

FILED
 FULTON COUNTY
 COURT OF COMMON PLEAS

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Mary S. Suggs
 CLERK

IN THE COURT OF COMMON PLEAS
 FULTON COUNTY, OHIO

STATE OF OHIO, ex rel.	:	
LEE FISHER,	:	
	:	
Plaintiff)	:	CASE NO. 90CV000001
	:	
vs.	:	JUDGE BARBER
	:	
PERFECTION FINISHERS, INC.,	:	
et al.,	:	
	:	
Defendants.	:	

CONSENT ORDER

Plaintiff, State of Ohio, by its Attorney General, Lee Fisher (hereinafter "Plaintiff"), having filed the Complaint herein against Defendants Perfection Finishers, Inc, ("PFI") and Master Vac, Inc., ("Master Vac") alleging violations of Chapters 3704 and 3734 of the Ohio Revised Code, and the parties having consented to the entry of this Order,

NOW THEREFORE, without the trial of any issue of fact or law, and upon the consent of the parties hereto, it is hereby ORDERED, ADJUDGED AND DECREED as follows:

I. JURISDICTION

1. The Court has jurisdiction over the subject matter of this action, pursuant to Chapters 3704 and 3734 of the Ohio Revised Code and the regulations adopted thereunder. This Court has jurisdiction over the parties. Venue is proper in

this Court. The Complaint states a claim upon which relief can be granted.

II. PARTIES

2. The provisions of this Consent Order shall apply and be binding upon the parties to this action, their agents, officers, employees, assigns, successors in interest and any person acting in concert, privity or participation with them who receives actual notice of this Consent Order whether by personal service or otherwise. Defendants shall provide a copy of this Consent Order to each contractor they employ to perform work itemized herein and each general contractor shall provide a copy of this Consent Order to each of its subcontractors for such work.

III. SATISFACTION OF LAWSUIT

3. Plaintiff has alleged in its Complaint that Defendants PFI and Master Vac have operated their facilities, located at 1151 North Ottokee Street, in Wauseon, and 9341 Fulton County Road 14, in Ottokee, respectively, in violation of various provisions of the air pollution control and/or hazardous waste laws of Ohio, as set forth in Chapters 3704 and 3734 of the Ohio Revised Code and the regulations adopted thereunder. Defendants deny these allegations and nothing herein shall be construed as an admission by the Defendants of the truth of any of the allegations of fact or law in the Complaint. Compliance with the terms of this Consent Order shall constitute full

satisfaction of any civil liability by Defendants for those claims under such laws and regulations which have been alleged in the Complaint.

4. This Consent Order shall not be construed to act as a bar to the authority of the Plaintiff to seek relief, by separate action, for future violations of law. The Plaintiff may also, if appropriate, enforce this Consent Order, through a contempt action or otherwise for future violations of law which also comprise violations of this Consent Order.

5. This Consent Order shall not be construed so as to preclude the State, pursuant to O.R.C. §§3734.20 through 3734.27, from seeking to require that PFI investigate, conduct any remedial or corrective action of any contamination or from seeking reimbursement from Defendant for any such actions resulting from the disposal of hazardous wastes at any solid waste landfill.

6. This Consent Order shall not be construed so as to preclude the State, pursuant to O.R.C. Sections 3734.20 through 3734.27, from seeking to require that PFI or Master Vac conduct remedial or corrective action or additional monitoring or testing at their facilities as a result of waste handling activities at such facilities, or from seeking reimbursement from the Defendants for any such actions or monitoring conducted by Plaintiff.

7. Nothing in this Order shall be construed to limit the authority of the Plaintiff to seek relief for claims or

conditions not alleged in the Complaint or addressed by this Consent Order.

IV. CLOSURE PLAN

8. Defendant PFI agrees and is hereby enjoined to perform a closure of the hazardous waste management units, as identified in Appendix A which is attached hereto and incorporated herein by reference. Such closure shall be performed and completed in accordance with the closure regulations set forth in O.A.C. Rules 3745-66-10 through 3745-66-20, and shall be in accordance with a closure plan submitted by Defendant PFI, as finally approved by OEPA or otherwise modified in accordance with the law. Defendant PFI retains the right to appeal to the Environmental Board of Review (EBR) pursuant to O.R.C. §3745.04, or other appropriate tribunal, the final action of OEPA regarding the approval/disapproval or modification of the Closure Plan.

9. Pursuant to O.A.C. Rule 3745-66-12(D)(4) and as a result of the notice of deficiency issued on June 18, 1991 and subsequent discussions between the parties. PFI agrees and is hereby enjoined to modify the plan or submit a new plan addressing the comments contained in the notice of deficiency for approval within forty-five (45) days after entry of this Consent Order. If the Director modifies the plan, this modified plan becomes the approved Closure Plan unless otherwise modified in accordance with the law.

10. Defendant PFI agrees and is enjoined to complete closure in accordance with the Closure Plan submitted by Defendant PFI as approved by OEPA or otherwise modified in accordance with the law, and such approved Closure Plan shall be incorporated by reference into this Consent Order. Within sixty days of completion of closure, PFI agrees and is enjoined to submit to the Director, pursuant to O.A.C. Rule 3745-66-15, a certification that the unit has been closed in accordance with the approved Closure Plan.

