	882	NA	418	533	659	NA	NA	365	NA
Mercury	NA	0.02J	0.98J	NA	0.10	0.54	0.10	NA	NA	0.10	NA
Nickel	NA	23.7	27.7	NA	62.0	37.1	54.0	NA	NA	37.2	NA
Potassium	NA	830Q	1,252	NA	765Q	994Q	760Q	NA	NA	858Q	NA
Selenium	NA	-	-	NA	-	-	-	NA	NA	-	NA
Silver	NA	-	2.1	NA	-	-	-	NA	NA	-	NA
Sodium	NA	144Q	140Q	NA	152Q	155Q	169Q	NA	NA	203Q	NA
Thallium	NA	-	-	NA	-	-	-	NA	NA	-	NA
Vanadium	NA	10.9Q	-	NA	--	-	-	NA	NA	-	NA
Zinc	NA	77.2	120.7	NA	64.7	68.5	68.3	NA	NA	69.6	NA
CYANIDE (mg/kg)	NA	-	-	NA	-	-	-	NA	NA	-	NA

- Not detected
D Duplicate
Q Estimated semi-quantitative value because concentration is below contract required quantitation limit
J Value is a semi-quantitative estimate based on QA/QC review
R Data failed to meet QA/QC requirements
NA Parameter not analyzed

TABLE 1 (continued)
SUMMARY OF SOIL ANALYTICAL RESULTS
METALS AND CYANIDE
NATIONAL PIPE, VESTAL, NY

BORING NUMBER	B6	B7	B7	B7	B9	B9	B10	B10	B11	B11-D	B12
DEPTH (FT)	8-10	2-4	4-6	6-8	2-4	4-6	2-4	4-6	4-6	4-6	2-4
DATE	4-14-88	4-14-88	4-14-88	4-14-88	4-15-88	4-15-88	4-15-88	4-15-88	4-18-88	4-18-88	4-18-88
METALS (mg/kg)											
Aluminum	10,300	NA	NA	8,050	7,550	10,400	10,900	9,380	11,700	11,500	17,700
Antimony	-	NA	NA	-	-	-	-	-	-	-	-
Arsenic	-	NA	NA	-	-	-	-	-	-	-	-
Barium	42.0	NA	NA	29.8Q	50.4	65.5	43.0	48.7	27.3Q	30.9Q	60.3
Beryllium	-	NA	NA	-	-	-	-	-	-	-	-
Cadmium	R	NA	NA	1.6BJ	0.90Q	1.2	1.8	3.7	5.3	2.0	205.0
Calcium	5,560	NA	NA	14,300	40,500	4,600	2,080	1,660	1,290	1,250	1,660
Chromium	-	NA	NA	-	-	-	-	-	-	-	-
Cobalt	-	NA	NA	-	-	-	-	-	-	-	-
Copper	18.9	NA	NA	25.2	15.6	19.4	25.0	20.8	12.9	12.6	14.4
Iron	28,600	NA	NA	19,000	15,800	28,200	23,900	22,700	35,700	32,900	22,200
Lead	9,600	NA	NA	9,400	100	38	19	22	22	17,900	22,200
Magnesium	3,900	NA	NA	5,100	4,630	2,600	3,240	3,040	107Q	3,040	1,210
Manganese	342	NA	NA	167	319	148	384	495	18	393	462
Mercury	0.09	NA	NA	0.07	-	0.02Q	0.03Q	0.07	0.07	0.07	0.42
Nickel	66.3	NA	NA	52.1	14.1	61.7	17.8	26.5	37.2	34.5	16.6
Potassium	676Q	NA	NA	946Q	481Q	455	691Q	560Q	18.1Q	956Q	1,010
Selenium	-	NA	NA	-	-	-	-	-	-	-	-
Silver	-	NA	NA	-	-	-	-	-	-	-	-
Sodium	449Q	NA	NA	181Q	66.6Q	39	40.2Q	56.3Q	129Q	126Q	157Q
Thallium	-	NA	NA	-	-	-	-	-	-	-	-
Vanadium	-	NA	NA	-	-	-	-	-	-	-	-
Zinc	71.2	NA	NA	56.3	50.6	47.9	62.6	57.2	68.2	70.0	77.8
CYANIDE (mg/kg)	-	NA	NA	-	-	-	-	-	-	-	-

- Not detected
D Duplicate
Q Estimated semi-quantitative value because concentration is below contract required quantitation limit
J Value is a semi-quantitative estimate based on QA/QC review
R Data failed to meet QA/QC requirements
NA Parameter not analyzed

TABLE 1 (continued)
SUMMARY OF SOIL ANALYTICAL RESULTS
METALS AND CYANIDE
NATIONAL PIPE, VESTAL, NY

BORING NUMBER	B13	B14	B15	B16	B17	B18	B19	B20
DEPTH (FT)	6-8	4-6	2-4	4-6	0-2	0-2	0-2	0-2
DATE	4-19-88	4-19-88	4-19-88	4-20-88	4-25-88	4-25-88	4-25-88	4-25-88
METALS (mg/kg)								
Aluminum	6,336	12,384	11,800	11,362	13,621	13,614	14,165	12,337
Antimony	-	-	-	-	-	-	-	-
Arsenic	-	-	-	-	-	-	-	-
Barium	23.6Q	42.4	24.1Q	33.9Q	57.9	27.7Q	47.7	30.1
Beryllium	-	-	-	-	-	0.4Q	-	-
Cadmium	-	-	-	-	1.3	-	-	-
Calcium	813Q	967	1,686	902Q	341Q	8,299	189Q	850Q
Chromium	-	-	-	-	0.52Q	-	-	0.51Q
Cobalt	-	-	-	-	-	-	-	-
Copper	-	-	17.2	-	15.3	15.5	12.2	26.0
Iron	14,806	18,463	16,952	15,920	41,068	27,149	27,680	22,905
Lead	28	22	22.5J	10.6J	26,100	14,100	13,400	2,220
Magnesium	1,276	1,898	1,278	650Q	2,432	4,948	3,120	2,862
Manganese	169	385	313	114	925	657	1,001	639
Mercury	0.11J	0.04J	0.24J	0.26J	0.10Q	0.20	0.75	0.1Q
Nickel	8.8Q	8.5Q	7.9Q	6.3Q	21.5	23.6	19.6	20.9
Potassium	240Q	682Q	793Q	379Q	267	498Q	518Q	449Q
Selenium	-	-	-	-	-	-	-	-
Silver	-	4.8	2.1	2.1Q	1.7Q	1.7Q	1.6Q	1.3Q
Sodium	151Q	155.9Q	88.3Q	172Q	65.4Q	67.7Q	103Q	75Q
Thallium	-	-	-	-	-	-	-	-
Vanadium	18.1	-	-	38.7	-	-	-	-
Zinc	25.0	39.5	44.7	21.4	89.3	66.4	69.0	90.4
CYANIDE (mg/kg)	-	-	-	-	-	-	-	-

- Not detected
D Duplicate
Q Estimated semi-quantitative value because concentration is below contract required quantitation limit
J Value is a semi-quantitative estimate based on QA/QC review
R Data failed to meet QA/QC requirements
NA Parameter not analyzed

TABLE 2
SUMMARY OF SOIL ANALYTICAL RESULTS, METALS AND CYANIDE
NATIONAL PIPE, VESTAL, NY

BORING NUMBER	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-8D	MW-9	MW-10	MW-11	MW-12	MW-14	MW-15	FB-1	FB1.1
DEPTH (FT)	4-6	4-6	6-8	8-10	4-6	10-12	8-10	4-6	15-17	4-6	4-5	5-7	40-41	-	-
DATE	9-6-89	9-6-89	1-30-88	12-8-88	9-8-88	9-13-88	9-13-88	8-30-88	8-31-88	9-12-88	9-1-88	9-9-88	9-7-88	9-8-88	9-12-89
METALS (mg/kg)															
Aluminum	9,460	12,800	142,000	149,000	9,370	5,870	6,490	8,080	4,650	6,570	10,000	8,680	8,860	-	-
Antimony	13.30	3.21	-	-	-	-	-	-	-	-	-	-	-	-	-
Arsenic	5.50	4.75	7.7J	9.22	R	10.4Q	R	R	R	R	R	12.7	R	R	-
Barium	-	-	78.0	50.6	29.9J	27.3J	-	34.3J	44	25.7J	-	-	-	-	-
Beryllium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	6.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium	1,350	2,520	1,430	787	1,560	741J	777J	6,040	3,330	9,830	2,990	757J	4,650	-	-
Chromium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cobalt	11.6	11.7	-	-	-	-	-	-	-	-	-	-	-	-	-
Copper	24.3	18.1	19.8	19.4	12.1	43.3	-	17.5	12.4	12.8	18.4	12.7	14.1	-	-
Iron	25,100	34,300	21,300	16,300	13,500	15,600	15,200	16,900	14,000	10,300	19,200	14,200	17,000	-	-
Lead	10.2	9.7	8.24J	11.6J	12.1Q	21.3Q	27.1Q	20.0	10.4	15.8	15.6	10.1	10.9	-	-
Magnesium	3,820	4,480	3,440	2,280	1,730	1,740	1,770	4,250	2,530	2,530	2,580	1,840	3,220	-	-
Manganese	783	607	604	354	300	389	300	338	437	300	324	297	294	-	-
Mercury	-	-	-	0.12	2.91	1.78	2.24	5.78	2.36	2.27	2.31	2.43	2.47	-	-
Nickel	34.7	38.8	21.5	12.9	15.1Q	11.6Q	-	-	-	8.72Q	10.2Q	3.99Q	3.70Q	-	-
Potassium	629	950	677	587	1,400Q	1,400Q	785J	1,040Q	781	1,040Q	1,170Q	748J	1,180Q	-	-
Selenium	-	-	2R	2R	-	-	-	-	-	-	-	0.73J	-	-	-
Silver	-	-	0.82	-	-	0.99	-	-	-	-	-	1	-	-	-
Sodium	126	105	117	135	118J	196J	161J	363J	88.6J	130J	158	121J	165J	-	-
Thallium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vanadium	19.1	16.8	-	-	-	-	9.0	-	-	-	15.5	-	-	-	-
Zinc	69.7	68.4	64.9	53.9	66.1	53.4	49.9	63.1	38.5	43.6	52.5	49.8	48.1	-	-
CYANIDE (mg/kg)	-	-	-	-	-	-	-	0.1J	-	-	-	-	-	-	-

- Not detected
D Duplicate (MW-8 listed as MW-8A on the chain of custody)
Q Estimated semi-quantitative value because concentration is below contract required quantitation limit
J Value is a semi-quantitative estimate based on QA/QC review
R Data failed to meet QA/QC requirements

TABLE 3
SUMMARY OF SEDIMENT ANALYTICAL RESULTS
NATIONAL PIPE, VESTAL, NY

Sample number	SD-1	SD-1D	SD-2	SD-4	SD-6	SD-7	SD-8	SD-9	SD-10	SD-11	SD-12
Sample date	4-27-88	4-27-88	4-28-88	4-29-88	4-28-88	4-27-88	4-27-88	4-28-88	4-29-88	4-27-88	4-28-88
VOLATILE ORGANICS (ug/kg)											
1,1-Dichloroethane	-	-	-	-	-	-	-	-	-	-	10
Toluene	-	-	-	2800J	-	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	13	-	14	17	-	20	-	28	-
Xylene (total)	-	-	-	12	-	-	-	-	-	-	-
TICs Number[a]	0	2	0	7	0	0	0	0	0	0	0
Total concentration	-	22	-	1,088	-	-	-	-	-	-	-
SEMIVOLATILE ORGANICS[aa] (ug/kg)											
bis(2-Ethylhexyl)phthalate	-	-	3,600	4,600	23,000	-	45,000	2,600	-	2,000	-
TICs Number[a]	6	4	11	21	9	14	13	5	3	0	9
Total concentration	15,400	5,150	45,600	408,900	20,930	104,600	144,300	29,300	7,200	-	35,520
METALS (mg/kg)											
Aluminum	5,015	4,141	5,178	3,890	6,169	9,960	19,207	13,250	10,536	13,121	4,969
Antimony	-	-	-	-	-	-	-	-	-	-	-
Arsenic	-	-	-	-	-	-	-	-	-	-	-
Barium	44.6	30.4Q	17.3Q	20.7Q	16.6Q	19.3Q	66.3	19.9Q	40.8	0.9Q	11.1Q
Beryllium	-	-	1.25Q	-	-	-	-	0.93Q	1.3Q	-	1.41
Cadmium	-	-	-	1.6	-	-	-	-	-	-	1.2
Calcium	44,709	52,303	58,651J	28,010.3J	48,918J	9,326	1,822	-	3,151J	742Q	490.31BJ
Chromium	-	-	-	-	-	-	1.1	-	-	-	-
Cobalt	-	-	-	-	-	-	4	-	-	-	-
Copper	37.5	-	19.7	19.8	12.9	14.6	28.1	26.3	22.3	13.7	15.8
Iron	11,208	13,356	17,196	14,582	14,007	19,807	20,117	34,750	28,869	31,145	11,690
Lead	20,600	41,100	10,100	29,563	25,364J	33,983	7,306	20,785	39,116J	20,900	5,659
Magnesium	4,266	3,276	5,074.6Q	4,252	5,359	3,502	4,480	2,712	2,693	3,350	6,921
Manganese	347	491	199	229	328	345	1,703	1,171	660	649	683
Mercury	0.2Q	0.08Q	-	-	0.25	0.15	-	-	0.34	0.12Q	-
Nickel	8.53Q	7.89Q	5.2Q	-	7.69Q	17.10	21.40	17.20	10.80	20.50	9.84
Potassium	332Q	214Q	405.8Q	496.3Q	419.9Q	380Q	910	553.8Q	415Q	539Q	273.3Q
Selenium	-	-	-	-	-	-	-	-	-	-	-
Silver	1.7Q	2.1Q	-	-	-	3.70	4.59	3.56	-	1.4Q	-
Sodium	86.2	74.6	125Q	199.1Q	130Q	264Q	389.9	344.5Q	265.8Q	411Q	526.5Q
Thallium	-	-	-	-	-	-	-	-	-	-	-
Vanadium	-	-	-	-	-	-	-	-	-	-	-
Zinc	109.0	82.6	228.7	138.9	71.4	131.6	544.3	250.0	344.9	189.7	89.0
CYANIDE (mg/kg)	-	-	-	-	-	-	-	-	-	-	-

TICs compounds (listed in Appendix B)
- Not detected
D Duplicate of SD-1 (labeled as SD-6 on the chain of custody)
Q Estimated semi-quantitative value because concentration is below contract required quantitation limit
J Value is a semi-quantitative estimate based on QA/QC review
R Data failed to meet QA/QC requirements
NA Parameter not analyzed
E Analyte quantified from 5-fold sample dilution
aa All semivolatile analyses performed on 2 to 5 fold sample dilutions; refer to Appendix

TABLE 4

ROBINTECH PHASE I SPLIT SAMPLE DATA

	B-2;s	B-15;s	B-15;w	B-20;s	SW-5	SW-6	SD-6	SD-10	M-2;s	M-2;D
Inorganics										
Aluminum	11800 P	10100 P	941000 P	14300 P	302 P	626 P	7920 P	19600 P	570 P	35 UP
Chromium	16 EP	14 EP	1070 E+P	36.3 P	9.1 BP	6 UP	12.3 P	27 P	10 PU	6 UP
Barium	67 P	[33] P	2940 P	92.6 JP	71.6 BP	25.3 BP	34.3 BJP	98.4 JP	700 PJ	240 P
Beryllium	[1.1] P	[.58] P	65 EP	0.47 BP	1 UP	1 UP	0.38 BP	0.64 BP	1 UP	1 UP
Cadmium	1.2 UP	1.2 UP	12 P	1.2 U+P	5 UP	5 UP	1.2 U+P	2.2 U+P	5 UP	5 UP
Cobalt	[8.2] P	[9.1] P	990 N+PJ	11.3 BP	6 UP	6 UP	6.5 BP	15.1 BP	15 UP	6 UP
Copper	22 P	13 P	2990 P	27.1 P	116 P	12.3 BP	23 P	31.4 P	15 UP	6 BP
Iron	20300 P	23000 P	2.02e P	29700 P	731 P	1110 P	18000 P	41600 P	2100 PJ	1940 P
Lead	22 P	.16 eP	1560N+PJ	[9.1eN]P	5.6 BNJP	4.2 BNJP	16.3 eNJP	61.3 P	3 UP	2.8 BNJP
Nickel	19 P	17 P	2030 E+P	25.1 JP	8 UP	8 UP	18.9 JP	31.9 JP	25 UP	8 UP
Manganese	420 eP	536 eP	24300 P	849 P	16.7 JP	47.9 P	627 P	879 P	1500 PE	1500 P
Zinc	68 P	50 P	6590 P	89 EP	77.1 JP	68.5 JP	84 EP	282 EP	1100 PE	1020 JP
Vanadium	17 EP	15 EP	1030 P	20.6 P	8 UP	8 UP	12.2 BP	31.9 P	25 UP	8 UP
Arsenic	3.1 P	2.8 P	FBA	18 BJP	2.0 UBP	2 UP	9.1 BJP	24.6 BJP	20 P	27 P
Antimony	[3 UNPJ	[3 UNPJ	FBA	7.2 UNJP	25 UP	20 UP	7.2 UNJP	12.5 UNJP	60 UP	25 UP
Selenium	.94 UNPJ	.84 UNPJ	FBA	0.25 UBP	2.5 BNP	1 UP	0.25UBP	6.43 UP	4 UP	1.9 UBP
Thallium	0.44 UP	0.44 UP	[2.4]NPJ	0.5 UP	2.0 UBP	2.0 UBP	0.50 UBP	0.86 UP	4.0 UPNJ	2.0 UBP
Mercury	.10 UNCVJ	.11 UNCVJ	FBA	0.1 UCV	0.2 UCV	0.2 UCV	0.1 UCV	0.2 UCV	0.2 UCV	0.2 UCV
Tin										
Silver	2 UP	1.9 UP	4.4 UP	2.2 BNJP	4.0 UNJP	4.0 UNJP	1.0 BNJP	3.8 BNJP	10 UP	4.0 UNJP
Calcium	[180 P	[8513] P	265000 P	4340 P	57200 P	39800 P	59400 P	4570 P	104000 PE	112000 P
Potassium	[819] P	1030 P	12600 P	905 BP	918 BP	2100 BP	880 BP	1380 P	2000 UP	1700 BP
Sodium	[4571] P	[6953] P	22500 EP	496 UP	667000 P	86200 P	499 UP	864 UP	24000 PJ	27900 P
Magnesium	2780 EP	2780 EP	3498 P	3740 P	8400 P	3430 BP	6110 P	4720 P	18200 PJ	18900 P
Cyanide	0.63 U	0.64 U	10 U	0.62 UAS	10.0 UAS	62.8 AS	0.62 UAS	1.1 UAS	10 U	10.0 UAS

Note: All values are in ug/l unless noted otherwise

U Indicates element was analyzed for but not detected. The number shown is the detection limit.

[ ] Value is greater than or equal to instrument detection limit but less than the contract detection limit.

E Indicates an estimated value due to presence of interference.

FBA Indicates analysis failed EPA Quality Assurance review.

TABLE 5

ROBINTECH
INORGANIC DATA
METALS DATA (ug/L)

	CASE NO. 11330		CASE NO. 12712		CASE NO. 12689							
SAMPLE NUMBER:	MBPY13	MBPY10	MB1217	MB1210	MB6100							
SAMPLE LOCATION:			MW3-4, 4-6'		MW3-3, 4-6'							
MATRIX:	WATER	WATER	SOIL	WATER	SOIL							
Aluminum	75.00 B	3450.00	15700	30.0 B	11000.00							
Antimony	60.00 UJ	60.00 B	7.0 UNJ	35.0 UJ	3.40 UNJ							
Arsenic	1.00 B	49.00	8.7	2.0 B	10.00 J							
Barium	20.00 B	765.00	52.0	3.0 B	43.90							
Beryllium	1.00 B	1.00 B	0.32 B	2.0 B	0.95 B							
Cadmium	4.00 B	4.00 B	3.0	3.0 B	0.80 UNJ							
Calcium	250.00 B	10000.00	3390	193 B	1000.00							
Chromium	10.00 B	23.00	19.5	7.0 B	13.30							
Cobalt	13.00 B	13.00 B	10.1	9.0 B	9.10 B							
Copper	20.00 UJ	19.00 B	26.1	8.0 B	31.50 J							
Iron	239.00	10000.00 B	35900	86.6 B	24200.00							
Lead	2.00 B	5.90	12.3 NJ	1.0 B	10.20 NJ							
Magnesium	500.00 B	22000.00	9510.0	109 B	3400.00							
Manganese	2.00 B	1100.00	693.0	2.0 B	731.00							
Mercury	0.20 B	0.20 B	0.07 UJ	0.20 UJ	0.10 B							
Nickel	19.00 B	22.00 B	32.5	10.0 B	23.30							
Potassium	1000.00 B	4230.00 B	1210.0 J	400 B	710.00 UJ							
Selenium	1.00 B	1.00 UNJ	0.21 B	1.0 B	0.66 UNJ							
Silver	10.00 UR	10.00 UR	1.0 B	7.0 B	1.60 B							
Sodium	700.00 B	10000.00 J	175.0 UR	369 B	91.00							
Thallium	2.00 UJ	2.00 UNJ	0.42 B	2.0 B	0.90 UR							
Vanadium	10.00 B	10.00 B	17.7	10.0 B	13.60							
Zinc	27.00	370.00 B	80.6 EJ	101 J	36.90 J							
Cyanide	10.00 B	10.00 B	1.1 B	10.0 B	1.10 B							

TABLE 6

REINHOLD/NATIONAL PIPE CO. SITE
SURFACE WATER, SEDIMENT, AND SURFACE SOIL SAMPLES
NATIONAL PIPE PROPERTY
INORGANIC ANALYSIS[a]

Split No.	Detection Limits[c]		SS1[b]	SW1	Sed 1 Dup	Sed 1	Sed 1 Dup	SW2	Sed 2	SW3	Sed 3	SW80-10	SW80-01	SS-05-01	SS-07-01	SS-09-01
Sampling Date	Soil	Water	8/30/85	8/29/85	8/29/85	8/29/85	8/29/85	8/29/85	8/29/85	8/30/85	8/30/85	7/00/85	7/00/85	3/10/86	3/12/86	3/12/86
Units	ppm	ppb	ppm	ppb	ppb	ppm	ppm	ppb	ppm	ppb	ppm	ppb	ppm	ppm	ppm	ppm
Aluminum			NA	NA	NA	NA	NA	NA	NA	NA	NA	205	7040	12900	12700	10500
Antimony	5.2	0.5	ND	ND	NA	ND	ND	ND	60.3/ND	ND/.11	58.9/ND	230	100	20 U	36	75
Arsenic	1	.005	15.4/ND	ND	NA	1.41/ND	1.38	ND	21.3/ND	.011/ND	20.8/ND	100	7.50	6.8	24	230
Barium			NA	NA	NA	NA	NA	NA	NA	NA	NA	454	55	65	59	69
Beryllium	5.2	.5	ND/ND	ND	NA	ND/.21	ND	ND	ND/.6	ND/.004	ND/.45	0.30	0.5	1.10	1.60	4.20
Cadmium	5.2	.5	ND/.21	ND	NA	ND/.52	ND	ND	ND/.9	ND/.01	ND/.75	3.00	3.00	2.30	3.20	17
Calcium			NA	NA	NA	NA	NA	NA	NA	NA	NA	94300	20041	R	2200	9750
Chromium	5.2	.5	ND/5.5	ND	NA	ND/27	ND	ND	ND/14	ND/.03	ND/11	R	25	13	19	19
Cobalt			NA	NA	NA	NA	NA	NA	NA	NA	NA	6.40	8	8.6	9.4	130
Copper	3.0	0.5	ND/20	ND/.05	NA	225/144	174	ND	56.5/23	ND/.05	53.0/20	R	42	14	22	35
Iron			NA	NA	NA	NA	NA	NA	NA	NA	NA	853	19254	22900	26200	18200
Lead	5.2	0.5	ND/14	ND	NA	ND/30	ND	ND	79.2/42	ND/.14	78.5/35	5.00	45.0	17	36	143
Magnesium			NA	NA	NA	NA	NA	NA	NA	NA	NA	14970	3574	2710	3340	2000
Manganese			NA	NA	NA	NA	NA	NA	NA	NA	NA	107	335	247	400	881
Mercury	.000	.0005	ND	ND	NA	ND	ND	ND	ND	ND	ND	0.40	0.20	.120	0.100	0.620
Nickel	11	.5	ND/20	ND	NA	ND/15	ND	ND	ND/32	ND/.07	ND/23	200	100	19	32	34
Potassium			NA	NA	NA	NA	NA	NA	NA	NA	NA	R	R	752	905	1290
Selenium	0.6	0.005	ND	ND	NA	ND	ND	ND	ND	.024/ND	ND	R	4.00 J	2.90	4.00	10.0
Silver	.5	.5	ND/.03	ND	NA	ND/.02	ND	ND	ND/.5	ND/.01	ND/.38	2.5	3.0	1.70	2.40	6.9
Sodium			NA	NA	NA	NA	NA	NA	NA	NA	NA	28200	150	354	90	506
Thallium	05.0	0.5	116/5.2	ND	NA	ND/1.5	ND	ND	198/ND	.30/ND	167/1.1	100	80	5.00	7.90	210
Tin			NA	NA	NA	NA	NA	NA	NA	NA	NA	30	150	110	150	420
Vanadium			NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6	20.0	120	19	27
Zinc	2.0	0.5	ND/35	ND/.10	NA	91.3/57	82.6	ND/.17	105/205	ND/17	804/630	R	373	500	76	757
Cyanide			ND/.20	NA	NA	NA	ND	NA	NA	NA	NA	100	7.1	.00	0.00	2.10

Footnotes:

ND = Compound was analyzed for but was not detected at the detection limit specified in first column.
U = Compound was not detected at concentration indicated. This notation is used where the detection limit differs from the standard detection limit indicated in first column.
• = Detection limits indicated by lab analysis. For inorganics undetected, the detection limit was not given.
a = This sample was from fill material in southern depression, approximately 3-1/2 feet below pavement.
b = When results are different between split samples both results are indicated, (i.e. both CDM's and F.C. Hart's results).
R = Compound did not pass QA/QC.

