

INTRUSIVE ACTIVITY PROTOCOL
FOR THE
CUMBERLAND VALLEY BUSINESS PARK



Prepared for the
Letterkenny Industrial Development Authority
By
EPSYS Corporation

Summary of Intrusive Activity Protocol Cumberland Valley Business Park

The Letterkenny Industrial Development Authority (LIDA) has developed the following intrusive activity protocol plan for use by landowners and LIDA property lease tenants within the Cumberland Valley Business Park. It has been approved by the Army for use during intrusive activities such as construction excavation, demolition, or drilling which involves penetrating the ground surface of the property. Because all property within the park is considered to be within the National Priority Listing (Superfund) due to groundwater contamination, these precautions are to be followed to avoid exposure of any unknown contaminant sources or hazards to employees or contractors conducting their work.

Volume I - Sampling and Waste handling Plan for Intrusive Activity - October 1998

The sampling requirements address the needs during *maintenance activities*, small jobs of short duration or emergency excavating, as well as *construction activities* with large volumes of soil disturbance. In general, prior to any excavation, notification of your intent to excavate must be given, a review of available environmental and utility background information should be completed, and a soil vapor survey by OVM or PID to discern any organic vapors which may exist. The number of tests and locations will vary with the size of the excavation. Soil sampling and analytical testing may be required based upon findings of the soil vapor investigation.

The characterization of the soil to be excavated will determine how it must be handled during excavation. Water which is encountered must also be analyzed to determine its handling and disposal.

Volume II - Health and Safety Plan for Intrusive Activity - October 1998

The Health and Safety Plan (HASP) has been created by LIDA to provide a *unified systematic approach to personnel protection during construction within the proximity of any hazards* which may be encountered. The designation of a Health and Safety Officer (HSO) will be required for the proper management and compliance of each project. All notification, reporting, employee training, medical surveillance and compliance of personnel to use personal protective equipment will be the responsibility of each HSO.

The establishment of an "exclusion zone" is required in the presence of hazardous soil gases or contaminated groundwater. The level of protection required will be determined by the level of contamination encountered or expected from sampling. Precautions for confined space work, decontamination and emergency planning are also included in the HASP.

Volume I

Sampling & Waste Handling Plan for Intrusive Activity

Cumberland Valley Business Park

Prepared for

The Letterkenny Industrial Development Authority

by

EPSYS Corporation
5801 Grayson Road
Harrisburg PA 17111

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1.0 INTRODUCTION

The Letterkenny Industrial Development Authority (LIDA) has developed this sampling plan prior to conducting intrusive work on the property proposed for conveyance to LIDA from portions of the Letterkenny Army Depot by the U.S. Army. This property transaction is a result of the 1995 recommendation by the Base Realignment and Closure (BRAC) Committee that approximately 1500 acres of LEAD be considered excess to the realigned base. The property being transferred is part of two United States Environmental Protection Agency (EPA) National Priority List sites. The Army has completed numerous environmental investigations and has conducted remedial actions to address source areas of groundwater contamination and is operating a groundwater recovery and treatment system to address the presence of chlorinated volatile organic compounds in groundwater beneath much of the site. The property that will be transferred has not been found to be contaminated, but the groundwater beneath some of the tracts is contaminated by volatile organic compounds (VOCs). In order to determine the environmental condition of property to be leased and ultimately transferred as part of the BRAC process, the Army had Phase I and Phase II Environmental Baseline Studies conducted. These studies included in-depth background and historical reviews, interviews, file review and historical aerial photograph studies, and site inspections of the property and buildings to determine the environmental condition of the BRAC parcels. The EBS studies were used to determine the suitability of the lands to be leased or transferred. The Army used these reports to develop Finding of Suitability to Lease or Finding of Suitability to Transfer documents, which include provisions that all intrusive work will require prior notice to the Army and sampling in conjunction with a Health and Safety Plan. Intrusive work includes any excavation, demolition, drilling, or other activity that involves penetrating the ground surface and exposing workers to potentially contaminated soils, soil vapors, or groundwater.

The LIDA Sampling Plan for Intrusive Activities (Volume I) contains the overall sampling plan, sampling and analysis Quality Assurance/Quality Control (QA/QC) procedures and a plan for storing soil and groundwater wastes. Volume II contains a Health and Safety Plan (HASP) for sampling activities. These plans have been developed as a general guideline to characterize any soils at the site which are to be disturbed. This plan makes provisions for minor excavating and emergency repairs. For large scale construction or development, a site-specific sampling plan

prepared along the outlines contained in this document shall be prepared and approved by the Army.

