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IT CORPORATION
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HEALTH AND SAFETY PLAN
GROUNDWATER MONITORING
FORMER THOMAS A. SHORT COMPANY PROPERTY
OAKLAND, ALAMEDA COUNTY, CALIFORNIA

December 19, 2001

Prepared for:

California Department of Transportation
Office of Environmental Engineering
Box 23660
Oakland, California 94623-0660

Prepared by:

IT Corporation
1326 North Market Boulevard
Sacramento, California 95834

Task Order No.: 04-911052-WB
Contract No.: 43A0078

IT Project No.: 830714

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Table of Contents

List of Figures	ii
List of Tables.....	iii
List of Appendices.....	iii
Disclaimer	iii
1.0 General Information.....	1-1
1.1 Task Order Manager: Donald P. Bransford, R.G.	1-1
1.2 Site Safety Officer: Paul Weinhardt.....	1-1
1.3 Project Certified Industrial Hygienist: Paul Lawless, CIH	1-1
1.4 Work Objectives/Scope.....	1-2
2.0 Site Health and Safety Information.....	2-1
2.1 Site Description.....	2-1
2.2 Site Background/History	2-1
2.3 Known/Suspected Chemical Hazards.....	2-2
2.4 First Aid.....	2-2
2.5 Physical Hazards	2-2
2.6 Site Control Measures	2-3
2.7 Personal Protective Equipment.....	2-4
2.8 Training.....	2-5
2.9 Medical Surveillance Requirements.....	2-5
2.10 Emergency Response Plan	2-5
3.0 Emergency Information	3-1
3.1 Nearby Hospital/Clinic.....	3-1
3.2 Emergency Route	3-1
3.3 Fire Department: Phone: 911.....	3-1
3.4 Police Department: Phone: 911	3-1
4.0 Health and Safety Plan Approvals and Acknowledgement.....	4-1
4.1 Approvals.....	4-1
4.2 Acknowledgments.....	4-1
5.0 Health and Safety Plan Acknowledgement	5-1

List of Figures

- Figure 1 Site Location Map
Figure 2 Hospital Location Map

List of Tables

Table 1	Chemicals of Concern and Occupational Hazard Characteristics
Table 2	Calibration and Maintenance of Field Sampling Equipment
Table 3	Airborne Contaminant Action Levels

List of Appendices

Appendix A	Proposition 65 Warning and Notification
Appendix B	Incident Investigation Report and Flow Chart
Appendix C	Job Safety Analysis Worksheet

Disclaimer

The enclosed site Health and Safety Plan (HSP) has been designed for the methods presently contemplated by IT Corporation (IT) for execution of the proposed work. Therefore, the HSP may not be appropriate if the work is not performed by or using the methods presently contemplated by IT.

In addition, as the work is performed, conditions different from those anticipated might be encountered and the HSP may have to be modified. Therefore, IT makes no representations or warranties as to the adequacy of the HSP, except for warranties specifically stated in the HSP itself.

1.0 General Information

IT Project No.: 830714 **Date:** August 24, 2001
Project Name: Cypress Groundwater Monitoring (Thomas A. Short Co.)
Project Site Location: 3430 Wood Street, Oakland, Alameda County, California
Client Contact: Mr. Christopher Wilson **Phone:** (510) 286-5647

1.1 Task Order Manager: **Donald P. Bransford, R.G.**

The Task Order Manager is responsible for all on-site activities, including having all appropriate plans prepared and distributing the plans to IT Corporation (IT) field personnel and to authorized representatives of each subcontractor employed to perform work on-site. The Task Order Manager is also responsible for ensuring that the provisions of the Health and Safety Plan (HSP) are carried out. This includes ensuring that all IT field personnel have received adequate training, that an adequate supply of safety and emergency equipment is available, and that the required safety reports are submitted to the area Health and Safety Manager/Project Certified Industrial Hygienist (CIH).

1.2 Site Safety Officer: **Paul Weinhardt**

The Site Safety Officer is responsible for implementing the site HSP and shall be knowledgeable in various state and federal regulations. This includes ensuring that field personnel have read and signed the HSP, and that a Tailgate Safety Meeting is conducted on-site each day prior to initiating field activities. In addition, the Site Safety Officer will be responsible for auditing the site operations for compliance with the HSP and any applicable federal, state or local requirements. Any violations, unsafe conditions, and changes to the HSP shall be discussed by Site Safety Officer with the area Health and Safety Manager/Project CIH. The Site Safety Officer shall stop work due to violations and unsafe conditions until appropriate action is taken to correct these deficiencies and the HSP shall be amended by the Site Safety Officer to include necessary changes. The Site Safety Officer is required to be on-site at all times. In the Site Safety Officer's absence, a designated alternate will assume the duties and responsibilities.

1.3 Project Certified Industrial Hygienist: **Paul Lawless, CIH**

The CIH is responsible for approval of the final version and all changes made by the Site Safety Officer of this HSP and that a copy of it has been provided to the Site Safety Officer.

1.4 Work Objectives/Scope

The scope of work for this project includes continued groundwater studies that have been previously initiated at the former Thomas A. Short Co. property in Oakland, California. Groundwater studies include quarterly monitoring of groundwater in three on-site wells in order to investigate the presence, concentration, and extent of petroleum hydrocarbons and heavy metals in groundwater.

The work will include measurement of water levels, and purging of water and collection of groundwater samples using dedicated, disposable, polyethylene bailers. Purge water will be placed into 208-liter (55-gallon) United Nations-approved drums.

Activities Planned (Check those that are applicable):

	underground storage tank removal
	oversight of soil excavation with backhoe or other equipment
	confirmation soil sampling during soil excavation and removal
	geophysical survey
	soil boring and soil sampling with HSA or air rotary drilling
	groundwater grab sampling from temporarily open boreholes
X	groundwater sampling of on-site wells
	other: installation of groundwater monitoring wells

2.0 Site Health and Safety Information

2.1 Site Description

The project site is located at the former Thomas A. Short Co. property, 3430 Wood Street, Oakland, Alameda County, California (Figure 1). The wells are currently located on a vacant parcel, beneath the Interstate 880 freeway overhead structure.

2.2 Site Background/History

The former Thomas A. Short Co. facility manufactured and repaired marine valves and associated parts for approximately 36 years. One 4,000-gallon gasoline underground storage tank (UST) and one 1,000-gallon diesel UST at the site were formerly present. The USTs were removed in January 1993.

Three more monitoring wells were installed in May 2000. The wells were sampled over three quarters. The most recent monitoring results from March 2001 reported total petroleum hydrocarbons as gasoline at concentrations that ranged from 0.26 to 8.1 milligrams per liter (mg/l) and total petroleum hydrocarbons as diesel at concentrations that ranged from 0.42 to 0.96 mg/l. Benzene, toluene, ethyl benzene, and xylenes were detected in each of the groundwater samples collected from the three wells. Benzene concentrations ranged from 0.035 to 0.052 mg/l. The groundwater samples were reported to contain various other volatile organic compounds common to gasoline. Methyl tertiary butyl ether was not reported in the groundwater samples collected during the last monitoring event, although it was reported in previous groundwater sampling events at concentrations up to 0.007 mg/l.

Waste Type(s) (Mark those that are applicable):

	soil	X	Other (please specify): soils and groundwater are potentially impacted with low-concentrations of petroleum hydrocarbons, diesel, lead, and volatile organic compounds (VOCs).
	petroleum liquids		
X	groundwater		

Waste Characteristics: (Mark those that are applicable):

	ignitable	X	volatile
	corrosive		radioactive
X	toxic		unknown

	reactive		Other (please specify): see box above
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2.3 *Known/Suspected Chemical Hazards*

Chemicals of concern may include petroleum hydrocarbons such as gasoline and diesel, volatile organic compounds including benzene, and lead. Over exposure to these compounds can cause headache, dizziness, nausea, and eye, nose and throat irritation. Some of the chemicals of concern have been determined to cause cancer and reproductive harm (Appendix A). Table 1 consists of a list of representative chemicals of concern and their occupational hazard characteristics (PELs, IDLHs, etc.). Appendix A lists the Proposition 65 chemicals of concern which is required by the State of California.

Overall Hazard Level:	<input type="checkbox"/> Serious	<input type="checkbox"/> Moderate	<input checked="" type="checkbox"/> Low	<input type="checkbox"/> Unknown
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Onsite Monitoring Required? Yes No

If yes, specify equipment: Not applicable.

Noise Monitoring: None.

2.4 *First Aid*

Inhalation: At first signs of headache or dizziness, remove victim from work area and give fresh air. If breathing has stopped, administer artificial respiration. Get medical attention immediately.

Skin and Eye Contact: Flush eyes immediately with water for at least 15 minutes, occasionally lifting the eyelids. Remove contaminated clothing. Wash affected body areas with large amounts of soap and water. Get medical attention if irritation persists after washing.