11. Defendant PFI agrees and is hereby enjoined to characterize the waste in the three drums in area 10 as identified in Appendix C. If said waste in the drums is determined to be a hazardous waste, Defendant PFI agrees and is hereby enjoined to manage such as a hazardous waste and to scoop visibly contaminated areas in area 10 and manage excavated materials in accordance with Ohio's hazardous waste laws.

12. Defendant PFI agrees and is hereby enjoined, pursuant to O.A.C. Rule 3745-66-42, to develop and prepare a detailed written estimate, in current dollars, of the cost of closing the hazardous waste management units as identified in Appendix A and to obtain financial assurance for closure of these areas in accordance with O.A.C. Rule 3745-66-43 or in another manner acceptable to OEPA. This provision in no way obligates OEPA to accept such other mechanisms of financial assurance as may be proposed by Defendant PFI. Defendant PFI agrees and is hereby enjoined to submit the detailed cost estimate for closure and

documentation of its obtaining financial assurance for closure to the OEPA at the following address:

Director, Ohio Environmental Protection Agency
P.O. Box 1049
1800 WaterMark Drive
Columbus, Ohio 43266-0149
Attn: Manager, Compliance Monitoring & Enforcement
Section, Division of Hazardous Waste Management

V. SAMPLING AND ANALYSIS WORKPLAN

13. Defendant Master Vac has submitted a approved sampling and analysis work plan for the areas at the Master Vac facility. The workplan is identified as Appendix B (attached hereto and incorporated by reference herein).

14. Defendant Master Vac is enjoined to use its best efforts to implement the approved workplan as soon as practicable but no later than thirty (30) days after entry of this Consent Order. Defendant Master Vac agrees and is enjoined to notify the State of scheduled sampling activities at which a representative of OEPA will be present. Further, Master Vac is enjoined to complete the workplan in accordance with the schedule included in the workplan. Defendant Master Vac agrees and is enjoined to submit a report of the results of the sampling and analysis workplan to OEPA within thirty (30) days of obtaining analytical results of the samples.

15. If results of the sampling and analysis workplan indicate the presence of contamination, as a result of Master Vac's hazardous waste handling activities, Master Vac agrees and is enjoined to submit an approvable Closure Plan to OEPA within thirty (30) days of submission of the report referenced in paragraph 15 to OEPA.

VI. CIVIL PENALTY

16. Defendant PFI shall pay to Plaintiff the amount of Fifty-Two Thousand Five Hundred Dollars (\$52,500.00). PFI agrees and is enjoined to pay this amount pursuant to the following schedule:

1. Seventeen Thousand Five Hundred Dollars (\$17,500.00) within thirty (30) days of entry of this Consent Order;
2. Seventeen Thousand Five Hundred Dollars (\$17,500.00) within thirty (30) days of the 1st year anniversary of entry of this Consent Order; and
3. Seventeen Thousand Five Hundred Dollars (\$17,500.00) within thirty (30) days of the 2nd year anniversary of entry of this Consent Order.

This amount shall be paid by delivering to counsel for Plaintiff a certified check for such amounts, payable to the order of "Treasurer, State of Ohio". Such payment shall be deposited into the hazardous waste clean-up fund created pursuant to O.R.C. §3734.28. (A portion of this payment may be considered to be in payment for violations of O.R.C. Chapter 3704 and any such portion shall be credited in accordance with O.R.C. §3704.06(D)).

17. Defendant Master Vac shall pay to the State of Ohio the amount of Seventeen Thousand Five Hundred Dollars (\$17,500.00). Master Vac agrees and is enjoined to pay this sum pursuant to the following schedule:

1. Five Thousand Eight Hundred Thirty-Three Dollars and Thirty-Three Cents (\$5,833.33) within thirty (30) days of entry of this Consent Order;
2. Five Thousand Eight Hundred Thirty-Three Dollars and Thirty-Three Cents (\$5,833.33) within thirty (30) days of the 1st year anniversary of entry of this Consent Order; and
3. Five Thousand Eight Hundred Thirty-Three Dollars and Thirty-Three Cents (\$5,833.33) within thirty (30) days of the 2nd year anniversary of entry of this Consent Order.

This amount shall be paid by delivering to counsel for Plaintiff a certified check for such amounts, payable to the order of "Treasurer, State of Ohio". Such payment shall be deposited into the hazardous waste clean-up fund created pursuant to O.R.C. §3734.28.