1.1 Administrative Record

The Army has established an Administrative Record for the Letterkenny Army Depot. The Administrative Record contains copies of the environmental investigations conducted to date at LEAD. This sampling plan will require documentation of excavating activities. Copies of all results, surveys and reports should be placed in the Administrative Record and supplied to LIDA. Figure 1 is a form for summarizing results. The Administrative Record for the Letterkenny Army Depot site is located at:

Coyle Free Library
102 North Main Street
Chambersburg, PA 17201
(717) 263-1054
and

Letterkenny Army Depot
U.S. Army Central PA Public Works Center - Environmental Mgt. Division
Building 618 - South Patrol Road
Chambersburg, PA 17201
Contact: Joe Petrsek (717) 267-8438

1.2 Compounds of Concern

The chemicals that have been found in groundwater at the site associated with the Industrial Wastewater System soils, Oil Burn Pit, and various spill or disposal areas at LEAD include 1,1-dichloroethene (1, 1-DCE), 1,2-dichloroethene (1, 2-DCE), methylene chloride, tetrachloroethene (PCE), trichloroethene (TCE), 1,1,1-trichloroethane (1,1,1-TCA), and vinyl chloride. The predominant VOCs found in groundwater in the PDO area include 1,2-DCE, TCE and 1,1,1-TCA. Aromatic compounds (i.e., BTEX -benzene, toluene, ethylbenzene, and xylenes) have only been found in the immediate vicinity of the Oil Burn Pit , which underwent remedial action in the summer of 1997.

FORM 1
SUMMARY OF EXCAVATING ACTIVITIES

Brief description of activity: _____

Location of excavation(s), depth: describe with parcel # or attach map: _____

Were unknown utilities encountered that are of future concern? _____

Were odors, stains or nonaqueous liquids encountered? _____

Was a soil vapor survey performed? Attach results. _____

Were soil samples collected for laboratory analysis? Attach results and scaled diagram. _____

Copies of this report should be provided to the LIDA, Army, and the Administrative Record.

2.0 SAMPLING PLAN

This Sampling Plan will be implemented whenever intrusive activities are planned. Since the Letterkenny Army Depot contains two (NPL) Superfund sites with pervasive VOC groundwater contamination, any excavating can place workers at risk of direct exposure to contaminants by inhalation or dermal contact. Sampling requirements will vary from project to project. A distinction is made here between sampling prior to maintenance activities and sampling prior to preconstruction or predevelopment. The PADEP has developed statewide health standards that are protective for direct contact with organic compounds in soils at non-residential sites (Appendix B) that can be used to evaluate analytical results.

2.1 Pre-maintenance Sampling Activities

Maintenance activities are defined as excavations less than two square yards, such as fence post holes, utility post holds, minor utility repairs, minor landscaping, tree planting, or emergency utility repairs of any size. Due to the small scale and short duration of these projects, a reduced soil investigation will be implemented. The first step prior to any excavating activity is to fill out the site background and site safety assessment forms (Appendix C). Much of the needed information may be obtained from LIDA or the Letterkenny Army Depot Base Environmental Coordinator.

2.1.1 Utility Survey/Notification

A three-day notification is required prior to any excavating. Notification can be made to Pennsylvania One Call (800-242-1776). Provide the following information:

- Date and time of excavating.
- Nearest street intersection.
- Township, borough, or municipality.
- County.
- Type of excavating activity and purpose.

Utilities are currently being transferred from the Army to LIDA and/or private contractors. Until the utilities are transferred, there may be no non-Army utilities on the base and the 1-Call system may not be appropriate. Notification shall therefore also be made to LIDA and the Director of Public Works for the Army by letter or FAX.

2.1.2 Soil Vapor Survey

Prior to any digging, a soil vapor survey should be performed to identify any areas possibly containing organic vapors in the shallow subsurface. For large areas, soil vapor surveys are normally completed on a grid with a spacing between 5 and 100 feet. The initial grid spacing is selected based on the project size. During the survey, the spacing will be reduced where anomalies are measured. The grid should surround each anomaly to completely define its areal extent, beyond the excavation area if necessary.