Ingestion: Do not induce vomiting. Keep victim warm and at rest. Get medical attention.

2.5 *Physical Hazards*

These hazards are primarily associated with on-site equipment and the general nature of construction work. IT personnel will follow all safety rules established in IT's training program. The job safety analysis (Appendix C) will be reviewed with all workers prior to initiating site activities and periodically thereafter to assure on-going prevention of safety incidents.

Workers conducting sampling activities should be alert for potential injury and/or disease from stray animals. If stray animals appear, workers should avoid feeding these animals and the

animal's behavior should be noted. Animals, especially wild animals, usually avoid contact with humans. Wounded/injured animals and/or animals that display aggressive behavior may be carrying diseases, such as rabies, and should be avoided and reported to animal welfare experts or county animal control office. If an animal bites a worker, immediate medical attention must be obtained and the location and type of animal, if known, be reported to the county animal control office.

	Heat	X	Slip, Trip, Fall		Excavations/Trenches
X	Cold		Noise		Moving Equipment
X	Rain		Underground Hazards		Traffic
	Fog		Overhead Hazards		Other:

2.6 Site Control Measures

If necessary, work areas will be secured from the public by orange traffic cones. Drinking or smoking is not permitted in the work area. The Site Safety Officer shall enforce these measures, personal protective equipment (PPE) and training requirements for all on site personnel. Spills are not expected to be a concern on the project. However, if a spill is to occur, adsorbent materials are available.

A Tailgate Safety Meeting will be held by the Site Safety Officer for all site personnel. The safety discussion will include, in addition to other items in this HSP, the following issues:

- Site personnel will execute proper lifting techniques for heavy items. The maximum weight to be lifted by any site personnel should not exceed 60 lbs.
- Sampling equipment shall be in good working order prior to operation.
- If necessary, an exclusion zone shall be secured around the work area.
- Fire extinguisher, first aid kit, eye wash, and hospital route map shall be staged for easy access during drilling activities.
- On-site personnel shall contact the Site Safety Officer with any health and safety issues.

Site Entry Procedures: The Contractor shall provide the Contract Manager or the Contract Manager's designee with safe access to the work site during the investigation.

Personal Decontamination Procedures: Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of ingestion of material is prohibited in the exclusion zone. Wash hands and face prior to eating, drinking or smoking and before leaving the

site. Remove contaminated clothing as soon as possible when leaving the exclusion zone and shall be disposed of in the excavated material or with other potential impacted material.

Kneeling, sitting, leaning, or general contact with potentially impacted surfaces, or with surfaces suspected of being potentially impacted by hazardous materials (i.e., puddles, mud, leachate, etc.) should be avoided. Medicine and alcohol can potentiate the effects of exposure to toxic chemicals. Prescribed drugs should not be taken by personnel if the likelihood of such potentiation effects exists. Ingestion of alcohol is prohibited.

Equipment Decontamination Procedures: All sampling equipment will be washed prior to arrival at the site. To avoid cross-contamination, all appropriate downhole equipment and sampling equipment will be steam cleaned or washed with an Alconox solution followed by a double rinse with deionized water. Any rinsate or decontamination water will be retained in a 208-liter (55-gallon) United Nations-approved drum.

2.7 Personal Protective Equipment

Level of Protection:	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input checked="" type="checkbox"/> D (modified)
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Modifications: Any modifications to levels of protection shall be made by the CIH.

X	Hard Hat	X	Safety Eyewear
X	Safety Toed Boots		Respirator (Type): Standby full-face air-purifying respirator (APR)
X	Orange Vest		Filter Type: Organic Vapor and high-efficiency particulate air (HEPA)
X	Hearing Protection	X	Gloves (Type): Latex or nitrile
X	Tyvek Coveralls (if needed)		Other:

Other Emergency/Safety Equipment:

X	15 Minute Eyewash	X	Fire Extinguisher		Barricades
X	First Aid Kit	X	Potable Water	X	Traffic Cones

Additional emergency/safety equipment includes pagers and cellular phones. Workers are encouraged to avoid use of hand-held cellular telephones while operating motor vehicles.

2.8 Training

All personnel on site will have completed a minimum of 40 hours of training, and an 8-hour refresher as required by 29 Code of Federal Regulations (CFR) 1910.120 and 8 CCR 5192. This includes, but shall not be limited to, first aid/CPR, hearing conservation, respiratory protection, Hazardous Waste Site training, Qualified Equipment Operator, Bloodborne Pathogen (BBP), PPE, decontamination, hazard recognition, and safe operating procedures.

2.9 Medical Surveillance Requirements

The IT Medical Surveillance Program (MSP) requires all personnel on-site to successfully complete a pre-placement or annual physical examination. The physical examination typically includes: medical and occupational history questionnaire, physical examination, complete blood count with differential, liver enzyme profile, chest X-ray (one every three years for non-asbestos workers), pulmonary function test, audiogram, electrocardiogram for persons older than 35 years of age, illegal drug screening, and visual acuity. The MSP will at a minimum meet the requirements of the Occupational Safety and Health Administration (OSHA) regulation 29 CFR 1910.120 (f), medical surveillance programs for hazardous waste operations and emergency response (29 CFR 1910.134 Respiratory Protection and 29 CFR 1910.95 Hearing Conservation). The program shall also comply with Title 8 CCR 5192.

2.10 Emergency Response Plan

IT's Emergency Response/Contingency Plan (ER/CP) is designed to define and communicate procedures to be followed in case of an emergency. The ER/CP is consistent with the regulations under 29 CFR 1910.120 (l) (1). Due to the nature of this work, it is unlikely that a significant, unplanned event (e.g., explosion, fire, etc.) will occur. However, in case of an emergency, the Site Safety Officer shall ensure that all personnel working at the site shall know at a minimum the following evacuation procedures:

1. If evacuation is necessary, all personnel will proceed to a predetermined location in the support zone, upwind and upslope (as necessary) of the work zone.

THE SIGNAL FOR EVACUATION WILL BE THREE SHORT BLASTS IN SUCCESSION ON AN AIR OR CAR HORN.

2. Site-specific evacuation incident procedures will be discussed and documented by the Site Safety Officer.

3. Any person requiring medical attention shall be evacuated promptly from any contaminated area. For personnel requiring medical attention, the emergency information guidelines in Section 3.0 shall be followed.

3.0 Emergency Information

If injuries occur on site, take the following action:

1. Stop work, evacuate any injured personnel, initiate first aid, implement procedures to limit the extent of the emergency event (ensure response actions do not endanger site personnel).
2. Get medical attention for the injured person immediately, if necessary, from the emergency medical facility. Site Supervisor will notify *Health Resources at 1-800-350-4511* for any injury/illness requiring medical attention beyond first aid.
3. Contact the Site Safety Officer or Task Order Manager. The Site Supervisor shall complete a Supervisors Employee Injury Report (SEIR) and forward it to the Area Health and Safety Manager/Project CIH within 24 hours. The project CIH will be notified immediately via phone.
4. Site Supervisor must complete an IT Incident Investigation Report form (Appendix B) and submit it to the Area Health & Safety Manager and the Task Order Manager within 24 hours.
5. Follow reporting guidelines in the attached flow chart and checklist (Appendix C).

3.1 Nearby Hospital/Clinic

The nearest hospital is Summit Medical Center located in Oakland, California (Figure 2).

Summit Medical Center	
Phone:	(510) 655-4000
Address:	350 Hawthorne Avenue Oakland, California

3.2 Emergency Route

From the project site, proceed south on Wood Street. Turn left (east) on 32nd Street. Turn right (south) onto Mandela Parkway. Turn left (east) onto West Grand Avenue. Turn left (north) onto Telegraph Avenue. Turn right (east) onto Hawthorne Avenue. Follow signs to the hospital.

3.3 Fire Department:

Phone: 911

3.4 Police Department:

Phone: 911

4.0 Health and Safety Plan Approvals and Acknowledgement

4.1 Approvals

I have read and approved this HSP with respect to project hazards, regulatory requirements, and IT procedures.

Project Name: Cypress Groundwater Monitoring (Thomas A. Short Co.)

Contract Number: 43A0078

DPB 12/19/01

Donald P. Bransford, R.G. Date
Task Order Manager

Paul C Lawless 10/11/01
Paul Lawless, CIH Date
Project Certified Industrial Hygienist

4.2 Acknowledgments

The final approved version of this HSP has been provided to the Site Safety Officer. I acknowledge my responsibility to provide the Site Safety Officer with the equipment, materials, and qualified personnel to implement fully all safety requirements in this HSP. I will formally review this plan with the health and safety staff every six months until project completion.