VII. GENERAL INJUNCTION

18. Defendant PFI agrees and is hereby permanently enjoined to operate its business, located at 1151 North Ottokee Street in Wauseon, Ohio, in compliance with Chapters 3704 and 3734 of the Ohio Revised Code and the regulations promulgated thereunder. Specifically, Defendant PFI agrees and is enjoined to achieve and maintain compliance with all applicable generator requirements set forth at O.A.C. Chapter 3745-52, including but not limited to the following regulations, within thirty (30) days of entry of this Order:

Personnel Training Requirements (O.A.C. Rule 3745-65-16)

Preparedness and Prevention Requirements (O.A.C. Rules 3745-65-30 through 37)

Contingency Plan Requirements (O.A.C. Rules 3745-65-50 through 56)

Container Management Requirements (O.A.C. Rules 3745-66-71 through 77)

19. Defendant Master Vac agrees and is hereby permanently enjoined to operate its business located at 9341 Fulton County Road 14, Ottokee, Ohio in compliance with Chapter 3734 of the Ohio Revised Code and the regulations promulgated thereunder. Specifically, Master Vac agrees and is permanently enjoined to comply with all applicable generator requirements set forth in O.A.C. Chapter 3745-52.

20. Defendant PFI agrees that it will refrain and is hereby permanently enjoined from transporting or causing to be transported any hazardous wastes except to facilities licensed or permitted in accordance with O.R.C. §3734.02(F)(1)-(5).

21. Defendant PFI agrees to refrain and is hereby permanently enjoined from treating, storing, and/or disposing of hazardous wastes, including the incineration of any hazardous wastes, at its facility located at 1151 North Ottokee Street in Wauseon, Ohio unless and until such time as PFI receives a hazardous waste permit for the conduct of such activities from the Ohio Hazardous Waste Facilities Siting Board in accordance with O.R.C. §3734.05. Nothing herein shall prohibit Defendant PFI from accumulating hazardous waste in accordance with O.A.C.

Rule 3745-52-34.

22. Defendant PFI agrees that it will refrain and is permanently enjoined from burning any non-hazardous waste until such time as Defendant PFI obtains a current Permit-to-Install and Permit-to-Operate from OEPA's Division of Air Pollution Control.

23. Defendant Master Vac agrees that it will refrain and is hereby permanently enjoined from transporting or causing to be transported hazardous wastes except to facilities licensed or permitted in accordance with O.R.C. §3734.02(F)(1)-(5).

24. Defendant PFI agrees and is hereby enjoined to record and document the amount of hazardous waste generated at the PFI facility for a period of two years from the date of entry of this Order.

VIII. COMPLIANCE WITH APPLICABLE LAWS

25. Nothing herein shall affect Defendants obligations to comply with all applicable federal, state or local laws, regulations, rules or ordinances.

IX. STIPULATED PENALTIES

26. In the event that PFI or Master Vac violates any of the requirements of Article IV and V (Closure Plan and Sampling Plan) of this Consent Order or any timeline requirement in the Closure Plan schedule as approved by OEPA or as modified by the EBR or other appropriate tribunal, such Defendant shall immediately and automatically be liable for and shall pay a

stipulated penalty according to the following payment schedule. For each day of each failure to meet a requirement, up to thirty (30) days - Two Hundred Fifty Dollars (\$250.00) per day. For each day of each failure to meet a requirement, from thirty-one (31) to sixty days (60) - One Thousand Dollars (\$1,000.00) per day. For each day of each failure to meet a requirement, from sixty-one days (61) to ninety (90) days - Two Thousand Dollars (\$2,000.00) per day. For each day of failure to meet a requirement, over ninety days (90) days - Three Thousand Dollars (\$3,000.00) per day.

27. Any payment required to be made under the provisions of Paragraph 26 of this Order shall be made by delivering to Plaintiff's counsel a certified check or checks for the appropriate amounts, within forty-five (45) days from the date of the failure to meet the requirement of the Consent Order, made payable to "Treasurer, State of Ohio". Such payment shall be deposited into the hazardous waste clean-up account.

28. PFI may request an extension to the closure period pursuant to O.A.C. Rule 3745-66-13(B). The State may, in its discretion, waive any stipulated penalties which may be due under this Article.

29. In any action to enforce the provisions of this Article, Defendants may raise at that time the question of whether they are entitled to a defense that their conduct was caused by reasons beyond their control such as, by way of example and not limitation, act of God, unusually severe weather conditions, strikes, acts of war or civil disturbances,

or orders of any regulatory agency. While Plaintiff does not agree that such a defense exists, it is, however, hereby agreed that it is premature at this time to raise and adjudicate the existence of such a defense and that the appropriate point at which to adjudicate the existence of such a defense is at the time that a dispute arises and/or an enforcement action, if any, is commenced.

X. TERMINATION OF STIPULATED PENALTIES

30. The provisions of this Consent order set forth in Section VIII, paragraphs 21 and 22, requiring the payment of stipulated penalties shall, with respect to PFI, terminate on a date not earlier than eighteen months from the date Defendant PFI has fully completed closure under its approved closure plan to the satisfaction of the OEPA; provided, however, that such termination will not take effect unless the Defendants can demonstrate to the satisfaction of the Plaintiff that it has been in compliance with the terms of this Consent Order for such eighteen month period. With respect to Master Vac, the stipulated penalties shall terminate in the event that Master Vac can demonstrate to the satisfaction of the State that it has been in compliance with the terms of this Consent Order for a eighteen month period from the date of entry of this Order. Should the Defendants not demonstrate that they have been in compliance for such eighteen month periods, they must, in order to obtain a termination of the stipulated penalty section, demonstrate to the State that they have been in compliance with

the terms of this Consent Order for some other eighteen month period. Termination of stipulated penalties shall be by order of the Court, upon application by any party and a demonstration that the conditions of this paragraph have been met.