The soil vapor survey is conducted using a portable organic vapor meter (OVM) - Flame ionization detector or Photo ionization detector and a manually or hydraulically driven hollow rod (e.g., Geoprobe or equivalent). The rod is manually driven into the soil to a depth of four feet, withdrawn approximately one half foot, and a polyethylene tube inserted into the base of the rod via an O-ring adaptor. The subsurface soil vapor is withdrawn through the tube by the OVM meter or via a vacuum device. Soil gases are analyzed for relative concentrations of total organic vapors. This technique will screen for the presence and areal extent of organic vapors in the subsurface and guide the positioning of soil sampling or borings. The grid and results will be plotted on a base map.

A minimum of one soil vapor location per excavation location is required. The results should be noted on the Soil Vapor Survey Results form (Figure 2) and placed in the Administrative Record. The locations should be accurately described so that a master base map can be developed to compile all results.

FIGURE 2
SOIL VAPOR SURVEY RESULTS

Location	Location Description	Measurement
Calibration	Office - away from work site	
Ambient @ Site - start		
SV-1		
SV-2		
SV-3		
SV-4		
SV-5		
SV-6		
SV-7		
SV-8		
SV-9		
SV-10		
SV-11		
SV-12		
SV-13		
SV-14		
SV-15		
Ambient @ Site - end		

Attach map if locations are not described.

Site Location: _____ Date: _____

Notes: _____

Surveyed by: _____

2.1.3 Soil Sampling

If soil vapor survey results are less than 10 parts per million (ppm) above ambient readings at the work area, no soil sample or further monitoring will be needed and the Health and Safety Plan (HASP) will not be applicable to subsequent intrusive activities at the work area. If the soil vapor results are less than 100 ppm, but exceed 10 ppm, no soil sample will be required. Work cannot proceed, however, unless the following conditions are met:

- Work zones as described in the HASP are established.
- Respirators with combination particulate/organic vapor cartridges are available on standby for each worker within the exclusion zone.
- An organic vapor meter is continuously in operation during excavation. If organic vapors exceed 5 ppm above ambient levels in the breathing zone, respirators will be worn until compound-specific sampling for vinyl chloride can be performed. If the excavation area is near occupied buildings or near areas with pedestrians, other monitoring may be needed at the worksite perimeter or in the building interior to assure there is no adverse exposure to other workers.

A soil sample should be collected where soil vapor readings are in excess of 100 ppm or if visibly stained soils or product are noted. A borehole or test pit should be advanced to the depth of the final excavation and soils screened with a flame-ionization detector (FID) or photoionization detector (PID). The soil with the highest FID or PID detection (or if no distinct zone is encountered, from total depth) should be tested for Target Compound List (TCL) volatile organics with location and concentration documented in the Administration Record on Form 1.

If the sampling results exceed PADEP Act 2 direct contact standards, LIDA and the LEAD Environmental Coordinator should be contacted and excavation halted until the situation is assessed.

If the results do not exceed DEP standards and no further investigation is necessary, the results should be compiled and placed in the Administrative Record with a copy supplied to LIDA following excavation.

2.1.4 Emergency Excavating

There will be occasions where there is no time to wait for soil sample results. Prior to excavating, utility and soil vapor surveys will still be required.

If the soil vapor survey measures organic vapors that exceed 10 ppm above ambient, work cannot proceed unless the following conditions are met:

- Work zones as described in the HASP are established.
- Respirators with combination particulate/organic vapor cartridges are available on standby for each worker within the exclusion zone.
- An organic vapor meter is continuously in operation during excavation. If readings exceed five ppm in the breathing zone, respirators will be worn until compound-specific sampling for vinyl chloride can be performed. If the excavation area is near occupied buildings or near areas with pedestrians, other monitoring may be required at the worksite perimeter or in the interiors to assure no adverse exposure to other workers.

If breathing zone measurements of organic vapors exceed 100 ppm at any time, work shall be immediately halted and the workers removed from the exclusion zone. Work may not proceed until:

- Each worker inside the exclusion zone has a self-contained breathing apparatus (SCBA) and other Level B safety protection.

2.2 Preconstruction and Predevelopment Activities

2.2.1 Site Contamination Assessment - Phase I

A Site Contamination Assessment (SCA) is required for any major construction activity or development of new buildings. The Phase I SCA will not require Army approval. Each SCA will consist of the following work activities:

- **Review Phase I EBS** - Review the EBS and applicable reports on file with LIDA and in the Administrative Record to determine the historical site usage and the findings on the environmental condition of the area in question.
- **Site Reconnaissance** - Prior to beginning field activities, complete:
 - Site Background Information Form, Appendix C, to determine the potential and type of hazardous materials present. LEAD and LIDA Engineering drawings should be consulted to locate utilities, USTs, fuel lines, and the industrial waste line.
 - Site Safety Assessment Form, Appendix C, to select the necessary safety precautions described in the HASP, Volume II.

