Department of Environmental Conservation

Division of Hazardous Waste Remediation

INTERIM REMEDIAL MEASURE DECISION DOCUMENT

Vibratech, Inc.
City of Buffalo, Erie County

OCTOBER 1995

New York State Department of Environmental Conservation
GEORGE E. PATAKI, *Governor* MICHAEL D. ZAGATA, *Commissioner*

DECLARATION STATEMENT - INTERIM REMEDIAL MEASURE

VIBRATECH, INC.
City of Buffalo, Erie County, New York

Statement of Purpose and Basis

This Decision Document summarizes the activities to be completed as an Interim Remedial Measure (IRM) at the Vibratech Inc. property Inactive Hazardous Waste Disposal Site. The IRM was chosen in accordance with the New York State Environmental Conservation Law (ECL). These remedial activities qualify as an IRM in accordance with the NYS Department of Environmental Conservation, Division of Hazardous Waste Remediation, Technical and Administrative Guidance Memorandum (TAGM) HWR-92-4042, because the action: (1) can be undertaken without extensive investigation and evaluation; (2) will prevent, mitigate, or remedy environmental damage or the consequences of environmental damage attributable to the site; (3) will lessen obvious hazardous waste risks to the environment and public health; and (4) will reduce the scope and cost of the final remedy. The Interim Remedial Measure proposed is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300).

Assessment of the Site

Actual or threatened release of solvent related volatile organic compounds (VOCs) from this site, if not addressed by the implementation of an IRM, as described in this Decision Document, presents a current or potential threat to public health and the environment.

Description of Selected Remedy

The IRM activities constitute an interim remedy for the Vibratech, Inc. property. Following completion of the IRM, a final remedy for the site will be selected. The final remedy will be based on the completion of the IRM, and the results of post remedial samples. The major elements of the IRM include:

- Excavation of approximately 500 - 700 cubic yards of VOC contaminated soil.

- The on-site treatment of excavated soils in a designated Corrective Action Management Unit (CAMU) prepared with a polyethylene liner. Soil will be treated by Soil Vapor Extraction (SVE) technology. Off-gas (vapors collected during the treatment process) from the SVE treatment cell will be collected and treated using activated carbon prior to discharge in accordance with limitations to be set by NYSDEC. Monitoring of the discharge will be in accordance with the Air Monitoring Plan. Treatment will be considered complete when the soil concentration of VOCs attains established cleanup goals (sec. 4.2 pg. 10) to the extent practicable. Treated soils will be placed back into the excavated area and graded to meet the elevation of the surrounding area.

New York State Department of Health Acceptance

The New York State Department of Health concurs with the interim remedy selected for this site as being protective of human health.

Declaration

The selected interim remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This interim remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

10/12/95
Date

Michael J. O'Toole, Jr., P.E.
Director
Division of Hazardous Waste
Remediation

TABLE OF CONTENTS

INTERIM REMEDIAL MEASURE DECISION DOCUMENT

VIBRATECH, INC.
Buffalo (C), Erie County, New York

OCTOBER 1995

SECTION 1: PURPOSE OF THE DECISION DOCUMENT

The New York State Department of Environmental Conservation (NYSDEC), in consultation with the New York State Department of Health (NYS DOH), is proposing an Interim Remedial Measure (IRM) work plan for the Vibratech, Inc. site to address VOC (volatile organic compound) contaminated surface and subsurface soils.

This Decision Document specifically addresses the IRM, which will consist of:

- Excavation of approximately 500 - 700 cubic yards of VOC contaminated soil.
- The on-site treatment of excavated soils by Soil Vapor Extraction (SVE) technology.
- SVE off-gas treatment by activated carbon prior to discharge.

To implement the above remedial activities, the IRM includes the following activities:

- Designating a Corrective Action Management Unit (CAMU) at the site, consisting of those areas where the VOC contaminated soil will be excavated, treated and disposed. A CAMU is an area at the facility that is approved by the NYSDEC for the purpose of managing and implementing the treatment requirements of the chosen remedial action.
- Allowing Vibratech, Inc. to treat excavated VOC contaminated soils onsite using Soil Vapor Extraction technology to volatilize the VOCs from the soil. Off-gas, containing VOCs volatilized from the soil, will be treated to remove the VOCs and discharged to the atmosphere.
- Allowing the facility to place the treated soils back on the property in the area of the excavation.

This Decision Document is issued by the NYSDEC and is consistent with the intent of the citizen participation plan responsibilities provided by the New York State Environmental Conservation Law (ECL), State regulation 6NYCRR375 and the Federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act of 1986. This document is a summary of the information that can be found in greater detail in the reports on file which are available for review at the following document repositories:

NYSDEC Region 9 Office
270 Michigan Avenue
Buffalo, New York 14203-2999

Contact: Mr. Maurice F. Moore
Project Manager
(716) 851-7220
(by appointment only)

East Delevan Branch Library
1187 E. Delevan Ave.
Buffalo, New York 14215
(716)896-4433

SECTION 2: SITE LOCATION AND DESCRIPTION

The Vibratech, Inc. facility is located at 537 East Delevan Ave. in the City of Buffalo, Erie County, New York. A manufacturer of vibration dampers and rotary shock absorbers for the trucking and railroad industry the facility is located on the south side of East Delevan in a mixed industrial, commercial and residential area. The facility was built in 1927 and is occupied by Vibratech, Inc., a paint coating operation, and a tire warehouse. The neighborhood is an urban area with residences to the east, industry to the south (machine & tool company), a commercial operation to the north (auto wrecker yard), and to the west small manufacturing and commercial businesses (Figure 1).

The site is situated on a flat lake plain. The geology of the area consists of approximately two to five feet of native silty clay and/or gravel, sand and silty fill over Fractured Onondaga Limestone bedrock. Bedrock in this portion of the Buffalo area is generally shallow (approximately five feet below ground surface).

The groundwater at the site is found in the uppermost bedrock water bearing zone, the top 5 feet of the fractured bedrock. There are no water bodies in the general vicinity of the site. The Scajaquada Drain (Creek) is located approximately 1100 feet south of the property. The specific area of contamination, the "site", is located at the railroad spur area in the rear of the facility, at the edge of the lugger box storage area (Figure 2). Total area of the site is approximately 6250 sq. ft.