(138/14)MW

TABLE 6 (cont'd)

[illegible] PIPE CO. SITE
STATE ESTATE PROPERTY
SURFACE SOIL SAMPLES
INORGANIC ANALYSES

Results in parts per million

Sample No. Sampling Date	Detection Limit[a]	[illegible] 3/10/86	[illegible] 3/10/86	[illegible] 3/10/86	[illegible] 3/10/86	[illegible] 3/11/86	[illegible] 7/9/86	[illegible] 3/11/86	[illegible] 7/9/86	[illegible] 7/9/86	[illegible] 7/9/86
Aluminum		3890	4790	9900	9240	5400	7500	9940	11770	9533	10212
Antimony	24-33	BD	BD	200	BD	BD	150	BD	150	130	130
Arsenic	6.6-8.4	BD	BD	9.7	BD	BD	BD	BD	BD	9.2	8.6
Barium		38	38	46	57	40	63	73	70	48	44
Beryllium	1.2-2	BD	BD	BD	BD	BD	0.3	BD	0.4	0.3	0.4
Cadmium	2.-2.6	BD	BD	BD	BD	BD	BD	BD	BD	BD	BD
Chromium		8.9	16	16	15	16	21	16	32	16	17
Cobalt	6.8	BD	6	9.9	9.7	7.9	8	9	11	11	11
Copper		12	15	31	46	37	27	35	36	28	30
Iron		9230	10540	23900	21300	12400	18830	20140	27474	23891	26300
Lead		25	30	56	56	90	43.0	53	21.0	13	28
Magnesium		1790	1820	3330	3150	2900	3271	3330	3030	4450	4005
Manganese		245	285	586	571	7193	918	5483	752	593	649
Mercury	.38-.50	BD	BD	BD	BD	BD	BD	BD	BD	BD	BD
Nickel	9.7	BD	16	31	30	14	21	25	18	16	22
Potassium		680	721	779	1050	780	a	1030	a	a	a
Selenium	2.3-4.9	BD	BD	BD	BD	BD	J	BD	J	J	J
Silver	1.4-2.9	BD	BD	BD	BD	BD	2.4	BD	3.0	BD	2.2
Sodium		165	90	65	150	165	180	165	130	70	81
Thallium	5-7.6	0.70	0.50	BD	BD	0.40	BD	BD	BD	BD	BD
Tin	16-16	31	45	20	42	102	63	20	BD	BD	BD
Vanadium		6.5	8.4	13	14	12	18.3	16	23.3	16.5	18.4
Zinc		52.3	103.0	138.0	173.0	330	205	246	84	62	66
Cyanide	.80-1.3	BD	BD	BD	BD	1.20	BD	0.520	BD	BD	BD

Footnotes:

BD = Compound was analyzed for but was not detected at the detection limit.

a = Detection limit indicated by lab analysis (i.e., Antimony = 180)
For these inorganics above the limits the detection limit was not given.

a = Compound was not detected at concentration indicated. This notation is used where the detection limit for this analysis differs from the standard detection limit indicated in first column.

J = Compound is present but cannot be quantified with precision normal for that method.

(139/29)RF

TABLE 6 (cont'd)

REMEDIATIONAL PIPE CO. SITE
SUBSURFACE SOIL SAMPLES - SOLVENT "EXTRACTION"
INORGANIC ANALYSIS

Results in parts per million

Sample No. / Sampling Type / Sampling Date	Detection Limit*	SS-01-01 3/6/85	SS-01-05 3/6/85	SS-01-03 3/6/85	SS-02-02 3/6/85	SS-02-01 3/6/85	SS-02-05 3/6/85	SS-03-02 3/6/85	SS-03-04 3/6/85	SS-03-05 3/6/85	SS-03-05 Dupl 3/6/85	SS-17-02 3/13/85	SS-17-05 3/13/85
Aluminum		11100	11100	13300	12800	6700	11000	24000	14000	9100	8500	9100	9500
Antimony	19 - 25	10	10	10	10	10	10	30 U	10	10	10	22	27
Arsenic	5.6 - 6.8	10	7.7	7.7	10	10	8.4	8.9	20	7.4	8.8	7.4	7.7
Barium		46	61	44	124	30	67	170	81	39	39	61	80
Beryllium	1.1 - 1.3	10	10	10	10	10	10	1.8 U	10	10	10	10	10
Cadmium	2.2 - 2.8	10	10	10	10	10	10	3.6 U	10	10	10	3.6	10
Calcium		1000	2200	3700	2700	1200	2000	4800	4200	8	8	755	1300
Chromium		14	13	18	16	11	13	23	20	11	9.9	12	14
Cobalt		9.2	11	13	6.8	7.6	11	9.5	16	7.6	6.8	7.3	8.5
Copper		21	15	19	19	15	21	26	20	25	23	9.2	20
Iron		23000	23000	31000	28000	13000	26000	33000	30000	22000	20000	21000	22000
Lead		11	10	9.3	13	12	9.6	30	17	9.7	9	17	10
Magnesium		4400	4600	6800	2900	2700	4500	3800	8600	4000	3800	2200	3500
Manganese		300	1000	500	457	112	674	592	500	338	301	702	610
Mercury	.01 - .13	10	10	10	10	10	10	.30 U	10	10	10	10	10
Nickel		25	26	30	18	14	23	29	30	19	16	19	20
Potassium		900	900	1300	1000	700	1000	1400	1300	892	900	812	914
Selenium	2.8 - 3.3	10	10	10	10	10	10	4.4 U	10	10	10	10	10
Silver	1.7 - 2.0	10	10	10	10	10	10	2.7 U	10	10	10	10	2.0
Sodium	31 - 35	42	51	51	47	30	46	60	53	56	40	30	40
Thallium	5.6 - 6.8	10	10	10	10	10	10	8.9 U	10	10	10	10	10
Tin	11 - 13	10	10	10	10	10	10	17 U	10	10	10	10	10
Vanadium		15	15	20	16	11	16	34	28	13	11	17	13
Zinc		60	66	82	57	54	67	125	87	55	49	49	55
Cyanide	0.6 - 0.7	J	J	J	J	J	J	J	J	J	J	80	80
Percent Solids		85.3	78.6	79.6	82.7	89.5	83.5	91.4	76.3	88.7	88.5	85.9	88.9

Footnotes:

R = Compound did not pass EPA QA/QC
U = Compound was analyzed for but was not detected at the detection limit
* = Detection limits indicated by lab analysis (i.e., Antimony = 100). For those inorganics above the limit, the detection limit was not given.
U = Compound was not detected at concentration indicated. This notation is used where the detection limit differs from the standard detection limit indicated in first column.
J = Compound is present but cannot be quantified with precision normal for that method.

(10/17)/W

TABLE 6 (cont'd)

REDMEDIATION PIPE CO. SITE
SURFACE SOIL SAMPLES - NORTHERN "EXTENSION"
INORGANIC ANALYSIS

Results in parts per million

Sample No.	Detection Limit*	SS-09-02	SS-09-03	SS-10-01	SS-10-05	SS-11-01	SS-11-04	SS-12-02	SS-12-04	SS-13-01	SS-13-01 Dup	SS-13-03	SS-13-05	SS-14-02	SS-14-04
Sampling Date		3/11/85	3/11/85	3/11/85	3/11/85	3/11/85	3/11/85	3/11/85	3/11/85	3/12/85	3/12/85	3/12/85	3/11/85	3/12/85	3/12/85
Aluminum		12000	8000	10000	9000	12000	7400	7400	10000	10000	7900	12000	9000	8000	12000
Antimony	19 - 20	20	20	20	20	20	20	20	20	36	20	23	24	25	36
Arsenic	5.5 - 6.3	9.2 B	20	20	20	7.5	20	6.2	9.9	20	20	20	8.1	20	7.5
Barium		62	38	38	38	38	23	24	46	100	32	42	28	46	29
Beryllium	1.0 - 1.3	20	20	20	20	20	20	20	20	1.7	20	20	20	20	20
Cadmium	2.1 - 2.5	20	20	20	20	20	20	20	20	20	20	20	2.7	20	20
Calcium		1000	3900	3800	5400	1000	5100	800	1000	1300	4900	2400	4000	2700	4900
Chromium		14	12	10	11	16	9.6	10	13	14	10	17	14	10	17
Cobalt		8.0	8.2	7.5	7.5	8.2	7.3	7.7	8.3	3.0	5.7	14	9.5	4.4	12
Copper		16	15	12	18	12	15	20	16	8.6	14	21	14	20	17
Iron		23000	20000	19000	23500	23000	17400	19400	25000	24000	19000	28000	23000	24000	28000
Lead		19	11	22	6.9	19	5.7	7.3	6.6	8.8	8.4	15	9.3	10	6.7
Magnesium		2300	5400	5500	8000	3300	8100	2300	4800	1500	4800	3000	7700	3000	4400
Manganese		230	1540	300	360	254	270	175	300	n	n	725	304	97	352
Mercury	.10 - .12	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Nickel		16	16	13	21	21	17	18	23	20	16	33	25	25	32
Potassium		630	800	900	1100	800	800	800	900	300	700	800	800	600	1200
Selenium	2.6 - 3.1	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Silver	1.6 - 1.9	20	20	20	20	20	20	20	20	20	1.8	20	20	20	20
Sodium	35	72	35	130	130	35	36	20	20	71	170	20	137	47	111
Thallium	5.2 - 6.3	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Tin	9.9 - 12	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Vanadium		15	12	15	12	18	9.9	12	12	28	14	16	11	11	15
Zinc		54	54	60	53	52	46	50	48	31	42	62	47	38	48
Cyanide	.6	J	J	J	J	J	J	J	J	20	20	20	20	20	20
Percent Solids		81.4	88.9	87.1	79.6	81.1	83.6	82.5	92.1	82.5	91.5	78.5	88.1	84.1	85

Footnotes:

B = Compound did not pass EPA QA/QC
(20) = Compound was analyzed for but was not detected at the detection limit
J = Compound is present by cannot be quantified with precision enough for that method.
* = Detection limit indicated by lab analysis (ie., Antimony = 19.0). For those inorganics above the limit, the detection limit was not given.
B = Compound was not detected at concentration indicated. This notation is used where the detection limit differs from the standard detection limit indicated in first column.

(10/17)W

TABLE 6 (cont'd)

ROBINTECH/NATIONAL PIPE CO. SITE
SUBSURFACE SOIL SAMPLES - WESTERN SECTION
INORGANIC ANALYSIS

Results in parts per billion

Sample No. Sampling Date	Detection Limit*	SS-04-02 3/07/86	SS-04-06 3/07/86	SS-05-01 3/07/86	SS-05-03 3/07/86	SS-07-01 3/10/86	SS-07-01 Dup 3/10/86	SS-07-05 3/10/86	SS-08-01 3/10/86	SS-08-05 3/10/86
Aluminum		12300	9020	13400	12000	11800	11800	12200	12700	11500
Antimony	18-21	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	5.3-6.8	9.7	9.2	12	8.2	11	7.2	11	9.7	8.1
Barium		55	155	43	33	38	42	40	28	37
Beryllium	1.0-1.2	ND	ND	ND	1.1	ND	ND	ND	ND	ND
Cadmium	2.1-2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calcium		1630	8360	13100	8740	1800	1520	1900	2500	6300
Chromium		16	13	17	13	17	16	16	17	14
Cobalt		12	9.7	11	12	12	12	12	13	11
Copper		23	22	26	23	8	8	21	29	22
Iron		28000	24500	29500	30000	23000	33000	33000	30000	29000
Lead		15	14	14	9.7	13	8.0	6.4	9.4	7.6
Magnesium		3950	4060	5090	4300	3800	4000	4000	4200	4000
Manganese		383	1530	500	566	402	401	462	411	438
Mercury	0.11	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel		25	17	23	22	25	24	25	27	25
Potassium		1040	1130	909	844	803	1300	1100	1100	882
Selenium	2.6-3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	1.6-1.9	1.6	ND	ND	1.6	ND	ND	ND	ND	ND
Sodium	33-35	ND	56	109	55	80	71	70	39	39
Thallium	5.2-6.2	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tin	10-12	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium		17	12	18	15	13	16	15	15	13
Zinc		73	60	79	73	60	70	60	60	60
Cyanide	0.6-0.6	J	J	J	J	ND	ND	ND	ND	ND
Percent Solids		90.9	89.7	91.9	94.1	93.1	93.7	93.8	93.4	93.6

Footnotes: ND = Compound was analyzed for but was not detected at the detection limit

* = Detection limits indicated by lab analysis (i.e., Antimony = 18U). For those inorganics above the limit, the detection limit was not given.

J = Compound is present but cannot be quantified with precision normal for that method.

(140/18)

TABLE 6 (cont'd)

[redacted]
SURFACE SOIL SAMPLES - EASTERN SECTION
INORGANIC ANALYSIS

Results in parts per billion

Sample No. / Sample Type / Sampling Date	Detection Limit*	[redacted] 3/12/86	[redacted] Dup 3/12/86	[redacted] 3/12/86	[redacted] 3/12/86	[redacted] 3/13/86	SS-18-01 3/13/86	SS-18-05 3/13/86	[redacted] 3/14/86	[redacted] 3/14/86
[redacted]		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	10800	10700	[redacted]	[redacted]
Antimony	10-21	23	[redacted]	27	31	29	35	22	22	[redacted]
Arsenic	0.3-0.8	[redacted]	[redacted]	[redacted]	9.7	[redacted]	[redacted]	7.6	[redacted]	[redacted]
Barium		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	41	41	[redacted]	[redacted]
Beryllium	1.0-1.2	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Cadmium	2.1-2.5	[redacted]	[redacted]	2.5	[redacted]	2.8	2.7	2.8	[redacted]	[redacted]
Calcium		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	1160	1090	[redacted]	[redacted]
Chromium		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	14	14	[redacted]	[redacted]
Cobalt		[redacted]	9.1	9.1	[redacted]	8.3	9.5	10	9.2	[redacted]
Copper		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	21	19	[redacted]	[redacted]
Iron		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	22800	26300	[redacted]	[redacted]
Lead		[redacted]	[redacted]	[redacted]	[redacted]	5.1	14	5.9	[redacted]	[redacted]
Magnesium		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	2610	3600	[redacted]	[redacted]
Manganese		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	394	525	[redacted]	[redacted]
Mercury	0.11	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Nickel		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	23	26	[redacted]	[redacted]
Potassium		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	712	915	[redacted]	[redacted]
Selenium	2.6-2.1	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Silver	1.6-1.9	[redacted]	[redacted]	[redacted]	[redacted]	1.4	2.1	2.0	[redacted]	[redacted]
Sodium	39-36	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	58	[redacted]	[redacted]
Thallium	0.2-0.2	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Tin	10-12	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Vanadium		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	16	14	[redacted]	[redacted]
Zinc		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	58	64	[redacted]	[redacted]
Cyanide	0.5-0.6	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Percent Solids		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	87.2	87.6	[redacted]	[redacted]

Footnotes:

[redacted] = Compound did not pass EPA QA/QC
[redacted] = Compound was analyzed for but was not detected at the detection limit
J = Compound is present but cannot be quantified with precision normal for that method
* = Detection limits indicated by lab analysis (i.e., Antimony = [redacted]) For those inorganics above the limit, the detection limit was not given.

[redacted]

Table 7
Spectrace 9000 (XRF) Lead Results in Soil
Robintech
Vestal, N.Y.
February, 1992

Sample Number	Location / Depth	Recovered Pb (mg/kg)	Reported Pb (mg/kg)
A13906	A-1 1'	43	43 J
A13825	A-1 2'	27	27 J
A13907	A-1 3'	45	45 J
A13908	A-1 5'	46	46 J
A13909	A-1 6'	35	35 J
A13913	A-1 5'	42	42 J
A13770	A-1 6'	38	38 J
A13826	A-2 2'	33	33 J
A13769	A-2 6'	32	32 J
A13827	A-3 2'	46	46 J
A13776	A-3 6'	29	29 J
A13828	A-4 2'	26	26 J
A13777	A-4 6'	23	23 J
A13829	A-5 2'	68	68
A13778	A-5 6'	48	48 J
A13830	A-6 2'	51	51 J
A13779	A-6 6'	66	66
A13824	A-7 2'	8	ND
A13780	A-7 6'	38	38 J
A13831	A-8 2'	41	41 J
A13781	A-8 6'	47	47 J
A13832	A-9 2'	39	39 J
A13782	A-9 6'	25	25 J
A13833	A-10 2'	64	64
A13835	A-10 2'	44	44 J
A13834	A-10 2'(DUP)	29	29 J
A13783	A-10 6'	27	27 J
A13835	A-11 2'	43	43 J
A13835	A-11 2'	21	21 J
A13784	A-11 6'	25	25 J
A13874	A-12 1'	87	87
A13836	A-12 2'	35	35 J

ND – Denotes Not Detected

J – Denotes value is between detection and quantitation limit

Table 7 (con't)
Spectrace 9000 (XRF) Lead Results in Soil
Robintech
Vestal, N.Y.
February, 1992

Sample Number	Location / Depth	Recovered Pb (mg/kg)	Reported Pb (mg/kg)
A13901	A-12 2'	30	30 J
A13785	A-12 6'	29	29 J
A13785	A-12 6'	34	34 J
A13837	A-13 2'	46	46 J
A13786	A-13 6'	27	27 J
A13904	A-14 1'	27	27 J
A13838	A-14 2'	70	70
A13905	A-14 2'	29	29 J
A13787	A-14 6'	51	51
A13839	A-15 2'	37	37 J
A13788	A-15 6'	36	36 J
A13840	A-16 2'	28	28 J
A13789	A-16 6'	31	31 J
A13841	A-17 2'	52	52
A13790	A-17 6'	34	34 J
A13895	A-18 1'	23	23 J
A13842	A-18 2'	24	24 J
A13791	A-18 6'	39	39 J
A13843	A-19 2'	40	40 J
A13792	A-19 6'	28	28 J
A13844	A-20 2'	82	82
A13845	A-20 2'(DUP)	59	59
A13793	A-20 6'	40	40 J
A13846	A-21 2'	59	59
A13794	A-21 6'	30	30 J
A13881	A-22 1'	37	37 J
A13847	A-22 2'	17	17 J
A13882	A-22 2'	22	22 J
A13883	A-22 3'	25	25 J
A13884	A-22 4'	41	41 J
A13795	A-22 6'	51	51
A13848	A-23 2'	11	ND

ND – Denotes Not Detected

J – Denotes value is between detection and quantitation limit

Table 7 (con't)
Spectrace 9000 (XRF) Lead Results in Soil
Robintech
Vestal, N.Y.
February, 1992

Sample Number	Location / Depth	Recovered Pb (mg/kg)	Reported Pb (mg/kg)
A13796	A-23 6'	37	37 J
A13849	A-24 2'	21	21 J
A13797	A-24 6'	24	24 J
A13850	A-25 2'	23	23 J
A13798	A-25 6'	24	24 J
A13851	A-26 2'	35	35 J
A13799	A-26 6'	23	23 J
A13852	A-27 2'	16	16 J
A13860	A-27 2'(DUP)	13	ND
A13800	A-27 6'	25	25 J
A13890	A-28 1'	21	21 J
A13801	A-28 2'	13	ND
A13853	A-28 6'	28	28 J
A13854	A-29 2'	20	20 J
A13802	A-29 6'	19	19 J
A13855	A-30 2'	50	50 J
A13803	A-30 6'	65	65
A13856-1	A-31 2'	52	52
A13856-2	A-31 2'	49	49 J
A13856-3	A-31 2'	46	46 J
A13804	A-31 6'	28	28 J
A13857	A-32 2'	29	29 J
A13805	A-32 6'	24	24 J
A13858	A-33 2'	43	43 J
A13806	A-33 6'	27	27 J
A13859	A-34 2'	18	18 J
A13861	A-34 2'(DUP)	17	17 J
A13807	A-34 6'	22	22 J
A13864	A-35 2'	42	42 J
A13863	A-35 6'	32	32 J
A13876	A-36 1'	20	20 J
A13873	A-36 2'	25	25 J

ND – Denotes Not Detected

J – Denotes value is between detection and quantitation limit

Table 7 (con't)
Spectrace 9000 (XRF) Lead Results in Soil
Robintech
Vestal, N.Y.
February, 1992

Sample Number	Location / Depth	Removed Pb (mg/kg)	Reported Pb (mg/kg)
A13677	A-36 2'	24	24 J
A13678	A-36 3'	25	25 J
A13679	A-36 4'	22	22 J
A13680	A-36 5'	22	22 J
A13672.	A-36 6'	24	24 J
A13756-1	B-35 6'	19	19 J
A13756-2	B-35 6'	22	22 J
A13756-3	B-35 6'	24	24 J
A13755	B-36 6'	26	26 J
A13919	B-36 1'	27	27 J
A13920	B-36 2'	19	19 J
A13921	B-36 3'	20	20 J
A13922	B-36 3.5'	23	23 J
A13754	B-37 6'	22	22 J
A13753	B-38 6'	30	30 J
A13752	B-39 6'	24	24 J
A13751	B-40 6'	138	138
A13750	B-41 6'	28	28 J
A13915	B-41 2'	24	24 J
A13775	B-41 3'	21	21 J
A13916	B-41 3'	25	25 J
A13914	B-41 4'	22	22 J
A13917	B-41 4'	15	ND
A13918	B-41 5'	25	25 J
A13757	C-42 6'	43	43 J
A13887	C-42 1'	27	27 J
A13758	C-43 6'	54	54
A13759	C-44 6'	344	344
A13888	C-44 1'	48	48 J
A13762	C-45 6'	145	145
A13760	C-46 6'	71	71
A13762	C-48 6'	96	96

ND – Denotes Not Detected

J – Denotes value is between detection and quantitation limit

Table 7 (con't)
Spectrace 9000 (XRF) Lead Results in Soil
Robintech
Vestal, N.Y.
February, 1992

Sample Number	Location / Depth	Recovered Pb (mg/kg)	Reported Pb (mg/kg)
A13763	C-50 6"	104	104
A13764-1	C-51 6"	60	60
A13764-2	C-51 6"	60	60
A13764-3	C-51 6"	56	56
A13766-1	C-52 6"	216	216
A13766-2	C-52 6"	208	208
A13766-3	C-52 6"	223	223
A13765	C-53 6"	40	40 J
A13767	C-54 6"	34	34 J
A13768	C-55 6"	34	34 J
A13808	D-56 6"	55	55
A13809	D-57 6"	61	61
A13810	D-58 6"	45	45 J
A13811	D-59 6"	30	30 J
A13812	E-60 6"	33	33 J
A13813	E-61 6"	27	27 J
A13814	E-62 6"	31	31 J
A13815	E-63 6"	28	28 J
A13816	E-64 6"	19	19 J
A13820	E-64 6"(DUP)	18	18 J
A13817	E-65 6"	24	24 J
A13818	E-66 6"	23	23 J
A13819	E-67 6"	20	20 J
A13865-1	F-56 6"	23	23 J
A13865-2	F-56 6"	28	28 J
A13865-3	F-56 6"	29	29 J
A13866	F-57 1'	25	25 J
A13867	F-58 6"	77	77
A13868	F-59 1'	28	28 J
A13897	F-59 2'	21	21 J
A13898	F-59 5'	25	25 J
A13899	F-59 4'	23	23 J

ND – Denotes Not Detected

J – Denotes value is between detection and quantitation limit

Table 7 (con't)
Spectrace 9000 (XRF) Lead Results in Soil
Robintech
Vestal, N.Y.
February, 1992

Sample Number	Location / Depth	Recovered Pb (mg/kg)	Reported Pb (mg/kg)
A13900	F-59 5'	11	ND
A13869	F-60 6"	91	91
A13889	F-60 6"(DUP)	85	85
A13870	F-61 12"	33	33 J
A13871	F-62 6"	102	102
A13886	F-63 1'	27	27 J
A13910	G-68 2"	34	34 J
A13911	G-69 2"	39	39 J
A13912	G-70 2"	50	50 J
A13924	REF-1 2"	2550	2550
A13925	REF-2 2"	52	52
A13926	REF-3 2"	93	93

ND – Denotes Not Detected

J – Denotes value is between detection and quantitation limit

TABLE 8
CONFIRMATION SAMPLE SPECTRACE 9000 XRF AND METAL ANALYSIS RESULTS
mg/kg LEAD (Pb)

ROBINTECH SITE
FEBRUARY 4-6, 1992

SAMPLE NUMBER	SAMPLE LOCATION	SPECTRACE XRF mg/kg Pb	METAL ANALYSIS mg/kg Pb
A13832	A-9 2'	39	22
A13791	A-18 6'	39	9
A13851	A-26 2'	35	13
A13799	A-26 6'	23	14
A13755	B-36	36	18
A13751	B-40	138	140
A13775	B-41 3'	21	29
A13759	C-44	344	390
A13761	C-45	145	160
A13763	C-50	104	100
A13766	C-52	216	200
A13809	D-57	61	130
A13816	E-64	19	8
A13868	F-59 1'	38	10
A13898	F-59 3'	35	7
A13900	F-59 5'	11	5
A13765	C-53	40	24
A13750	B-41	38	21
A13886	F-63 1'	27	6
A13889	F-60 6' (DUP)	85	68
A13924	REF-1 2'	2550	2100
DETECTION LIMIT		15	5

Table 9
Spectrace 9000 XRF
Lead Results (mg/kg)
Robintech, Inc.
Vestal, New York
September 9-11, 1992

RI[1]-SAMPLE ID	REAC SAMPLE ID	CLIENT SAMPLE ID	Pb
SD-1	1 SD	B17242	ND[2]
SD-1	1 A SD	B17243	ND
B-2	2-0' S	B17251	ND
B-2	2-1' S	B17252	ND
B-2	2-2' S	B17253	ND
B-2	2-2.3' S	B17254	ND
B-2	2-3' S	B17264	ND
B-2	2-5' S	B17265	ND
B-2	2-7' S	B17266	ND
B-2	2-8' S	B17267	ND
B-2	2-9' S	B17268	ND
B-2	2-10' S	B17269	ND
B-4	4-8' S	B17270	ND
B-4	4-10' S	B17271	ND
B-5	5-4' S	B17258	ND
B-5	5-5' S	B17259	ND
B-5	5-6' S	B17260	ND
SD-6	6 SD	B17244	ND
SD-6	6 SD DUP	B17244	44 J[3]
B-6	6-8' S	B17274	ND
B-6	6-8' S DUP	B17274	ND
B-6	6-10' S	B17275	ND
B-6	6-10' S DUP	B17275	ND
B-7	7-6' S	B17272	ND
B-7	7-6' S DUP	B17272	ND
B-7	7-8' S	B17273	ND
B-7	7-8' S DUP	B17273	ND
SD-8	8 SD	B17245	79 J
SD-8	8 SD DUP	B17245	89 J
—	8 A SD	B17246	ND
SD-9	9 SD	B17247	ND
SD-10	10 SD	B17248	ND
SD-11	11 SD	B17249	ND
B-11	11-4' S	B17261	ND
B-11	11-5' S	B17262	ND
B-11	11-6' S	B17263	ND
SD-12	12 SD	B17250	ND
B-12	12-2' S	B17255	ND
B-12	12-3' S	B17256	ND
B-12	12-4' S	B17257	ND

[1] Data taken from draft Remedial Investigation Report, Robintech, Inc./National Pipe Co. Site, McClaren/Hart Environmental Engineers, December 1990.
[2] ND - denotes not detected
[3] J - denotes value is below quantitation limit

Minimum Detection Limit: Pb = 42
Minimum Quantitation Limit: Pb = 140

APPENDIX III

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION LETTER OF CONCURRENCE

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

Thomas C. Jorling
Commissioner

MAR 12 1993

Mr. George Pavlou, P.E.
Acting Director
Emergency & Remedial Response Division
U.S. Environmental Protection Agency
Region II
26 Federal Plaza
New York, New York 10278

Dear Mr. Pavlou:

Re: Robintech Site, Vestal, Broome County, New York, Site No. 7-04-002

The Record of Decision (ROD) for the Robintech site operable unit No. 2 (OU2) was received by this office on March 3, 1993. Both the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH) have reviewed this document.