Perform a site reconnaissance of the grounds and buildings at each location. The site reconnaissance consists of a walkover to observe the physical characteristics, conditions, and daily operations of the facility. In particular, perform close examination of the site buildings, surficial soils, and cover materials for evidence of possible existing contamination such as surface stains, odors, and stressed vegetation.
- **Soil Vapor Survey** - Prior to obtaining soil samples, a soil vapor survey should be performed to identify any areas possibly containing organic vapors in the shallow subsurface. Refer to Section 2.1.

- **UST Investigation** - A metal detector will be used to locate potential underground structures such as USTs or lines serving USTs. If previously unknown USTs or lines are found, a soil vapor survey with a minimum of four locations will be performed. If possible, locate fill port, locate, and obtain UST capacity and contents.
- **Utility Survey** - Contact Pennsylvania One Call (800-242-1776) prior to any digging, excavating or drilling and/or notify LIDA and the Army Director of Public Works per section 2.1.1.
- A summary report is to be placed in the Administrative Record. Copies of the report should be given to LIDA.

2.2.2 Minimum Sampling Requirements

A minimum of one soil sample will be collected and analyzed for Target Compound List (TCL) volatiles if soil survey results exceed 10 ppm above ambient levels or if stained soils or product are noted. This preliminary sample will serve to screen for the presence of contaminants near or above the regulatory thresholds.

Within the area of excavation, the preliminary soil sample location should be based upon the results of visual inspection, soil vapor survey and the SCA. If no soil vapor anomaly is detected, the soil sample location should be placed at the center of the excavation. For large excavation areas, one sample location per acre up to a total of five sample locations will be collected. The formal sampling requirements of SW-846 (EPA, Test Methods for Evaluating Solid Waste - Physical/Chemical Methods EPA SW-846, 1984) are not necessary for preliminary sampling. Sample depths for the various analyses are discussed in Section 2.5.

2.3 Site Contamination Assessment - Phase II

If the sampling plan investigation detects TCL materials that exceed PADEP's statewide health standards the following procedures should be followed:

A.) Report to LIDA and Army Environmental Coordinator.

B.) Assess Situation.

1) Are there any immediate health and safety concerns?

2) Modify or update the Health & Safety Plan, if appropriate.

C.) Formulate a new scope.

1) Terminate or relocate project.

2) If construction is to proceed, additional sampling will be required to identify the vertical and horizontal extent of contamination

2.3.1 Analytical Testing

2.3.1.1 Preliminary Samples - Soils - Preliminary soil samples should be tested for the Target Compound List (TCL) volatiles, Figure 3 in the following manner:

- TCL - volatile organics, highest PID or FID reading or stained area

Samples collected by trenching, hand auguring, or drilling should be screened for organic vapors with a PID or FID. The sample with the highest reading should be analyzed for TCL volatile organics. If no organic vapors are detected, obtain the soil sample from the maximum depth of excavation or where stained soils are noted.

Groundwater - If groundwater is encountered, groundwater samples from monitoring wells should be tested for TCL volatile organics. Water in the subsurface that is determined to be perched water over bedrock or recently infiltrated water from a precipitation event is not expected to be contaminated and does not have to be tested. Water contained during intrusive activities

should be analyzed for purgeable halocarbons by EPA method 8021B (refer to Section 3.0 on Waste Handling).

FIGURE 3
TARGET COMPOUND LIST
TCL Volatile Organics by GC/MS

Acetone	Dibromochloromethane	4-Methyl-2-pentanone (MIBK)
Benzene	1,1-Dibromochloromethane	Styrene
Bromodichloromethane	1,2-Dichloroethane	1,1,2,2-Tetrachloroethane
Bromoform	1,1-Dichloroethene	Tetrachloroethane
Bromomethane	trans-1,2-Dichloroethene	Toluene
2-Butanone	1,2-Dichloropropane	1,1,1-Trichloroethane
Carbon Disulfide	cis-1,3-Dichloropropene	1,1,2-Trichloroethane
Carbon Tetrachloride	trans-1,3-Dichloropropene	Trichloroethene
Chlorobenzene	Ethylbenzene	Vinyl Acetate
Chloroethane	2-Hexanone	Vinyl Chloride
Chloroform	Methylene Chloride	Xylenes, Total
Chloromethane		

2.3.2 Additional Samples

In subsequent tests, the number of parameters can be reduced based upon preliminary results, site conditions, and approval of PADEP. One soil sample should be collected, its soil classification noted, and evaluated for:

- Particle size gradation.
- Specific gravity.
- Total organic carbon.
- Dry bulk density.
- Provide method detection limit and estimated quantification limit for applicable analyses.