SECTION 3: SUMMARY OF SITE CHARACTERISTICS

3.1: Nature and Extent of Contamination

In December 1993, a Phase II Environmental Investigation was conducted to assess potential environmental liabilities associated with existing environmental conditions. This investigation revealed the presence of degreasing solvents containing volatile organic compounds, also known as VOCs, at concentrations as high as 675 parts per million (ppm) in soil. Clean-up goals in soil for VOCs have been established by NYSDEC and are identified in (sec. 4.2 pg.10). Total VOCs shall not exceed 10 ppm. Degreasing solvents are commonly used in the manufacturing of metal items to clean off oils, greases and other petroleum products. Used, or "dirty", solvent is considered a hazardous waste and its disposal is heavily regulated to prevent improper disposal or use. It is believed this VOC contamination is a result of incidental spillage of degreasing solvents. The VOCs of concern are: 1,1-dichloroethane; 1,2-dichloroethane; cis-1,2-dichloroethane; toluene; 1,1,1-trichloroethane; trichloroethene; vinyl chloride; and total xylenes (Figures 3, 4 & Table 1).

Additional investigations were performed in March 1994, October 1994, and March 1995 by the Vibratech consultant, Conestoga-Rovers Associates, to define the horizontal (surface area) and vertical (depth) extent of the VOC contaminated soil. Based upon the results of these investigations, the area of soil contamination was determined to be approximately 6250 square feet with an average depth of 3.5 feet. The volume of contaminated soil was estimated to be approximately 500 - 700 cubic yards (yd^3).

Groundwater samples were collected in April 1994 from monitoring wells, MW1, MW2, MW3, and MW4. In October 1994, as part of the supplemental investigation, four additional wells, MW5 through MW8, were installed and sampled. The results and locations are presented in Figure 5.

There is no evidence of a widespread contaminant plume, but there is evidence of contamination in the groundwater that exceeds standards. The removal of the contaminated soil will remove the source of the groundwater contamination.

The groundwater flows in a southwestern direction where it infiltrates into the facility's sanitary sewer and into the sanitary sewer at Winchester Avenue. This infiltration will