OU2 addresses site related contamination of soil and sediment suspected to be contaminated with lead. The recommended alternative in this ROD for OU2 is no action. This remedy was selected because confirmatory data performed by the U.S. Environmental Protection Agency (USEPA) determined that lead contamination is not present at levels requiring remediation.

By means of this letter, the NYSDEC and the NYSDOH concur with the remedy recommended by the March, 1993 ROD.

If you have any questions, you may contact Mr. Robert W. Schick, P.E., of my staff, at 518/457-4343.

Sincerely,

Ann Hill DeBarbieri

Ann Hill DeBarbieri
Deputy Commissioner
Office of Environmental Remediation

cc: C. Petersen, USEPA
M. Hauptman, USEPA
M. Granger, USEPA
A. Carlson, NYSDOH

APPENDIX IV

RESPONSIVENESS SUMMARY

RESPONSIVENESS SUMMARY
FOR OPERABLE UNIT 2
OF THE
ROBINTECH, INC./NATIONAL PIPE CO. SUPERFUND SITE
TOWN OF VESTAL, NEW YORK

RESPONSIVENESS SUMMARY FOR THE
ROBINTECH, INC./NATIONAL PIPE CO. SUPERFUND SITE
OPERABLE UNIT 2
TOWN OF VESTAL, NEW YORK

INTRODUCTION

This Responsiveness Summary provides a summary of citizen's comments and concerns and the U.S. Environmental Protection Agency's (EPA's) responses to those comments and concerns regarding the Proposed Plan for the Robintech, Inc./National Pipe Co. Site ("the Robintech Site" or "the Site"), Operable Unit 2 (OU-2). EPA, in consultation with the New York State Department of Environmental Conservation (NYSDEC), will make a final determination regarding the proposed no action alternative for OU-2 of the Robintech Site only after reviewing and considering all public comments received during the public comment period.

EPA held a public comment period from December 31, 1992 through January 30, 1993 to provide interested parties with the opportunity to comment on the Proposed Plan for OU-2 of the Robintech Site. A public meeting was held to discuss the investigatory history for OU-2 of the Site and to present EPA's preferred no action alternative. The meeting was held at the George F. Johnson Memorial Library in Endicott, New York on January 12, 1993 at 7:00 p.m.

Community interest regarding the Site and EPA's Proposed Plan was moderate. Questions on OU-2 were oriented toward clarification of EPA's assessment of the total data set for soils and sediments and there were several inquiries of a technical nature. Several questions were raised regarding the status of the OU-1 groundwater remedy. Approximately 15 people attended the meeting. The audience consisted of local businessmen, residents, and state and local government officials. The question and answer session lasted approximately 40 minutes. A summary of the questions posed during the meeting is provided in Section III, below.

This community relations responsiveness summary is divided into the following sections:

I. **OVERVIEW:** This section briefly outlines the EPA's preferred alternative.

II. **BACKGROUND:** This section provides a brief history of community concerns and interests regarding OU-2 of the Robintech Site.

III. **COMPREHENSIVE SUMMARY OF MAJOR QUESTIONS, COMMENTS, CONCERNS AND RESPONSES:** This section summarizes comments received by EPA at the public meeting for OU-2 of the Robintech Site.

I. OVERVIEW

At the time of the public comment period, EPA published its preferred alternative for OU-2 of the Robintech, Inc./National Pipe Co. Site ("the Robintech Site" or "the Site") located in the Town of Vestal, New York. EPA screened possible alternatives, giving consideration to the following nine key criteria:

- Threshold Criteria, including:
  - -- overall protection of human health and the environment; and
  - -- compliance with Federal and State environmental laws.
- Balancing Criteria, including:
  - -- long-term effectiveness;
  - -- short-term effectiveness;
  - -- reduction of mobility, toxicity, or volume;
  - -- ability to implement; and
  - -- cost.
- Modifying Criteria, including;
  - -- state acceptance; and
  - -- local acceptance.

EPA weighed State and local acceptance of the remedy prior to reaching the final decision regarding the remedy for OU-2 of the Site.

The Agency's selected remedy for OU-2 is no action. This decision is based upon the review of all available data and the Risk Assessment. Based on a comprehensive review of all data generated for the Site, a no action decision is protective of human health and the environment.

This plan satisfies the threshold criteria for remedy selection and obviates the need for long-term treatment and management.

II. BACKGROUND

Community concern has not been high regarding the Site-related contamination of soils and sediments. It appears generally understood that a full assessment of all data generated for the Site indicates that the data upon which the suspicion of elevated lead concentrations in soil and sediment had been based was erroneous.

EPA's community relations efforts began in August 1986. At that time a community relations plan (CRP) was formulated, including an outline of community concerns and a comprehensive list of federal, state, and local contacts. Also at that time, site information repositories were established, one located at the EPA Region II office in New York City and the other located at the Vestal Public Library in Vestal, New York. The information repositories, which contain the RI/FS Report and other relevant documents, were updated periodically.

Revising and updating the CRP, including an updated outline of community concerns and an updated contact list was initiated in April 1991. The CRP was finalized on May 1,1992.

To obtain public input on the proposed remedy, EPA held a public comment period from December 31, 1992 through January 30, 1993. The EPA Proposed Plan, describing the Agency's proposed no action decision for OU-2 of the Site, was sent to the information repository and distributed to citizens and officials on EPA's site mailing list for review at the opening of the public comment period.

A public meeting notice appeared in the December 31, 1992 edition of the Binghamton Press & Sun Bulletin, and a public meeting was held on January 12, 1993. Community interest regarding the Site and EPA's Proposed Plan was moderate. Questions on OU-2 were oriented toward clarification of EPA's assessment of the total data set for soils and sediments and there were several inquiries of a technical nature. Several questions were raised regarding the status of the OU-1 groundwater remedy. Approximately 15 people attended the meeting. The audience consisted of local businessmen, residents, and state and local government officials. The question and answer session lasted approximately 40 minutes. A summary of the questions posed during the meeting is provided in Section III, below.

III. COMPREHENSIVE SUMMARY OF MAJOR QUESTIONS, COMMENTS, AND CONCERNS, AND EPA'S RESPONSES

This section addresses comments received by EPA during the public comment period (December 31, 1992 to January 30, 1993). The following verbal comments were from the public meeting held at the George F. Johnson Memorial Library in Endicott, New York on January 12, 1993, and are categorized by topic. No written comments were received during the public comment period.

Lead Contamination

Several comments and questions were received regarding the perceived lead contamination at the Site. Throughout the meeting EPA emphasized that a comprehensive analysis of all data generated for the Site since 1985 indicates that there is no lead problem in soils and sediments. Specific inquiries and EPA's responses are summarized below.

1. Several citizens, including the Vestal Town Supervisor, the Chairman of the Vestal Advisory Commission, and a resident who lives within 100 yards of the Site, inquired about the levels and possible sources of lead at the Site. The Town Supervisor suggested that numerous leaded gasoline storage tanks which were used in Vestal from the 1940s to the mid-1970s may have been a potential source of contamination. He also expressed concern about improperly handled gasoline spills which occurred during this period.

EPA Response. The highest lead concentration detected in Site-related soils and sediments during EPA's two 1992 resampling events at the Site, which included the analysis of over 200 samples, was 350 parts per million (ppm) with most values under 100 ppm. The 2,550 ppm value reported in a background sample and discussed on Page 6 of the ROD was not collected from soil or sediment related to the Site. Regardless of the history of the area, a comprehensive analysis of all data generated for the Site since 1985 indicates that there is not a lead problem in soils and sediments associated with the Site. This analysis further indicates that the McLaren/Hart samples reporting extremely high lead levels were in error.

2. A resident asked if EPA had considered the possibility that facility activities had resulted in contamination other than lead, particularly tin or oil. He reported that circuit board printing, soldering, and processes

involving hydraulic damping equipment have occurred at the Site in addition to the manufacture of PVC pipe.

EPA Response. A historical search is conducted as a routine step in the RI process. EPA reviews historical information about a site in order to identify possible past sources of contaminant release. Depending on what operations have occurred at a site, different contaminants are more likely to be found than others. At the Robintech Site, the risk assessment for the Site (written by an EPA contractor) as well as available Federal and State guidance values had indicated that lead was the only contaminant of concern for soils and sediments. The result of this finding was to create a second operable unit to further investigate this suspected contamination.

3. The Chairman of the Vestal Advisory Commission requested clarification of the nature of the error associated with the McLaren/Hart data. The Chairman went on to ask if the error in calculation could be pinpointed.

EPA Response. Upon suspicion of an error in the McLaren/Hart data, EPA requested McLaren/Hart to recheck their data validation. McLaren/Hart reported that the data had been validated properly. Still suspecting an error, the next step was to request McLaren/Hart to recalculate their data from scratch. When the data were recalculated, the results differed from those originally reported by an order of magnitude. Although this discrepancy was sufficient to question the validity of the McLaren/Hart data as it related to reported lead values in soil and sediment, EPA made the decision to resample the exact locations, including the exact vertical horizons, from where the McLaren/Hart samples had been collected in order to ensure that no significant lead levels existed at the Site. EPA collected new samples from virtually all of the McLaren/Hart sampling locations where elevated lead concentrations had been reported. Because most of the Site is paved, suspected elevated lead concentrations in the soil would have been unlikely to diminish between the McLaren/Hart and the EPA sampling events. EPA's results, which included collection and analysis of almost 200 samples, did not indicate elevated lead levels in soil and sediment.

In terms of uncovering the exact nature of the calculation error, it would be a very complicated and time consuming endeavor to unravel the exact nature of such an error. EPA opted to return to the sampling locations where elevated lead concentrations had been reported (analyzing many more samples in addition to these locations while in the field) rather than pursue the exact nature of the calculation error. In this way, EPA was able to produce tangible, reliable, and most

importantly, timely evidence that the elevated concentrations reported in the McLaren/Hart data set were in fact erroneous and that conditions at the Site, with respect to OU-2, were protective of the community.

4. A representative from the Broome County Health Department asked about the results from background samples collected near the Site during EPA's two 1992 sampling events.

EPA Response. Of the three background samples collected in soil near the Site, one sample contained an elevated concentration of lead. Since this sample was collected from an area where it was evident that household refuse and motor oil, cans, and filters had been disposed, this contamination was not considered Site-related. Lead levels in the other two samples were both under 100 ppm.

5. A citizen asked who had originally analyzed the McLaren/Hart samples.

EPA Response. McLaren/Hart used Enviropact Services, Inc. to analyze their samples.

6. The Chairman of the Vestal Advisory Commission asked about the effects of lead on children who might come into contact with soils when playing at the Site.

EPA Response. A comprehensive analysis of all data generated for the Site since 1985 indicates that there is not a lead problem in soils and sediments associated with the Site. Further, this assessment indicates that the McLaren/Hart samples reporting extremely high lead levels were in error.

In a hypothetical scenario involving lead contamination in soils, a risk assessor would calculate risk by assuming exposure to a certain amount of contaminated soils at a certain frequency over a certain length of time. These assumptions would depend on the age of the exposed individual, the depth of the contaminated soils, and other factors. For lead, EPA currently adheres to guidance that specifies a range of 500-1000 ppm to protect human health. For lead in soils and sediments this guidance range was designed to be protective of children. The lower and more protective value of 500 ppm was selected by EPA as a threshold value for the Site.

Though the Site is not considered a source of risk as far as lead is concerned, citizens are encouraged to contact the local Health Department for more information should they be

interested in learning more about the risks associated with lead-related exposures.

7. The Town Supervisor asked if lead concentrations in soil could contaminate the water supply; he also asked if there are any safe levels of lead in drinking water.

EPA Response. A comprehensive analysis of all data generated for the Site since 1985 indicates that there is not a lead problem in soils and sediments associated with the Site. Further, this assessment indicates that the McLaren/Hart samples reporting extremely high lead levels were in error. Hence, EPA has concluded that there is not a source of lead in Site-related media that would contribute to groundwater contamination. Please note that Site-related ground water will be retested for metals (including lead) before being treated, as metals may interfere with the operation of the air stripper.

EPA has established an action level for lead in groundwater of 15 parts per billion (ppb). Simultaneous filtered and unfiltered samples were collected from all monitoring wells during the course of the RI. Sampling results from two unfiltered samples were slightly above the action level (MW-10, 23.5 ppb/MW-11, 29.2 ppb). Results from the corresponding filtered samples from these monitoring wells, however, indicated no lead present whatsoever. For the remaining groundwater samples most lead results indicated that no lead was present. For the few detections of lead reported in groundwater, all were at or below 10 ppb.

8. Several citizens asked if EPA would conduct any future sampling or monitoring of soils at the Robintech Site.

EPA Response. EPA has completed its investigation of suspected soil and sediment contamination at the Robintech Site. Lead was the sole contaminant of concern for OU-2 of the Site, and EPA has concluded that there are no elevated concentrations of lead in Site soils and sediments. Further sampling or monitoring activities are considered unnecessary.

Operable Unit 1 (OU-1) Contamination (Ground Water)

1. A citizen asked about the distinction between the two operable units at the Site. Another citizen asked if the ground water monitoring schedule described in the Record of Decision (ROD) for OU-1 would be affected by a No Action decision for OU-2.

EPA Response. The ROD issued for OU-1 (ground water contamination) will not be affected by the ROD for OU-2. The ROD for OU-2 relates to soils and sediments only. Ground water monitoring activities will be conducted as stated in the ROD for OU-1. EPA made a distinction between the operable units so that the known problem (ground water contamination) could be addressed as soon as possible while at the same time allowing further investigation of the suspected lead-contamination of soil and sediment. Currently, the groundwater remedy is in the early stages of the design process.

2. A Vestal Town Councilman asked if ground water at the Site would be pumped out of the aquifer and treated with an air stripper.

EPA Response. EPA will proceed with the ground water remediation as described in the ROD for OU-1. The process will involve pumping ground water out of the aquifer and using an air stripper to remove volatile organic compounds (VOCs). Treated groundwater can either be used in the plant processes or discharged at the facility's permitted outfall.

3. The Vestal Town Supervisor expressed concern about the discharge of ground water into the river. He cited past problems that the town has had with discharges into the river. He also asked how the pumping system would be structured.

EPA Response. All discharges from the plant, including the discharge from the air stripper, must comply with the facility's existing State Pollutant Discharge Elimination System (SPDES) permit. The permit takes into consideration the fact that the effluent ultimately enters the Susquehanna River. The State of New York has designated the river as a Class A water body, which means that it is considered protected.

Three areas requiring treatment have been established at the Site. Water will be pumped from these three areas to the air stripper for treatment. The extraction and treatment systems will be fully modeled and tested before implementation. Air discharges from the air stripper must comply with NYSDEC standards.

4. A citizen asked where the ground water will go after treatment.

EPA Response. Once the ground water is treated, the plant has the option to use the water in the pipe production operation or to discharge it under their SPDES permit. EPA anticipates the plant will decide to reuse the treated water in their operations.

5. A citizen asked if the plant currently holds an SPDES permit.

EPA Response. The Robintech plant has held an SPDES permit since 1981. The plant is required to have this permit because their operations include using water to cool newly formed PVC pipe.

6. A citizen asked how often the aqueous discharge from the air stripper will be monitored, and whether the plant would be informed beforehand. He also asked what type of corrective action would occur if the plant was not in compliance with standards.

EPA Response. EPA will be involved throughout the remedial process, overseeing the PRPs during sampling, testing of equipment, and other aspects of the design, construction, and operation of the extraction and treatment system. In addition, EPA will be approving or disapproving any modifications to the system. The aqueous discharge from the air stripper will be periodically monitored with EPA collecting split samples for verification purposes. Monitoring will be conducted using 10 to 15 wells, including some new wells constructed specifically for the remedial project. In addition, the regular monthly monitoring of plant discharges associated with the SPDES permit will supplement the new monitoring program. Should the groundwater extraction and treatment system fail to achieve the level of removal of contaminants required, EPA would require the PRPs to modify the system to achieve these goals.

7. A citizen requested clarification of the relationship between the SPDES permit and the Superfund investigation at the Site.

EPA Response. From 1966 to 1983, the Robintech plant used public water in their operations. In 1981, the plant obtained an SPDES permit. The plant installed its own wells in December 1983. A routine analysis of the plant's effluent collected by NYSDEC in 1984 showed contaminants present that were not listed in the permit. Further investigation into the source of these contaminants led to the conclusion that they originated in the groundwater beneath the Site. The Site was

placed on EPA's Superfund National Priorities List in June of 1986.

8. A citizen asked which series of analytical method is used to evaluate the plant's SPDES parameters, as different series are associated with different detection levels.

EPA Response. According to NYSDEC personnel, the series of analytical method utilized by NYSDEC for the Site pipe production facility's SPDES permit in their grab samples is the 600 series. This is the series associated with wastewater. The specific analytical methodology would be either 601 or 624. This is in accordance with 40 CFR Part 136 of the federal guidelines regarding the testing of such effluent. The analytical method utilized by the pipe production facility to monitor their effluent for their SPDES permit would follow suit accordingly.

Other Issues

1. The Vestal Town Supervisor asked why the meeting was being held in Endicott, New York as opposed to Vestal, New York. He stated that residents from the Town of Vestal were not well informed of the meeting and so were unable to respond properly, as evidenced by the small turnout compared to that for a previous public meeting for OU-1 which was held in Vestal Town Hall. He said that he could have secured a room in Vestal to conduct the public meeting. He requested that the EPA conduct a second hearing for OU-2 in the Town of Vestal.

EPA Response. In December of 1992 EPA attempted to secure a meeting place for January of 1993 in the Town of Vestal. Several town representatives of Vestal informed EPA that no meeting spaces were available. While the preferable location for the meeting would have been in Vestal, EPA concluded it was appropriate under the circumstances to accept a nearby location in order to present the findings in a timely manner.

EPA uses a variety of approaches to disseminate information to the public. Approaches used for informing the public about the Robintech Site meeting and public comment period for OU-2 included press releases to local newspapers, announcements on radio and television, mailing information directly to local officials and concerned citizens included in the mailing list for the Site, and paid public notices published in local newspapers. The press release, mailing list, and public notice information was communicated clearly, accurately, and within an appropriate time frame. For the most part the radio and television information was communicated correctly and

accurately, though the Town Supervisor pointed out that he had seen a television announcement that had communicated the wrong meeting location. This was the basis of his request for a second hearing and his basis for claiming a low turnout.

EPA does not feel that a second meeting is justifiable or necessary. In almost all instances, information concerning the location and time of the public meeting was communicated correctly. EPA cannot control or be held accountable for the accuracy or content of the public media.

2. A citizen expressed concern about other contaminant releases by the plant. He described a contaminant release to the air that had occurred on Thanksgiving night, 1992. The release was reported to the Broome County Health Department as a discharge of a large volume of chemicals into the air, described as butyltin mercaptide ethyl sulfide. He was concerned that the plant was not being governed properly and felt that the EPA should work closely with the local agencies to ensure the plant's compliance.

EPA Response. Butyltin mercaptide ethyl sulfide is not a hazardous substance listed under Section 102(a) of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), and does not appear to be a substance the release of which would trigger the reporting requirements of CERCLA §103 or Section 304 of the Emergency Planning and Community Right-to-Know Act ("EPCRA"). Nevertheless, the November 26, 1992 release of butyltin mercaptide ethyl sulfide at the Site was reported to NYSDEC's Region 7 office located in Kirkwood, New York, who responded to the scene. This particular release does not appear to be one which required a response action by EPA under CERCLA.

As a general matter, where a hazardous substance is released from a facility in an amount which equals or exceeds the reportable quantity for that substance, the person in charge of the facility, or the owner or operator of the facility, must immediately notify the National Response Center, the State Emergency Response Commission, and the Local Emergency Planning Committee and provide certain information. Such notification helps insure that federal, state and local officials can properly respond to environmental emergencies. Not all releases of substances require a response action.

The pipe production and electronic cable assembly facilities are periodically inspected by NYSDEC under various environmental statutes. The effluent from the pipe production process is sampled and sent to a lab for analysis on a monthly basis under the SPDES program. The cable assembly operation

operates under a NYSDEC air permit. The pipe production facility operates under 15 air permits which are inspected annually by NYSDEC or upon a reported release. In addition, EPA regulates the pipe production and electronic cable assembly facilities as small generators under the RCRA program. Both facilities are inspected annually under this program.

APPENDIX V

ADMINISTRATIVE RECORD FILE INDEX

Document Number: RBT-001-0001 To 0297 Date: 03/01/92

Title: Skate Estate Soil Sampling Investigation, Robintech Site, Vestal, New York, Final Report

Type: REPORT
Category: 2.2.0.0.0 Sampling and Analysis Data/Chain of Custody
Author: Miller, David M.: Environmental Response Team (ERT)
Sprenger, Mark D.: Environmental Response Team (ERT)
Recipient: none: US EPA

Document Number: RBT-001-0298 To 0450 Date: 12/01/92

Title: Final Report Soil Sampling Investigation, Robintech Site, Vestal, NY

Type: REPORT
Category: 3.2.0.0.0 Sampling and Analysis Data/Chain of Custody Forms
Author: Munney, Kenneth L.: Environmental Response Team (ERT)
Sprenger, Mark D.: Environmental Response Team (ERT)
Recipient: none: US EPA

Document Number: RBT-001-0451 To 0515 Date: 12/21/92

Title: Robintech Inc./National Pipe Co. Site Report on Suspected Lead Contamination in Surface Soils, Subsurface Soils, and Sediments

Type: REPORT
Category: 3.4.0.0.0 RI Reports
Author: none: none
Recipient: none: none

Document Number: RBT-001-0516 To 0518 Date: 09/07/89

Title: (Memo discussing establishing an interim guidance for soil lead cleanup levels at Superfund sites)

Type: CORRESPONDENCE
Category: 11.1.0.0.0 EPA Headquarters Guidance
Author: Diamond, Bruce: US EPA
Longest, Henry L. II: US EPA
Recipient: directors: US EPA

Document Number: RBT-001-0519 To 0527 Date: 12/01/92

Title: Superfund Proposed Plan, Robintech, Inc./National Pipe Co. Site, Vestal, New York

Type: PLAN
Category: 4.3.0.0.0 Proposed Plan
Author: none: US EPA
Recipient: none: none

ROD FACT SHEET

SITE

Name:	Robintech, Operable Unit 2
Location/State:	Vestal, Broome Co., New York
EPA Region:	II
HRS Score (date):	30.76 (6/86)
NPL Rank (date):	Not Applicable

ROD for OU-2

Date Signed:	March 30, 1993

Selected Remedy for OU-2

Soil and Sediment:	No Action
Capital Cost:	N/A
O & M:	N/A
Present Worth:	N/A

LEAD

Enforcement, PRP Lead
Primary Contact (phone): Mark Granger (212-264-9588)
Secondary Contact (phone): Melvin Hauptman (212-264-7681)

WASTE (OU-2)

Type:	Lead (Suspected).
Medium:	Soil and Sediments.
Origin:	Unknown, suspected erroneous data: of 200 samples collected to verify elevated concentrations none of Site-related data was elevated

RECORD OF DECISION

ROBINTECH, INC./NATIONAL PIPE CO. SITE
OPERABLE UNIT 2
TOWN OF VESTAL
BROOME COUNTY, NEW YORK

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II

NEW YORK

DECLARATION FOR THE RECORD OF DECISION

Site Name and Location

Robintech, Inc./National Pipe Co. Site, Town of Vestal, Broome County, New York.

Statement of Basis and Purpose

This decision document presents the selected remedial action for the Robintech, Inc./National Pipe Co. Site (hereinafter, the "Site" or the "Robintech Site"), Operable Unit Two (OU-2), located in the Town of Vestal, Broome County, New York, which was chosen in accordance with the requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. §§ 9601-9675, as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300. This decision document explains the factual and legal basis for selecting the no action remedy for OU-2 of the Site.