This information can be used to calculate a site-specific soil to groundwater pathway/number value using the equation in the Act 2 regulations at 250.308 (a)(3).

$$MSC_s = MSC_{GW} ((K_{oc} * f_{oc}C) + 0_w/P_b) DF$$

where: MSC_s (mg/kg) = the generic value for a regulated substance in soil

MSC_{GW} (mg/L) = MSC of a regulated substance in groundwater

K_{oc} (L/kg) = organic carbon partition coefficient for a regulated substance

f_{oc} = fraction of organic carbon in soil (default value = 0.0025)

0_w = water-filled porosity of soil (default value = 0.2)

P_b (kg/L) = dry bulk density of soil (default value = 1.8 kg/l)

DF = dilution factor (default value = 100)

2.3.3 Analytical Testing QA/QC

All laboratory analyses must be conducted in accordance with SW-846 procedures and methodologies. Samples must be analyzed by a laboratory certified by PADEP for Volatile Organics.

To insure precision reproducibility and accuracy of preliminary and additional samples submitted for laboratory analysis and field sampling, QA/QC procedures will be followed for Preconstruction/Predevelopment Activities. This will be accomplished through sample blanks and duplicates. Sample blanks are designed to measure any contaminants derived from sampling equipment or acquired during transport. Duplicates are designed to measure laboratory accuracy and overall precision of the sampling program. The exact number of blanks should be defined in the work scope; QA/QC samples will not be required for emergency excavation sampling or on projects where three or fewer samples are collected. The following table lists the types of QA/QC samples:

QA Sample	Description	Frequency
Sample Duplicate	Soil or water sample split in two and blindly submitted to the laboratory.	One per 20 samples.
Field Blank, Water	Sample generated at the time of sampling. Containers and reagents transported to field and exposed to the same conditions as the samples.	One blank per day or one blank per 20 samples, whichever is fewer.
Trip Blank, Water and Soil	Sample prepared prior to sampling event and carried through sampling without being opened in field. This blank is generated for volatile organics only.	One per day or one per container.
Rinsate Blank	Sample generated by passing DI water over equipment after soil sampling and decontamination.	One per 20 samples.

If TCL compounds are detected in QA/QC samples, laboratory procedures must be evaluated for contamination induced during the analysis. Next evaluate whether the detected compound is statistically significant. If all explanations indicate unreliable results, resampling must be done.

3.0 WASTE HANDLING

Before contaminated soil or groundwater are excavated or pumped, LIDA and the Army must approve contingencies made for treatment, storage, or disposal. Any time contaminated soils or groundwater are generated or expected to be generated, storage and handling of this material shall be coordinated with the Director of Public Works. Provisions for treatment or disposal will be considered on a case-by-case basis and are not discussed in this sampling plan.

Waste handling activities must meet the hazardous waste requirements of the EPA (40 CFR) and Pennsylvania Title 25, Chapters 260 to 270.

Three types of soils are anticipated to be potentially encountered during excavation activities: soils with no staining or positive OVM readings that are believed to be uncontaminated; soils with minor amounts of contamination, such as slight staining or moderate OVM readings, and soils with significant evidence of contamination. Soils that are believed to be uncontaminated may be used for backfill at the project site if no contaminated soils were encountered but shall be tested if other contaminated soils are found in the excavation or if they are to be taken off the base. Soils with minor evidence of contamination shall be handled in accordance with Pennsylvania's Residual Waste Regulations found at 25 Pa. Code Chapters 287 and 299. Soils with significant evidence of contamination should be handled as if it were hazardous waste until analytical results are obtained to determine if the material is a characteristic hazardous waste.

Groundwater may also be encountered during drilling or excavation activities. Perched precipitation or shallow groundwater in the hilltop areas underlain by the Martinsburg Formation may not be contaminated with volatile organic compounds, but groundwater in the limestone bedrock over much of the site does contain chlorinated solvents. Groundwater (not perched water) that is produced during intrusive activities shall be handled as if contaminated and contained in drums or portable tanks until it is analyzed for purgeable halocarbons (EPA SW846 test method 8021B). Water that is found to be uncontaminated (levels of volatile organic compounds are below the Pennsylvania Act 2 Standards for groundwater) may be discharged to the local stormwater conveyance system after receipt of laboratory results. A copy of the laboratory results shall be furnished to LIDA and the Army. The need to contain water at

ongoing project sites where the water is found to be uncontaminated will be resolved with the Army on a case-by-case basis. Contaminated water shall be stored and handled in accordance with the procedures described below. No excavations shall be pumped or dewatered without first contacting the Army.