FIGURE 1
SITE MAP

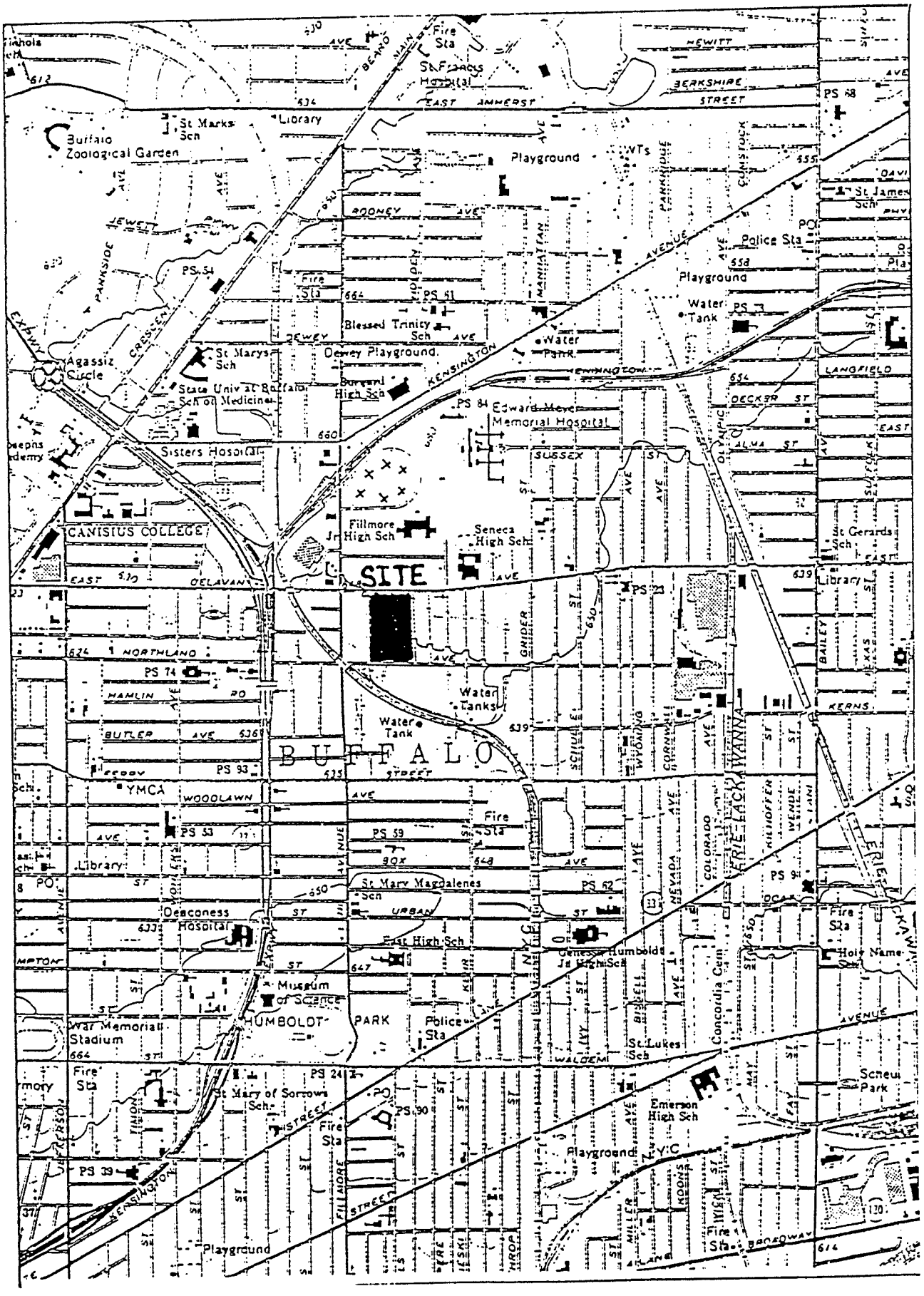

FIGURE 2
SITE PLAN

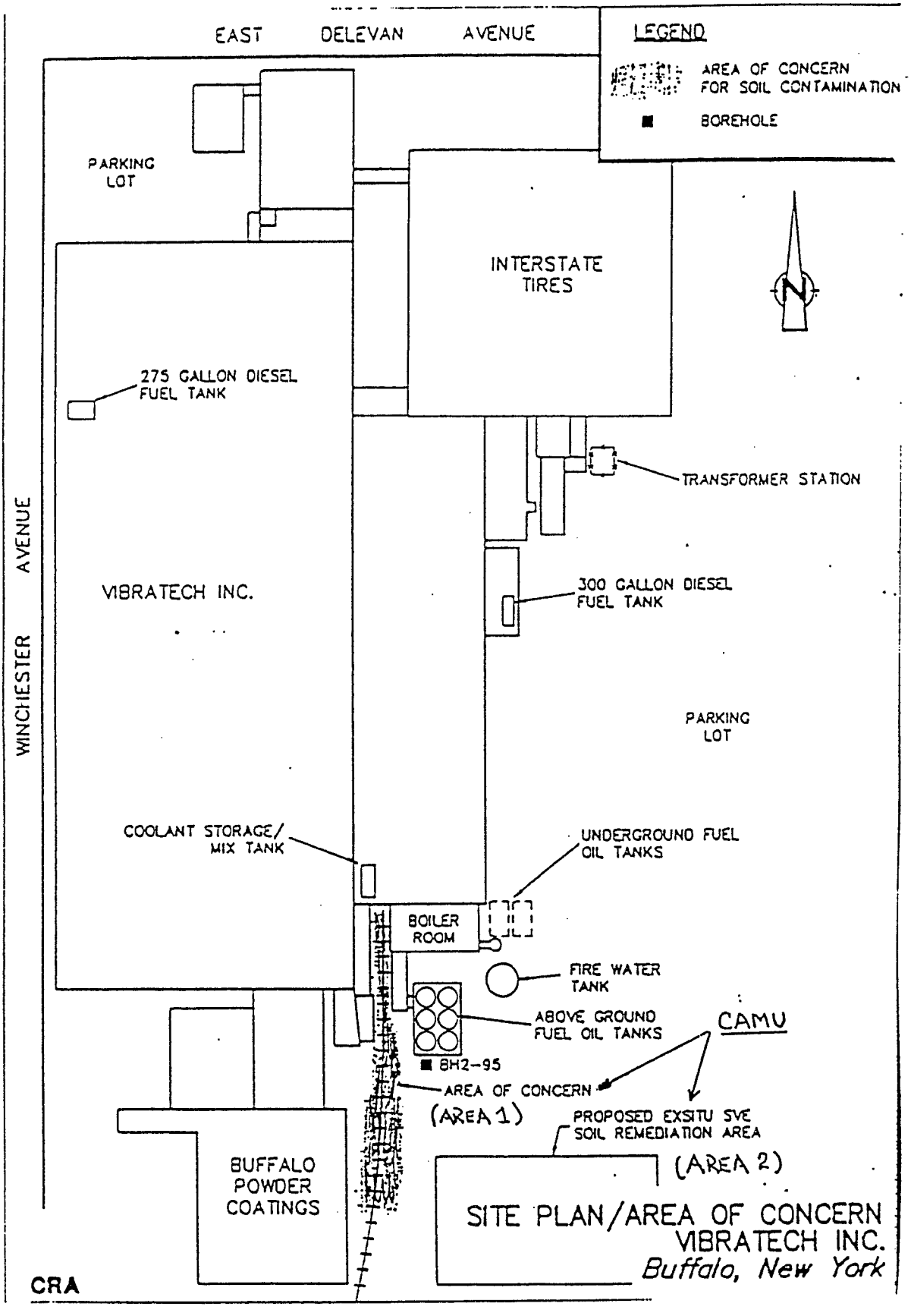

FIGURE 3
SOIL SAMPLING LOCATIONS,
DECEMBER 1993

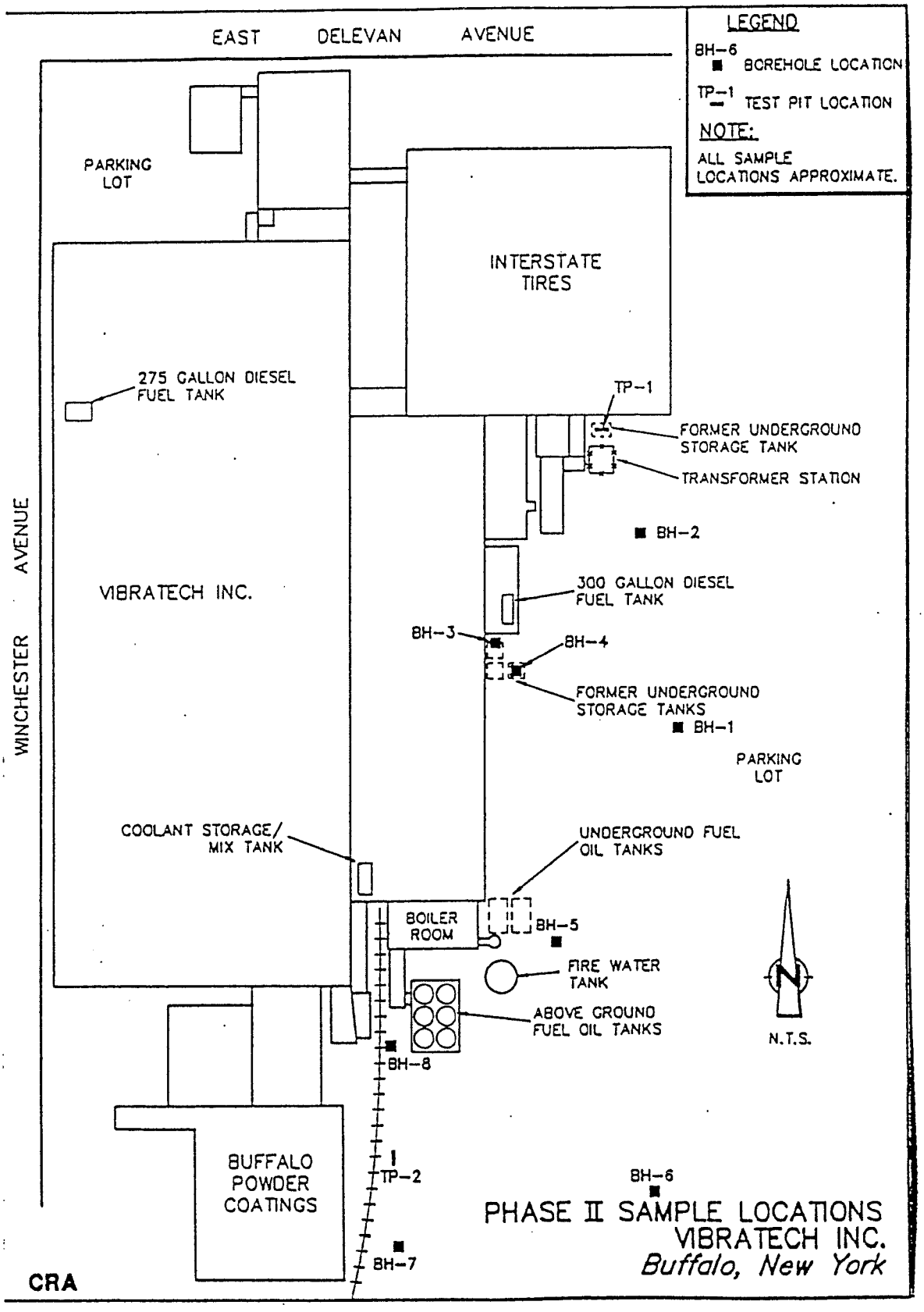

FIGURE 4
SOIL SAMPLING LOCATIONS,
MARCH 1994

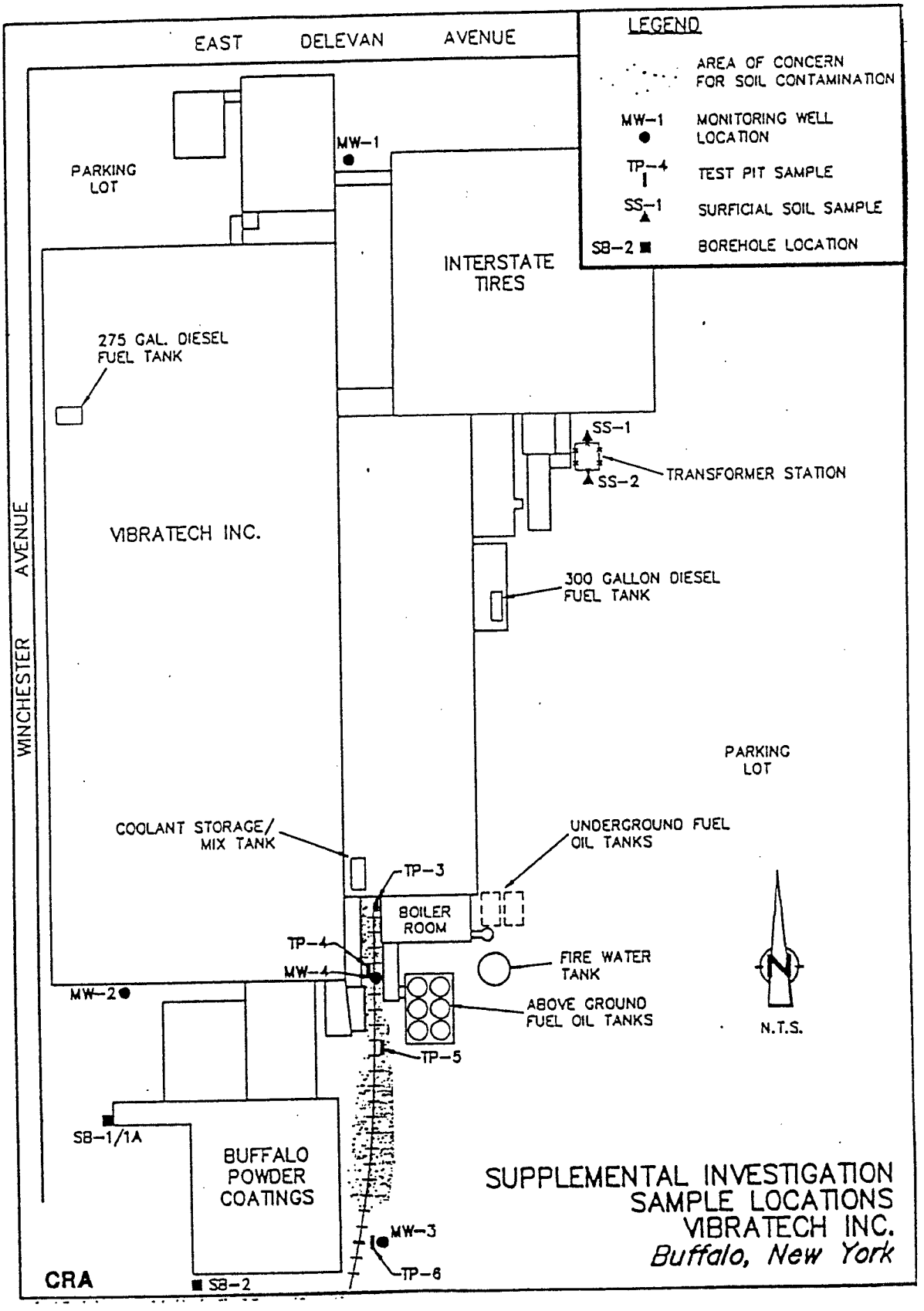

FIGURE 5
TOTAL VOCs IN GROUNDWATER,
APRIL 1994

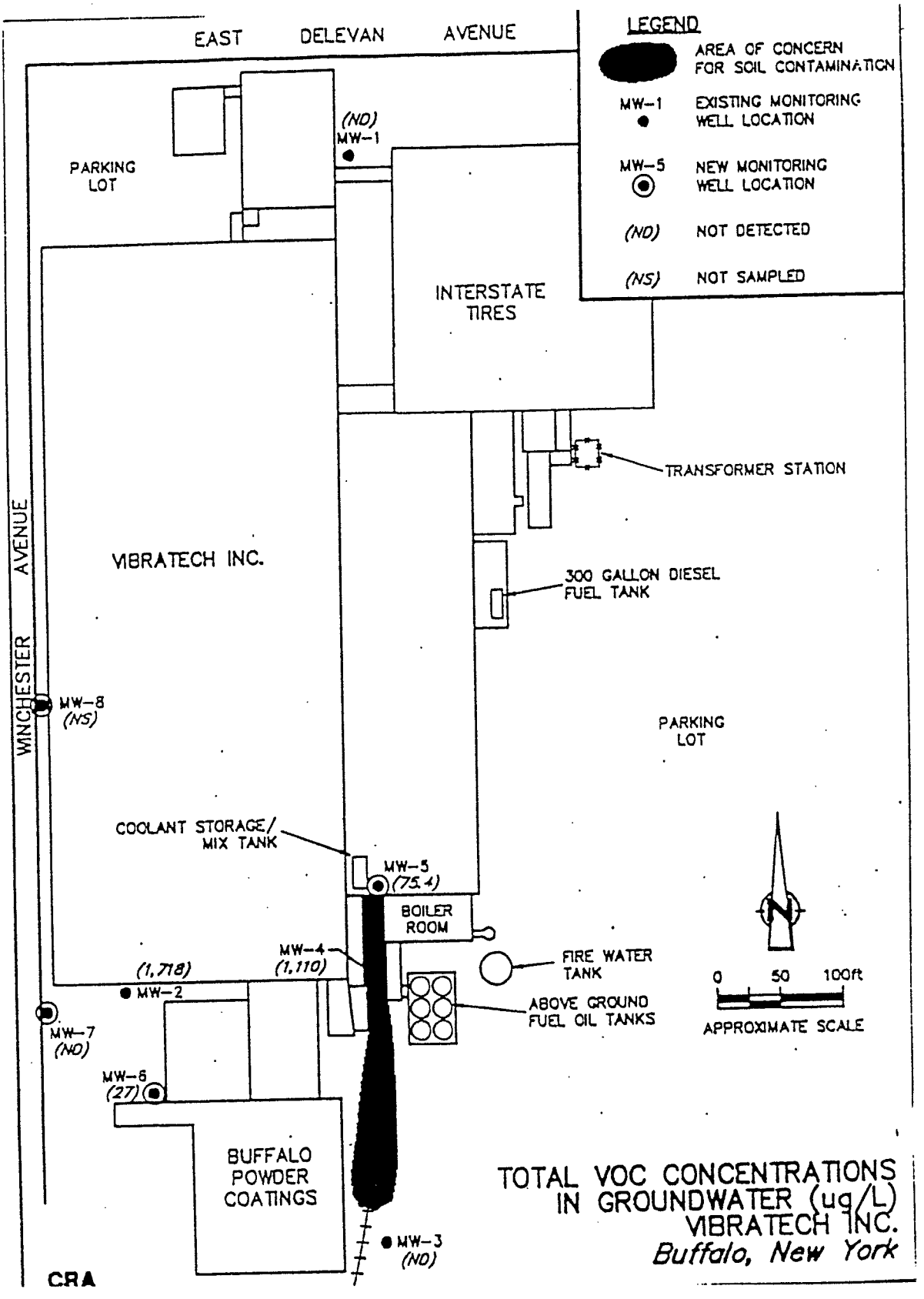

TABLE 1
SOIL SAMPLING RESULTS

VIBRATECH, Inc.

Summary of Soil Samples
Rail Spur Area

Soil Samples Summary of Detected Chemicals

Volatile Organic Compounds (VOCs) (ug/kg)	NYSDEC Cleanup Levels (1)	BH-4	BH-8	TP-1 0-3.5 (2)	TP-2 0-1.7	TP-3 0-3.0	TP-4 Upper 0-2.5	TP-5 0-2.1	TP-6 0-3.6
Acetone	200	20UJ	20U	20U	***373J***	1500U	1600U	1500U	10J
Benzene	60	20UJ	***89***	20U	20UJ	740U	780U	770U	6.1U
1,1-Dichloroethane	200	104J	***8060***	20U	***24700J***	740U	***13000***	***15000***	6.1U
1,2-Dichloroethane	100	20UJ	***226***	20U	20UJ	740U	***1200***	***1400***	6.1U
1,1-Dichloroethene	400	20UJ	59.6	20U	***8610J***	740U	780U	770U	6.1U
cis-1,2-Dichloroethene	-	124J	4210	40.6	6360	75000D	26000	19000	6.1U
trans-1,2-Dichloroethene	300	19.7J	***1410J***	20U	***562J***	***6500D***	***1500***	***920***	6.1U