The New York State Department of Environmental Conservation ("NYSDEC") concurs with the selected no action remedy. A letter of concurrence from NYSDEC is attached as Appendix III to this document.

The information supporting this no action decision is contained in the Administrative Record file for the Site. The Administrative Record file index is attached as Appendix V.

Description of the Selected Remedy: No Action

The United States Environmental Protection Agency (EPA) has determined that no action is necessary for the suspected lead contamination of Site-related soil and sediment at the Robintech Site. EPA bases this decision, in part, on the Remedial Investigation (RI) report dated September 1991; Appendices A and D of EPA's 1987 RI Work Plan; as well as the EPA reports entitled "Skate Estate Soil Sampling Investigation" dated March 1992; "Report on Suspected Lead Contamination in Surface Soils, Subsurface Soils, and Sediments" dated December 1992; and "Soil Sampling Investigation, Robintech Site" dated December 1992. Confirmatory sampling of the suspected Site-related lead contamination of soil and sediment was conducted in both February and September 1992. The concentrations of lead in Site-related soil and sediment were found to be acceptable for protection of human health and the environment. Thus, "No Action" is the selected remedy for the second operable unit for the Site.

Declaration Statement

In accordance with the requirements of CERCLA, as amended, and the NCP, EPA, in consultation with the State of New York, has determined that the suspected lead contamination of soil and sediment at the Robintech, Inc./National Pipe Co. Site does not pose a significant threat to human health or the environment and, therefore, remediation of the Site-related soil and sediment is not necessary.

The alternative selected for the first operable unit of the Site will result in contaminants remaining on-site above health based limits until the contaminant levels in the aquifer are reduced below MCLs. CERCLA requires that this action be reviewed at least once every five years after commencement of the remedial action, and every five years thereafter, to ensure that the remedy continues to provide adequate protection of human health and the environment.

William J. Muszynski P.E.
Acting Regional Administrator

March 30, 1993
Date

TABLE OF CONTENTS

ATTACHMENTS

I. SITE NAME, LOCATION AND DESCRIPTION

The Robintech Inc./National Pipe Co. Site (hereinafter, the "Site" or the "Robintech Site") is located at 3421 Old Vestal Road in the Town of Vestal, Broome County, New York (see Figure 1). Vestal, with a population of 27,238 (U.S. Census, 1980), is located within a regionally important industrial center adjacent to Binghamton, N.Y. in the Susquehanna River basin. An estimated 5,350 people live within a one mile radius of the Site. A Site location map is included in Appendix I as Figure 1.

The Site occupies 12.7 acres, and is bordered by Commerce Road and several warehouses and light industrial buildings to the east; Old Vestal Road and several residences to the south; an amusement facility (known as the Skate Estate) and fuel storage tanks (Mobil Tank Farm) to the west; and by Conrail railroad tracks and Parkway Vending Inc. to the north. The Site is located approximately half-way down the westerly face of a hill that slopes gently toward the Susquehanna River. Consistent with this, EPA field observations and examination of topographic contours indicate that the superficial (overland) flow of surface water across the Site is to the west, controlled by a series of conduits and drainage ditches which direct the flow to the river, located approximately a half mile to the north and west. A Site layout map is included in Appendix I as Figure 2.

The area has two distinct aquifers which are sources of water supply. The upper aquifer is comprised of the overburden material above bedrock. This material consists mainly of gray and brown till which becomes harder with depth. In addition, fill material associated with extensive grading on-site for parking spaces and storage ranges from 0-6 feet. Groundwater was encountered within the upper aquifer unit 6-20 feet below the ground surface. The lower aquifer is shale bedrock with a weathered zone 7-10 feet thick. The primary permeability of this material is low but the secondary permeability is much higher. Fractures along the horizontal bedding planes and vertical joints in the shale allow for groundwater flow. Groundwater was encountered in this zone 10-60 feet below the ground surface.

Groundwater flow in the study area is primarily toward the west, with minor components trending to the northwest and southwest, and is recharged from rainfall. There are no private drinking water wells in the vicinity of the Site. All residents are supplied with drinking water by the Vestal public water supply system.

The area where the Site is located is not known to contain any ecologically significant habitat, wetlands, agricultural land, or historic or landmark sites which are impacted by the Site.

II. SITE HISTORY AND ENFORCEMENT ACTIVITIES

In 1966, Robinson Technical Products, Inc. constructed the main building that currently exists at the Site. The first floor of the building was used for the manufacture of aircraft engine mounts and automobile accelerator control cables. The second floor was used for the assembly of electronic cable. In 1970, Robinson Technical Products was renamed Robintech, Inc., and first floor production activities were replaced with PVC pipe extrusion operations. Between 1966 and 1979 the present pipe staging area was paved in four successive stages to the north. The warehouse was constructed in 1974. Ten production wells were installed on-site in 1983 to supply cooling water for the PVC pipe extrusion process. Pipe production had previously relied on municipal water for this purpose.

The Site was bought by Buffton Corporation, the current owner, in 1982, and was occupied by its subsidiaries National Pipe Company (National Pipe) and Electro-Mech, Incorporated (Electro-Mech). Electro-Mech has continued the assembly of electronic cable on the second floor of the facility located at the Site. National Pipe continued the PVC pipe extrusion operations until 1991, when substantially all of National Pipe's assets were sold to LCP National Plastics, Inc. (LCP). LCP is currently occupying that portion of the plant at the Site that previously was used by National Pipe.

An effluent sample collected in 1984 by The New York State Department of Environmental Conservation ("NYSDEC") to verify discharge permit compliance found certain organic constituents above standards that were not covered under the existing permit. Further investigation resulted in the conclusion that the source of contamination was coming from the groundwater beneath the Site. This groundwater was being pumped from the newly installed on-site production wells, used as cooling water in the PVC pipe extrusion process, and then discharged at the permitted effluent point. The Robintech Site was placed on EPA's National Priorities List (NPL) in 1986. An Administrative Order on Consent (AOC) for a Remedial Investigation and Feasibility Study (RI/FS) was issued in 1987 to General Indicator Group, Inc. (a successor of Robintech), Buffton, Buffton Electronics (subsequently renamed Electro-Mech, Inc.), and National Pipe Company. McLaren/Hart, retained by Buffton, implemented the EPA approved work plan. The RI Report was approved by EPA in October 1991. The FS Report was approved by EPA in March 1992.

In response to inconsistencies of data associated with levels of lead in soils and sediments, the Site was separated into two operable units (OUs), or phases, on February 12, 1992. The first OU (OU-1) addressed groundwater, surface water and air; the second OU (OU-2), which is the subject of this ROD, addresses Site-related soils and sediments suspected to be contaminated

with lead. Only groundwater was found to be of concern for OU-1. A Record of Decision (ROD) was issued on March 30, 1992 which calls for the pumping of groundwater from three on-site locations to an air stripper and discharge of the treated groundwater to the facility's permitted outfall. Treated groundwater may be used in the facility's production process before being discharged to the outfall, if so desired. Depending on contaminant load, air pollution controls may be added to the treatment system. EPA issued a Unilateral Administrative Order (UAO) to Buffton Corporation and Electro-Mech, Inc. on September 29, 1992, requiring those companies to conduct the groundwater remedial design and remedial action (RD/RA). The RD is expected to be completed in the Fall of 1994.

III. HIGHLIGHTS OF COMMUNITY PARTICIPATION

EPA is basing the no action decision for suspected lead contamination of Site-related soils and sediments, in part, on the Remedial Investigation (RI) report dated September 1991; Appendices A and D of EPA's 1987 RI Work Plan; as well as the EPA reports entitled "Skate Estate Soil Sampling Investigation" dated March 1992; "Report on Suspected Lead Contamination in Surface Soils, Subsurface Soils, and Sediments" dated December 1992; and "Soil Sampling Investigation, Robintech Site" dated December 1992. These and other significant documents, as well as the OU-2 Proposed Plan for the Site were released to the public for comment on December 31, 1992. These documents were made available to the public in both the OU-2 Administrative Record file and information repositories maintained at the EPA Docket Room in the Region II New York City office and at the Town of Vestal Public Library located at 320 Vestal Parkway East, Vestal, New York. The notices of availability for these documents were published in the Binghamton Press & Sun Bulletin on December 31, 1992. A public comment period was held from December 31, 1992 through January 30, 1993. A public meeting was held on January 12, 1993 at the George F. Johnson Memorial Library in Endicott, New York. At this meeting, representatives from EPA presented the findings of the comprehensive analysis of all data collected since 1985 as it relates to lead in Site-related soils and sediments and answered questions from the public about the Site and the no action remedy under consideration. Responses to the comments received during this comment period are included in the Responsiveness Summary, which is attached to this ROD as Appendix IV.

IV. SCOPE AND ROLE OF RESPONSE ACTION

This ROD focuses on EPA's selection of a no action decision for the Site-related soils and sediments. As noted previously, a ROD was issued on March 30, 1992 for OU-1. The OU-1 ROD calls for

the pumping of groundwater from three on-site locations to an air stripper and discharge of the treated groundwater to the facility's permitted outfall. Treated groundwater may be used in the facility's production process before being discharged to the outfall, if so desired. Depending on contaminant load, air pollution controls may be added to the treatment system. EPA issued a Unilateral Administrative Order (UAO) to Buffton Corporation and Electro-Mech, Inc. on September 29, 1992, requiring those companies to conduct the groundwater remedial design and remedial action (RD/RA). The RD is expected to be completed in the Fall of 1994. This action will reduce the threat to the environment by removing contaminated groundwater from the aquifer and reducing or eliminating the threat to human health and the environment of groundwater contaminant migration from the Site.

Based on EPA's analysis of data generated as relevant to OU-2, and on EPA's Risk Assessment and other supporting documentation, the Site-related soils and sediments do not pose a threat to human health or the environment.

V. SUMMARY OF SITE CHARACTERISTICS

RI Summary of Soil and Sediment Data as Related to OU-2:

Under the supervision of EPA, sampling of sediment, surface and subsurface soils, air, surface water and groundwater was conducted by McLaren/Hart during the RI. As mentioned previously, groundwater, air and surface water were addressed as part of the OU-1 ROD and, as such, are not addressed in the OU-2 ROD. Further information related to OU-1 may be found in the OU-1 Administrative Record file.

The topography in the vicinity of the Site slopes primarily to the west and to a lesser extent to the north. Surficial soils that were suspected of being disturbed or reworked during construction activities were classified as fill. Typically, these materials were encountered to a maximum depth of 6 feet below ground surface. The composition of the fill is similar to other surficial soils encountered on-site.

Several volatile organic compounds (VOCs) were detected in soil in the northern portion of the paved pipe staging area of the Site at levels below concern. Levels of semi-volatile contaminants in this area are associated with the asphalt paving. The only VOC detected in on-site sediment samples was 1,1,1-trichloroethane ("1,1,1-TCA"). Reported values ranged from 14 to 28 parts per billion ("ppb"). No Federal or State standards exist for contaminants in sediment.

Based upon the McLaren/Hart data set from the RI report, lead in

on-site and downgradient soil and sediment was the sole contaminant of concern. Soil and sediment samples analyzed by McLaren-Hart showed lead levels exceeding the EPA interim lead cleanup level of 500-1000 ppm in 24 of 64 samples collected down to a depth of 10 feet. Elevated concentrations ranged from 2,000 to 56,000 ppm. In addition, a small off-site area located on the Skate Estate property displayed elevated lead levels in surface soil. All other reported lead values from this data set were below 100 ppm. EPA conducted confirmatory split sampling at several locations at the time these samples were collected. The EPA split samples failed to confirm the elevated lead concentrations. Concentrations for the EPA split samples ranged from 12-61 ppm. RI data summary tables are included in Appendix II (see Tables 1 thru 3). EPA's split sample data summary tables are included as Tables 4 and 5. In addition, a map of split sample and RI sampling locations can be found in Appendix I as Figures 3 and 4.

Summary of Other Soil and Sediment Data as Related to OU-2:

Two other sets of data, one before the McLaren/Hart RI and one after, were collected by EPA and included over 250 samples analyzed for lead and other compounds.

EPA initiated sampling events in July 1985 as part of developing an RI/FS Work Plan for the Site. These events are summarized (including maps of sampling locations) in Appendices A and D of the 2/10/87 RI/FS Work Plan developed for EPA by CDM-FPC, an EPA contractor. This document is included in the Administrative Record file for the Site. A total of five sediment samples at four locations were collected as part of this investigation. McLaren/Hart split three of these samples with EPA. All eight analyses were below 80 ppm for lead. Of 58 subsurface and surface soil samples collected both on- and off-site, all were below 50 ppm for lead, with the exception of one reported value of 143 ppm from a sample collected from a drainage ditch located in the extreme northern portion of the Site between the paved pipe-staging area and the gravel lot area. Maps of sampling locations associated with these events can be found in Appendix I (see Figures 5 thru 7). Data summary tables can be found in Appendix II (see Table 6).

In response to the elevated detections of lead in the Skate Estate surface soils reported in the McLaren/Hart RI data, EPA tasked its Environmental Response Team (ERT) to determine if the property qualified for a removal action. The assessment, initiated in February 1992, analyzed 155 surface soil, subsurface soil and sediment samples associated with the Skate Estate property and, to a lesser extent, the western perimeter of the Site. Three background samples were collected at nearby locations unassociated with either the Skate Estate or Robintech properties. Analysis was by portable X-Ray Florescence (XRF)

methodology. XRF methodology is a truck mounted field screening analytical method which generates real-time data. In addition, 21 split samples were lab-analyzed using Contract Lab Program (CLP) methodology to provide confirmation of XRF sampling data. The McLaren/Hart soil and sediment sampling locations associated with elevated lead detections were duplicated as closely as possible. Results indicated 120 samples below 50 ppm, 26 samples within 50-100 ppm, 4 samples within 100-150 ppm, and 3 samples within 200-250 ppm (or 153 out of 155 samples below 250 ppm). One detection was recorded at 344 ppm, well below the EPA interim cleanup level of 500 ppm for lead in soil. A single detection of 2,550 ppm was recorded in the off-site background location and is considered anomalous. This detection was recorded in a location described by ERT as being characterized by "historical disposal of household debris and automotive waste materials, including oil cans and used oil filters." The split samples, analyzed by CLP methodologies, confirmed the accuracy of the XRF samples.

In September 1992 a second sampling event was initiated by ERT to reanalyze areas where elevated detections of lead had been indicated by the McLaren/Hart data set in an effort to confirm the validity of that data. The original locations were checked against known landmarks and confirmed by the EPA Project Manager for the Site. In the case of the McLaren/Hart subsurface soil borings, the original bore holes had been grouted to grade with concrete and were especially easy to locate. A total of 39 samples were collected from 16 relevant surface soil, subsurface soil, and sediment RI-related locations. Analysis was by portable XRF methodology. Where an elevated detection had been made during the course of the McLaren/Hart sampling rounds in a particular horizon, samples were collected down to that horizon using a drill rig. All but 2 of the 39 samples collected were below 50 ppm and all samples recorded lead values below 100 ppm. Split samples analyzed in the lab using CLP methodologies confirmed the accuracy of the XRF sampling results. All 10 of these lab samples were below 50 ppm.

A more detailed discussion of these sampling events, including maps of sampling locations, can be found in Appendices A and D of EPA's 1987 RI Work Plan, as well as in the EPA reports entitled "Skate Estate Soil Sampling Investigation" dated March 1992; "Report on Suspected Lead Contamination in Surface Soils, Subsurface Soils, and Sediments" dated December 1992; and "Soil Sampling Investigation, Robintech Site" dated December 1992. Data summary tables can be found in Appendix II (see Tables 7 thru 9). Maps of sampling locations associated with these events can be found in the EPA reports entitled "Skate Estate Soil Sampling Investigation" dated March 1992 and "Soil Sampling Investigation, Robintech Site" dated December 1992. These documents may be found in the Administrative Record file for the Site.

Although the exact reason is not apparent, a comprehensive analysis of all sampling data collected since 1985 for the Site indicates that the McLaren/Hart data set is erroneous and inaccurate as it relates to reported lead values in soil and sediment.

VI. SUMMARY OF SITE RISKS

EPA conducted a Risk Assessment to estimate the health and environmental risks of all potentially affected media at the Site. The Risk Assessment began by selecting indicator chemicals which would be representative of Site risks. These chemicals were identified based on factors such as potential for exposure to receptors, toxicity, concentration and frequency of occurrence. These contaminants included VOCs, semi-volatiles, and metals in various media.

The Risk Assessment evaluated the health effects which could result from exposure to contaminated or potentially contaminated media including groundwater, surface water, air, surface and subsurface soils, and sediment. Risks associated with groundwater, surface water and air are the subject of OU-1 and as such are not addressed as part of this ROD.

The results of the Baseline Risk Assessment are contained in the Draft Final Risk Assessment, Robintech, Inc./National Pipe Co. Site dated February 1992 and prepared by Alliance Technologies Corporation under contract to EPA. This document is included in the Administrative Record file for the Site.

Current federal guidelines for acceptable exposures are a maximum health Hazard Index (HI) equal to 1.0 and an individual lifetime excess carcinogenic risk in the range of 10^{-4} to 10^{-6} (or $\approx$ 1:10,000 to 1:1,000,000). The Hazard Index reflects noncarcinogenic health effects for an exposed population and is calculated by dividing the chronic daily intake of a chemical by the daily dose believed to be protective of human health including sensitive sub-populations. If the HI exceeds one (1.0), there is a possibility of adverse health effects.

For soil and sediment, the exposure pathway demonstrating the greatest risk was ingestion of on-site soils by a trespasser. This risk value (1.0×10^{-5}) is, however, within the target carcinogenic risk range of 10^{-4} to 10^{-6} discussed above and in the NCP. Risk for this scenario was due primarily to PAHs which were detected in a single sample underlying the pavement. None of the HIs exceeded 1.0 for soils or sediments. Quantifiable risks, therefore, have been determined to be insignificant.

It should be noted that EPA has temporarily withdrawn the toxicity values used to quantitatively evaluate risks associated with lead exposure in soil and sediment. In the meantime EPA has set an interim cleanup level of 500 to 1,000 ppm for the maximum allowable concentration of lead in soil in residential areas. This range is designed to protect sensitive sub-populations (i.e., children). While the Site and most of the surrounding area is zoned for industrial use, this range has at times provided a basis for remedial action at industrial sites as well. For the Robintech, Inc./National Pipe Co. Site, the lower and more protective value of 500 ppm is considered the threshold value. Employing this value at the Site affords an added layer of safety.

The 500 ppm threshold value was significantly exceeded in Site-related soils and sediments from one of the three data sets collected for the Site (i.e., the data set collected as part of the McLaren/Hart RI). As summarized previously (see "RI Summary of Soil and Sediment Data as Related to OU-2" and "Summary of Other Soil and Sediment Data as Related to OU-2" sections, above), data collected before the McLaren/Hart data set, split samples collected concurrently with the McLaren/Hart data set, and data collected in response to the McLaren/Hart data set have failed to detect even a single elevated concentration of lead in Site-related soil or sediment. The 2,550 ppm value reported in a background sample and discussed on Page 6 of this ROD was not collected from soil or sediment related to the Site. A comprehensive analysis of all sampling data collected since 1985 for the Site indicates that the McLaren/Hart data set is erroneous and inaccurate as it relates to reported lead values in soils and sediments. Therefore, based on the data sets relied on by EPA in evaluating Site conditions, there is no significant human health hazard due to Site-related lead levels in soils and sediments.

In terms of environmental risk, it is important to consider that the area where the Site is located is not known to contain any ecologically significant habitat, plant and animal species, or wetlands. Though no measurable evaluation criteria are available to quantify and assess potential environmental risk, it should be noted that, from a qualitative perspective, the threshold value, designed to be protective of children (who are extremely sensitive to lead exposure), by extension would be protective of most environmental receptors. Thus, children as an indicator species combined with the absence of sensitive ecological factors leads to the conclusion that there are no significant environmental risks due to Site-related lead levels in soils and sediments.

Areas of Uncertainties

The procedures and inputs used to assess risks in this evaluation, as in all such assessments, are subject to a wide variety of uncertainties. In general, the main sources of uncertainty include:

- environmental chemistry sampling and analysis
- environmental parameter measurement
- fate and transport modeling
- exposure parameter estimation
- toxicological data

Uncertainty in environmental sampling arises in part from the potentially uneven distribution of chemicals in the media sampled. Consequently, there is significant uncertainty as to the actual levels present. Environmental chemistry analysis uncertainty can stem from several sources including the errors inherent in the analytical methods and characteristics of the matrix being sampled.

Uncertainties in the exposure assessment are related to estimates of how often an individual would actually come in contact with the chemicals of concern, the period of time over which such exposure would occur, and in the models used to estimate the concentrations of the chemicals of concern at the point of exposure.

Uncertainties in toxicological data occur in extrapolating both from animals to humans and from high to low doses of exposure, as well as from the difficulties in assessing the toxicity of a mixture of chemicals. These uncertainties are addressed by making conservative assumptions concerning risk and exposure parameters throughout the assessment. As mentioned previously, lead is currently undergoing a toxicological reevaluation. While issues of toxicological uncertainty are being resolved, EPA has established an interim soil cleanup level (500-1,000 ppm) as protective of the most sensitive sub-population, that being children.

VII. STATE ACCEPTANCE

The State of New York concurs with EPA's selected no action remedy. Their letter of concurrence is attached as Appendix III.

VIII. COMMUNITY ACCEPTANCE

The community had a few questions about the no action remedy. Inquiries generally regarded lead concentrations present in Site-related soils and sediments. EPA addressed these questions at

the public meeting and assured those present that the low lead concentrations in Site-related soils and sediments did not require action. In general, the community appeared satisfied with the no action remedy. All comments that were received from the public during the public comment period, including all questions and comments raised during the public meeting, are addressed in the Responsiveness Summary attached as Appendix IV.

IX. DESCRIPTION OF THE "NO ACTION" REMEDY

Based upon the review of all available data and the findings of the RI conducted at the Site, a no action decision for OU-2 of the Site is protective of human health and the environment. The no action decision complies with Federal and State requirements that are legally applicable or relevant and appropriate to the remedial action and is cost effective.

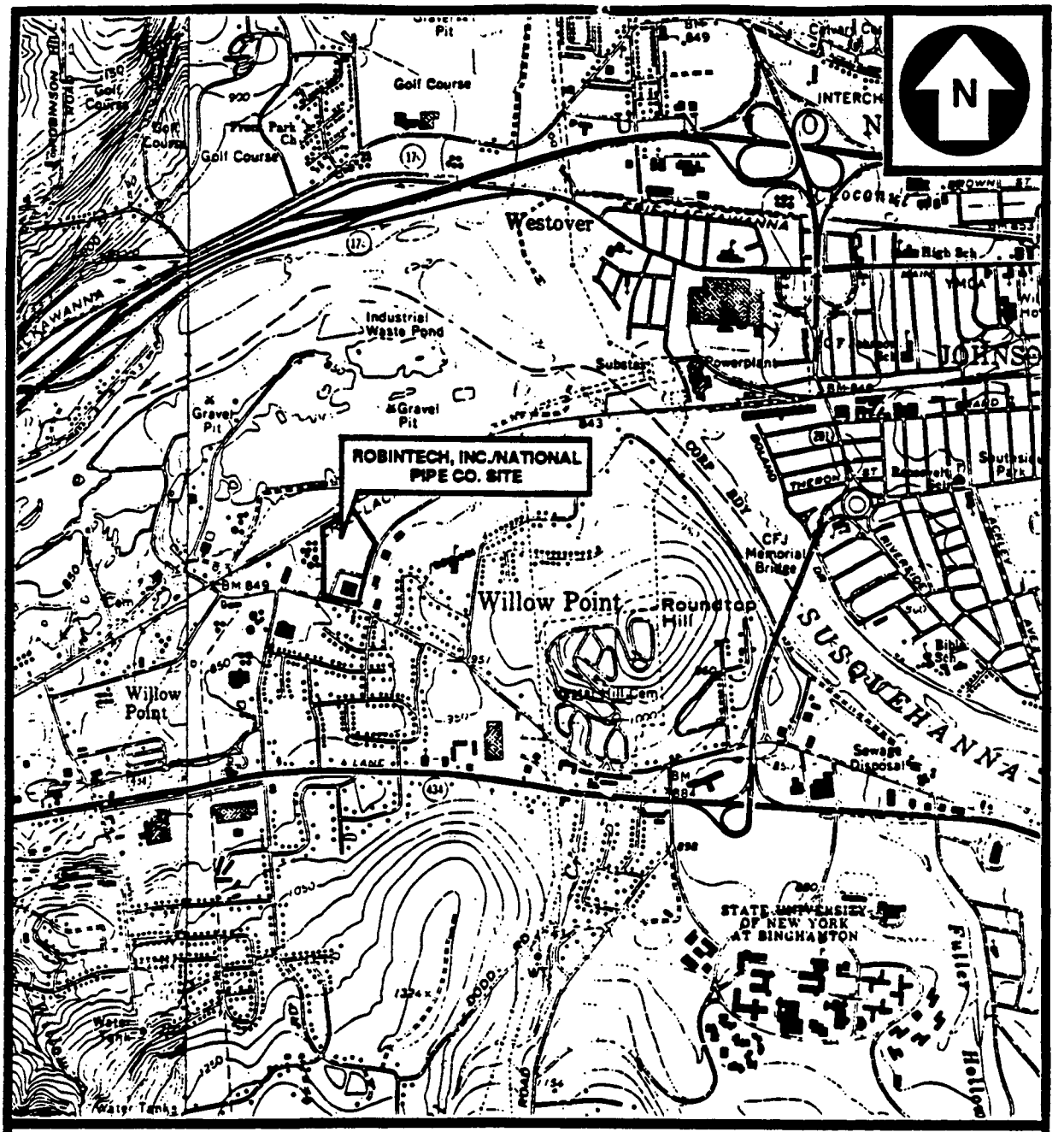
A comprehensive review of all data collected at the Site indicates that there are no concentrations of lead in Site-related soils and sediments above the 500 ppm threshold value. As such, there is no significant threat to human health or the environment due to Site-related lead levels in soils and sediments.