Task Order Manager: DPB Date: 12/19/01

I acknowledge receipt of this HSP from the Task Order Manager, and that it is my responsibility to explain its contents to all site personnel and cause these requirements to be fully implemented. Any change in conditions, scope of work, or other change that may affect worker safety requires me to notify the Task Order Manager and/or the Health and Safety Representative.

Site Safety Officer: DPB for Paul Weikhardt Date: 12/19/01

TABLE 1
Chemicals of Concern and Occupational Characteristics (1)

Chemical	OSHA PEL (2)	ACGIH TLV (3)	IDLH (4)	Comments
Gasoline	300 ppm (5)	300 ppm	N/A (5)	Carcinogen; flammable liquid; kidney toxin; headaches; dizziness; eye, nose, and throat irritant
Benzene	1 ppm	0.5 ppm	500 ppm	Carcinogen; flammable liquid with aromatic odor
Toluene	100 ppm	50 ppm	500 ppm	Flammable liquid with benzene odor; liver and kidney toxin; skin irritant; dermatitis; dermal absorption; skin (6)
Ethylbenzene	100 ppm	100 ppm / 125 ppm STEL	800 ppm	Flammable liquid with aromatic odor; irritant; narcotic; dermatitis
Xylenes	100 ppm	100 ppm / 150 ppm STEL	900 ppm	Flammable liquid with aromatic odor; irritant; dermatitis
Lead	0.05 mg/m ³	0.05 mg/m ³	100 mg/m ³	Carcinogen; Weakness, insomnia, abdominal pain, brain and kidney damage. Irritant to eyes.
Polycyclic Aromatic Hydrocarbons	0.2 mg/m ³	-	-	Carcinogen: suspect
Benzo (A) Pyrene	0.2 mg/m ³	A-2	-	Mutagen: suspect, human carcinogen
Nickel	1 mg/m ³	0.1 mg/m ³	10 mg/m ³	Skin irritant, allergic asthma, pneumonitis.

Notes:

1. Source: National Institute for Occupational Safety and Health (NIOSH), *Guide to Chemical Hazards*, 1990. Ppm = parts per million. mg/m³ = milligrams per cubic meter.
2. OSHA PEL = 29 CFR 1910, Subpart Z, *General Industry Standards for Toxic and Hazardous Substances, Permissible Exposure Limit*.
3. ACGIH TLV = American Conference of Governmental Industrial Hygienists, *Threshold Limit Value*.
4. IDLH = *Immediately dangerous to life and health*.
5. N/A = not applicable
6. Skin = The designation "skin" refers to potential significant contribution to the overall exposure by skin contact with vapors or with the substance.

TABLE 2

Calibration and Maintenance of Field Sampling Equipment

Monitor Type	Calibration Method	Calibration Frequency	Maintenance Schedule
Combustible gas indicator (CGI)/oxygen meter	CGI sensor calibrated against known concentration of hexane (demonstration bottle). Zero setting checked in non-contaminated air.	CGI span calibrated once per month. CGI zero checked daily.	Instrument cleaned as needed and no less than annually. Oxygen sensor changed annually and changes if necessary.
Photoionization detector (PID)	Oxygen sensor calibrated daily to 20.9 percent fresh, non-contaminated air. PID zeroed in clean air. Span calibrated using known concentration of isobutylene (demonstration bottle).	Oxygen sensor calibrated daily. PID zeroed and span checked daily at start of work day.	Annual cleaning by qualified technician. Annual calibration of electronics by qualified technician. Clean lamp if sensitivity drops or if used in very dusty environment.
Draeger tube sampling system	Check air tightness of pump, time for one minute, chain should remain slack. If chain taut, then maintenance required.	Check daily prior to start of workday.	Maintenance required whenever pump fails to pass leak test. Replace seals and/or lubricate per instruction manual.
Air sampling pump	Verify airflow using primary standard (bubble meter) or precalibrated rotameter.	Verify airflow prior to and after use with sampling head in place. Spot check flow rate throughout sampling period.	Minimum of annual cleaning. Clean whenever pump unable to hold flow rate. Maintenance required if pump will not hold charge or flow rate is erratic.
Sound level meter	Calibrate using known noise source (manufacturer-supplied acoustic calibrator). Check battery level within recommended limits.	Calibrate meter and check battery daily prior to use.	Annual cleaning by qualified technician. Maintenance required if meter fails to calibrate.

TABLE 3

Airborne Contaminant Action Levels

When in Level D PPE:

Parameter	Action Level ¹	Required Action ²
Dust	≥ 0.5 mg/m ³ above background	Upgrade to Level C
Unknown VOCs	> 5 ppm above background < 50 ppm	Detector tube for benzene, continue to work if no benzene detected
Benzene	> 0.5 ppm	Upgrade to Level C Stop work; contact CIH ³
O ₂	≥ 23.5% or < 19.5%	Stop work; determine cause ³
LEL	≥ 10% of LEL	Stop work; determine cause ³

When in Level C PPE:

Parameter	Action Level ¹	Required Action ²
Dust	≥ 5 mg/m ³ above background	Stop work; initiate dust suppression ³
Unknown VOCs	> 50 ppm above background < 100 ppm	Stop work; detector tube for benzene; if no benzene, continue in Level C ³
Benzene	> 5 ppm	Upgrade to Level B; contact CIH ³
O ₂	≥ 23.5% or < 19.5%	Stop work; determine cause ³
LEL	≥ 10% of LEL	Stop work; determine cause ³

When in Level B PPE:

Parameter	Action Level ¹	Required Action ²
Unknown VOCs	>100 ppm above background	Stop work; detector tube for benzene; contact CIH ³
O ₂	≥ 23.5% or < 19.5%	Stop work; determine cause ³
LEL	≥ 10% LEL	Stop work; determine cause ³

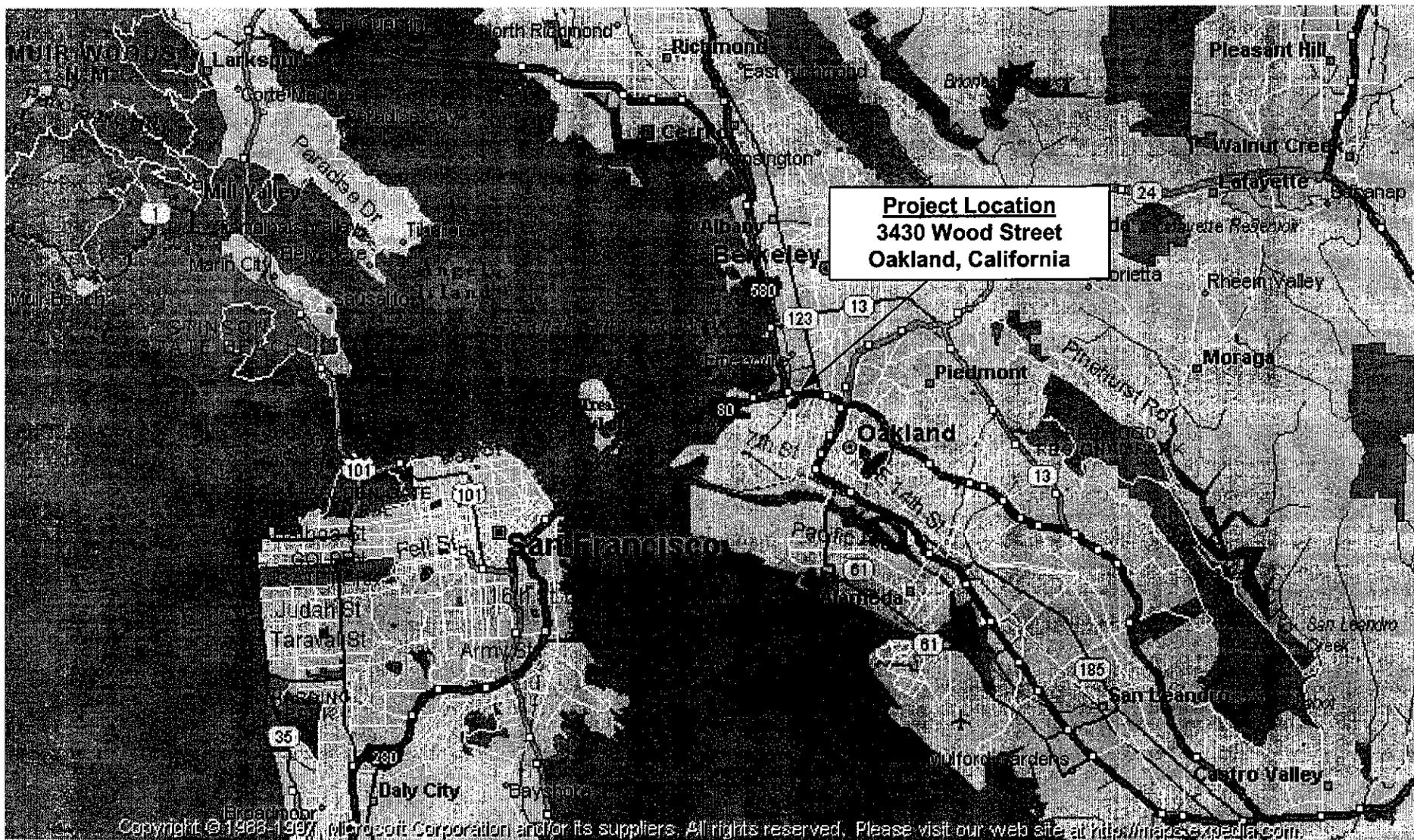
Notes:

ppm = parts per million.