XI. RETENTION OF JURISDICTION

31. This Court will retain jurisdiction of this action for the purpose of overseeing compliance with this Consent Order.

XII. MISCELLANEOUS

32. Defendants shall pay all court costs of this action.

DATED 1-7-92, 1991



JUDGE, FULTON COUNTY COURT
OF COMMON PLEAS

Approved:

STATE OF OHIO, ex rel.
LEE FISHER
ATTORNEY GENERAL OF OHIO

BY: Beverly Hale Pfeiffer
BEVERLY YALE PFEIFFER
CHRISTOPHER KORLESKI
Assistant Attorneys General
Environmental Enforcement
Section, 25th Floor
30 East Broad Street
Columbus, OH 43266-0410

PERFECTION FINISHERS, INC.,

BY: DR Stray

MASTER VAC, INC.,

BY: DR Stray

APPROVED BY:

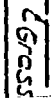
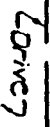
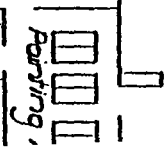
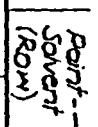
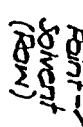
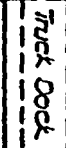
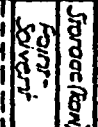
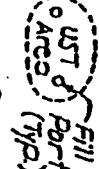
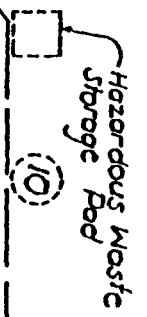
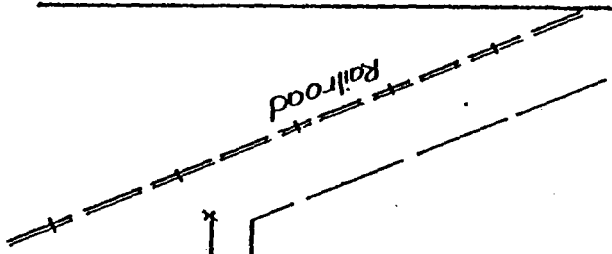
Edward X. Junia
JOSEPH A. GREGG, ESQ.
EDWARD X. JUNIA, ESQ.
Eastman & Smith
800 United Savings Bldg.
Toledo, Ohio 436094-1141

Counsel for Perfection Finishers,
Inc. and Master Vac, Inc.

APPENDIX A

Map Of Designated Areas For Closure

APPENDIX A



SECTION C D

← Corn Field

APPENDIX B

*SAMPLING PLAN
FOR
MASTER VAC INC.
9353 COUNTY ROAD 14
WAUSEON, OHIO 43567*



HERITAGE REMEDIATION/ENGINEERING, INC.

**SAMPLING PLAN
FOR
MASTER VAC INC.
9353 COUNTY ROAD 14
WAUSEON, OHIO**

Prepared for:

Master Vac Inc.
9353 County Road 14
Wauseon, Ohio 43567

Prepared by:

Heritage Remediation/Engineering, Inc.
5656 Opportunity Drive
Toledo, Ohio 43612

December 13, 1991

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1.0 INTRODUCTION

Heritage Remediation/Engineering, Inc. (HR/E) has been retained to prepare a Sampling Plan for Master Vac Inc. (MVI) at 9353 County Road 14 near Wauseon, Ohio. Figure 1 is a USGS 7.5 minute topographic map showing the site location. The Sampling Plan has been developed to address the concerns specified in the September 26, 1990 letter from the Ohio Environmental Protection Agency (OEPA) regarding the areas at which hazardous wastes may have been handled. OEPA comments in a letter dated December 5, 1991 are incorporated into this plan. The purpose of this sampling plan is to ascertain soil sampling results in assessment of this site. The sampling plan consists of a description of methods and locations, sample handling and analysis and quality control procedures.