X. DOCUMENTATION OF SIGNIFICANT CHANGES

There are no significant changes from the preferred alternative presented in the Proposed Plan.

APPENDIX I

FIGURES



BASE MAP IS A PORTION OF THE FOLLOWING 7.5' U.S.G.S. QUADRANGLES:
ENDICOTT, NY, 1969; BINGHAMTON WEST, NY, 1976

LOCATION MAP

LOCATION OF THE ROBINTECH, INC./NATIONAL PIPE CO. SITE
VESTAL, NEW YORK

Figure 1.

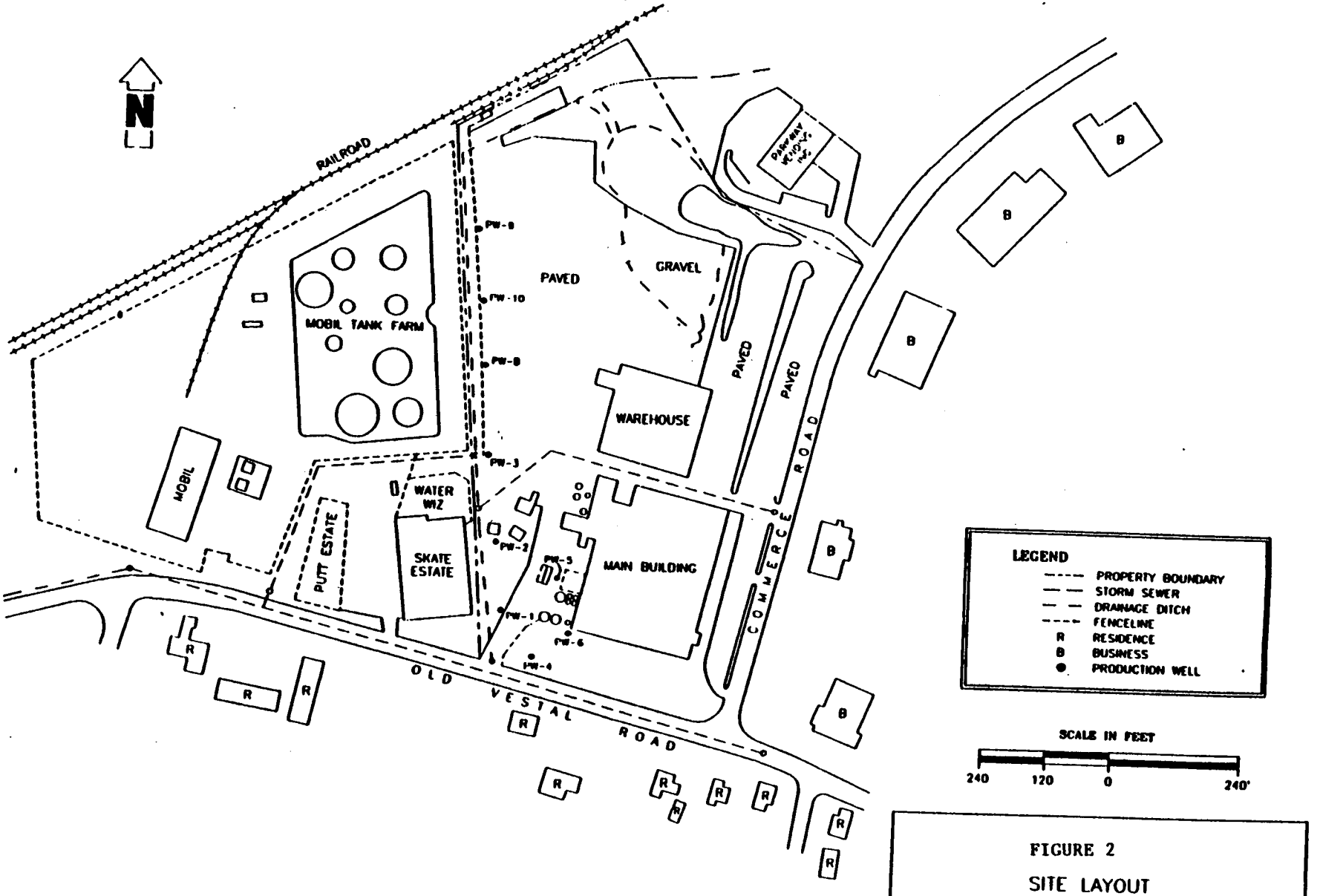
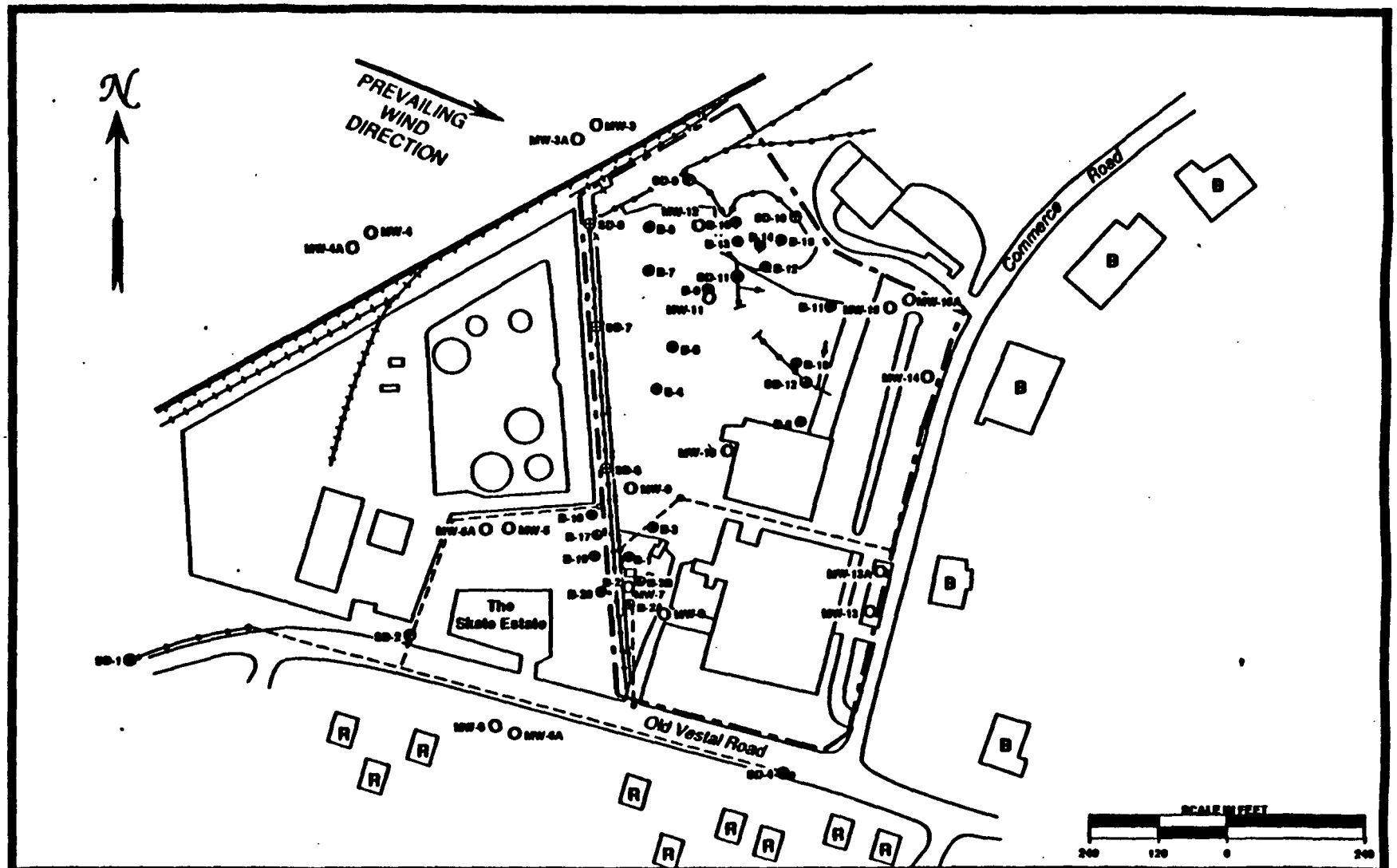


FIGURE 2

SITE LAYOUT
NATIONAL PIPE, VESTAL, NY

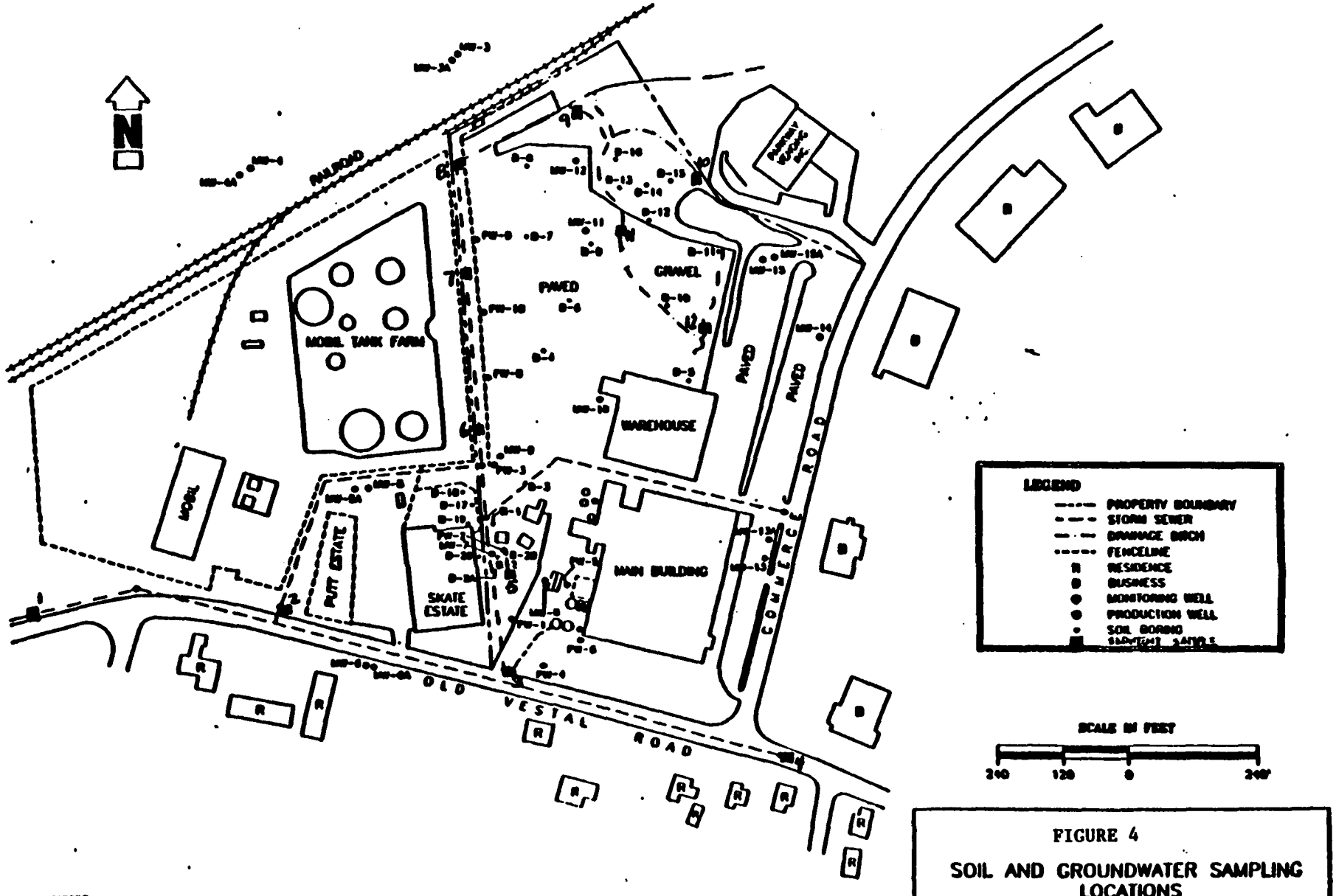


Railroad
Residence
Business
Fuel Storage Tank
Monitoring Well Location
Soil Boring Location
Sediment Sampling Location
Manhole
Storm Water Sewer
Fence
Property Boundary
Drainage Ditch

SITE LAYOUT INCLUDING SOIL BORING, SEDIMENT SAMPLING, AND MONITORING WELL LOCATIONS

ROBINTECH, INC./NATIONAL PIPE CO. SITE
VESTAL, NEW YORK

Figure 3



NOTES:

BEDROCK WELLS ARE DESIGNATED BY "A" FOLLOWING THE WELL NUMBER.

ALL PRODUCTION WELLS WITH THE EXCEPTION OF PW-10 ARE BEDROCK WELLS.

FIGURE 4

SOIL AND GROUNDWATER SAMPLING LOCATIONS
NATIONAL PIPE, VESTAL, NY

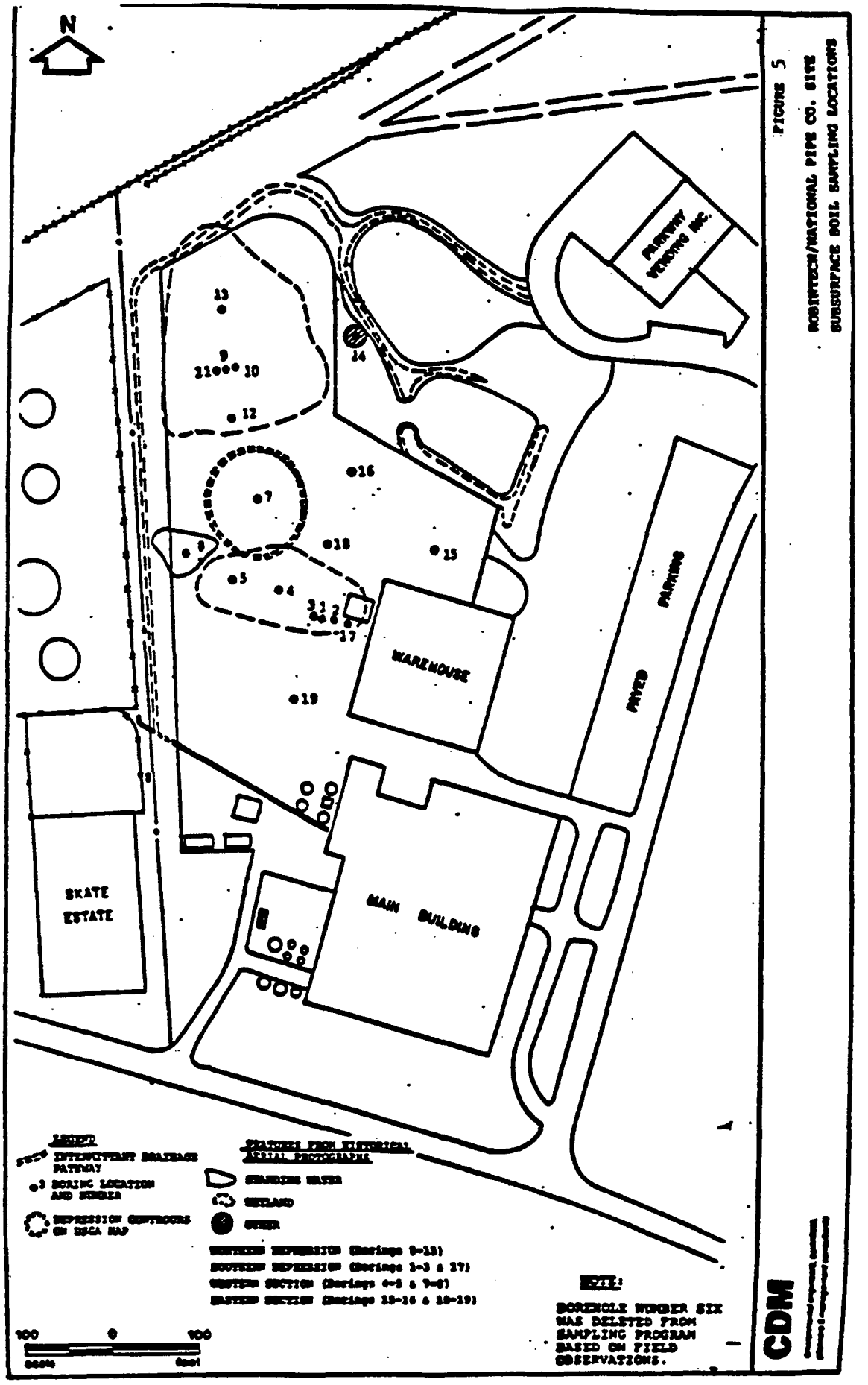


FIGURE 5
ROBINTECH/NATIONAL PIPE CO. SITE
SUBSURFACE SOIL SAMPLING LOCATIONS

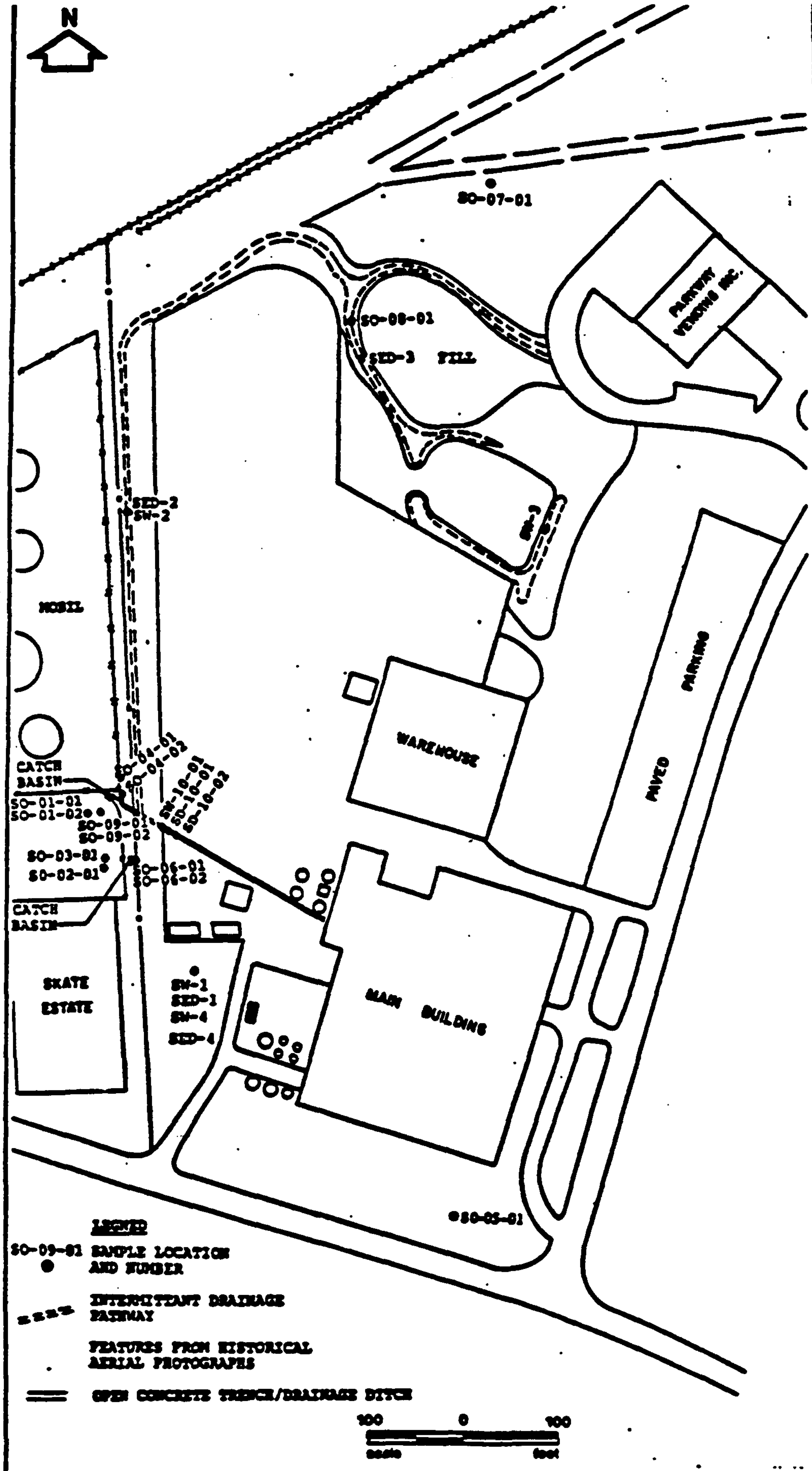
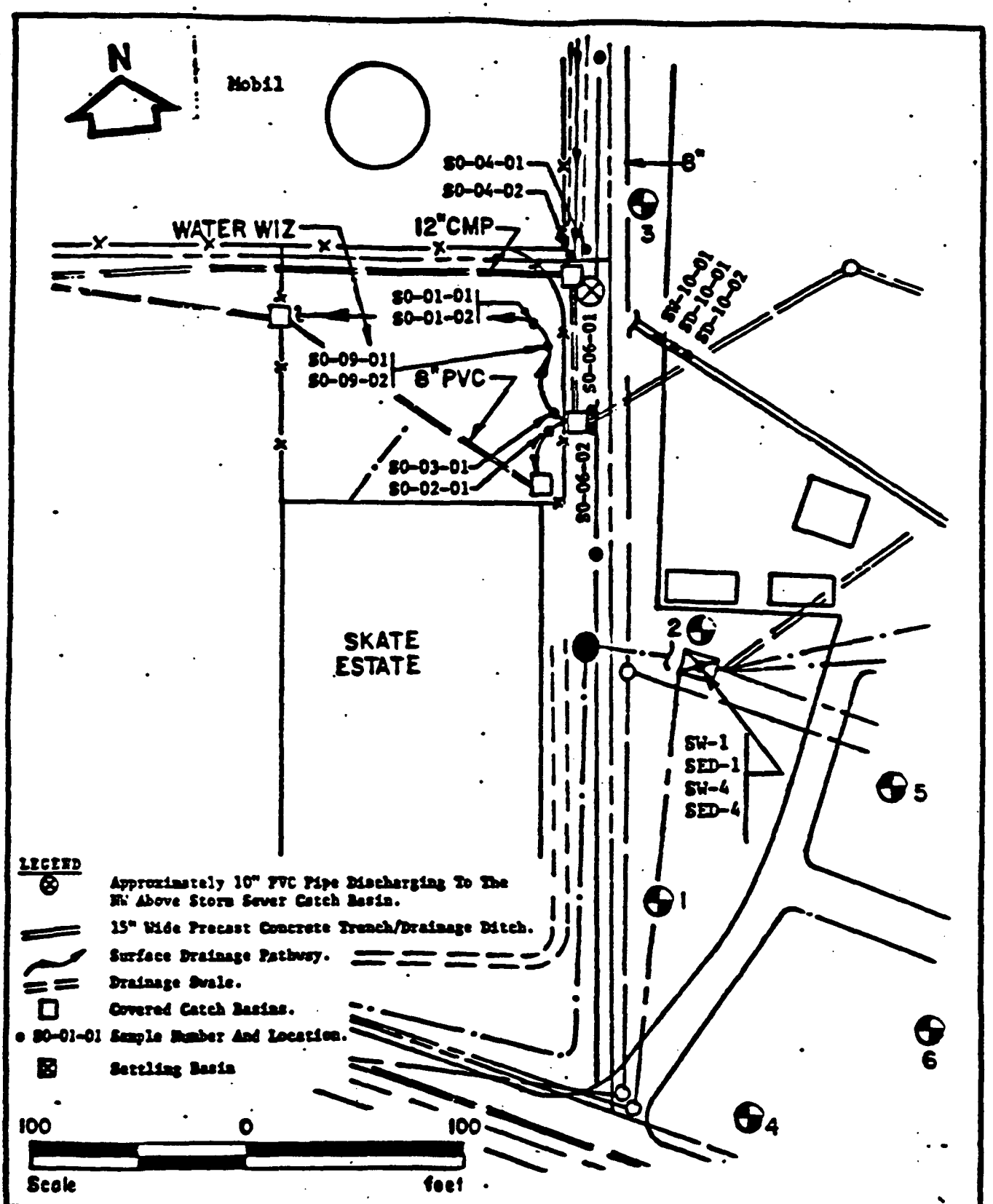


Figure 6

ROBINTECH/NATIONAL PIPE CO. SITE

SURFACE SOIL, SEDIMENT AND WATER SAMPLING LOCATIONS

CDM



CDM

environmental engineers, scientists, planners & management consultants

Figure 7

ROBINTECH/NATIONAL PIPE CO. SITE
ENLARGEMENT OF SURFACE SOIL, SEDIMENT AND WATER SAMPLING LOCATIONS IN SW SITE AREA

APPENDIX II

TABLES

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
METALS AND CYANIDE
NATIONAL PIPE, VESTAL, NY

BORING NUMBER	B1	B1-D	B1	B2	B2	B2	B2A	B2A-D	B2A	B2B	B2B
DEPTH (FT)	2-4	2-4	8-10	2-4	4-6	8-10	4-6	4-6	8-10	2-4	6-8
DATE	4-20-88	4-20-88	4-20-88	4-21-88	4-21-88	4-21-88	4-21-88	4-21-88	4-21-88	4-21-88	4-21-88
METALS (mg/kg)											
Aluminum	15,719	11,925	5,515	NA	7,110	6,692	8,080	6,692	6,944	6,860	10,205
Antimony	-	-	-	NA	-	-	-	-	-	-	-
Arsenic	-	-	-	NA	-	-	-	-	-	-	-
Barium	28.3Q	-	-	NA	29.9Q	-	42.7	36Q	32.7Q	-	-
Beryllium	-	0.52Q	-	NA	-	-	-	-	-	-	-
Cadmium	-	-	-	NA	-	-	-	-	-	-	-
Calcium	3,434	148	21,839	NA	2,297	129Q	2,345	1,719	1,711	13,263	354Q
Chromium	-	-	-	NA	-	-	-	-	-	-	-
Cobalt	19.4	-	27.1	NA	-	-	-	-	-	-	-
Copper	26.4	20.3	19.8	NA	12.1	11.6	20.4	14.3	17.5	77.2	19.3
Iron	26,764	22,184	13,982	NA	15,838	14,940	16,881	12,514	16,611	10,869	16,038
Lead	29	25	10.4J	NA	21.4J	12,800	31J	26J	24	15,600	7,270
Magnesium	4,091	3,162	2,617	NA	1,800	1,693	1,831	1,526	2,060	3,187	3,280
Manganese	781	435	672	NA	425	286	534	451	872	461	405
Mercury	0.10J	0.08J	0.26J	NA	0.24J	0.05Q	0.16J	0.18J	0.50J	0.08Q	0.05Q
Nickel	24.3	41.7	16.6	NA	12.8	15.0	16.1	11.4	16.2	13.7	22.1
Potassium	923Q	472Q	383Q	NA	271Q	237Q	441Q	301Q	391Q	295Q	156
Selenium	-	-	-	NA	-	-	-	-	-	-	0.44
Silver	2.4	1.2Q	1.2Q	NA	-	-	-	-	-	2.2Q	1.5Q
Sodium	133Q	93.1Q	50Q	NA	60.7Q	67.1Q	116Q	89.6Q	58.1Q	93.3Q	67.3Q
Thallium	-	1.9Q	-	NA	-	-	-	-	-	-	-
Vanadium	-	-	18.9	NA	-	-	-	19.7	-	-	-
Zinc	66.0	61.8	45.2	NA	50.4	33.9	48.1	37.1	47.4	77.5	67.7
CYANIDE (mg/kg)	-	-	-	NA	-	-	-	-	-	-	-