LEL = lower explosive limit.

1. *Five excursions above the action level in any 15 minute period or a sustained reading in excess of the action levels for 5 minutes will trigger a response.*
2. *Frequency of air monitoring may be adjusted by the CIH after sufficient characterization of site contaminants has been completed, tasks are modified or site controls have proven effective.*
3. *Contact with the Project CIH must be made prior to continuance of work. The Project CIH may then initiate integrated air sampling along with additional engineering controls.*

No one is permitted to downgrade levels of PPE without authorization from the Project CIH.



Project Location
3430 Wood Street
Oakland, California

Reference:
 Microsoft Expedia, Streets 98

Scale

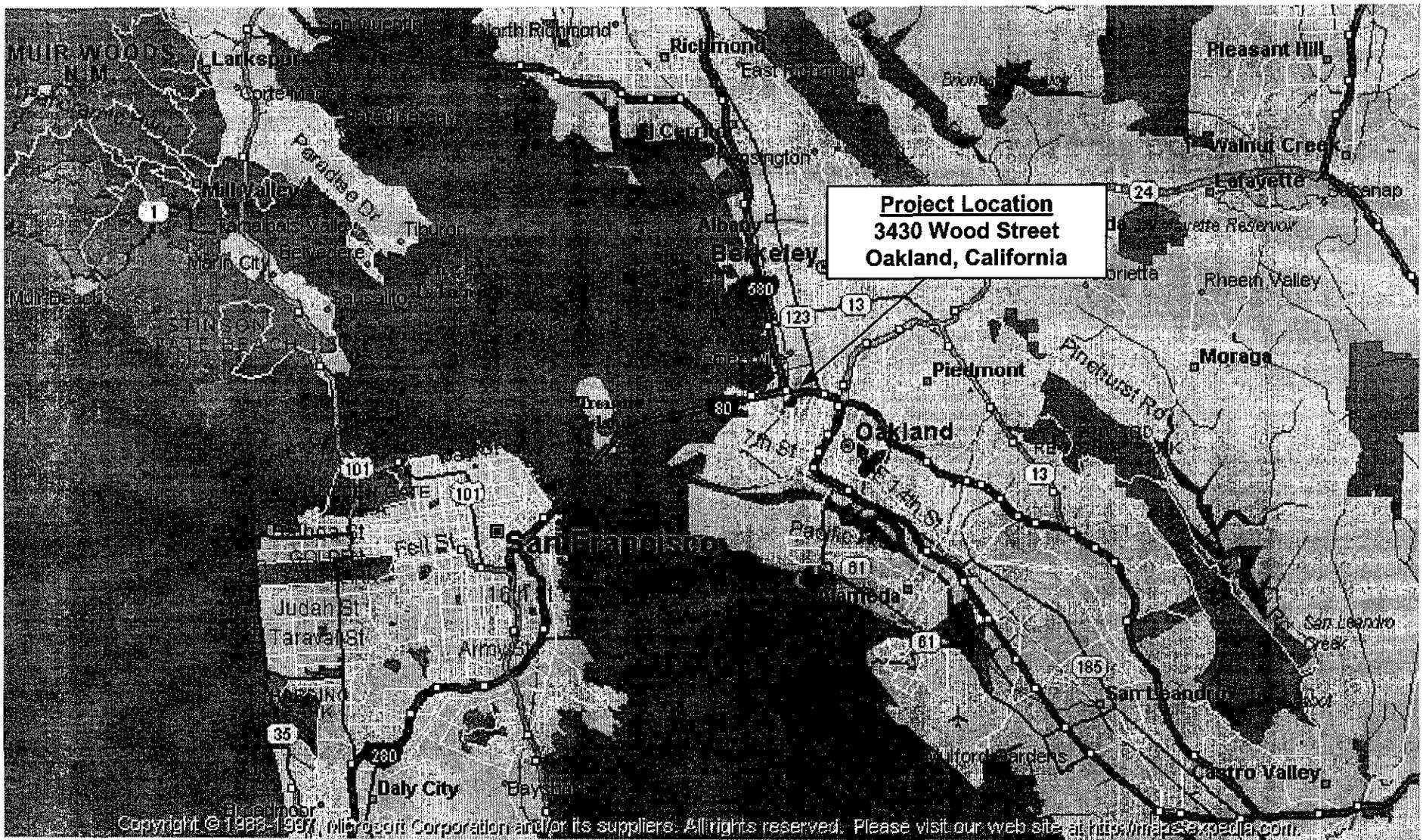


Figure 1

SITE LOCATION MAP



Caltrans-Cypress GW (Thomas Short Co.)
 Quarterly GW Monitoring
 Task Order No.04-911052-WB



Reference:
 Microsoft Expedia, Streets 98

Scale



Figure 1

SITE LOCATION MAP



Caltrans-Cypress GW (Thomas Short Co.)
 Quarterly GW Monitoring
 Task Order No.04-911052-WB

APPENDIX A
PROPOSITION 65 WARNING AND NOTIFICATION

Appendix A

Proposition 65 Warning and Notification

As required under the Safe Drinking Water and Toxic Enforcement Act of 1986 (also known as Proposition 65), on February 27, 1987, the Governor published a listing of those chemicals determined by the State of California to cause cancer, birth defects, or other reproductive harm. Proposition 65 requires that businesses that handle any of the listed chemicals notify people in the affected area of that fact. IT anticipates handling some of the listed chemicals at the project sites.

The chemicals present on site that have been determined to cause cancer include:

- Diesel Engine Exhaust
- Gasoline Engine Exhaust
- Lead
- Benzene

The following contaminants on site have been determined by the State to cause reproductive harm:

- Lead
- Toluene

APPENDIX B
INCIDENT INVESTIGATION REPORT AND FLOW CHART

PROCEDURE

Subject: ACCIDENT PREVENTION PROGRAM: REPORTING, INVESTIGATION, AND REVIEW

1.0 PURPOSE AND SUMMARY

The purpose of this procedure is to establish the requirements for incident reporting, investigation, and review. This procedure is an integral part of the company's overall accident prevention program and aids in the determination of causal factors and corrective actions necessary to prevent incident re-occurrence. Key elements of this procedure include:

- **All occupational injuries/illnesses, vehicle accidents, and near miss incidents must be promptly reported and investigated.**
- All Occupational Safety and Health Administration (OSHA) recordable injuries/illnesses and chargeable vehicle accidents must be reviewed by an Accident Review Board. The Accident Review Board report is submitted/approved up through management to the appropriate business line President.
- All incidents involving a fatality, major injury/illness, or resulting in significant property damage will be immediately reported to: the business line Health and Safety Manager; the Vice President, Health and Safety; the business line President; the Vice President, Legal Department; and the CEO.
- All business lines are required to submit a Monthly Loss Report summarizing all incidents that took place during the previous reporting period.

2.0 TABLE OF CONTENTS

- 1.0 Purpose and Summary
- 2.0 Table of Contents
- 3.0 Responsibility Matrix
 - 3.1 Procedure Responsibility
 - 3.2 Action/Approval Responsibilities
- 4.0 Definitions
- 5.0 Text
 - 5.1 Incident Reporting Process
 - 5.2 Supervisor's Employee Injury Report
 - 5.3 Vehicle Accident Report
 - 5.4 General Liability, Property Damage, and Loss Report
 - 5.5 Incident Investigation Report
 - 5.6 Accident Review Board
 - 5.7 Insurance Notification



- 5.5 Monthly Loss Report
- 6.0 Exception Provisions
- 7.0 Cross References
- 8.0 Attachments

3.0 RESPONSIBILITY MATRIX

3.1 Procedure Responsibility

The Vice President, Health and Safety is responsible for the issuance, revision, and maintenance of this procedure.

3.2 Action/Approval Responsibilities

The Responsibility Matrix is Attachment 1.

4.0 DEFINITIONS

Chargeable Vehicle Accident - Any **at-fault** vehicle accident meeting any **one** of the following criteria:

- An individual other than an employee of the company is a party in the accident
- Property owned by a person or entity other than the company is damaged
- When only company employees, company owned or leased (**not** rented) vehicles, and company property is involved and damage exceeds \$1,000.00.