3.1 Storage

The length of time that regulated materials can be stored on-site without meeting the substantial requirements of a storage facility (required by the 1976 Resource Conservation and Recovery Act [RCRA] in Subtitle C Hazardous Waste Management) is dependent on the quantity and type of waste. For the purposes of storage times, there are two waste types, hazardous (requiring an EPA identification number) and nonhazardous. Time extensions can be obtained at the discretion of the EPA regional administrator on a case-by-case basis. Contact the EPA Regional Representative, Mr. William Arguto. The following table lists the storage times and possible extensions:

DETERMINING INTERIM WASTE STORAGE TIME			
Quantity	Waste Category	Storage Time	Extension
More than 2,200 pounds per month	Large quantity generator, hazardous	90 days	30 days
220 to 2,200 pounds per month	Large quantity generator, hazardous	180 days	90 days
Any amount	Nonhazardous	1 year	None

For a full discussion of storage and container requirements, see 40 CFR Part 265.

For small quantities of soil or liquid wastes, new 55-gallon drums can be used. Drums should be stored in containerized skids or diked areas and managed according to the Hazardous Waste Manual. Rules for use and management of containers are found in 40 CFR 265.170. The stored materials should be examined weekly for leaks and odors. Figure 5 is a sample inspection form.

FIGURE 4

INSPECTION FOR LEAKS HAZARDOUS WASTE STORAGE				
Week	Day	Date	Inspector	Comments
1	7			
2	14			
3	21			
4	28			
5	35			
6	42			
7	49			
8	56			
9	63			
10	70			
11	77			
12	84			
	90	Maximum Storage Time		

Inspect each drum and containment structure for leaks. Note presence of odors, corrosion, or staining.

APPENDIX A
PADEP ENVIRONMENTAL ACT 2 MEDIUM SPECIFIC CONCENTRATIONS

APPENDIX B
SITE BACKGROUND INFORMATION FORM

SITE BACKGROUND INFORMATION
Part A

Site Mailing Address:

Normal Facility Hours: _____

Site Contact: _____

Title: _____

Telephone: _____

Site Map Available? _____

Location Map Available? _____

Facility Elevation: _____

Reason for Investigation: _____

Facility Size: _____

Ground Cover: _____

Water Source: _____

Water Discharge: _____

Former Facility Uses: _____

Proposed Facility Uses: _____

Nearby Businesses: _____

Nearby Residences: _____

Known Groundwater Problems: _____

Known Vapor Problems: _____

Expected Depth to Water: _____

Nearby Surface Water: _____

Geologic Formation: _____

Surface Water Elevation: _____

Soil Type: _____

Expected Depth to Rock: _____

SITE BACKGROUND INFORMATION

Part B

Utility Information

	Present		Contacted			
Utilities Survey	Yes	No	Yes	No	Utility Name	Phone No.
Gas						
Fuel						
Water						
Electrical						
Telephone						
Video						
Other						

Municipality: _____

One Call Serial No.: _____

SITE BACKGROUND INFORMATION

Part C Site Hazards

Describe Known Site Hazards (include sketch plan) _____

Suspected Hazards _____

Plan to Control Hazards _____

Personnel Protection Required: A _____ B _____ C _____ D _____

Modifications or Specialized Equipment: _____

Detection Equipment: _____

Action Level: _____

Action Planned: _____

Decontamination Procedures:

Personnel: _____

Protective Equipment: _____

Support Equipment: _____

Sampling Equipment: _____

Other (describe): _____

Assigned On-Site Personnel	Task	Date: Trained	Physical

SITE BACKGROUND INFORMATION

Part D
Hazardous Materials On-Site

Hazardous Material Form: Gas _____ Liquid _____ Solid _____

Containment: Groundwater _____ Free Product _____ Soils _____
Lagoon _____ Seep _____ Drum _____ Other _____

Material Characteristics: Ignitable _____ Reactive _____
Volatile _____ Toxic _____ Radioactive _____

Hazardous Materials (Add Hazardous Substance Data Sheets for each compound):

Compound	Concentration	Warning Properties

Plan Approved By (Company official) _____ Date: _____
(Signature)

Company Safety Officer _____ Date: _____
(Signature)