- Not detected
D Duplicate
Q Estimated semi-quantitative value because concentration is below contract required quantitation limit
J Value is a semi-quantitative estimate based on QA/QC review
R Data failed to meet QA/QC requirements
NA Parameter not analyzed

TABLE 1 (continued)
SUMMARY OF SOIL ANALYTICAL RESULTS
METALS AND CYANIDE
NATIONAL PIPE, VESTAL, NY

BORING NUMBER	B2B	B3	B3	B4	B4	B5	B5	B5	B5	B6	B6
DEPTH (FT)	8-10	2-4	4-6	2-4	8-10	0-2	4-6	6-8	8-10	0-2	4-6
DATE	4-21-88	4-20-88	4-20-88	4-14-88	4-14-88	4-14-88	4-14-88	4-14-88	4-14-88	4-14-88	4-14-88
METALS (mg/kg)											
Aluminum	NA	12,192	31,034	NA	10,300	13,000	10,900	NA	NA	13800	NA
Antimony	NA	-	-	NA	-	-	-	NA	NA	-	NA
Arsenic	NA	-	-	NA	13.00	-	2.07	NA	NA	-	NA
Barium	NA	22.4Q	137.5	NA	42.8	22.6Q	42.9	NA	NA	68.4	NA
Beryllium	NA	-	-	NA	0.02	-	-	NA	NA	-	NA
Cadmium	NA	-	-	NA	18.3	0.08Q	3.49J	NA	NA	11.5	NA
Calcium	NA	9,206	6,960	NA	2,190	54,500	1,600	NA	NA	4870	NA
Chromium	NA	-	-	NA	-	-	-	NA	NA	-	NA
Cobalt	NA	-	-	NA	-	-	-	NA	NA	-	NA
Copper	NA	15.9	20.4	NA	12.2	18.7	17.9	NA	NA	15.6	NA
Iron	NA	24,224	20,795	NA	28,300	29,100	26,800	NA	NA	26,800	NA
Lead	NA	31.2J	28J	NA	8,620	13.4J	10,700	NA	NA	37	NA
Magnesium	NA	4,664	1,752	NA	3,300	5,680	3,240	NA	NA	3,400	NA
Manganese	NA	771	882	NA	418	533	659	NA	NA	365	NA
Mercury	NA	0.02J	0.98J	NA	0.10	0.54	0.10	NA	NA	0.10	NA
Nickel	NA	23.7	27.7	NA	62.0	37.1	54.0	NA	NA	37.2	NA
Potassium	NA	830Q	1,252	NA	765Q	994Q	760Q	NA	NA	858Q	NA
Selenium	NA	-	-	NA	-	-	-	NA	NA	-	NA
Silver	NA	-	2.1	NA	-	-	-	NA	NA	-	NA
Sodium	NA	144Q	140Q	NA	152Q	155Q	169Q	NA	NA	203Q	NA
Thallium	NA	-	-	NA	-	-	-	NA	NA	-	NA
Vanadium	NA	10.9Q	-	NA	--	-	-	NA	NA	-	NA
Zinc	NA	77.2	120.7	NA	64.7	68.5	68.3	NA	NA	69.6	NA
CYANIDE (mg/kg)	NA	-	-	NA	-	-	-	NA	NA	-	NA

- Not detected
D Duplicate
Q Estimated semi-quantitative value because concentration is below contract required quantitation limit
J Value is a semi-quantitative estimate based on QA/QC review
R Data failed to meet QA/QC requirements
NA Parameter not analyzed

TABLE 1 (continued)
SUMMARY OF SOIL ANALYTICAL RESULTS
METALS AND CYANIDE
NATIONAL PIPE, VESTAL, NY

BORING NUMBER	B6	B7	B7	B7	B9	B9	B10	B10	B11	B11-D	B12
DEPTH (FT)	8-10	2-4	4-6	6-8	2-4	4-6	2-4	4-6	4-6	4-6	2-4
DATE	4-14-88	4-14-88	4-14-88	4-14-88	4-15-88	4-15-88	4-15-88	4-15-88	4-18-88	4-18-88	4-18-88
METALS (mg/kg)											
Aluminum	10,300	NA	NA	8,050	7,550	10,400	10,900	9,380	11,700	11,500	17,700
Antimony	-	NA	NA	-	-	-	-	-	-	-	-
Arsenic	-	NA	NA	-	-	-	-	-	-	-	-
Barium	42.0	NA	NA	29.8Q	50.4	65.5	43.0	48.7	27.3Q	30.9Q	60.3
Beryllium	-	NA	NA	-	-	-	-	-	-	-	-
Cadmium	R	NA	NA	1.6BJ	0.90Q	1.2	1.8	3.7	5.3	2.0	205.0
Calcium	5,560	NA	NA	14,300	40,500	4,600	2,080	1,660	1,290	1,250	1,660
Chromium	-	NA	NA	-	-	-	-	-	-	-	-
Cobalt	-	NA	NA	-	-	-	-	-	-	-	-
Copper	18.9	NA	NA	25.2	15.6	19.4	25.0	20.8	12.9	12.6	14.4
Iron	28,600	NA	NA	19,000	15,800	28,200	23,900	22,700	35,700	32,900	22,200
Lead	9,600	NA	NA	9,400	100	38	19	22	22	17,900	22,200
Magnesium	3,900	NA	NA	5,100	4,630	2,600	3,240	3,040	107Q	3,040	1,210
Manganese	342	NA	NA	167	319	148	384	495	18	393	462
Mercury	0.09	NA	NA	0.07	-	0.02Q	0.03Q	0.07	0.07	0.07	0.42
Nickel	66.3	NA	NA	52.1	14.1	61.7	17.8	26.5	37.2	34.5	16.6
Potassium	676Q	NA	NA	946Q	481Q	455	691Q	560Q	18.1Q	956Q	1,010
Selenium	-	NA	NA	-	-	-	-	-	-	-	-
Silver	-	NA	NA	-	-	-	-	-	-	-	-
Sodium	449Q	NA	NA	181Q	66.6Q	39	40.2Q	56.3Q	129Q	126Q	157Q
Thallium	-	NA	NA	-	-	-	-	-	-	-	-
Vanadium	-	NA	NA	-	-	-	-	-	-	-	-
Zinc	71.2	NA	NA	56.3	50.6	47.9	62.6	57.2	68.2	70.0	77.8
CYANIDE (mg/kg)	-	NA	NA	-	-	-	-	-	-	-	-

- Not detected
D Duplicate
Q Estimated semi-quantitative value because concentration is below contract required quantitation limit
J Value is a semi-quantitative estimate based on QA/QC review
R Data failed to meet QA/QC requirements
NA Parameter not analyzed

TABLE 1 (continued)
SUMMARY OF SOIL ANALYTICAL RESULTS
METALS AND CYANIDE
NATIONAL PIPE, VESTAL, NY

BORING NUMBER	B13	B14	B15	B16	B17	B18	B19	B20
DEPTH (FT)	6-8	4-6	2-4	4-6	0-2	0-2	0-2	0-2
DATE	4-19-88	4-19-88	4-19-88	4-20-88	4-25-88	4-25-88	4-25-88	4-25-88
METALS (mg/kg)								
Aluminum	6,336	12,384	11,800	11,362	13,621	13,614	14,165	12,337
Antimony	-	-	-	-	-	-	-	-
Arsenic	-	-	-	-	-	-	-	-
Barium	23.6Q	42.4	24.1Q	33.9Q	57.9	27.7Q	47.7	30.1
Beryllium	-	-	-	-	-	0.4Q	-	-
Cadmium	-	-	-	-	1.3	-	-	-
Calcium	813Q	967	1,686	902Q	341Q	8,299	189Q	850Q
Chromium	-	-	-	-	0.52Q	-	-	0.51Q
Cobalt	-	-	-	-	-	-	-	-
Copper	-	-	17.2	-	15.3	15.5	12.2	26.0
Iron	14,806	18,463	16,952	15,920	41,068	27,149	27,680	22,905
Lead	28	22	22.5J	10.6J	26,100	14,100	13,400	2,220
Magnesium	1,276	1,898	1,278	650Q	2,432	4,948	3,120	2,862
Manganese	169	385	313	114	925	657	1,001	639
Mercury	0.11J	0.04J	0.24J	0.26J	0.10Q	0.20	0.75	0.1Q
Nickel	8.8Q	8.5Q	7.9Q	6.3Q	21.5	23.6	19.6	20.9
Potassium	240Q	682Q	793Q	379Q	267	498Q	518Q	449Q
Selenium	-	-	-	-	-	-	-	-
Silver	-	4.8	2.1	2.1Q	1.7Q	1.7Q	1.6Q	1.3Q
Sodium	151Q	155.9Q	88.3Q	172Q	65.4Q	67.7Q	103Q	75Q
Thallium	-	-	-	-	-	-	-	-
Vanadium	18.1	-	-	38.7	-	-	-	-
Zinc	25.0	39.5	44.7	21.4	89.3	66.4	69.0	90.4
CYANIDE (mg/kg)	-	-	-	-	-	-	-	-

- Not detected
D Duplicate
Q Estimated semi-quantitative value because concentration is below contract required quantitation limit
J Value is a semi-quantitative estimate based on QA/QC review
R Data failed to meet QA/QC requirements
NA Parameter not analyzed

TABLE 2
SUMMARY OF SOIL ANALYTICAL RESULTS, METALS AND CYANIDE
NATIONAL PIPE, VESTAL, NY

BORING NUMBER	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-8D	MW-9	MW-10	MW-11	MW-12	MW-14	MW-15	FB-1	FB1.1
DEPTH (FT)	4-6	4-6	6-8	8-10	4-6	10-12	8-10	4-6	15-17	4-6	4-5	5-7	40-41	-	-
DATE	9-6-89	9-6-89	1-30-88	12-8-88	9-8-88	9-13-88	9-13-88	8-30-88	8-31-88	9-12-88	9-1-88	9-9-88	9-7-88	9-8-88	9-12-89
METALS (mg/kg)															
Aluminum	9,460	12,800	142,000	149,000	9,370	5,870	6,490	8,080	4,650	6,570	10,000	8,680	8,840	-	-
Antimony	13.30	3.31	-	-	-	-	-	-	-	-	-	-	-	-	-
Arsenic	5.50	4.75	7.7J	9.22	R	10.4Q	R	R	R	R	R	12.7	R	R	-
Barium	-	-	78.8	50.6	29.9J	27.3J	-	34.3J	44	25.7J	-	-	-	-	-
Beryllium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	6.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium	1,350	2,320	1,430	747	1,540	741J	777J	6,040	3,330	9,030	2,990	757J	4,650	-	-
Chromium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cobalt	11.6	11.7	-	-	-	-	-	-	-	-	-	-	-	-	-
Copper	24.3	18.1	19.8	19.4	12.1	43.3	-	17.5	12.4	12.8	18.4	12.7	14.1	-	-
Iron	25,100	34,300	21,200	16,300	13,500	15,600	15,200	16,900	14,000	10,300	19,200	14,200	17,000	-	-
Lead	10.2	9.7	8.2J	11.6J	12.1Q	21.3Q	27.1Q	20.0	10.4	15.8	15.6	10.1	10.9	-	-
Magnesium	3,820	4,480	3,440	2,280	1,730	1,740	1,770	4,250	2,530	2,530	2,580	1,840	3,220	-	-
Manganese	783	607	604	354	300	389	300	338	437	200	324	297	294	-	-
Mercury	-	-	-	0.12	2.9J	1.7B	2.2A	5.7B	2.3B	2.2J	2.3J	2.43	2.4J	-	-
Nickel	34.7	38.8	21.5	12.9	15.1Q	11.6Q	-	-	-	8.72Q	10.2Q	3.99Q	3.70Q	-	-
Potassium	629	950	677	587	1,400Q	1,400Q	785J	1,040Q	78J	1,040Q	1,170Q	748J	1,180Q	-	-
Selenium	-	-	2R	2R	-	-	-	-	-	-	-	0.73J	-	-	-
Silver	-	-	0.82	-	-	0.99	-	-	-	-	-	1	-	-	-
Sodium	126	105	117	133	118J	194J	161J	363J	88.6J	130J	158	121J	165J	-	-
Thallium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vanadium	19.1	16.8	-	-	-	-	9.0	-	-	-	15.5	-	-	-	-
Zinc	43.7	68.4	64.9	53.9	66.1	53.4	49.9	63.1	38.5	43.6	52.5	49.8	48.1	-	-
CYANIDE (mg/kg)	-	-	-	-	-	-	-	0.1J	-	-	-	-	-	-	-

- Not detected
D Duplicate (MW-8 listed as MW-8A on the chain of custody)
Q Estimated semi-quantitative value because concentration is below contract required quantitation limit
J Value is a semi-quantitative estimate based on QA/QC review
R Data failed to meet QA/QC requirements

TABLE 3
SUMMARY OF SEDIMENT ANALYTICAL RESULTS
NATIONAL PIPE, VESTAL, NY

Sample number	SD-1	SD-1D	SD-2	SD-4	SD-6	SD-7	SD-8	SD-9	SD-10	SD-11	SD-12
Sample date	4-27-88	4-27-88	4-28-88	4-28-88	4-28-88	4-27-88	4-27-88	4-28-88	4-29-88	4-27-88	4-28-88
VOLATILE ORGANICS (ug/kg)											
1,1-Dichloroethane	-	-	-	-	-	-	-	-	-	-	10
Toluene	-	-	-	2900E	-	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	12	-	14	17	-	20	-	28	-
Xylene (total)	-	-	-	12	-	-	-	-	-	-	-
TICs Number*	0	2	0	7	0	0	0	0	0	0	0
Total concentration	-	22	-	1,068	-	-	-	-	-	-	-
SEMIVOLATILE ORGANICS (ug/kg)**											
bis(2-Ethylhexyl)phthalate	-	-	3,600	4,600	23,000	-	45,000	2,600	-	2,000	-
TICs Number*	6	4	11	21	9	14	13	5	3	0	9
Total concentration	15,400	5,150	45,600	408,800	20,930	104,600	144,500	29,300	7,200	-	35,520
METALS (mg/kg)											
Aluminum	5,015	4,141	5,178	3,890	6,169	9,980	19,207	13,250	10,536	13,121	4,969
Antimony	-	-	-	-	-	-	-	-	-	-	-
Arsenic	-	-	-	-	-	-	-	-	-	-	-
Barium	44.6	30.4Q	17.3Q	20.7Q	16.6Q	19.3Q	66.3	19.9Q	40.8	0.9Q	11.1Q
Beryllium	-	-	1.25Q	-	-	-	-	0.93Q	1.3Q	-	1.41
Cadmium	-	-	-	1.6	-	-	-	-	-	-	1.2
Calcium	44,709	32,903	58,651J	28,010.5J	48,918J	9,526	1,822	-	3,151J	742Q	490.51BJ
Chromium	-	-	-	-	-	-	1.1	-	-	-	-
Cobalt	-	-	-	-	-	-	4	-	-	-	-
Copper	17.5	-	19.7	19.8	12.9	14.6	28.1	26.3	22.3	13.7	15.8
Iron	11,208	13,356	17,196	14,582	14,007	19,857	20,117	34,750	28,869	31,145	11,690
Lead	10,600	41,100	10,100	29,563	25,364J	55,983	7,506	20,785	39,116J	20,900	5,659
Magnesium	4,266	3,276	5,074.6Q	4,232	5,359	3,502	4,480	2,712	2,693	3,350	6,921
Manganese	347	491	199	229	328	345	1,703	1,171	660	649	683
Mercury	0.2Q	0.08Q	-	-	0.25	0.15	-	-	0.34	0.12Q	-
Nickel	8.53Q	7.89Q	5.2Q	-	7.69Q	17.10	21.40	17.20	10.80	20.50	9.84
Potassium	332Q	214Q	405.8Q	496.2Q	419.9Q	580Q	910	553.8Q	415Q	539Q	273.3Q
Selenium	-	-	-	-	-	-	-	-	-	-	-
Silver	1.7Q	2.1Q	-	-	-	3.70	4.59	3.56	-	1.4Q	-
Sodium	86.2	74.6	125Q	199.1Q	130Q	264Q	389.9	346.5Q	265.8Q	411Q	526.5Q
Thallium	-	-	-	-	-	-	-	-	-	-	-
Vanadium	-	-	-	-	-	-	-	-	-	-	-
Zinc	109.0	82.6	228.7	138.9	71.4	131.6	544.3	250.0	244.9	189.7	89.0
CYANIDE (mg/kg)	-	-	-	-	-	-	-	-	-	-	-

TICs compounds (listed in Appendix B)
- Not detected
D Duplicate of SD-1 (labeled as SD-0 on the chain of custody)
Q Estimated semi-quantitative value because concentration is below constant required quantitation limit
J Value is a semi-quantitative estimate based on QA/QC review
R Data failed to meet QA/QC requirements
NA Parameter not analyzed
E Analyte quantified from 5-fold sample dilution
** All semivolatile analyses performed on 2 to 5 fold sample dilutions; refer to Appendix

TABLE 4

ROBINTECH PHASE I SPLIT SAMPLE DATA

	B-2;s	B-15;s	B-15;w	B-20;s	SW-5	SW-6	SD-6	SD-10	M-2;s	M-2;D
Inorganics										
Aluminum	11800 P	10100 P	941000 P	14300 P	302 P	626 P	7920 P	19600 P	570 P	35 UP
Chromium	16 EP	14 EP	1070 E+P	36.3 P	9.1 BP	6 UP	12.3 P	27 P	10 PU	6 UP
Barium	67 P	[33] P	2940 P	92.6 BP	73.6 BP	25.3 BP	34.3 B3P	98.4 BP	700 PJ	240 P
Beryllium	[1.1] P	[.58] P	65 EP	0.47 BP	1 UP	1 UP	0.38 BP	0.64 BP	1 UP	1 UP
Cadmium	1.2 UP	1.2 UP	12 P	1.2 U+P	5 UP	5 UP	1.2 U+P	2.2 U+P	5 UP	5 UP
Cobalt	[8.2] P	[9.1] P	990 N+PJ	11.3 BP	6 UP	6 UP	6.5 BP	15.1 BP	15 UP	6 UP
Copper	22 P	13 P	2990 P	27.1 P	216 P	12.3 BP	23 P	31.4 P	15 UP	6 BP
Iron	20300 P	23000 P	2.02e P	29700 P	731 P	1110 P	18000 P	41600 P	2100 PJ	1940 P
Lead	22 P	.16 UP	1560N+PJ	49.1NEP	5.6 BNJP	4.2 BNJP	16.3 eNJP	61.3 P	3 UP	2.8 BNJP
Nickel	19 P	17 P	2030 E+P	25.1 BP	8 UP	8 UP	18.9 BP	31.9 BP	25 UP	8 UP
Manganese	420 eP	536 eP	24300 P	849 P	16.7 BP	47.9 P	427 P	879 P	1500 PE	1300 P
Zinc	48 P	50 P	6590 P	89 EP	77.1 BP	68.5 BP	84 EP	282 EP	1100 PE	1020 BP
Vanadium	17 EP	16 EP	1050 P	20.4 P	8 UP	8 UP	12.2 BP	31.5 P	25 UP	8 UP
Arsenic	3.1 P	2.8 P	FBA	18 BNJP	2.0 UNP	2 UP	9.1 BNJP	24.6 BNJP	20 P	20 P
Antimony	10 UNPJ	10 UNPJ	FBA	7.2 UNJP	25 UP	20 UP	7.2 UNJP	12.5 UNJP	60 UP	25 UP
Selenium	.54 UNPJ	.54 UNPJ	FBA	0.25 UNP	2.5 BNP	1 UP	0.25UNP	0.43 UP	4 UP	1.9 BNP
Thallium	0.44 UP	0.44 UP	[2.4]NPJ	0.5 UP	2.0 UNP	2.0 UNP	0.50 UNP	0.86 UP	4.0 UPNJ	2.0 UNP
Mercury	.10 UNCVJ	.11 UNCVJ	FBA	0.1 UCV	0.2 UCV	0.2 UCV	0.1 UCV	0.2 UCV	0.2 UCV	0.2 UCV
Tin										
Silver	2 UP	1.9 UP	4.4 UP	2.2 BNJP	4.0 UNJP	4.0 UNJP	1.0 BNJP	3.8 BNJP	10 UP	4.0 UNJP
Calcium	[189] P	[3511] P	265000 P	4340 P	57300 P	39800 P	59400 P	4570 P	104000 PE	112000 P
Potassium	[3191] P	[290] P	12600 P	606 BP	918 BP	2190 BP	880 BP	1380 P	2090 UP	1200 BP
Sodium	[4571] P	[6951] P	22500 EP	496 UP	667000 P	86200 P	499 UP	864 UP	24000 PJ	27500 P
Magnesium	2780 EP	2780 EP	3490 P	3740 P	8450 P	3430 BP	6110 P	4720 P	18200 PJ	18900 P
Cyanide	0.63 U	0.64 U	10 U	0.62 UAS	10.0 UAS	60.8 AS	0.62 UAS	1.1 UAS	10 U	10.0 UAS

Key: • All values are in ug/l unless noted otherwise

B Indicates element was analyzed for but not detected. The number shown is the detection limit.

[ ] Value is greater than or equal to instrument detection limit but less than the contract detection limit.

E Indicates an estimated value due to presence of interference.

FBA Indicates analysis failed EPA Quality Assurance review.