Company - All wholly-owned subsidiaries of The IT Group, Inc.

Lost Workday Case - Cases which involve days away from work, days of restricted work activity, or both. Days away from work are the number of workdays (consecutive or not), excluding the date of injury, the employee **would have worked**, but could not because of occupational injury or illness; and/or the number of workdays (consecutive or not), excluding the date of injury, on which, because of injury or illness:

- The employee was assigned to another job on a temporary basis;
- The employee worked at a permanent job less than full time; or
- The employee worked at a permanently-assigned job, but could not perform all duties normally connected with it.

Near Miss Incident - Any incident where no injury occurred, but where the potential for injury existed.

OSHA Recordable Case - All work-related deaths and illnesses, and those work-related injuries which result in loss of consciousness, restriction of work or motion, transfer to another job, or require medical treatment beyond first aid (see Attachment 7).

Vehicle - Any passenger vehicle, including trucks, used upon the highway or in private facilities for transporting passengers and/or property. For the purpose of this procedure, off-road vehicles such as earthmoving equipment, forklifts, non-highway use trucks, etc., are not considered vehicles.

5.0 TEXT

5.1 Incident Reporting Process

Employees are required to immediately report to their direct supervisor all occupational injuries, illnesses, accidents, and near miss incidents having the potential for injury. Any supervisor (but preferably the supervisor directly responsible for the involved employees) with first-hand knowledge of an incident is required to:

- Immediately arrange for appropriate medical attention and notify the responsible health and safety representative.
- Inform Health Resources of all incidents requiring medical attention by calling 1-800-350-4511, and providing the following information:
 - Company Name (The IT Group)
 - Employee Name
 - Name of treating medical facility and phone number
 - Brief description of incident.

Health Resource's role is to interface with the treating physician to ensure that appropriate care is provided to the injured employee.

- Complete the *Authorization for Treatment, Release of Medical Information, and Return to Work* (Attachment 8) and the *Supervisor's Employee Injury Report* (Attachment 2) for all cases requiring medical attention. The employee or his/her supervisor is to ensure that these completed forms are faxed to Health Resources at (800) 853-2641 prior to leaving the medical facility or as soon as reasonably possible.
- Prior to an injured employee returning to his/her job duties, a follow-up call by Health Resources will be made to the project site. The purpose of this call is to ensure work restrictions are clarified and planned work activities are consistent with medical recommendations.

The supervisor is to initiate/complete the appropriate company documentation in accordance with the following incident classifications:

· OSHA Recordable Cases

- a. Supervisor's Employee Injury Report (Attachment 2)
- b. Incident Investigation Report (Attachment 5)
- c. Accident Review Board (Attachment 6)

· First Aid Cases

- a. Supervisor's Employee Injury Report (Attachment 2)
- b. Incident Investigation Report (Attachment 5)

· Chargeable Vehicle Accidents

- a. Vehicle Accident Report (Attachment 3)
- b. Incident Investigation Report (Attachment 5)
- c. Accident Review Board (Attachment 6)
- d. Driving Record Certification (Procedure HS800)

· Non-Chargeable Vehicle Accidents

- a. Vehicle Accident Report (Attachment 3)
- b. Incident Investigation Report (Attachment 5)

· Near Miss

- a. Incident Investigation Report (Attachment 5)

· Property Damage/General Liability

- a. General Liability, Property Damage, and Loss Report (Attachment 4).

All forms, with the exception of the Accident Review Board and Incident Investigation Report, must be completed and forwarded to the appropriate health and safety representative within **one** business day of the incident.

All incidents involving a fatality, major injury/illness, or resulting in significant property damage are to be reported to the appropriate business line President; Vice President, Health and Safety; Vice President, Legal Department; and CEO as soon as possible, but not later than the close of business on the day of the incident.

5.2 Supervisor's Employee Injury Report

The Supervisor's Employee Injury Report (Attachment 2) is to be completed for all incidents that result in an employee occupational injury or illness. It is to be initiated by the supervisor of the injured employee and forwarded to the project/location manager for comments. The appropriate health and safety representative must receive a copy of the report within one business day of the incident.

5.3 Vehicle Accident Report

The Vehicle Accident Report (Attachment 3) must be completed for any vehicle accident in which a company vehicle is involved. This includes company-owned or leased vehicles, rental vehicles, and personal vehicles being used for company business. This report is to be initiated by the employee involved in the accident or his/her direct supervisor, then forwarded to the appropriate health and safety representative.

5.4 General Liability, Property Damage, and Loss Report

The General Liability, Property Damage, and Loss Report is to be used for all losses or damage to company property in excess of \$1,000.00. This form must be completed for all third party property, regardless of value, damaged as a result of company activities.

The employee most familiar with the events that contributed to the loss or damage will complete the form, then forward it to the project/location manager. The Corporate Risk Management Department must receive a copy of the report within one business day of the incident.

5.5 Incident Investigation Report

All injuries, illnesses, accidents, and near miss incidents will be investigated. Once arrangements for immediate medical care have been made, the employee's direct supervisor, with assistance from the health and safety representative and/or business line Health and Safety Manager, will:

- Reconstruct the conditions which led to the incident (collect the facts);
- Describe and document (include sketch, photos, etc.) how the incident occurred;
- List witnesses and collect written statements when possible;
- Identify and discuss the causative factors;
- Identify the unsafe act or unsafe condition that contributed to the incident;
- Identify possible systematic/management deficiencies; and
- List the corrective actions which are to be taken to prevent re-occurrence of the incident, the person responsible for the corrective action, and the date by which action is to be completed.

The investigation will be started as soon as possible after the incident and a written report (Attachment 5) submitted to the appropriate health and safety representative within 72 hours. In addition to the previous information, reports from external sources (police, insurance carriers, testing laboratories, etc.) are to be obtained as soon as they become available and forwarded to the recipients of the investigation report.

5.6 Accident Review Board

Each manager whose project/location experiences an OSHA recordable or a chargeable vehicle accident is required to convene an Accident Review Board within **10 days** of the accident. The purpose of the Accident Review Board is to review the information gathered for each incident and take appropriate action to prevent its recurrence. The Accident Review Board shall be composed of the project/location manager, the employee's direct supervisor, a health and safety representative, and the employee(s) involved in the incident. When appropriate, a representative of other internal sources of expertise should be involved.

It is generally not acceptable to discipline an employee for having an accident. However, if the Accident Review Board determines that the accident resulted from an unsafe act or violation of company procedure on the employee's part, the employee should be subject to disciplinary action in accordance with the company's progressive disciplinary action system (see Human Resources Procedure HR207).

5.7 Insurance Notification

The business line Health and Safety Manager or his/her designee is to report all employee injuries/illnesses requiring outside medical treatment to Constitution State Service Company (CSSC), a subsidiary of Travelers Insurance, within 24 hours of injury/illness occurrence. This may be accomplished by calling CSSC at 1-800-243-2490.

Some states (i.e., Ohio, Washington, and West Virginia) have specific reporting requirements that differ from those previously discussed. Call Gates McDonald Health Plus at 1-800-642-7587 (select option 1) to report injuries requiring medical attention in these states. Assistance for the reporting of incidents that occur in these states can be obtained through the Corporate Risk Management Department office at (412)-380-4097.

All vehicle accidents involving third party individuals or property, with the exception of company-rented Hertz automobiles, will be reported to CSSC by calling 1-800-243-2490 within 24 hours of the accident.

5.8 Monthly Loss Report

Each business line Health and Safety Manager is responsible to submit a Monthly Loss Report summarizing incidents that took place within their business line during the previous month. The business line Health and Safety Manager is responsible for submitting a consolidated package for the entire business line to the corporate health and safety office for receipt **no later than the 5th working day of the following month.**

6.0 EXCEPTION PROVISIONS

Variances and exceptions may be requested pursuant to the provisions of Procedure HS013, Health and Safety Procedure Variances.