Tetrachloroethene	1400	20UJ	30.3	20U	***87600J***	740U	780U	770U	3.0J
1,1,1-Trichloroethane	800	108J	***1050***	105	***675000J***	740U	***9100***	***26000***	6.1U
Trichloroethene	700	***1260J***	***733***	180	***3260J***	***12000D***	***10000***	***15000***	6.1U
Vinyl chloride	200	20J	***3440***	20U	***673J***	***1600J***	780U	770U	6.1U

(1) - TAGM-4046, Determination of Soil Cleanup Objectives and Cleanup Levels (revised) , 1/24/94
(2) - Depth of Test Pit in Feet
BH - Bore Hole
TP - Test Pit
U - Not detected at the stated detection limit
J - Associated Value is estimated
D - Sample was diluted
Bold Italic - exceeds NYSDEC clean up levels
BH-4, BH-8, TP-1, TP-2 samples were collected in December 1993
TP-3, TP-4 Upper, TP-5, TP-6 samples were collected in March 1994

subsequently be intercepted by the Buffalo Sewer Authority. Residents in the city of Buffalo do not utilize groundwater for drinking water or domestic use and all are connected to a public water supply. The absence of contaminants downgradient of the Winchester Avenue sewer indicates that the sewer is an effective barrier to migration under residences to the southwest of the site.

To ensure that the groundwater is no longer being impacted by the site, the remediation program will include post-remedial monitoring of the groundwater. In addition, this monitoring will ensure that the Winchester Avenue sewer is acting as barrier to contaminant migration under the residences.

3.2: Remedial History

On February 14, 1995, Vibratech officials met with NYSDEC and voluntarily discussed the results of the environmental investigations performed at the site. After reviewing the information, it was apparent that the site does not presently constitute an imminent threat to the environment, and/or public health but performing selective remediation action would mitigate the obvious hazardous waste risks to the environment and public health.

One empty steel underground storage tank (UST) was emptied and filled with concrete in July 1986. Three other USTs were decommissioned and removed in the 1980's. Vibratech reportedly cleaned up a leak from an aboveground diesel storage tank.

All electrical transformers containing polychlorinated biphenyls (PCBs) were sampled, drained, and rinsed or removed and replaced in 1986. A release of 2 ounces of PCB oil from a transformer was cleaned up and the transformer removed in 1989.

No remediation has taken place regarding the VOCs to date.