TABLE 5

ROBINTECH
INORGANIC DATA
METALS DATA (ug/L)

	CASE NO. 11130		CASE NO. 12712		CASE NO. 12689
SAMPLE NUMBER:	MBP913	MBP910	MB1217	MB1210	MB1100
SAMPLE LOCATION:			MW3-4', 4'-6'		MW3-3, 4'-6'
MATRIX:	WATER	WATER	SOIL	WATER	SOIL
Aluminum	75.00 U	3430.00	18700	30.0 U	41000.00
Antimony	60.00 UJ	60.00 U	7.0 UMJ	35.0 UJ	3.90 UMJ
Arsenic	1.00 U	99.00	8.7	2.0 U	10.00 J
Barium	20.00 U	763.00	32.0	3.0 U	63.90
Beryllium	1.00 U	1.00 U	0.52 B	2.0 U	0.95 B
Cadmium	4.00 U	4.00 U	3.0	3.0 U	0.80 UMJ
Calcium	930.00 U	50000.00	3390	133 B	1400.00
Chromium	10.00 U	23.00	59.3	7.0 U	13.30
Cobalt	10.00 U	10.00 U	14.1	9.0 U	9.10 B
Copper	20.00 UJ	19.00 B	26.1	8.0 U	31.50 J
Iron	229.00	50000.00 U	33900	86.6 B	24200.00
Lead	3.00 U	3.90	12.3 MJ	1.0 U	10.20 MJ
Magnesium	500.00 U	22000.00	5510.0	109 B	3400.00
Manganese	2.00 U	1100.00	693.0	2.0 U	731.00
Mercury	0.20 U	0.20 U	0.07 MJ	0.20 UJ	0.10 U
Nickel	10.00 U	22.00 B	32.3	10.0 U	23.30
Potassium	5000.00 U	6230.00 B	1210.0 J	440 B	710.00 MJ
Selenium	1.00 U	1.00 UMN	0.21 B	1.0 U	0.66 UMJ
Silver	10.00 UR	10.00 UR	1.0 U	7.0 U	1.00 U
Sodium	700.00 U	19000.00 J	125.0 BR	369 B	91.00
Thallium	2.00 UJ	2.00 UMN	0.42 B	2.0 U	0.44 UR
Vanadium	10.00 U	10.00 U	87.7	10.0 U	13.60
Zinc	27.00	579.00 B	80.6 EJ	101 J	36.00 J
Cyanide	10.00 U	10.00 U	1.1 U	10.0 U	1.10 U

TABLE 6

ROBINSON/NATIONAL PIPE CO. SITE
SURFACE WATER, SEDIMENT, AND SURFACE SOIL SAMPLES
NATIONAL PIPE PROPERTY
INORGANIC ANALYSIS[b]

Unit No.	Detection Limits[a]		SS1[b]	SS2	SS2 Dupe	Sed 1	Sed 1 Dupe	SW2	Sed 2	SW3	Sed 3	SW10-10	SW8-01	SD-05-01	SD-07-01	SD-08-01
Sampling Date	Soil	Water	8/30/85	8/29/85	8/29/85	8/29/85	8/29/85	8/29/85	8/29/85	8/30/85	8/30/85	7/09/86	7/09/86	3/10/86	3/12/86	3/12/86
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	ppm
Aluminum			NA	NA	NA	NA	NA	NA	NA	NA	NA	286	7044	12400	12100	10900
Antimony	5.2	0.5	ND	ND	NA	ND	ND	ND	69.3/ND	ND/.11	58.9/ND	230	180	20 U	31	75
Arsenic	1	.005	15.4/ND	ND	NA	1.41/ND	1.38	ND	21.3/ND	.011/ND	20.8/ND	101	7.91	6.8	24	210
Barium			NA	NA	NA	NA	NA	NA	NA	NA	NA	454	56	55	59	69
Beryllium	5.2	.5	ND./ND	ND	NA	ND/.21	ND	ND	ND/.5	ND/.001	ND/.45	0.30	0.5	1.10	1.40	4.20
Cadmium	5.2	.5	ND/.21	ND	NA	ND/.92	ND	ND	ND/.9	ND/.01	ND/.75	3.00	3.00	2.30	3.20	17
Calcium			NA	NA	NA	NA	NA	NA	NA	NA	NA	94300	28001	R	2200	9950
Chromium	5.2	.5	ND/3.5	ND	NA	ND/27	ND	ND	ND/14	ND/.03	ND/11	R	24	13	19	19
Cobalt			NA	NA	NA	NA	NA	NA	NA	NA	NA	6.40	8	8.6	9.8	130
Copper	3.0	0.5	ND/20	ND/.16	NA	225/140	174	ND	55.5/23	ND/.05	53.0/24	R	42	14	22	35
Iron			NA	NA	NA	NA	NA	NA	NA	NA	NA	653	19854	22900	26200	18200
Lead	5.2	0.5	ND/14	ND	NA	ND/30	ND	ND	79.2/42	ND/.14	78.5/36	5.00	46.0	17	35	143
Magnesium			NA	NA	NA	NA	NA	NA	NA	NA	NA	14970	3574	2710	3340	2000
Manganese			NA	NA	NA	NA	NA	NA	NA	NA	NA	187	335	247	400	881
Mercury	.000	.0005	ND	ND	NA	ND	ND	ND	ND	ND	ND	0.40	0.24	.120	0.160	0.420
Nickel	11	.5	ND/24	ND	NA	ND/15	ND	ND	ND/12	ND/.07	ND/23	200	100	19	32	34
Potassium			NA	NA	NA	NA	NA	NA	NA	NA	NA	R	R	752	905	1290
Selenium	0.6	0.005	ND	ND	NA	ND	ND	ND	ND	.024/ND	ND	R	4.80 J	2.50	4.00	10.0
Silver	.5	.5	ND/.40	ND	NA	ND/.62	ND	ND	ND/.5	ND/.01	ND/.38	2.6	3.0	1.70	2.40	6.9
Sodium			NA	NA	NA	NA	NA	NA	NA	NA	NA	28200	250	354	90	596
Thallium	05.0	0.5	116/4.2	ND	NA	ND/4.5	ND	ND	198/ND	.70/ND	167/4.1	100	80	5.80	7.90	210
Tin			NA	NA	NA	NA	NA	NA	NA	NA	NA	38	151	110	150	430
Vanadium			NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6	20.0	150	19	27
Zinc	2.0	0.5	ND/56	ND/.10	NA	91.3/57	82.6	ND/.17	185/205	ND/17	844/630	R	373	560	76	757
Cyanide			ND/.20	NA	NA	NA	ND	NA	NA	NA	NA	100	7.1	.00	0.00	2.10

Footnotes:

ND = Compound was analyzed for but was not detected at the detection limit specified in first column.
U = Compound was not detected at concentration indicated. This notation is used where the detection limit differs from the standard detection limit indicated in first column.
a = Detection limits indicated by lab analysis. For inorganics undetected, the detection limit was not given.
b = This sample was from fill material in southern depression, approximately 3-1/2 feet below pavement.
b = When results are different between split samples both results are indicated, (i.e. both CDM's and F.C. Hart's results).
R = Compound did not pass QA/QC.

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TABLE 6 (cont'd)

ROBINSON-NATIONAL PIPE CO. SITE
SKATE ESTATE PROPERTY
SURFACE SOIL SAMPLES
INORGANIC ANALYSES

Results in parts per million

Sample No. / Sampling Date	Detection Limit[a]	SO-01-01 3/10/86	SO-01-02 3/10/86	SO-02-01 3/10/86	SO-03-01 3/10/86	SO-04-01 3/11/86	SO-04-02 7/9/86	SO-05-01 3/11/86	SO-05-02 7/9/86	SO-06-01 7/9/86	SO-06-02 7/9/86
Aluminum		3890	4710	9280	9290	5440	7500	9640	11770	9630	10212
Antimony	24-33	ND	ND	230	ND	ND	150	ND	150	130	130
Arsenic	6.5-9.4	ND	ND	9.7	ND	ND	ND	ND	ND	9.2	8.4
Barium		38	38	46	57	48	43	73	78	48	44
Beryllium	1.2-2	ND	ND	ND	ND	ND	0.3	ND	0.4	0.3	0.4
Cadmium	2.-2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium		8.9	10	16	19	16	21	18	32	15	17
Cobalt	5.0	ND	6	9.9	9.7	7.9	8	9	11	11	11
Copper		12	15	34	46	37	27	36	46	30	30
Iron		9220	10500	23400	21300	12400	16800	20100	27474	23000	25300
Lead		25	30	56	56	90	43.0	53	21.0	13	31
Magnesium		1790	1820	3330	3150	2940	3271	3300	3031	4450	4095
Manganese		245	280	686	571	719J	918	540J	752	549	649
Mercury	.10-.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	9.7	ND	18	38	30	14	21	25	18	15	22
Potassium		690	721	779	1050	780	a	1070	a	a	a
Selenium	2.7-4.9	ND	ND	ND	ND	ND	J	ND	J	J	J
Silver	1.4-2.9	ND	ND	ND	ND	ND	3.4	ND	3.0	ND	2.2
Sodium		165	90	65	159	165	108	164	130	70	81
Thallium	5-7.6	9.7U	8.9U	ND	ND	9.4U	ND	ND	ND	ND	ND
Tin	14-16	33	45	28	62	102	43	20	ND	ND	ND
Vanadium		6.4	8.4	13	14	12	18.3	16	23.1	16.5	18.4
Zinc		58J	103J	138J	173J	308	205	246	84	62	66
Cyanide	.89-1.3	ND	ND	ND	ND	1.0J	ND	0.59J	ND	ND	ND

Footnotes:

ND = Compound was analyzed for but was not detected at the detection limit.

a = Detection limit indicated by lab analysis (i.e., Antimony = 18J)
For these inorganics above the limits the detection limit was not given.

a = Compound was not detected at concentration indicated. This notation is used where the detection limit for this analysis differs from the standard detection limit indicated in first column.

J = Compound is present but cannot be quantified with precision ascribed for that method.

(138/24)RV

TABLE 6 (cont'd)

ROBINTECH/NATIONAL PIPE CO. SITE
SUBSURFACE SOIL SAMPLES – SOUTHERN "DEPRESSION"
INORGANIC ANALYSIS

Results in parts per million

Sample No. Sampling Type Sampling Date	Detection Limit*	SS-01-04 3/6/86	SS-01-05 3/6/86	SS-01-06 3/6/86	SS-02-02 3/6/86	SS-02-03 3/6/86	SS-02-06 3/6/86	SS-03-02 3/6/86	SS-03-05 3/6/86	SS-03-06 3/6/86	SS-03-06 Dupl 3/6/86	SS-17-02 3/13/86	SS-17-05 3/13/86
Aluminum		11100	11100	13000	12000	6070	11000	24000	14500	9080	8850	9030	9830
Antimony	10 – 23	ND	ND	ND	ND	ND	ND	30 U	ND	ND	ND	22	27
Arsenic	5.6 – 6.0	ND	7.7	7.7	ND	ND	8.4	8.9	20	7.4	8.8	7.4	7.7
Barium		46	81	44	124	30	67	170	81	30	30	64	80
Beryllium	1.1 – 1.3	ND	ND	ND	ND	ND	ND	1.8 U	ND	ND	ND	ND	ND
Cadmium	2.2 – 2.8	ND	ND	ND	ND	ND	ND	3.6 U	ND	ND	ND	3.6	ND
Calcium		1080	2720	3730	2770	1250	2080	4850	4200	R	R	756	1500
Chromium		14	13	18	16	11	13	23	20	11	9.9	12	14
Cobalt		9.2	11	13	6.8	7.6	11	9.5	16	7.6	6.8	7.3	8.5
Copper		21	16	19	19	15	21	26	28	25	23	9.2	20
Iron		25200	25000	38400	28700	17000	28400	33000	38000	22800	20000	21400	22400
Lead		11	10	9.3	13	12	9.6	30	17	9.7	9	17	10
Magnesium		4840	4640	6660	2940	2700	4620	3980	6540	4430	3880	2250	3620
Manganese		300	1150	543	457	112	674	582	540	370	344	702	633
Mercury	.11 – .13	ND	ND	ND	ND	ND	ND	.18 U	ND	ND	ND	ND	ND
Nickel		25	26	30	18	14	23	29	30	19	16	19	20
Potassium		906	986	1130	1070	700	1000	1400	1300	802	918	612	914
Selenium	2.8 – 3.3	ND	ND	ND	ND	ND	ND	4.4 U	ND	ND	ND	ND	ND
Silver	1.7 – 2.0	ND	ND	ND	ND	ND	ND	2.7 U	ND	ND	ND	ND	2.0
Sodium	34 – 35	42	51	91	47	ND	46	60	53	56	40	ND	40
Thallium	5.6 – 6.6	ND	ND	ND	ND	ND	ND	8.9 U	ND	ND	ND	ND	ND
Tin	11 – 13	ND	ND	ND	ND	ND	ND	17 U	ND	ND	ND	ND	ND
Vanadium		15	15	20	16	11	16	34	21	13	11	17	13
Zinc		60	65	82	57	54	67	125	87	56	40	49	56
Cyanide	0.6 – 0.7	J	J	J	J	J	J	J	J	J	J	ND	ND
Percent Solids		85.3	76.6	79.6	82.7	80.5	80.5	96.4	76.3	80.7	80.5	85.9	80.9

Footnotes:

R = Compound did not pass EPA QA/QC
ND = Compound was analyzed for but was not detected at the detection limit
* = Detection limits indicated by lab analysis (i.e., Antimony = 10D). For those inorganics above the limit, the detection limit was not given.
U = Compound was not detected at concentration indicated. This notation is used where the detection limit differs from the standard detection limit indicated in first column.
J = Compound is present but cannot be quantified with precision normal for that method.

(340/17)JW

TABLE 6 (cont'd)

[redacted]
SURFACE SOIL SAMPLES - NORTHERN "DEPRESSION"
INORGANIC ANALYSIS

Results in parts per million

Sample No.	Detection Limit*	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted] Dupe	[redacted]	[redacted]	[redacted]	[redacted]
Sampling Date		3/11/85	3/11/85	3/11/85	3/11/85	3/11/85	3/11/85	3/11/85	3/11/85	3/12/85	3/12/85	3/12/85	3/11/85	3/12/85	3/12/85
Aluminum		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Antimony	19 - 20	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Arsenic	5.5 - 6.3	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Barium		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Beryllium	1.0 - 1.3	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Cadmium	2.1 - 2.5	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Calcium		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Chromium		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Cobalt		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Copper		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Iron		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Lead		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Magnesium		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Manganese		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Mercury	.10 - .12	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Nickel		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Potassium		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Selenium	2.6 - 3.1	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Silver	1.6 - 1.9	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Sodium	35	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Thallium	5.2 - 6.3	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Tin	9.9 - 12	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Vanadium		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Zinc		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Cyanide	.6	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Percent Solids		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Footnotes:

R = Compound did not pass EPA QA/QC.
ND = Compound was analyzed for but was not detected at the detection limit.
J = Compound is present by cannot be quantified with precision equal for that method.
* = Detection limit indicated by lab analysis (i.e., Antimony = 19 ug). For these inorganics above the limit, the detection limit was not given.
B = Compound was not detected at concentration indicated. This notation is used where the detection limit differs from the standard detection limit indicated in first column.

[redacted]

TABLE 6 (cont'd)

ROBINTECH/NATIONAL PIPE CO. SITE
SUBSURFACE SOIL SAMPLES - WESTERN SECTION
INORGANIC ANALYSIS

Results in parts per billion

Sample No. Sampling Date	Detection Limit*	SS-04-02 3/07/86	SS-04-06 3/07/86	SS-05-01 3/07/86	SS-05-03 3/07/86	SS-07-01 3/10/86	SS-07-04 Dupe 3/10/86	SS-07-05 3/10/86	SS-08-01 3/10/86	SS-08-05 3/10/86
Aluminum		12300	9820	13400	12000	1800	1300	1220	1270	1100
Antimony	10-21	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	5.3-6.8	9.7	9.2	12	8.2	11	7.2	11	9.7	8.1
Barium		55	155	43	33	34	42	48	28	37
Beryllium	1.0-1.2	ND	ND	ND	1.1	ND	ND	ND	ND	ND
Cadmium	2.1-2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calcium		1630	8360	13100	8740	1800	1530	1900	2300	830
Chromium		16	13	17	13	17	16	16	17	14
Cobalt		12	9.7	11	12	12	12	12	11	11
Copper		23	22	26	23	8	23	29	29	22
Iron		28000	24500	29500	30800	2300	3200	3000	3000	2900
Lead		15	14	14	9.7	13	8.0	6.4	9.4	7.6
Magnesium		3950	4860	5890	4300	300	400	890	420	480
Manganese		383	1530	500	566	62	68	52	41	38
Mercury	0.11	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel		25	17	23	22	25	24	25	27	25
Potassium		1040	1130	989	844	800	1300	1100	1100	882
Selenium	2.6-3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	1.6-1.9	1.6	ND	ND	1.6	ND	ND	ND	ND	ND
Sodium	33-35	ND	56	109	55	80	71	70	30	30
Thallium	5.2-6.2	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tin	10-12	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium		17	12	18	15	13	16	15	15	13
Zinc		73	60	79	73	60	70	60	62	60
Cyanide	0.5-0.6	J	J	J	J	ND	ND	ND	ND	ND
Percent Solids		90.9	89.7	91.9	94.1	93.1	93.7	93.0	95.4	91.6

Footnotes: ND = Compound was analyzed for but was not detected at the detection limit

* = Detection limits indicated by lab analysis (i.e., Antimony = 10U). For those inorganics above the limit, the detection limit was not given.

J = Compound is present but cannot be quantified with precision normal for that method.

TABLE 6 (cont'd)

[redacted]
SURFACE SOIL SAMPLES - EASTERN SECTION
INORGANIC ANALYSIS

Results in parts per billion

Sample No. / Sample Type / Sampling Date	Detection Limit*	SS-16-01 3/12/86	SS-16-01 Dupe 3/12/86	SS-16-03 3/12/86	SS-16-02 3/12/86	SS-16-05 3/13/86	SS-18-01 3/13/86	SS-18-05 3/13/86	SS-19-02 3/14/86	SS-19-05 3/14/86
Aluminum		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	10800	10700	[redacted]	[redacted]
Antimony	10-21	23	0	27	33	20	35	22	22	0
Arsenic	0.3-0.8	0	0	0	2.7	0	0	7.6	0	2.8
Barium		0	57	0	0	0	41	41	72	0
Beryllium	1.0-1.2	0	0	0	0	0	0	0	0	0
Cadmium	2.1-2.5	0	0	2.5	0	2.6	2.7	2.8	0	0
Calcium		[redacted]	[redacted]	[redacted]	2130	1300	1160	1890	0	480
Chromium		17	17	13	14	11	14	14	0	11
Cobalt		11	8.1	8.1	11	8.3	9.5	10	8.2	11
Copper		28	23	20	28	0	21	19	15	0
Iron		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	22000	26300	[redacted]	[redacted]
Lead		0	0	14	12	5.1	14	5.9	14	0
Magnesium		3530	3530	3300	3680	4830	2610	3600	1780	3800
Manganese		526	550	491	565	353	394	525	773	756
Mercury	0.16	0	0	0	0	0	0	0	0	0
Nickel		26	29	26	26	26	23	26	16	25
Potassium		0	0	0	0	0	712	915	0	0
Selenium	2.6-3.1	0	0	0	0	0	0	0	0	0
Silver	1.5-1.9	0	0	0	0	1.5	2.1	2.0	0	0
Sodium	33-35	0	0	0	0	0	0	0	0	0
Thallium	0.2-0.2	0	0	0	0	0	0	0	0	0
Tin	10-12	0	0	0	0	0	0	0	0	0
Vanadium		17	17	13	15	12	16	14	17	0
Zinc		0	0	0	0	0	0	0	0	0
Cyanide	0.5-0.6	0	0	0	0	0	0	0	0	0
Percent Solids		82.7	81.9	92.7	85.7	90.1	87.2	87.6	85.4	89.5

Footnotes:

0 = Compound did not pass EPA QA/QC
U = Compound was analyzed for but was not detected at the detection limit
J = Compound is present but cannot be quantified with precision normal for that method
* = Detection limits indicated by lab analysis (i.e., Antimony = 10) for those inorganics above the limit, the detection limit was not given.

[redacted]

Table 7
Spectrace 9000 (XRF) Lead Results in Soil
Robintech
Vestal, N.Y.
February, 1992

Sample Number	Location / Depth	Recovered Pb (mg/kg)	Reported Pb (mg/kg)
A13906	A-1 1'	43	43 J
A13825	A-1 2'	27	27 J
A13907	A-1 3'	45	45 J
A13908	A-1 5'	46	46 J
A13909	A-1 4'	35	35 J
A13913	A-1 5'	42	42 J
A13770	A-1 6'	38	38 J
A13826	A-2 2'	33	33 J
A13769	A-2 6'	32	32 J
A13827	A-3 2'	46	46 J
A13776	A-3 6'	29	29 J
A13828	A-4 2'	26	26 J
A13777	A-4 6'	23	23 J
A13829	A-5 2'	68	68
A13778	A-5 6'	48	48 J
A13830	A-6 2'	51	51 J
A13779	A-6 6'	66	66
A13824	A-7 2'	8	ND
A13780	A-7 6'	38	38 J
A13831	A-8 2'	41	41 J
A13781	A-8 6'	47	47 J
A13832	A-9 2'	39	39 J
A13782	A-9 6'	25	25 J
A13833	A-10 2'	64	64
A13833	A-10 2'	44	44 J
A13834	A-10 2'(DUP)	29	29 J
A13783	A-10 6'	27	27 J
A13835	A-11 2'	48	48 J
A13835	A-11 2'	21	21 J
A13784	A-11 6'	25	25 J
A13874	A-12 1'	87	87
A13836	A-12 2'	35	35 J

ND – Denotes Not Detected

J – Denotes value is between detection and quantitation limit

Table 7 (con't)
Spectrace 9000 (XRF) Lead Results in Soil
Robintech
Vestal, N.Y.
February, 1992

Sample Number	Location / Depth	Recovered Pb (mg/kg)	Reported Pb (mg/kg)
A13901	A-12 3'	30	30 J
A13785	A-12 6'	29	29 J
A13785	A-12 6'	34	34 J
A13837	A-13 3'	46	46 J
A13786	A-13 6'	27	27 J
A13904	A-14 1'	27	27 J
A13838	A-14 3'	70	70
A13905	A-14 3'	29	29 J
A13787	A-14 6'	51	51
A13839	A-15 3'	37	37 J
A13788	A-15 6'	36	36 J
A13840	A-16 3'	28	28 J
A13789	A-16 6'	31	31 J
A13841	A-17 3'	52	52
A13790	A-17 6'	34	34 J
A13895	A-18 1'	23	23 J
A13842	A-18 3'	24	24 J
A13791	A-18 6'	39	39 J
A13843	A-19 3'	40	40 J
A13792	A-19 6'	28	28 J
A13844	A-20 3'	82	82
A13845	A-20 3'(DUP)	59	59
A13793	A-20 6'	40	40 J
A13846	A-21 3'	59	59
A13794	A-21 6'	30	30 J
A13881	A-22 1'	37	37 J
A13847	A-22 3'	17	17 J
A13882	A-22 3'	22	22 J
A13883	A-22 3'	25	25 J
A13884	A-22 4'	41	41 J
A13795	A-22 6'	51	51
A13848	A-23 3'	11	ND

ND – Denotes Not Detected

J – Denotes value is between detection and quantitation limit

Table 7 (con't)
Spectrace 9000 (XRF) Lead Results in Soil
Robintech
Vestal, N.Y.
February, 1992

Sample Number	Location / Depth	Recovered Pb (mg/kg)	Reported Pb (mg/kg)
A13796	A-23 6"	37	37 J
A13849	A-24 2"	21	21 J
A13797	A-24 6"	24	24 J
A13850	A-25 2"	23	23 J
A13798	A-25 6"	24	24 J
A13851	A-26 2"	35	35 J
A13799	A-26 6"	23	23 J
A13852	A-27 2"	16	16 J
A13860	A-27 2"(DUP)	13	ND
A13800	A-27 6"	25	25 J
A13870	A-28 1'	21	21 J
A13801	A-28 2"	13	ND
A13853	A-28 6"	28	28 J
A13854	A-29 2"	20	20 J
A13802	A-29 6"	19	19 J
A13855	A-30 2"	50	50 J
A13803	A-30 6"	65	65
A13856-1	A-31 2"	52	52
A13856-2	A-31 2"	49	49 J
A13856-3	A-31 2"	46	46 J
A13804	A-31 6"	28	28 J
A13857	A-32 2"	29	29 J
A13805	A-32 6"	24	24 J
A13858	A-33 2"	43	43 J
A13806	A-33 6"	27	27 J
A13859	A-34 2"	18	18 J
A13861	A-34 2"(DUP)	17	17 J
A13807	A-34 6"	22	22 J
A13864	A-35 2"	42	42 J
A13863	A-35 6"	32	32 J
A13876	A-36 1'	20	20 J
A13873	A-36 2"	25	25 J

ND – Denotes Not Detected

J – Denotes value is between detection and quantitation limit

Table 7 (con't)
Spectrace 9000 (XRF) Lead Results in Soil
Robintech
Vestal, N.Y.
February, 1992

Sample Number	Location / Depth	Recovered Pb (mg/kg)	Reported Pb (mg/kg)
A13677	A-36 2'	24	24 J
A13678	A-36 3'	25	25 J
A13679	A-36 4'	22	22 J
A13680	A-36 5'	22	22 J
A13672	A-36 6'	24	24 J
A13756-1	B-35 6'	19	19 J
A13756-2	B-35 6'	22	22 J
A13756-3	B-35 6'	24	24 J
A13755	B-36 6'	26	26 J
A13919	B-36 1'	27	27 J
A13920	B-36 2'	19	19 J
A13921	B-36 3'	20	20 J
A13922	B-36 3.5'	23	23 J
A13754	B-37 6'	32	32 J
A13753	B-38 6'	50	50 J
A13752	B-39 6'	24	24 J
A13751	B-40 6'	138	138
A13750	B-41 6'	38	38 J
A13915	B-41 2'	24	24 J
A13775	B-41 3'	21	21 J
A13916	B-41 3'	25	25 J
A13914	B-41 4'	22	22 J
A13917	B-41 4'	15	ND
A13918	B-41 5'	25	25 J
A13757	C-42 6'	43	43 J
A13887	C-42 1'	17	17 J
A13758	C-43 6'	54	54
A13759	C-44 6'	344	344
A13888	C-44 1'	48	48 J
A13761	C-45 6'	145	145
A13760	C-46 6'	71	71
A13762	C-48 6'	96	96

ND – Denotes Not Detected

J – Denotes value is between detection and quantitation limit

Table 7 (con't)
Spectrace 9000 (XRF) Lead Results in Soil
Robintech
Vestal, N.Y.
February, 1992

Sample Number	Location / Depth	Recovered Pb (mg/kg)	Reported Pb (mg/kg)
A13763	C-50 6"	104	104
A13764-1	C-51 6"	60	60
A13764-2	C-51 6"	60	60
A13764-3	C-51 6"	56	56
A13766-1	C-52 6"	216	216
A13766-2	C-52 6"	208	208
A13766-3	C-52 6"	223	223
A13765	C-53 6"	40	40 J
A13767	C-54 6"	34	34 J
A13768	C-55 6"	34	34 J
A13808	D-56 6"	55	55
A13809	D-57 6"	61	61
A13810	D-58 6"	45	45 J
A13811	D-59 6"	30	30 J
A13812	E-60 6"	33	33 J
A13813	E-61 6"	27	27 J
A13814	E-62 6"	31	31 J
A13815	E-63 6"	28	28 J
A13816	E-64 6"	19	19 J
A13820	E-64 6"(DUP)	18	18 J
A13817	E-65 6"	24	24 J
A13818	E-66 6"	23	23 J
A13819	E-67 6"	20	20 J
A13845-1	F-56 6"	23	23 J
A13845-2	F-56 6"	28	28 J
A13845-3	F-56 6"	29	29 J
A13846	F-57 1'	25	25 J
A13847	F-58 6"	77	77
A13848	F-59 1'	38	38 J
A13897	F-59 2'	21	21 J
A13898	F-59 3'	25	25 J
A13899	F-59 4'	23	23 J

ND – Denotes Not Detected

J – Denotes value is between detection and quantitation limit

Table 7 (con't)
Spectrace 9000 (XRF) Lead Results in Soil
Robintech
Vestal, N.Y.
February, 1992

Sample Number	Location / Depth	Recovered Pb (mg/kg)	Reported Pb (mg/kg)
A13900	F-59 5'	11	ND
A13869	F-60 6'	91	91
A13889	F-60 6'(DUP)	85	85
A13870	F-61 12"	33	33 J
A13871	F-62 6"	102	102
A13886	F-63 1'	27	27 J
A13910	G-68 2"	34	34 J
A13911	G-69 2"	39	39 J
A13912	G-70 2"	50	50 J
A13924	REF-1 2"	2550	2550
A13925	REF-2 2"	52	52
A13926	REF-3 2"	93	93

ND - Denotes Not Detected

J - Denotes value is between detection and quantitation limit

TABLE 8
CONFIRMATION SAMPLE SPECTRACE 9000 XRF AND METAL ANALYSIS RESULTS
mg/kg LEAD (Pb)