Procedure No.	HS020
Revision No.	9
Date of Revision	10/24/00
Last Review Date	10/24/00
Page	7 of 19

7.0 CROSS REFERENCES

HR207 Disciplinary Action
HS013 Health and Safety Procedure Variances
HS800 Motor Vehicle Operations - General Requirements
HS810 Commercial Motor Vehicles

8.0 ATTACHMENTS

1. Responsibility Matrix
2. Supervisor's Employee Injury Report
3. Vehicle Accident Report
4. General Liability, Property Damage, and Loss Report
5. Incident Investigation Report
6. Accident Review Board Report
7. Injury/Illness Classification Guidelines
8. Medical Forms



ATTACHMENT 1

ACCIDENT PREVENTION PROGRAM: REPORTING, INVESTIGATION, AND REVIEW
RESPONSIBILITY MATRIX

Action	Procedure Section	Responsible Party					
		Employee	Supervisor	Project/ Location Manager	Health and Safety Representative	Business Line Health and Safety Manager	Vice President, Health and Safety
Issue, Revise, and Maintain Procedure	3.1						X
Report All Incidents to Supervisor	5.1	X					
Notify Health and Safety Representative	5.1		X				
Arrange Medical Care	5.1		X		X		
Notify Health Resources or Gates McDonald of Incident	5.1		X		X		
Initiate/Complete Company Forms	5.1		X				
Complete Investigation of Incident	5.5		X	X	X		
Conduct Accident Review Board	5.6		X	X	X		
Report Injury/Accident to CSSC	5.7				X	X	
Complete Monthly Loss Report	5.8					X	



**ATTACHMENT 2
 SUPERVISOR'S EMPLOYEE INJURY REPORT**

This report is to be initiated by the employee's supervisor. Please answer all questions completely. This report must be forwarded to the appropriate Health and Safety Representative within 24 HOURS of the injury/illness.

EMPLOYEE

Injured's Name _____ Sex _____ S.S. No. _____ Birth Date _____
 Home Address _____
 City _____ State _____ Zip _____ Phone (____) _____
 Job Title _____ Hire Date _____ Hourly Wage _____

SUPERVISOR

Date of Incident _____ Time _____ Time Reported _____ To Whom? _____
 Project/Location Name _____ Address _____
 Project No. _____ Time Shift Began _____ Did the Employee Leave Work? No Yes When _____
 Has employee returned to work? No Yes When _____ Did employee miss a regularly scheduled shift? No Yes
 Doctor/Hospital Name _____ Address _____
 Witness Name(s) _____ Statement Attached? No Yes
 Nature of Injury _____ Exact Body Part _____
 Medical Attention: None First Aid On Site Doctor's Office Hospital ER Hospitalized
 Job Assignment at Time of Incident _____
 Describe Incident: _____

What unsafe condition and/or act contributed to the Incident? _____

What Corrective Action has been taken to prevent Recurrence? _____

Supervisor: _____
 (Print Name) (Signature) (Date)

MANAGER

Comments on Incident and Corrective Action _____

 Project/Location Mgr. : _____
 (Print Name) (Signature) (Date)

HEALTH AND SAFETY

Concur with Action Taken? No Yes Remarks _____

OSHA Classification:
 First Aid Recordable, No Lost/Restricted Workdays Recordable, Lost Workdays Recordable, Restricted Activity Fatality
 Days away from Work _____ Days Restricted Work _____

All injuries/illnesses requiring outside medical treatment must be reported to CSSC by calling 1-800-243-2490 within 24 hours of the incident. Contact Gates McDonald at 1-800 642-7587 for cases occurring in Ohio, Washington, or West Virginia.

Workers' Compensation Claim Number (if applicable) _____

Health and Safety Representative:

 (Print Name) (Signature) (Date)



Procedure No. HS020
 Revision No. 9
 Date of Revision 10/24/00
 Last Review Date 10/24/00
 Page 10 of 19

**ATTACHMENT 3
 VEHICLE ACCIDENT REPORT**

Page 1 of 2

ACCIDENT DESCRIPTION This report is to be initiated by the employee involved in the accident or his/her direct supervisor. Please answer all questions completely. This report must be forwarded to the appropriate health and safety representative within 24 HOURS of the accident.

ACCIDENT DATE _____ TIME _____ A.M. or P.M.
 LOCATION OF ACCIDENT (CITY, STATE) _____
 DESCRIPTION OF ACCIDENT _____

 WITNESS _____ PHONE NO. _____
 ADDRESS _____ CITY _____ STATE _____ ZIP _____
 POLICE OFFICER'S NAME _____ DEPARTMENT _____

COMPANY VEHICLE
 DRIVER _____ DRIVERS LICENSE NO. _____ STATE _____
 ADDRESS _____ CITY _____ STATE _____ ZIP _____
 WORK PHONE NO. (_____) _____ S.S. NO. _____ PROJECT NAME/NO. _____
 VEHICLE NO. _____ YEAR _____ MAKE _____ MODEL _____ LICENSE PLATE NO. _____
 STATE _____ VEHICLE OWNER: COMPANY LEASED/RENTED PRIVATE VEHICLE
 VEHICLE TYPE: COMMERCIAL MOTOR VEHICLE NON-COMMERCIAL
 IF NOT COMPANY-OWNED: OWNER _____ PHONE NO. (_____) _____
 ADDRESS _____ CITY _____ STATE _____ ZIP _____
 VEHICLE DAMAGE _____
 NO. OF VEHICLES TOWED FROM SCENE _____ NUMBER OF INJURIES _____ NUMBER OF FATALITIES _____
 WERE HAZARDOUS MATERIALS RELEASED? NO YES IF YES, DESCRIBE MATERIALS _____

OTHER VEHICLE
 DRIVER _____ DRIVERS LICENSE NO. _____ STATE _____
 ADDRESS _____ CITY _____ STATE _____ ZIP _____
 PHONE NO. (_____) _____ S.S. NO. _____
 OWNER'S NAME (CHECK IF SAME AS DRIVER) _____
 ADDRESS _____ CITY _____ STATE _____ ZIP _____
 INSURANCE COMPANY _____ POLICY NO. _____
 AGENT'S NAME _____ PHONE NO. (_____) _____
 ADDRESS _____ CITY _____ STATE _____ ZIP _____
 VEHICLE YEAR _____ MAKE _____ MODEL _____ PLATE NO. _____ STATE _____
 VEHICLE I.D. NO. _____
 VEHICLE DAMAGE _____
 PASSENGERS: NO YES INJURIES: NO YES (if Yes, list names and telephone numbers below)



Procedure No. HS020
 Revision No. 9
 Date of Revision 10/24/00
 Last Review Date 10/24/00
 Page 11 of 19

VEHICLE ACCIDENT REPORT

Page 2 of 2

- WEATHER: Clear Cloudy Fog Rain Sleet Snow Other _____
- PAVEMENT: Asphalt Steel Concrete Wood Gravel/Dirt
 Brick/Stone Other _____
- CONDITION: Dry Wet Icy Pot Holes Other _____
- TRAFFIC CONTROL: Traffic Light Stop Sign Railroad No Intersection No Control
- ROADWAY: Number of Lanes Each Direction: _____ Residential Divided Highway Undivided Highway

Draw and name roadways showing each vehicle, direction of travel, and point of impact. Indicate travel before the accident with a solid line, and post-accident movement with a broken line.

SYMBOLS:

Your Vehicle

Other Vehicle(s)

Pedestrian 

Stop Sign 

Yield

Railroad 

ADDITIONAL INFORMATION:

All vehicle accidents involving third party individuals or property, with the exception of accidents involving only company-rented Hertz automobiles, must be reported to CSSC by calling 1-800-243-2490 within 24 hours of the accident.

WAS VEHICLE ACCIDENT REPORTED TO CSSC? YES NO CLAIM NUMBER _____

EMPLOYEE _____ (Print) _____ (Signature) _____ (Date)

SUPERVISOR _____ (Print) _____ (Signature) _____ (Date)

HEALTH & SAFETY REP. _____ (Print) _____ (Signature) _____ (Date)

**REPORT MUST BE CALLED IN OR FAXED TO:
 CORPORATE HEALTH AND SAFETY (PHONE: 412-372-7701, FAX: 412-858-3976)
 AND CORPORATE RISK MANAGEMENT (PHONE: 412-380-4097, FAX: 412-380-6218)
 WITHIN 24 HOURS, OR NOT LATER THAN NEXT BUSINESS DAY**

These standard policies and procedures are applicable to all members of The IT Group, Inc., except where superseded or modified by the member Company.



ATTACHMENT 4

GENERAL LIABILITY, PROPERTY DAMAGE, AND LOSS REPORT

This report is to be completed for all losses or damage to company property in excess of \$1,000.00 and all third party damage, regardless of value, resulting from company activities.

PROJECT/LOCATION _____ PROJECT NO. _____ DATE _____

ADDRESS _____

HOW DID DAMAGE OR LOSS OCCUR: _____

DESCRIPTION AND VALUE (\$) OF DAMAGED/LOST/STOLEN PROPERTY: _____

LOCATION OF DAMAGED/LOST/STOLEN PROPERTY (Before Loss): _____

DATE AND TIME OF DAMAGE, LOSS, OR THEFT: Date: _____ Time: _____ a.m./p.m.