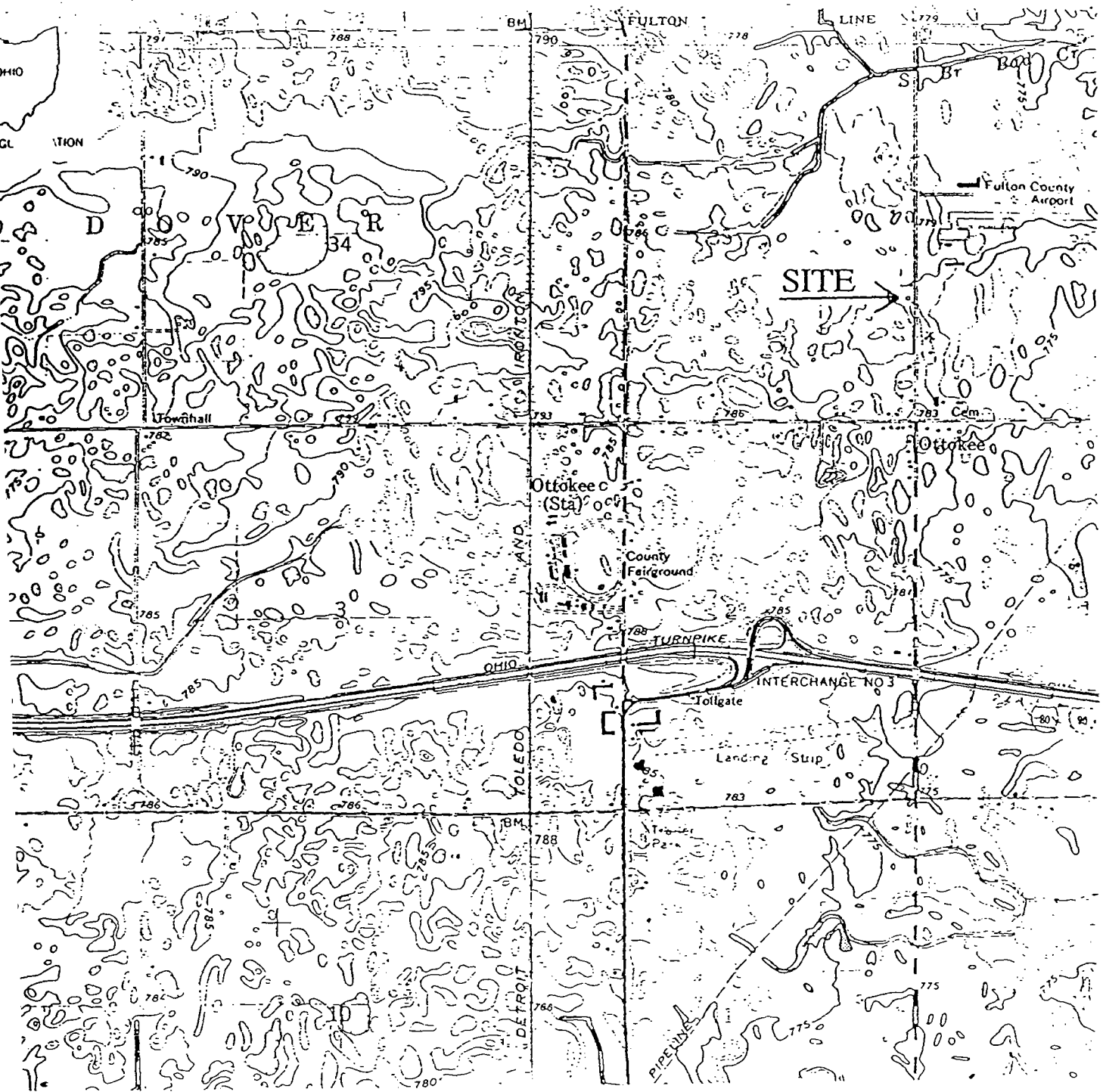
The MVI site covers approximately one acre with one-third of the site being comprised of the main building. Four areas of concern have been identified as indicated in Figure 2. These areas, as identified by the OEPA, are as follows:

- | | |
|--------|--------------------------|
| Area 1 | Former drum storage area |
| Area 2 | By the paint building |
| Area 3 | North of overhead door |
| Area 4 | South of overhead door |

Chemicals of concern for this Sampling Plan includes the following having been identified as the major chemicals on site:

- Acetone
- 2-Butanone (methyl ethyl ketone, MEK)
- 2-Propanol (isopropanol, or isopropyl alcohol)
- Xylenes

Breakdown products from the above chemicals were examined in the Handbook of Environmental Fate and Exposure Data for Organic Chemicals, Lewis Publishers. A possible breakdown product of MEK is acetaldehyde. Xylenes may break down into biacetylene, glyoxal, and methyglyoxal. These breakdown products are not listed in the Appendix to