ROBINTECH SITE
FEBRUARY 4-6, 1992

SAMPLE NUMBER	SAMPLE LOCATION	SPECTRACE XRF mg/kg Pb	METAL ANALYSIS mg/kg Pb
A13832	A-9 2'	39	22
A13791	A-18 6'	39	9
A13851	A-26 2'	35	13
A13799	A-26 6'	23	14
A13755	B-36	36	18
A13751	B-40	138	140
A13775	B-41 3'	21	29
A13759	C-44	344	390
A13761	C-45	145	160
A13763	C-50	104	100
A13766	C-52	216	200
A13809	D-57	61	130
A13816	E-64	19	8
A13868	F-59 1'	38	10
A13898	F-59 3'	35	7
A13900	F-59 5'	11	5
A13765	C-53	40	24
A13750	B-41	38	21
A13886	F-63 1'	27	6
A13889	F-60 6' (DUP)	85	68
A13924	REF-1 2'	2550	2100
DETECTION LIMIT		15	5

Table 9
Spectrace 9000 XRF
Lead Results (mg/kg)
Robintech, Inc.
Vestal, New York
September 9-11, 1992

RI[1]-SAMPLE ID	REAC SAMPLE ID	CLIENT SAMPLE ID	Pb
SD-1	1 SD	B17242	ND[2]
SD-1	1 A SD	B17243	ND
B-2	2-0' S	B17251	ND
B-2	2-1' S	B17252	ND
B-2	2-2' S	B17253	ND
B-2	2-2.3' S	B17254	ND
B-2	2-3' S	B17264	ND
B-2	2-5' S	B17265	ND
B-2	2-7' S	B17266	ND
B-2	2-8' S	B17267	ND
B-2	2-9' S	B17268	ND
B-2	2-10' S	B17269	ND
B-4	4-8' S	B17270	ND
B-4	4-10' S	B17271	ND
B-5	5-4' S	B17258	ND
B-5	5-5' S	B17259	ND
B-5	5-6' S	B17260	ND
SD-6	6 SD	B17244	ND
SD-6	6 SD DUP	B17244	44 J[3]
B-6	6-8' S	B17274	ND
B-6	6-8' S DUP	B17274	ND
B-6	6-10' S	B17275	ND
B-6	6-10' S DUP	B17275	ND
B-7	7-6' S	B17272	ND
B-7	7-6' S DUP	B17272	ND
B-7	7-8' S	B17273	ND
B-7	7-8' S DUP	B17273	ND
SD-8	8 SD	B17245	79 J
SD-8	8 SD DUP	B17245	89 J
—	8 A SD	B17246	ND
SD-9	9 SD	B17247	ND
SD-10	10 SD	B17248	ND
SD-11	11 SD	B17249	ND
B-11	11-4' S	B17261	ND
B-11	11-5' S	B17262	ND
B-11	11-6' S	B17263	ND
SD-12	12 SD	B17250	ND
B-12	12-2' S	B17255	ND
B-12	12-3' S	B17256	ND
B-12	12-4' S	B17257	ND

[1] Data taken from draft Remedial Investigation Report, Robintech, Inc./National Pipe Co. Site, McClaren/Hart Environmental Engineers, December 1990.
[2] ND - denotes not detected
[3] J - denotes value is below quantitation limit

Minimum Detection Limit: Pb = 42
Minimum Quantitation Limit: Pb = 140

APPENDIX III

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION LETTER OF CONCURRENCE

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

Thomas C. Jorling
Commissioner

MAR 12 1993

Mr. George Pavlou, P.E.
Acting Director
Emergency & Remedial Response Division
U.S. Environmental Protection Agency
Region II
26 Federal Plaza
New York, New York 10278

Dear Mr. Pavlou:

Re: Robintech Site, Vestal, Broome County, New York, Site No. 7-04-002

The Record of Decision (ROD) for the Robintech site operable unit No. 2 (OU2) was received by this office on March 3, 1993. Both the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH) have reviewed this document.

OU2 addresses site related contamination of soil and sediment suspected to be contaminated with lead. The recommended alternative in this ROD for OU2 is no action. This remedy was selected because confirmatory data performed by the U.S. Environmental Protection Agency (USEPA) determined that lead contamination is not present at levels requiring remediation.

By means of this letter, the NYSDEC and the NYSDOH concur with the remedy recommended by the March, 1993 ROD.

If you have any questions, you may contact Mr. Robert W. Schick, P.E., of my staff, at 518/457-4343.

Sincerely,

Ann Hill DeBarbieri

Ann Hill DeBarbieri
Deputy Commissioner
Office of Environmental Remediation

cc: C. Petersen, USEPA
M. Hauptman, USEPA
M. Granger, USEPA
A. Carlson, NYSDOH

APPENDIX IV

RESPONSIVENESS SUMMARY

RESPONSIVENESS SUMMARY
FOR OPERABLE UNIT 2
OF THE
ROBINTECH, INC./NATIONAL PIPE CO. SUPERFUND SITE
TOWN OF VESTAL, NEW YORK

RESPONSIVENESS SUMMARY FOR THE
ROBINTECH, INC./NATIONAL PIPE CO. SUPERFUND SITE
OPERABLE UNIT 2
TOWN OF VESTAL, NEW YORK

INTRODUCTION

This Responsiveness Summary provides a summary of citizen's comments and concerns and the U.S. Environmental Protection Agency's (EPA's) responses to those comments and concerns regarding the Proposed Plan for the Robintech, Inc./National Pipe Co. Site ("the Robintech Site" or "the Site"), Operable Unit 2 (OU-2). EPA, in consultation with the New York State Department of Environmental Conservation (NYSDEC), will make a final determination regarding the proposed no action alternative for OU-2 of the Robintech Site only after reviewing and considering all public comments received during the public comment period.

EPA held a public comment period from December 31, 1992 through January 30, 1993 to provide interested parties with the opportunity to comment on the Proposed Plan for OU-2 of the Robintech Site. A public meeting was held to discuss the investigatory history for OU-2 of the Site and to present EPA's preferred no action alternative. The meeting was held at the George F. Johnson Memorial Library in Endicott, New York on January 12, 1993 at 7:00 p.m.

Community interest regarding the Site and EPA's Proposed Plan was moderate. Questions on OU-2 were oriented toward clarification of EPA's assessment of the total data set for soils and sediments and there were several inquiries of a technical nature. Several questions were raised regarding the status of the OU-1 groundwater remedy. Approximately 15 people attended the meeting. The audience consisted of local businessmen, residents, and state and local government officials. The question and answer session lasted approximately 40 minutes. A summary of the questions posed during the meeting is provided in Section III, below.

This community relations responsiveness summary is divided into the following sections:

I. **OVERVIEW:** This section briefly outlines the EPA's preferred alternative.

II. **BACKGROUND:** This section provides a brief history of community concerns and interests regarding OU-2 of the Robintech Site.

III. **COMPREHENSIVE SUMMARY OF MAJOR QUESTIONS, COMMENTS, CONCERNS AND RESPONSES:** This section summarizes comments received by EPA at the public meeting for OU-2 of the Robintech Site.

I. OVERVIEW

At the time of the public comment period, EPA published its preferred alternative for OU-2 of the Robintech, Inc./National Pipe Co. Site ("the Robintech Site" or "the Site") located in the Town of Vestal, New York. EPA screened possible alternatives, giving consideration to the following nine key criteria:

- Threshold Criteria, including:
  - -- overall protection of human health and the environment; and
  - -- compliance with Federal and State environmental laws.
- Balancing Criteria, including:
  - -- long-term effectiveness;
  - -- short-term effectiveness;
  - -- reduction of mobility, toxicity, or volume;
  - -- ability to implement; and
  - -- cost.
- Modifying Criteria, including;
  - -- state acceptance; and
  - -- local acceptance.

EPA weighed State and local acceptance of the remedy prior to reaching the final decision regarding the remedy for OU-2 of the Site.

The Agency's selected remedy for OU-2 is no action. This decision is based upon the review of all available data and the Risk Assessment. Based on a comprehensive review of all data generated for the Site, a no action decision is protective of human health and the environment.

This plan satisfies the threshold criteria for remedy selection and obviates the need for long-term treatment and management.

II. BACKGROUND

Community concern has not been high regarding the Site-related contamination of soils and sediments. It appears generally understood that a full assessment of all data generated for the Site indicates that the data upon which the suspicion of elevated lead concentrations in soil and sediment had been based was erroneous.

EPA's community relations efforts began in August 1986. At that time a community relations plan (CRP) was formulated, including an outline of community concerns and a comprehensive list of federal, state, and local contacts. Also at that time, site information repositories were established, one located at the EPA Region II office in New York City and the other located at the Vestal Public Library in Vestal, New York. The information repositories, which contain the RI/FS Report and other relevant documents, were updated periodically.

Revising and updating the CRP, including an updated outline of community concerns and an updated contact list was initiated in April 1991. The CRP was finalized on May 1,1992.

To obtain public input on the proposed remedy, EPA held a public comment period from December 31, 1992 through January 30, 1993. The EPA Proposed Plan, describing the Agency's proposed no action decision for OU-2 of the Site, was sent to the information repository and distributed to citizens and officials on EPA's site mailing list for review at the opening of the public comment period.

A public meeting notice appeared in the December 31, 1992 edition of the Binghamton Press & Sun Bulletin, and a public meeting was held on January 12, 1993. Community interest regarding the Site and EPA's Proposed Plan was moderate. Questions on OU-2 were oriented toward clarification of EPA's assessment of the total data set for soils and sediments and there were several inquiries of a technical nature. Several questions were raised regarding the status of the OU-1 groundwater remedy. Approximately 15 people attended the meeting. The audience consisted of local businessmen, residents, and state and local government officials. The question and answer session lasted approximately 40 minutes. A summary of the questions posed during the meeting is provided in Section III, below.

III. COMPREHENSIVE SUMMARY OF MAJOR QUESTIONS, COMMENTS, AND CONCERNS, AND EPA'S RESPONSES

This section addresses comments received by EPA during the public comment period (December 31, 1992 to January 30, 1993). The following verbal comments were from the public meeting held at the George F. Johnson Memorial Library in Endicott, New York on January 12, 1993, and are categorized by topic. No written comments were received during the public comment period.

Lead Contamination

Several comments and questions were received regarding the perceived lead contamination at the Site. Throughout the meeting EPA emphasized that a comprehensive analysis of all data generated for the Site since 1985 indicates that there is no lead problem in soils and sediments. Specific inquiries and EPA's responses are summarized below.

1. Several citizens, including the Vestal Town Supervisor, the Chairman of the Vestal Advisory Commission, and a resident who lives within 100 yards of the Site, inquired about the levels and possible sources of lead at the Site. The Town Supervisor suggested that numerous leaded gasoline storage tanks which were used in Vestal from the 1940s to the mid-1970s may have been a potential source of contamination. He also expressed concern about improperly handled gasoline spills which occurred during this period.

EPA Response. The highest lead concentration detected in Site-related soils and sediments during EPA's two 1992 resampling events at the Site, which included the analysis of over 200 samples, was 350 parts per million (ppm) with most values under 100 ppm. The 2,550 ppm value reported in a background sample and discussed on Page 6 of the ROD was not collected from soil or sediment related to the Site. Regardless of the history of the area, a comprehensive analysis of all data generated for the Site since 1985 indicates that there is not a lead problem in soils and sediments associated with the Site. This analysis further indicates that the McLaren/Hart samples reporting extremely high lead levels were in error.

2. A resident asked if EPA had considered the possibility that facility activities had resulted in contamination other than lead, particularly tin or oil. He reported that circuit board printing, soldering, and processes

involving hydraulic damping equipment have occurred at the Site in addition to the manufacture of PVC pipe.

EPA Response. A historical search is conducted as a routine step in the RI process. EPA reviews historical information about a site in order to identify possible past sources of contaminant release. Depending on what operations have occurred at a site, different contaminants are more likely to be found than others. At the Robintech Site, the risk assessment for the Site (written by an EPA contractor) as well as available Federal and State guidance values had indicated that lead was the only contaminant of concern for soils and sediments. The result of this finding was to create a second operable unit to further investigate this suspected contamination.

3. The Chairman of the Vestal Advisory Commission requested clarification of the nature of the error associated with the McLaren/Hart data. The Chairman went on to ask if the error in calculation could be pinpointed.

EPA Response. Upon suspicion of an error in the McLaren/Hart data, EPA requested McLaren/Hart to recheck their data validation. McLaren/Hart reported that the data had been validated properly. Still suspecting an error, the next step was to request McLaren/Hart to recalculate their data from scratch. When the data were recalculated, the results differed from those originally reported by an order of magnitude. Although this discrepancy was sufficient to question the validity of the McLaren/Hart data as it related to reported lead values in soil and sediment, EPA made the decision to resample the exact locations, including the exact vertical horizons, from where the McLaren/Hart samples had been collected in order to ensure that no significant lead levels existed at the Site. EPA collected new samples from virtually all of the McLaren/Hart sampling locations where elevated lead concentrations had been reported. Because most of the Site is paved, suspected elevated lead concentrations in the soil would have been unlikely to diminish between the McLaren/Hart and the EPA sampling events. EPA's results, which included collection and analysis of almost 200 samples, did not indicate elevated lead levels in soil and sediment.

In terms of uncovering the exact nature of the calculation error, it would be a very complicated and time consuming endeavor to unravel the exact nature of such an error. EPA opted to return to the sampling locations where elevated lead concentrations had been reported (analyzing many more samples in addition to these locations while in the field) rather than pursue the exact nature of the calculation error. In this way, EPA was able to produce tangible, reliable, and most

importantly, timely evidence that the elevated concentrations reported in the McLaren/Hart data set were in fact erroneous and that conditions at the Site, with respect to OU-2, were protective of the community.

4. A representative from the Broome County Health Department asked about the results from background samples collected near the Site during EPA's two 1992 sampling events.

EPA Response. Of the three background samples collected in soil near the Site, one sample contained an elevated concentration of lead. Since this sample was collected from an area where it was evident that household refuse and motor oil, cans, and filters had been disposed, this contamination was not considered Site-related. Lead levels in the other two samples were both under 100 ppm.

5. A citizen asked who had originally analyzed the McLaren/Hart samples.

EPA Response. McLaren/Hart used Enviropact Services, Inc. to analyze their samples.

6. The Chairman of the Vestal Advisory Commission asked about the effects of lead on children who might come into contact with soils when playing at the Site.

EPA Response. A comprehensive analysis of all data generated for the Site since 1985 indicates that there is not a lead problem in soils and sediments associated with the Site. Further, this assessment indicates that the McLaren/Hart samples reporting extremely high lead levels were in error.

In a hypothetical scenario involving lead contamination in soils, a risk assessor would calculate risk by assuming exposure to a certain amount of contaminated soils at a certain frequency over a certain length of time. These assumptions would depend on the age of the exposed individual, the depth of the contaminated soils, and other factors. For lead, EPA currently adheres to guidance that specifies a range of 500-1000 ppm to protect human health. For lead in soils and sediments this guidance range was designed to be protective of children. The lower and more protective value of 500 ppm was selected by EPA as a threshold value for the Site.

Though the Site is not considered a source of risk as far as lead is concerned, citizens are encouraged to contact the local Health Department for more information should they be

interested in learning more about the risks associated with lead-related exposures.

7. The Town Supervisor asked if lead concentrations in soil could contaminate the water supply; he also asked if there are any safe levels of lead in drinking water.

EPA Response. A comprehensive analysis of all data generated for the Site since 1985 indicates that there is not a lead problem in soils and sediments associated with the Site. Further, this assessment indicates that the McLaren/Hart samples reporting extremely high lead levels were in error. Hence, EPA has concluded that there is not a source of lead in Site-related media that would contribute to groundwater contamination. Please note that Site-related ground water will be retested for metals (including lead) before being treated, as metals may interfere with the operation of the air stripper.

EPA has established an action level for lead in groundwater of 15 parts per billion (ppb). Simultaneous filtered and unfiltered samples were collected from all monitoring wells during the course of the RI. Sampling results from two unfiltered samples were slightly above the action level (MW-10, 23.5 ppb/MW-11, 29.2 ppb). Results from the corresponding filtered samples from these monitoring wells, however, indicated no lead present whatsoever. For the remaining groundwater samples most lead results indicated that no lead was present. For the few detections of lead reported in groundwater, all were at or below 10 ppb.

8. Several citizens asked if EPA would conduct any future sampling or monitoring of soils at the Robintech Site.

EPA Response. EPA has completed its investigation of suspected soil and sediment contamination at the Robintech Site. Lead was the sole contaminant of concern for OU-2 of the Site, and EPA has concluded that there are no elevated concentrations of lead in Site soils and sediments. Further sampling or monitoring activities are considered unnecessary.

Operable Unit 1 (OU-1) Contamination (Ground Water)

1. A citizen asked about the distinction between the two operable units at the Site. Another citizen asked if the ground water monitoring schedule described in the Record of Decision (ROD) for OU-1 would be affected by a No Action decision for OU-2.

EPA Response. The ROD issued for OU-1 (ground water contamination) will not be affected by the ROD for OU-2. The ROD for OU-2 relates to soils and sediments only. Ground water monitoring activities will be conducted as stated in the ROD for OU-1. EPA made a distinction between the operable units so that the known problem (ground water contamination) could be addressed as soon as possible while at the same time allowing further investigation of the suspected lead-contamination of soil and sediment. Currently, the groundwater remedy is in the early stages of the design process.

2. A Vestal Town Councilman asked if ground water at the Site would be pumped out of the aquifer and treated with an air stripper.

EPA Response. EPA will proceed with the ground water remediation as described in the ROD for OU-1. The process will involve pumping ground water out of the aquifer and using an air stripper to remove volatile organic compounds (VOCs). Treated groundwater can either be used in the plant processes or discharged at the facility's permitted outfall.

3. The Vestal Town Supervisor expressed concern about the discharge of ground water into the river. He cited past problems that the town has had with discharges into the river. He also asked how the pumping system would be structured.

EPA Response. All discharges from the plant, including the discharge from the air stripper, must comply with the facility's existing State Pollutant Discharge Elimination System (SPDES) permit. The permit takes into consideration the fact that the effluent ultimately enters the Susquehanna River. The State of New York has designated the river as a Class A water body, which means that it is considered protected.

Three areas requiring treatment have been established at the Site. Water will be pumped from these three areas to the air stripper for treatment. The extraction and treatment systems will be fully modeled and tested before implementation. Air discharges from the air stripper must comply with NYSDEC standards.

4. A citizen asked where the ground water will go after treatment.

EPA Response. Once the ground water is treated, the plant has the option to use the water in the pipe production operation or to discharge it under their SPDES permit. EPA anticipates the plant will decide to reuse the treated water in their operations.

5. A citizen asked if the plant currently holds an SPDES permit.

EPA Response. The Robintech plant has held an SPDES permit since 1981. The plant is required to have this permit because their operations include using water to cool newly formed PVC pipe.

6. A citizen asked how often the aqueous discharge from the air stripper will be monitored, and whether the plant would be informed beforehand. He also asked what type of corrective action would occur if the plant was not in compliance with standards.

EPA Response. EPA will be involved throughout the remedial process, overseeing the PRPs during sampling, testing of equipment, and other aspects of the design, construction, and operation of the extraction and treatment system. In addition, EPA will be approving or disapproving any modifications to the system. The aqueous discharge from the air stripper will be periodically monitored with EPA collecting split samples for verification purposes. Monitoring will be conducted using 10 to 15 wells, including some new wells constructed specifically for the remedial project. In addition, the regular monthly monitoring of plant discharges associated with the SPDES permit will supplement the new monitoring program. Should the groundwater extraction and treatment system fail to achieve the level of removal of contaminants required, EPA would require the PRPs to modify the system to achieve these goals.

7. A citizen requested clarification of the relationship between the SPDES permit and the Superfund investigation at the Site.

EPA Response. From 1966 to 1983, the Robintech plant used public water in their operations. In 1981, the plant obtained an SPDES permit. The plant installed its own wells in December 1983. A routine analysis of the plant's effluent collected by NYSDEC in 1984 showed contaminants present that were not listed in the permit. Further investigation into the source of these contaminants led to the conclusion that they originated in the groundwater beneath the Site. The Site was

placed on EPA's Superfund National Priorities List in June of 1986.

8. A citizen asked which series of analytical method is used to evaluate the plant's SPDES parameters, as different series are associated with different detection levels.

EPA Response. According to NYSDEC personnel, the series of analytical method utilized by NYSDEC for the Site pipe production facility's SPDES permit in their grab samples is the 600 series. This is the series associated with wastewater. The specific analytical methodology would be either 601 or 624. This is in accordance with 40 CFR Part 136 of the federal guidelines regarding the testing of such effluent. The analytical method utilized by the pipe production facility to monitor their effluent for their SPDES permit would follow suit accordingly.

Other Issues

1. The Vestal Town Supervisor asked why the meeting was being held in Endicott, New York as opposed to Vestal, New York. He stated that residents from the Town of Vestal were not well informed of the meeting and so were unable to respond properly, as evidenced by the small turnout compared to that for a previous public meeting for OU-1 which was held in Vestal Town Hall. He said that he could have secured a room in Vestal to conduct the public meeting. He requested that the EPA conduct a second hearing for OU-2 in the Town of Vestal.

EPA Response. In December of 1992 EPA attempted to secure a meeting place for January of 1993 in the Town of Vestal. Several town representatives of Vestal informed EPA that no meeting spaces were available. While the preferable location for the meeting would have been in Vestal, EPA concluded it was appropriate under the circumstances to accept a nearby location in order to present the findings in a timely manner.

EPA uses a variety of approaches to disseminate information to the public. Approaches used for informing the public about the Robintech Site meeting and public comment period for OU-2 included press releases to local newspapers, announcements on radio and television, mailing information directly to local officials and concerned citizens included in the mailing list for the Site, and paid public notices published in local newspapers. The press release, mailing list, and public notice information was communicated clearly, accurately, and within an appropriate time frame. For the most part the radio and television information was communicated correctly and

accurately, though the Town Supervisor pointed out that he had seen a television announcement that had communicated the wrong meeting location. This was the basis of his request for a second hearing and his basis for claiming a low turnout.

EPA does not feel that a second meeting is justifiable or necessary. In almost all instances, information concerning the location and time of the public meeting was communicated correctly. EPA cannot control or be held accountable for the accuracy or content of the public media.

2. A citizen expressed concern about other contaminant releases by the plant. He described a contaminant release to the air that had occurred on Thanksgiving night, 1992. The release was reported to the Broome County Health Department as a discharge of a large volume of chemicals into the air, described as butyltin mercaptide ethyl sulfide. He was concerned that the plant was not being governed properly and felt that the EPA should work closely with the local agencies to ensure the plant's compliance.

EPA Response. Butyltin mercaptide ethyl sulfide is not a hazardous substance listed under Section 102(a) of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), and does not appear to be a substance the release of which would trigger the reporting requirements of CERCLA §103 or Section 304 of the Emergency Planning and Community Right-to-Know Act ("EPCRA"). Nevertheless, the November 26, 1992 release of butyltin mercaptide ethyl sulfide at the Site was reported to NYSDEC's Region 7 office located in Kirkwood, New York, who responded to the scene. This particular release does not appear to be one which required a response action by EPA under CERCLA.

As a general matter, where a hazardous substance is released from a facility in an amount which equals or exceeds the reportable quantity for that substance, the person in charge of the facility, or the owner or operator of the facility, must immediately notify the National Response Center, the State Emergency Response Commission, and the Local Emergency Planning Committee and provide certain information. Such notification helps insure that federal, state and local officials can properly respond to environmental emergencies. Not all releases of substances require a response action.

The pipe production and electronic cable assembly facilities are periodically inspected by NYSDEC under various environmental statutes. The effluent from the pipe production process is sampled and sent to a lab for analysis on a monthly basis under the SPDES program. The cable assembly operation

operates under a NYSDEC air permit. The pipe production facility operates under 15 air permits which are inspected annually by NYSDEC or upon a reported release. In addition, EPA regulates the pipe production and electronic cable assembly facilities as small generators under the RCRA program. Both facilities are inspected annually under this program.

APPENDIX V

ADMINISTRATIVE RECORD FILE INDEX

Document Number: RBT-001-0001 To 0297 Date: 03/01/92

Title: Skate Estate Soil Sampling Investigation, Robintech Site, Vestal, New York, Final Report

Type: REPORT
Category: 2.2.0.0.0 Sampling and Analysis Data/Chain of Custody
Author: Miller, David N.: Environmental Response Team (ERT)
Sprenger, Mark D.: Environmental Response Team (ERT)
Recipient: none: US EPA

Document Number: RBT-001-0298 To 0450 Date: 12/01/92

Title: Final Report Soil Sampling Investigation, Robintech Site, Vestal, NY

Type: REPORT
Category: 3.2.0.0.0 Sampling and Analysis Data/Chain of Custody Forms
Author: Munney, Kenneth L.: Environmental Response Team (ERT)
Sprenger, Mark D.: Environmental Response Team (ERT)
Recipient: none: US EPA

Document Number: RBT-001-0451 To 0515 Date: 12/21/92

Title: Robintech Inc./National Pipe Co. Site Report on Suspected Lead Contamination in Surface Soils, Subsurface Soils, and Sediments

Type: REPORT
Category: 3.4.0.0.0 RI Reports
Author: none: none
Recipient: none: none

Document Number: RBT-001-0516 To 0518 Date: 09/07/89

Title: (Memo discussing establishing an interim guidance for soil lead cleanup levels at Superfund sites)

Type: CORRESPONDENCE
Category: 11.1.0.0.0 EPA Headquarters Guidance
Author: Diamond, Bruce: US EPA
Longest, Henry L. II: US EPA
Recipient: directors: US EPA

Document Number: RBT-001-0519 To 0527 Date: 12/01/92

Title: Superfund Proposed Plan, Robintech, Inc./National Pipe Co. Site, Vestal, New York

Type: PLAN
Category: 4.3.0.0.0 Proposed Plan
Author: none: US EPA
Recipient: none: none