OWNER OF DAMAGED/LOST/STOLEN PROPERTY:

Name _____ Phone No. () _____

Address _____ City _____

Employer and Address _____

INJURED PARTIES (Also complete a Supervisor's Employee Injury Report if a Company Employee):

Name _____ Phone No. () _____

Address _____ City _____

Employer and Address _____

Description of Injury _____

WITNESSES:

1. Name _____ Phone No. () _____

Address _____ City _____

Employer and Address _____

2. Name _____ Phone No. () _____

Address _____ City _____

Employer and Address _____

WERE PICTURES TAKEN? YES NO

WERE POLICE NOTIFIED? YES NO DEPT. _____ REPORT NO. _____

COMPLETED BY: _____

(Print)

(Signature)

(Date)

PROJECT/LOCATION MANAGER: : _____

(Print)

(Signature)

(Date)

REPORT MUST BE CALLED IN OR FAXED TO:
 CORPORATE RISK MANAGEMENT (PHONE: 412-380-4097, FAX: 412-380-6218)
 WITHIN 24 HOURS, OR NOT LATER THAN NEXT BUSINESS DAY



**ATTACHMENT 5
 INCIDENT INVESTIGATION REPORT**

*** MUST BE COMPLETED WITHIN 72 HOURS ***

Investigation Date _____ Date of Incident _____

Employee Name _____

Supervisor Name _____

Project Number/Name _____ / _____

Location of Incident _____

Incident Classification

<u>Injury</u>	<input type="checkbox"/> First Aid	<u>Vehicle</u>	<input type="checkbox"/> Chargeable	<u>DOT</u>	<input type="checkbox"/> DOT Vehicle
	<input type="checkbox"/> OSHA Recordable		<input type="checkbox"/> Non-chargeable		<input type="checkbox"/> DOT Reportable
	<input type="checkbox"/> Lost Workday				
	<input type="checkbox"/> Restricted Workday	<u>Near Miss</u>	<input type="checkbox"/>	<u>General Liability</u>	<input type="checkbox"/>

Description (Provide facts, describe how incident occurred, provide diagram [on back] or photos)

Analysis 1 (What unsafe acts or conditions contributed to the incident?)

Analysis 2 (What systematic or management deficiencies contributed to incident?)

Corrective Action(s) (List corrective action items, responsible person, scheduled completion date)

Witnesses (Attach statements or indicate why unavailable)

Investigated By	_____	_____	_____
	Print Name	Signature	Date
Project/Location Mgr.	_____	_____	_____
	Print Name	Signature	Date

(Attach Additional Pages if Needed)



ATTACHMENT 6

ACCIDENT REVIEW BOARD

DATE:		LOCATION:	
BOARD MEMBERS:			
ACCIDENT DATE:		EMPLOYEE(S) INVOLVED IN INCIDENT:	
INVESTIGATION COMPLETE: YES <input type="checkbox"/> NO <input type="checkbox"/>		ACCIDENT CLASSIFICATION:	
THE FOLLOWING INFORMATION <u>MUST</u> BE PROVIDED BY THE REVIEW BOARD FOR THIS INCIDENT (PRINT):			
SUPERVISOR: _____		PROJECT/LOCATION MGR.: _____	
CAUSE OF ACCIDENT:			
ACTION BY BOARD*:			
* ALL ACTIONS BY THE ACCIDENT REVIEW BOARD ARE SUBJECT TO FINAL REVIEW BY THE HUMAN RESOURCES AND LEGAL DEPARTMENTS.			
ACCEPTED:			
_____		_____	
(Employee Signature)		(Supervisor Signature)	
APPROVED:		REJECTED FOR:	
_____		_____	
(Project/Location Manager)			
APPROVED:		REJECTED FOR:	
_____		_____	
(Business Line Health and Safety Manager or Designee)			
APPROVED:		REJECTED FOR:	
_____		_____	
(Business Line Vice President)			

ATTACHMENT 7

INJURY/ILLNESS CLASSIFICATION GUIDELINES

Medical Treatment - The following are generally considered medical treatment. Work-related injuries for which this type of treatment was provided or should have been provided are almost always recordable.

- Treatment of **INFECTION**;
- Application of **ANTISEPTICS** during second or subsequent visit to medical facility;
- Treatment of **SECOND OR THIRD DEGREE BURN(S)**;
- Application of **SUTURES** (stitches);
- Application of **BUTTERFLY ADHESIVE DRESSING(S)** or **STERI STRIP(S)** in lieu of sutures;
- Removal of **FOREIGN BODIES EMBEDDED IN EYE**;
- Removal of **FOREIGN BODIES FROM WOUND**; if procedure is **COMPLICATED** because of depth of embedment, size, or location;
- Use of **PRESCRIPTION MEDICATIONS** (except a single dose administered on first visit for minor injury or discomfort);
- Use of hot or cold **SOAKING THERAPY** during second or subsequent visit to medical facility;
- Application of hot or cold **COMPRESS(ES)** during second or subsequent visit to medical facility;
- **CUTTING AWAY DEAD SKIN** (surgical debridement);
- Use of **WHIRLPOOL BATH THERAPY** during second or subsequent visit to medical facility;
- **POSITIVE X-RAY DIAGNOSIS** (fractures, broken bones, etc.); and
- **ADMISSION TO A HOSPITAL** or equivalent medical facility **FOR TREATMENT**.

First Aid Treatment - The following are generally considered first aid treatment (i.e., one-time treatment and subsequent observation of minor injuries) and should not be recorded if the work-related injury does not involve loss of consciousness, restriction of work or motion, or transfer to another job:

- Application of **ANTISEPTICS** during first visit to medical facility;
- Treatment of **FIRST DEGREE BURN(S)**;
- Application of **BANDAGE(S)** during any visit to medical facility;
- Use of **ELASTIC BANDAGE(S)** during first visit to medical facility;
- Removal of **FOREIGN BODIES NOT EMBEDDED IN EYE** if only irrigation is required;
- Removal of **FOREIGN BODIES FROM WOUND**; if procedure is **UNCOMPLICATED**, and is, for example, removed by tweezers or other simple technique;
- Use of **NON-PRESCRIPTION MEDICATIONS AND** administration of **single doses** of **PRESCRIPTION MEDICATION** on first visit for minor injury or discomfort;

- **SOAKING THERAPY on initial visit** to medical facility or removal of bandages by **SOAKING**;
- Application of hot or cold **COMPRESS(ES)** during **first visit** to medical facility;
- Application of **OINTMENTS** to abrasions to prevent drying or cracking;
- Use of **WHIRLPOOL BATH THERAPY** during **first visit** to medical facility;
- **NEGATIVE X-RAY DIAGNOSIS**; and
- **OBSERVATION** of injury during visit to medical facility.

The following procedure, by itself, is not considered medical treatment:

- Administration of **TETANUS SHOT(S)** or **BOOSTER(S)**. However, these shots are often given in conjunction with more serious injuries; consequently, injury requiring these shots may be recordable for other reasons.

Loss of Consciousness - If an employee loses consciousness as the result of a work-related injury/illness, the case must be recorded no matter what type of treatment was provided. The rationale behind this recording requirement is that loss of consciousness is generally associated with the more serious injuries.

Restriction of Work or Motion - Restricted work activity occurs when the employee, because of the impact of a job-related injury, is physically or mentally unable to perform all or any part of his or her normal assignment during all or any part of the workday or shift. The emphasis is on the employee's ability to perform normal job duties. Restriction of work or motion may result in either a lost worktime injury or a non-lost worktime injury, depending upon whether the restriction extended beyond the day of injury.

Transfer to Another Job - Injuries requiring transfer of the employee to another job are also considered serious enough to be recordable regardless of the type of treatment provided. Transfers are seldom the sole criterion for recordability because injury cases are almost always recordable on other grounds, primarily medical treatment or restriction of work or motion.



Procedure No. HS020
 Revision No. 9
 Date of Revision 10/24/00
 Last Review Date 10/24/00
 Page 17 of 19

**ATTACHMENT 8
 MEDICAL FORMS**

AUTHORIZATION FOR TREATMENT OF OCCUPATIONAL INJURY/ILLNESS

Employee Name: _____
 Social Security #: _____
 Job Title: _____
 Project/Location: _____
 Telephone #: _____
 H&S Representative: _____
 Body Part(s) Injured: _____
 Describe in detail how incident occurred: _____

Injury: Illness:
 Incident Date: _____
 Location of Accident/Exposure: _____

TO TREATING PHYSICIAN:

In the case of occupational injury/illness, please examine the employee and render necessary conservative treatment directly related to the occupational injury/illness.

Light Duty Work:

It is the policy of our company to provide work assignments, whenever possible, for employees with physical activity restrictions resulting from an occupational injury/illness. If the employee will be subject to a restriction, please contact **Health Resources** before releasing the employee, so that a light duty assignment may be arranged.

Medically Unfit to Return to Work:

It is the policy of our company to assist employees unable to return to work, due to an injury/illness, in obtaining needed medical care and other available benefits. Medical findings are also used to help evaluate unsafe conditions that may have led to the incident. Please help us assist our employees by contacting **Health Resources** with your findings as soon as possible, preferably before the employee leaves your office, but not later than the close of business on the day of initial treatment.