A work plan dated May 1995, for an IRM for the excavation and treatment of the contaminated soils was prepared by Vibratech Inc.'s consultant, Conestoga-Rovers Associates, as an addendum to a remedial Order on Consent (a legal agreement). The objective of the IRM is to remove all VOC contaminated soil at the site, to treat the soil using Soil Vapor Extraction Technology and to deposit the treated soil back onto the site.

SECTION 4: SUMMARY OF THE IRM

4.1: IRM REMEDIATION GOALS

Goals for the remedial program have been established through the remedy selection process stated in 6NYCRR 375-1.10. These goals are established under the guideline of meeting all standards, criteria, and guidance (SCGs) and protecting human health and the environment. At a minimum, the remedy selected will eliminate or mitigate all significant threats to public health and the environment presented by the hazardous waste present at the site through the proper application of scientific and engineering principles.

The overall objective of the IRM remedial action at Vibratech, Inc. is to reduce VOC contamination to a level which is protective of public health and the environment.

The goals selected for this site are:

- **Reduce soil VOC contamination present within the soils to the cleanup goals established (sec. 4.2 pg. 10).**

- **Eliminate the potential for direct human or animal contact with the contaminated soils on site.**

- **Eliminate the potential for contaminated soil to continue to contaminate groundwater.**

4.2: Selection of SCG's

The goal of this IRM is to remove soils containing VOCs at levels which would continue to contaminate groundwater. Therefore, the analytical data obtained from the Supplemental Sampling Investigations was compared to Applicable Standards, Criteria, and Guidance

(SCG) to determine whether remediation of the site would be required, and to determine applicable cleanup goals for the on-site treatment of contaminated soils. Soil cleanup goals were developed by the NYSDEC using the methodology outlined in Technical and Administrative Guidance Memorandum (TAGM) (HWR-92-4046 Revised) entitled "Determination of Soil Cleanup Objectives and Cleanup Levels," dated January 24, 1994. The cleanup goals for VOCs selected for the Vibratech, Inc. site are tabulated as follows:

Environmental Media		Cleanup Goal
Soil	Acetone	0.2 ppm
	Benzene	0.06 ppm
	1,1-Dichloroethane	0.2 ppm
	1,2-Dichloroethane	0.1 ppm
	1,1-Dichloroethene	0.4 ppm
	trans-1,2-Dichloroethene	0.3 ppm
	Tetrachloroethene	1.4 ppm
	1,1,1 Trichloroethane	0.8 ppm
	Trichloroethene	0.7 ppm
	Vinyl Chloride	0.2 ppm

Total of all VOCs* not to exceed 10 ppm

* (Total VOCs as listed in Appendix A, Table 1 of TAGM (HWR-92-4046 Revised)).

Based upon a comparison of the analytical results from sampling investigations conducted in December 1993, March 1994, October 1994, and March 1995 with the soil goals, the NYSDEC and NYS DOH determined that site remediation is appropriate.

4.3: Description of the IRM

The NYSDEC and Vibratech, Inc. propose an IRM be implemented at the Vibratech, Inc. site. An IRM can be implemented at a site prior to the completion of a Remedial Investigation/Feasibility Study (large scale site environmental investigation) to prevent, mitigate, or remedy environmental damage, or to reduce or eliminate public health risks associated with an identified source of contamination. The IRM being conducted by Vibratech, Inc. is intended to mitigate potential adverse impacts to the environment and public health from site soils and groundwater. Detailed procedures and requirements for implementing the IRM can be found in the document entitled, "Soil Vapor Extraction Work Plan", Vibratech, Inc., Buffalo, New York, May 1995, This document can be found at the aforementioned repositories at the Region 9 office of the NYSDEC and at the East Delevan Library. Ex-situ SVE was chosen over In-situ SVE because the contaminated soil volume is small and the ex-situ cell construction would speed the remediation process. In addition an engineered ex-situ cell lessens the chance of uncontrollable short-circuting that could occur in-situ due to the shallow nature of the soils in this area.

Specific elements of the IRM include:

4.3.1: Pre-excavation sampling

The last soil sampling event was performed in March 1995. Identification of the approximate extent of VOC contamination has allowed the approximate extent of excavation to be determined (Figure 2). The depth and southern extent of work will be determined during excavation, using a photo ionization detector (PID), an instrument which can detect VOC vapors in the field.

4.3.2: Soil Excavation and Staging

Approximately 500 - 700 yds^3 of VOC contaminated soil are expected to be removed with standard excavation equipment, transferred to an on-site treatment area (see Section 4.3.3), and staged in a pile. All VOC contaminated soil will be excavated to the top of bedrock. It is expected that the maximum depth of the excavation will not exceed 4.5 feet below grade. This excavation will result in the removal of all soil containing concentrations of VOCs above established cleanup goals. Confirmatory samples will be collected to insure that the remedial effort did indeed remove the contaminated soil. These samples will be analyzed by an independent certified laboratory. The open excavation will be barricaded with temporary fencing and posted with appropriate warning signs during SVE treatment.

4.3.3: Designation of a Corrective Action Management Unit (CAMU)

Designation of a CAMU at the Vibratech, Inc. site will allow Vibratech, Inc. to effectively treat and manage VOC contaminated soil at the site. In accordance with NYSDEC's CAMU guidance, an on-site treatment remedy will be utilized (see Section 4.3.4) that will be fully protective of public health and the environment, and will avoid the unnecessary transportation of VOC contaminated soil to off-site treatment and disposal facilities. The remedial work will utilize an innovative treatment approach (as described in Section 4.3.4) to remove VOCs from the soil and will reduce the reliance on containment remedies that require post-closure monitoring and maintenance.

The approximate areas requested for CAMU designation are shown on Figure 2 and include:

- Area 1: the area where soil containing VOCs will be excavated and subsequently backfilled

- Area 2: the area where on-site treatment will occur

CAMU Area 2 will be located in an uncontaminated area of the facility (Figure 2). A temporary storage pad will be constructed southeast of the contaminated area. Placement of the treatment area in an uncontaminated portion of the site is necessary because of the small area of VOC contaminated soil to be excavated. To prevent the contamination of the treatment area, the treatment area will be prepared with an 12-mil polyethylene liner which will serve as a barrier to protect the underlying clean pavement. A berm will be constructed around the perimeter of the treatment area to prevent the run-off of contaminated water and control precipitation run-off from the soil pile. The soil pile will be covered during treatment to control precipitation run-off and enhance the SVE process.