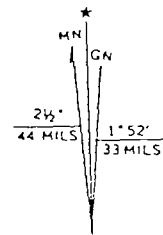


Wauseon, OHIO

130-W8407.5/7.5

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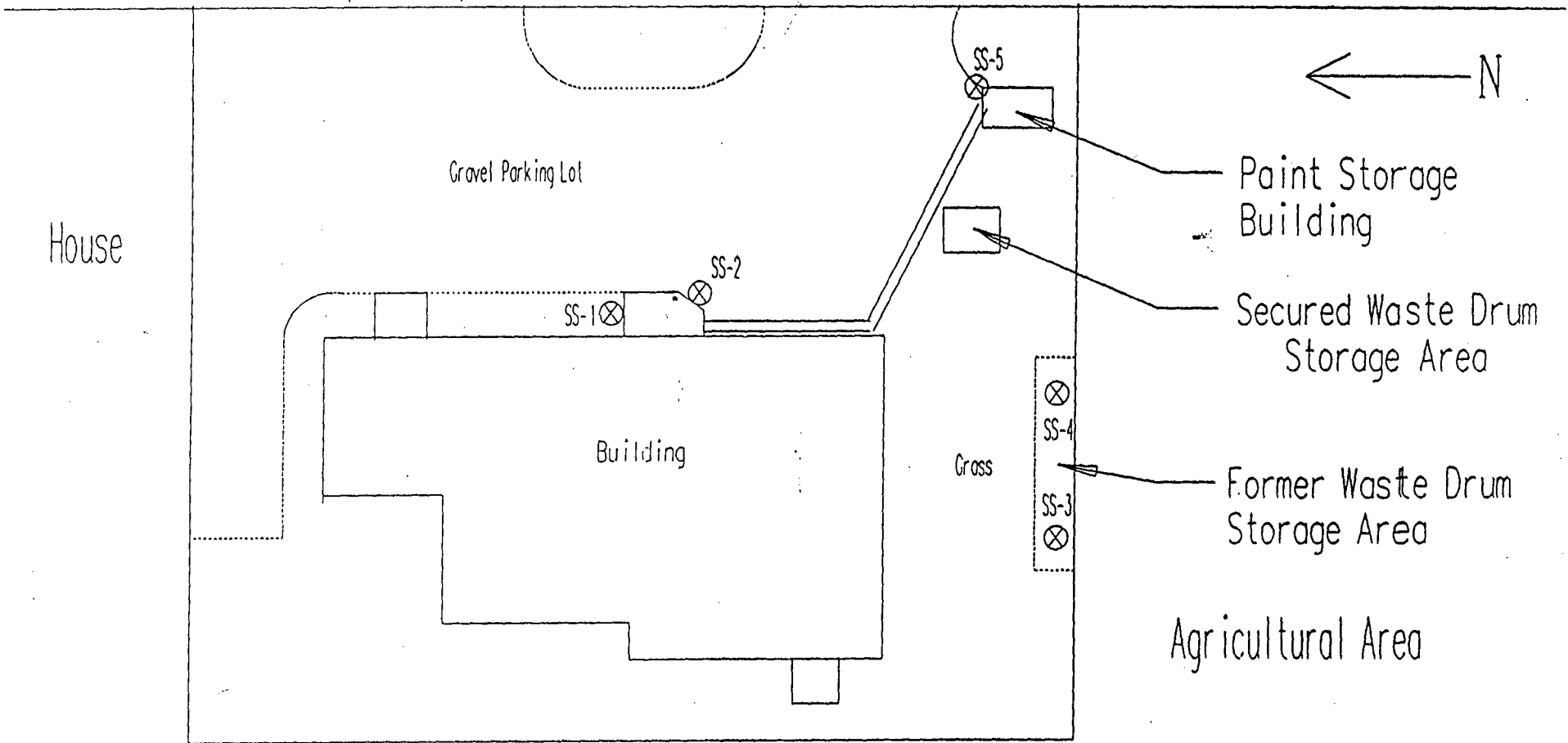
FIGURE 1
Site Location Map
Master Vac, Inc.
9353 County Road 14
Wauseon, Ohio



UTM GRID AND 1971 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

SCALE 1:24000

County Road 14



LEGEND	
SS - SOIL SAMPLES	
⊗ SAMPLE LOCATIONS	
NOT TO SCALE	

Agricultural Area

HERITAGE REMEDIATION/ENGINEERING	TOLEDO DIVISION
FIGURE 2 SAMPLE LOCATIONS MASTER VAC, INC. WAUSEON, OHIO DATE: 12-5-90	
DRAWN BY H. WILBARGER	

OAC Rule 3745-54-93 or the Appendix to OAC Rule 3745-54-98, and therefore will not be included in the parameters for laboratory analysis.

The objective of this sampling plan is to provide a document explaining sampling types, procedures, and practices that will be used in the sampling program. During the sampling program, soil samples will be collected for field screening and subsequent analysis.

2.0 SOILS INVESTIGATION

A soils investigation will be conducted to assess the vertical and horizontal extent of possible contamination of surface and subsurface soils from the four areas of concern. Soil samples will be obtained from each area by utilizing a hand auger and/or shovel to obtain representative samples from the surface and from a depth of approximately two feet. Laboratory analysis will be performed on selected soil samples based upon field screening with a photoionization detector (PID). An OEPA representative will be permitted to observe the field calibration and operation of the PID.

An OEPA representative will be present during all sampling activities, and will be notified at least one week prior to sampling. This representative will be permitted to direct the sampling activities by determining the location of each sample within the areas described in the plan. A PID will be utilized to locate the possible area of greatest contamination and that the number of samples described in the plan will be collected regardless of the results of the PID screening.

Composite sampling will be done carefully as to minimize possible volatilization of organic constituents. Sampling will include the top 18 inches of soil.

2.1 General Sampling Locations and Numbering System

Figure 2 shows the general location of sampling sites for this Sampling Plan. These sites were selected according to the areas of concern. Exact sampling locations will be determined in the field and recorded in the field sampling notebook.