Details concerning the CAMU designation can be found in the document entitled, "Soil Vapor Extraction Work Plan, Vibratech, Inc., Buffalo, New York, May 1995".

4.3.4: Soil Treatment

Vibratech, Inc. will treat contaminated soil using soil vapor extraction to remove the VOCs. Since these VOCs are volatile compounds, meaning they easily evaporate, this method is technically feasible and appropriate for solvent removal from soil. Soil to be treated will be consolidated into three piles measuring approximately 20 feet wide by 55 long by 5 feet in height and consisting of approximately 200-300 yd^3 of soil. Three - 2 inch diameter PVC slotted pipes will be installed within the piles. Piping will be arranged with appropriate valving to allow flexible operation of the SVE system to maximize the rate of contaminant removal from the piles. During the SVE, air in the soil will be drawn through the pipes by producing a vacuum on the system. As the air is removed from the soil the VOCs will be volatilized. Air removed from the soil will be treated using activated carbon and discharged. Monitoring for VOCs will be conducted on the air before and after each carbon treatment to assess the removal efficiencies from the soil and the treatment efficiencies of the carbon. The SVE process will continue until soil VOC levels meet the established goals (sec. 4.2 pg. 10). Following treatment, the treated soil will be placed in the original excavation, and graded to match the existing grade. The treatment area will be decommissioned and returned to its preexisting uncontaminated condition.

Details concerning the on-site treatment of VOC contaminated soils can be found in the document entitled, "Soil Vapor Extraction Work Plan, Vibratech, Inc., Buffalo, New York, May 1995".

4.3.5: Health and Safety

All IRM soil removal and treatment activities will be conducted under strict adherence to a detailed Health and Safety Plan (HSP). This plan defines procedures and protocols to be implemented during these activities to ensure the health and safety of field personnel, Vibratech, Inc. employees, and the nearby public. As part of this plan, real time air monitoring with field instruments will be conducted at the perimeters

of the work and in the treatment zones for compliance with action levels of 5 ppm above background for organic vapors, and 150 ppm total for particulates. If these action levels are exceeded, excavation and/or treatment activities will be modified or halted altogether until measured concentrations are again below the specified action levels. These action levels were selected to ensure that acceptable guidelines are not exceeded at the perimeter of Vibratech, Inc. property.

4.3.6: Interim Remedial Measures Evaluation Criteria

1. Compliance with New York State Standards, Criteria and Guidance (SCGs) -

Compliance with SCGs addresses whether or not a remedy will meet applicable environmental laws, regulations, standards and guidance. The interim remedy will comply with the chemical specific SCGs by treating the soil to the clean-up goals. A CAMU will be established at the site to allow for the treatment and disposal of the soil on the site to comply with administrative SCGs. Groundwater SCGs will not be immediately met. It is anticipated that the groundwater will eventually be in compliance after removal of the contaminant source. A long term monitoring plan will be implemented to insure this eventual compliance.

2. Protection of Human Health and the Environment:

This criterion is an overall evaluation of the health and environmental impacts to assess whether the interim remedy is protective. The interim remedy will provide adequate protection of human health and the environment with the treatment of the soil to the established clean-up goals. When clean-up is completed, and the contaminated groundwater has infiltrated the sanitary sewer, there will be no further route of exposure.

3. Short Term Effectiveness:

The potential short term adverse impacts of the interim remedy upon the community, the workers and the environment during the construction and implementation were evaluated. The primary period for the potential release of VOC emissions is during the excavation of the soil. Construction methods are available to minimize the extent of soil disturbance such as limiting movement of soil to avoid repeated staging prior to the construction of the soil pile. Air monitoring and the covering of excavated soil will also be employed to reduce VOC release. In the event that real time air monitoring indicates the need, more rigorous control measures, such as foam application may be implemented. In order to ensure the effectiveness of the controls on the SVE system, emissions testing will occur at startup and at regular intervals thereafter

4. Long Term Effectiveness:

This criteria evaluates the long term effectiveness of the interim remedy after implementation of the IRM. Since the intent of the IRM is to treat the soil to clean up goals established (sec. 4.2 pg. 10), no further action after the completion of this remedy is anticipated for the soil.

5. Reduction of Toxicity, Mobility or Volume:

When evaluating a remedial method, preference is given to the technology that permanently and significantly reduces the toxicity, mobility or volume of the wastes at the site. SVE will accomplish these goals by removing the VOCs from the soil, which will reduce the volume of contaminated media (soil). Elimination of VOCs from the soil will also eliminate the contaminants mobility. The air stream containing the VOCs will be treated prior to discharge. The activated carbon used for treatment will be properly disposed of by either offsite thermal destruction or by placement in a permitted landfill.

6. Implementability:

The technical and administrative feasibility of implementing the interim remedy was evaluated. Technically, this included the potential difficulties associated with the construction, the reliability of the technology, and the ability to monitor the effectiveness of the remedy. Administratively, the availability of necessary personnel and materials was evaluated, along with a review of potential difficulties in obtaining specific operating

approvals, access for construction, etc. The interim remedy is both technically and administratively feasible and can be constructed at the site using current construction methods and procedures.

7. Cost:

Capital and operation and maintenance costs are estimated at $113,000.00

8. Community Acceptance

To provide interested citizens near the site with an opportunity to learn about the IRM, an information sheet was sent on September 1, 1995. A public meeting was held on September 11, 1995 to present the information in this Decision Document. A 21 day comment period was offered to allow comments to this proposal.

SECTION 5: ENFORCEMENT STATUS

On September 18, 1995, Vibratech, Inc. voluntarily entered into an Order on Consent (a legal agreement) with the NYSDEC to implement an Interim Remedial Measure to remediate contaminated soil at the site.

APPENDIX A:
RESPONSIVENESS SUMMARY

Vibratech Inc.
Interim Remedial Measure Decision Document
Buffalo (C), Erie County

A Draft Interim Remedial Measure Decision Document for Vibratech, Inc. was prepared by the New York State Department of Environmental Conservation (NYSDEC) and was placed in the local repository in September 1995.

This plan outlined a proposed Interim Remedial Measure to remediate the contaminated soil at the Vibratech Inc. facility at 537 East Delevan Avenue. The preferred remedial measure is the excavation of contaminated soil, ex-situ soil vapor extraction and re-interment of cleaned soils.

The release of the Interim Remedial Measure Decision Document was announced in a Fact Sheet on September 1, 1995 to the mailing list established for this site. A public meeting was held on September 11, 1995 which included a presentation of the Interim Remedial Measure. The meeting provided the public an opportunity to become familiar with the proposal as well as provide a forum for their comments and questions. These comments have become a part of the Administrative Record for this site.

The public comment period ended on September 21, 1995. This Responsiveness Summary answers questions raised during the September 11, 1995 public meeting. Subsequent to the public meeting there were no written comments received.

****

1. Q. Vibratech is moving and they are going to sell the facility. What will ensure that Vibratech and whomever they sell the facility to will honor the decision?

   A. Vibratech and the NYSDEC have entered into an Order on Consent. This is a legal agreement between the company and the State of New York that ensures that the remediation will be completed.

2. Q. Who will monitor the work to ensure it is being done?

   A. The NYSDEC project manager has the responsibility to ensure that the work is completed as stipulated in the submitted work plans, and to ensure that this work accomplishes the goals set forth in the Decision Document and the Order on Consent.

3. Q. The project is expected to last three months but could be as long as nine months. Why the big difference?

A. The anticipated length of time necessary for the soils to reach cleanup goals is three months. However, the onset of winter with its cold temperatures could slow the process down. It is conceivable that the Soil Vapor Extraction (SVE) process could extend into the summer of 1996.

4. Q. What should people do in the meantime?

A. Nothing should be done differently than it is now. The cell construction will be a relatively quick project. The actual operation will hardly be noticed by the public. If you notice anything that you are not comfortable with, you should call one of the contact persons listed on the back of the fact sheet.

5. Q. Will the citizens be notified of progress and how often?

A. Another fact sheet will be mailed to notify the public of progress on the site. It is anticipated that this mailing will be sometime this winter. The NYSDEC usually sends a fact sheet every 6 months, unless there are special activities of which the public should be aware.

6. Q. What is the success rate of SVE?

A. We are comfortable with the success of SVE to remove volatile contamination in soils such as the soils at the Vibratech site. There are many projects in the local area currently utilizing this technology.

7. Q. When was the problem first discovered?

A. The problem was first discovered in 1993. This discovery and other areas of concern were noted in the Phase I report conducted by Conestoga-Rovers Associates, a consulting firm retained by Vibratech.

8. Q. How and why was the problem discovered?

A. This problem was discovered during an environmental audit. These audits are typical during property transfers.

9. Q. Why did Vibratech only approach the problem now?

A. It is a time consuming process to study problems such as the one at Vibratech. Remediation costs are very high and companies tend to make sure they have the problem delineated before they start remediation. This helps to ensure they are getting the problem solved correctly the first time around.

10. Q. Is the drinking water affected?

A. No. All residences in the City of Buffalo receive their water from the public water supply which is not impacted by the site.

11. Q. What if there was a backup of water, in the sewer, or from excessive rain? You say groundwater moves from the northeast to the southwest toward Winchester Avenue, but what if this changes?

A. Groundwater does not react in the same manner as does surface runoff. The movement of groundwater is slow to react to short term fluctuations in the surface water. At the Vibratech site, water tends to flow relative to the subsurface bedrock which slopes from the northeast to the southwest. If there were to be a backup chances are that the groundwater would not be affected before the backup subsided. In addition, a backup from the sewer would tend to enhance a hydraulic barrier effect by acting as a pressure dam slowing any migration from the property.

12. Q. What is the statute of limitations on this cleanup?

A. In the broadest sense, responsible parties remain responsible for cleanups until the remediation is complete and the problem no longer exists.

13. Q. What is the extent of contamination?

A. The rail spur area to the south of the main facility is affected. This area is directly behind Buffalo Powder Coatings and is an area approximately 20 feet wide by 200 feet long.

14. Q. You've said there will be excavation. What will prevent dust and contaminants from blowing around?

A. The workplan includes a comprehensive Health and Safety Plan. This plan requires that the soil will be kept moist to prevent dust from blowing around. Vapor concentrations will be closely monitored to ensure they do not exceed 5 parts per million (ppm) above background. If this is exceeded, alternative work practices or engineering controls will be utilized. If the vapors exceed 50 ppm the work will be shut down and re-evaluated before continuing.

15 Q. What about the remainder of the plant site? Is it clean?

A. Several areas were studied in the Phase I, Phase II and Supplemental Investigations. This was the only area that was determined to require remediation. The investigation reports can be found at the document repositories.

16. Q. What Health and Safety precautions will be taken?

A. Hourly perimeter air monitoring will take place when the excavation and cell construction is taking place. If fugitive dusts exceed 150 micrograms per cubic meter (ug/m^3) on a real time particulate monitor or vapor concentrations exceed 5 ppm on a photo-ionization detector (PID) dust suppression techniques and/or

vapor suppression techniques will be utilized. A detailed community health and safety plan can be viewed at the document repositories as a supplement to the "Soil Vapor Extraction Work Plan, Vibratech, Inc., Conestoga Rovers Associates, May 15, 1995". The construction will be monitored by Vibratech's consultant and the NYSDEC.

17. Q. Will the large oil tanks remain?

A. Yes. Only one tank still contains oil. This is # 6 - fuel oil for boiler operation. All tanks still in use, above and below ground, are permitted and must comply with NYSDEC regulations for storage tanks.

18. Q. How dangerous in relation to other chemicals is TCE?

A. The potential health effects to any chemical substance depends primarily on the amount of chemical to which the individual is exposed, its concentration, and the length and frequency of exposure. The key element, however, is that there must be exposure (i.e. ingestion, direct contact,inhalation) to the chemical for a health effect to occur. At the Vibratech site, no complete exposure pathways to off-site residents have been found.

Trichloroethene can affect the central nervous system when breathed in air at high concentrations causing effects such as dizziness and headache. Eye, nose, and throat irritation occur at similar concentrations. Based on animal evidence, trichloroethene may be capable of causing cancer in humans. However, at this time there is insufficient data to know if trichloroethene actually can cause cancer in humans.

19. Q. What concerns should we have about kids and pets playing in the area?

A. The area of concern is within a fenced manufacturing facility. There should be no activities in the area by children. The excavation and the soil piles will be covered and barricaded to prevent contact.

20. Q. What is the status of the project?

A. There will be a short comment period whereupon a response summary will be prepared from the comments received. After this the company will be allowed to begin remediation. This is expected to begin around October 16, 1995.