A sampling numbering system will be used to identify each sample taken during this program. This numbering system will provide a tracking procedure to allow retrieval of information about a particular sample and assure that each sample is uniquely numbered. A listing of the sample identification number will be maintained by the Sampling Team Leader. Each sample number will be composed of four components:

- Project Identification - MVI
- Sample Type - SS (soil sample)
- Sample Location - two digit number corresponding to site sampling location map
- Sample Number - two digit number indicating consecutive samples at a location, field blanks (FB) used in place of sample number, duplicates (D) at end of sample number

Example: MVI-SS02-01 (soil sample location #2-sample #1)

3.0 SAMPLING OPERATIONS

Required sample containers, filling instructions, sample preservation methods, and shipping instructions are presented in this section. The collected sample containers will be kept out of direct sunlight and will be placed in coolers, stored at 4 degrees C until they are packaged for shipping to the analytical laboratory. Samples for chemical analysis will be transported to EMS Laboratories on the day of sampling, or within 24 hours of sampling. Laboratory turnaround time is expected to be approximately 10 working days. Sample tags will be used to label each sample for analysis. Chain-of-custody records will be completed for all samples according to OEPA requirements.

3.1 General Decontamination Procedure

Decontamination of nondisposable personal gear (boots and gloves), and sampling equipment will be a minimum of the following successive rinses:

1. Non-phosphate detergent wash (Alconox or equivalent)
2. Potable water rinse
3. Distilled water rinse

In addition, sampling equipment coming in contact with soil/sediment will be scrub-washed with brushes, and further decontamination by using two rinses outlined above.

3.2 Sampling Procedures

It is proposed to obtain soil samples from four (4) areas as indicated in Figure 2 to assess the depth of possible contamination. Soil samples will be taken with a hand coring device (12" long, 3 1/4" diameter stainless steel soil auger sampler). Sampling will include the top 18 inches of soil. Samples will be extruded from the core sampler into individual eight ounce glass jars and the head space will be checked with a photoionization detector (PID) for ionizable vapors.

Soils exhibiting the highest PID readings from each sample location will be preserved for analysis. The number of samples described in the plan will be collected regardless of the results of the PID screening. Each container will be labeled including date, time, project name, and sample number. Sampling locations will be staked and flagged so that they can be found if additional samples are needed later. Photographs will be taken, where possible, for records of all sample sites.

A geologic log (see Appendix A) will be recorded at each boring location to describe the texture, strength, structure, color, mineralogy, and moisture content. Any abnormality observed and PID readings will be noted on the boring logs.

A summary of soil samples for collection is presented in Table 1. Table 2 is a summary of analytical parameters and analytical methodology. Table 3 represents sample preservation methods.

Soil samples for chemical analysis will be preserved by keeping on ice at approximately 4 degrees C. Only one soil sample per boring will be submitted for analysis for a total of 5 samples. Any remaining soil samples will be held in refrigeration for possible future analysis.

4.0 SAMPLE PREPARATION AND HANDLING

All samples collected will immediately be placed on ice to maintain a temperature of approximately 4 degrees C. All samples will be delivered to the analytical laboratory custodian within 24 hours of collection. Chain-of-custody documentation will accompany all appropriate samples delivered to the laboratory.

4.1 Chain-of-Custody Procedures

The procedures followed will provide an accurate written record which will permit tracing the possession and holding of samples from the time of collection through analysis and reporting. A copy of the standard Chain-of-Custody record to be used for all field sampling is presented in Appendix B.

Responsibility for the care and custody of the samples will be the field sampler until the samples are transferred for analysis. Separate Chain-of-Custody records will accompany each shipment of samples and will be placed in water-tight plastic bags taped to the underside lid of the sample cooler containing the samples designated on the form. The lid of the cooler will be securely taped shut, utilizing evidence tape to

allow detection of any possible tampering. Custody records will contain signatures of all participating members of the sampling team.

The records will also contain sequential sample number, sample date, sample time, sample location (and depth where appropriate), and analyses to be performed. The record will also reveal sample preservatives if any. Field crews will retain a copy of all custody records and complete all records at the time of the work. Upon arrival at the laboratory, samples will be checked in by the laboratory representative and compared with the chain-of-custody form. The laboratory will maintain custody records such that it can be introduced as evidence.

All samples will be retained by the laboratory for a period of three months after analysis or until permission to discard is received, to provide an opportunity for retesting if necessary. Samples must be protected from light and refrigerated at 4 degrees C until extraction.

4.2 Documentation

Documentation consists of sample location identification, recording site activities, and maintenance of a project file.

4.2.1 Site Location

Following sampling site identification, a wood stake (approximately 2"x2"x24") will be driven into the ground, allowing approximately 10 inches to remain visible. The top portion of the stake will be painted orange and labeled for identification. The label will contain job and site identification, sample location, and sample type. The location of each stake will be recorded by use of bearings and/or distances to physical objects.

4.2.2 *Field Notebooks*

Field notebooks (bound field survey books) will provide the means of recording data collecting activities performed at a location. Entries will be described in as much detail as possible so that anyone going to the site could reconstruct a particular situation without reliance on memory.

Notebooks will be assigned to field personnel, but will be stored with the project manager when not in use. Each notebook will be identified by the project-specific document number. The cover of each notebook will contain:

1. Person & organization to whom the book is assigned
2. Book number
3. Project name
4. Start date
5. End date

Entries into the notebook will contain a variety of information. At the beginning of each entry, the date, start time, weather, all field personnel present, level of personal protection used, and signature of note taker will be entered. The names of visitors to the location and reasons for their visit, and all field sampling team personnel will be recorded. All measurements made and samples collected will also be recorded.

All entries will be made in ink and no erasures made. If an incorrect entry is made, the information will be crossed out with a single strike mark. Wherever a sample is collected or a measurement made, a detailed description of the location of the station, including compass bearing and/or distances, shall be recorded. All equipment used to make measurements will be identified.

Samples will be collected following the procedures documented in this plan. The equipment used to collect samples will be noted, along with the time of sampling, sample description, depth at which sample was collected, volume and number of containers. In addition, the cooler number into which the sample was placed will be recorded. Sample numbers will be assigned prior to going on site. Duplicates and a field blank of water will be identified. Significant entries shall be countersigned by another member of the project team.

4.2.3 Project File

A project file will be maintained by the Project Manager which will contain complete project documentation. This file will include: project plans and specifications; field logbook and data records; photographs, maps, and drawings; sample identification documents; chain-of-custody records; the entire analytical data package provided by the laboratory including QC documentation; copies of raw data computer printout, data validation notes; references and literature; report notes and calculations; progress and technical reports; correspondence and other pertinent information.

4.3 Calibration Procedure and Frequency

Where appropriate, the field and laboratory equipment utilized during this project will be calibrated and operated in accordance with its standard operating procedures. Daily calibration will be done for both field and laboratory equipment prior to beginning and ending the use of any equipment utilized for measurements. Field calibration procedures will be performed on field equipment as follows:

Photoionization detector (PID) - The PID (MicroTip) will be field calibrated prior to initiation of field screening by utilization of 100 ppm isobutylene span gas as per the manufacturers specifications.

5.0 PERSONNEL, EQUIPMENT REQUIREMENTS, AND SCHEDULE

This section details the personnel and equipment required to implement this Sampling Plan. A schedule of activities is included with this section.

5.1 Personnel

The following personnel are required to conduct the sampling project tasks:

- Senior Hydrogeologist - A Certified Professional Geologist who will oversee all project work and assists Project Hydrogeologist. Analyze data and report information.
- Project Hydrogeologist - Oversees daily project work and assists field team as necessary. Coordinates and assists on-site personnel, keeps a general site log describing activities, and general observations. Field screens soil samples, and assesses PID readings.
- Hydrogeologist - Obtains soil samples with the sampling equipment and performs decontamination procedures.

5.2 Equipment

The following list encompasses the equipment needed to conduct the field operations for this plan.

1. Hand soil core sampler
2. Stainless steel bowl
3. Disposable sample gloves
4. Sample log notebook
5. PID and calibration equipment
6. Decontamination supplies
7. Chain of Custody forms
8. Copy of Sampling Plan
9. Sample containers and labels
10. Sample coolers, Blue ice

5.3 Schedule

Following is a schedule of events for implementation of the Sampling Plan.

<u>Event Completed</u>	<u>Day</u>
OEPA approval of Sampling Plan	0
Master-Vac executes contract with Consultant	7
Implementation of Sampling Plan	10
Receipt and Evaluation of Analytical Results	20
Sampling Results Documentation Prepared and Submitted	30

TABLE 1
PLANNED SAMPLING AND ANALYSIS EFFORT

TYPE OF SAMPLE	QUANTITY	BLANKS	DUPLICATES	TOTAL
Soil Sample (SS)	5	1	1	7

TABLE 2
PLANNED ANALYTICAL METHODOLOGY (a)

PARAMETER	METHOD	DETECTION LIMIT	REFERENCE
Isopropanol	GC/FID	2.0 mg/kg	8000
2-Butanone (MEK)	GC/MS	0.10 mg/kg	8240
Acetone	GC/MS	0.10 mg/kg	8240
Xylenes	GC/MS	0.005 mg/kg	8240

TABLE 3
SAMPLE PRESERVATION (a)

PARAMETER	CONTAINER	AMOUNT	PRESERVATION METHOD	HOLDING TIME
Isopropanol	P,G	04 grams	Cool 4° C	14 days
2-Butanone (MEK)	P,G	25 grams	Cool 4° C	14 days
Acetone	P,G	25 grams	Cool 4° C	14 days
Xylenes	P,G	25 grams	Cool 4° C	14 days

(a) Test Methods for Evaluating Solid Waste-Physical/Chemical Properties, SW-846 (3rd Edition, 1986).

Container Types: P-Plastic, G-Glass

APPENDIX A

Soil Boring Log

HERITAGE REMEDIATION/ENGINEERING, INC.
 556 Opportunity Drive
 Toledo, OH 43612
 419-78-4396

BORING LOG

Customer _____
 Location _____

Boring Number _____
 Date of Boring _____
 HR/E Project No. _____

Description	Depth	Sample	N	Remarks
	5 10 15 20 25 30 35 40 45			

Boring Method Rotary Hollow Stem Auger

Surface Elevation _____

Level Initial: _____ Final: _____

Logged By _____

in company _____

APPENDIX B
Chain of Custody Record

APPENDIX C

Diagram of Facility

SECTION C DIAGRAM

Corn Field

APPENDIX C