Health Resources: Telephone: 1-800-350-4511 Fax: (800) 853-2641

Please Send Reports To: **Health Resources**
 600 West Cummings Park, Suite 3400
 Woburn, Massachusetts 01801

Please Send Bills To: Workers' Compensation Claims Administrator
 Constitution State Service Company (Travelers)

DOCTOR, Please provide:

Medical Diagnosis: _____
 Treatment Provided: _____

Recommended Work Limitation/Restriction: _____
 Return Visit Needed: No Yes Date if Yes _____ First Aid Only
 Physician Name: _____ Physician Telephone: _____
 Physician Signature: _____ Date: _____

**YOU MUST CALL HEALTH RESOURCES FOR ALL OCCUPATIONAL INJURIES/ILLNESSES
 REQUIRING OUTSIDE MEDICAL TREATMENT: 1-800-350-4511.
 FAX COMPLETED FORM TO HEALTH RESOURCES (800) 853-2641.**



Procedure No. HS020
 Revision No. 9
 Date of Revision 10/24/00
 Last Review Date 10/24/00
 Page 18 of 19

**ATTACHMENT 8B
 MEDICAL FORMS**

AUTHORIZATION FOR RELEASE OF MEDICAL INFORMATION

I, _____, grant authorization to _____
 (Print Full Name) (Treating Physician's Name)
 for the release of any information concerning my occupational injury/illness to:

HEALTH RESOURCES
 600 West Cummings Park, Suite 3400
 Woburn, Massachusetts 01801
 Phone: (800) 350-4511
 Fax: (800) 853-2641

for the purpose of disability follow-up and return to work authorization.

Please provide the following information:

EMPLOYEE INFORMATION:

Full Name: _____
 Date of Birth: _____
 Social Security #: _____
 Home Address: _____
 Home Phone: _____
 Work Phone: _____

MEDICAL INFORMATION:

Treating Physician's Name: _____
 Physician's Address: _____
 Phone Number: _____
 Fax Number: _____

Employee Signature: _____ Date: _____



Procedure No. HS020
 Revision No. 9
 Date of Revision 10/24/00
 Last Review Date 10/24/00
 Page 19 of 19

**ATTACHMENT 8C
 MEDICAL FORMS**

RETURN-TO-WORK EXAMINATION FORM

Exam Date: ___/___/___ Employee Name: _____
 Birth Date: ___/___/___ Social Security #: _____ - _____ - _____
 Job Title: _____ Sex: Male Female

Examining Provider: Please complete this form and fax to Health Resources at (800) 853-2641. Please contact Health Resources at (800) 350-4511 to report status of employee post-treatment.

DIAGNOSIS: _____
TREATMENT PLAN: _____
MEDICATIONS: _____
PHYSICAL THERAPY: _____
OTHER: _____

May return to full duty work effective ___/___/___
 May return to limited duty from ___/___/___ to ___/___/___
 Unable to return to work from ___/___/___ to ___/___/___

WORK LIMITATIONS:

Restricted lifting/pushing/pulling: maximum weight in lbs: _____ (company limits all lifting to 60 lbs).
 Work only with right/left hand. Restricted repetitive motion right/left hand.
 Sitting job only. Restricted operation of moving equipment.
 Other: _____

FOLLOW-UP PLAN:

Release from care.
 Schedule for follow-up appointment on ___/___/___.
 Time _____ AM/PM
 Referral to _____
 Appointment date ___/___/___ Time _____ AM/PM

Comments: _____

 Examiner's Name (print)

 Examiner's Signature

 Date

APPENDIX C
JOB SAFETY ANALYSIS WORKSHEET

ACTIVITY HAZARD ANALYSIS DRUM HANDLING

Activity	Potential Hazards	Recommended Controls
Staging equipment	Contact with moving equipment/vehicles	Area around drums will be barricaded/demarcated.
		Equipment will be laid out in an area free of traffic flow.
	Cut hazards	Use care when handling any glassware. Wear adequate hand protection
Collect samples	Chemical contamination	Drum sampling will be performed in Level B PPE.
	Hazard communication	Label all containers as to contents.
	Cuts	Use care when handling glassware. Wear adequate hand protection.
Drum opening	Fire/Explosion	All equipment and tools will be of the type to prevent sources of ignition.
		Only essential personnel will be in drum opening area.
		Suspect drums will be opened using a beryllium or bronze spike.
		Bungs will be opened slowly without excessive pressure.
		Fire extinguishers will be available to control small fires.
		Only intrinsically safe equipment will be used to transfer contents of suspect drums. Real time monitoring will take place before and during drum opening/handling.
Drum handling	Spills	Absorbent and overpack drums will be kept available where leaks, spills, or ruptures may occur.
	Contact with potentially contaminated materials	Drum handling will be performed in Level B PPE.
Drum handling	Sprain/strains	Use caution when removing drum lids.
		Use the proper tool for the task being performed.
		Get assistance if required.
		Avoid twisting/turning while pulling on tools or drums.
	Heavy lifting	Lift with your legs, not your back. Lifts greater than 60 lbs. require assistance or mechanical equipment; size up the lift.
	Pinch points	Keep feet and hands clear of moving materials and equipment.
		Beware of contact points.

Activity	Potential Hazards	Recommended Controls
		Stay alert at all times.
	Cut hazards	Wear adequate hand protection
Drum transfer	Noise	Noise levels above 85 dBA mandates hearing protection.
	Heavy equipment operations	Before any machinery or mechanized equipment is placed into service, it shall be inspected and tested by a competent mechanic and certified to be in safe operating condition.
		Equipment shall be inspected before being placed into service and at the beginning of each shift.
		Preventive maintenance procedures recommended by the manufacturer shall be followed.
		A lockout - tagout procedure shall be used for equipment found to be faulty or undergoing maintenance.
		Machinery and mechanized equipment shall be operated only by designated personnel.
		Getting on or off any equipment while it is in motion is prohibited.
		Machinery or equipment requiring an operator shall not be permitted to run unattended.
		Machinery or equipment will not be operated in a manner that will endanger persons or property nor will the safe operating speeds or loads be exceeded.
Drum transfer	Heavy equipment operations	All machinery or equipment will be shutdown and positive means taken to prevent its operation while repairs or manual lubrications are being done.
		All repairs on machinery or equipment will be made at a location which provides protection from traffic for repair persons.
		All self-propelled construction equipment shall be equipped with a back-up alarm.
	Fire	Equipment will be equipped with at least one dry chemical fire extinguisher having a minimum UL rating of 1A5BC.
	Truck and Equipment Traffic	Site personnel will wear orange safety vests to identify themselves to traffic.
		Load out area will be properly demarcated.
	Slip, trip and fall hazards	Good housekeeping, keep work area picked up and as clean as feasible. Continually inspect the work area for slip, trip, and fall hazards. Look where you step, ensure safe footing when climbing on/off equipment etc.
Drum storage	Incompatible drums	Segregate drums so that no incompatibles are stored next to each other.
Drum transfer	Pinch points	Keep feet and hands clear of moving/suspended materials and equipment.

Activity	Potential Hazards	Recommended Controls
		Beware of contact points. Stay alert at all times!
	Sprain/strains	Use proper lifting techniques. Lifts greater than 60 lbs require assistance or mechanical equipment. Size-up the lift. Recommend wearing a back support if possible. When pulling on materials, pull in a straight line. Do not twist and pull simultaneously.
	Ropes, slings, chains, and hooks	The use of ropes, slings, and chains shall be in accordance with the safe recommendations of their manufacturer.
		Rigging equipment shall not be loaded in excess of its recommended safe working load.
		The use of open hooks is prohibited in rigging to lift any load where there is danger of relieving the tension on the hook due to the load or hook catching or fouling.
Drum transfer	Ropes, slings, chains and hooks	Hooks, shackles, rings, pad eyes, and other fittings that show excessive wear or that have been bent, twisted, or otherwise damaged shall be removed from service.
		Rigging equipment for material handling shall be inspected prior to use on each shift and as necessary during its use to insure that it is safe. Defective rigging equipment shall be removed from service.
		Rigging equipment, when not in use, shall be removed from the immediate work area and properly stored so as not to present a hazard.
		Taglines shall be used to control the loads being handled by hoisting equipment.
	Hoisting Equipment	All hoisting equipment shall be capable of passing a performance (operating) test prior to being placed into service.
		At no time shall the hoisting equipment be loaded in excess of the manufacturers rating except during performance tests.
	Hoisting Equipment	While hoisting equipment is in operation, the operator shall not perform any other work and he/she shall not leave his/her position at the controls until the load has been safely landed or returned to the ground.
		A standard signal system shall be used on all hoisting equipment.
	Insects, spiders, and snakes	Inspect work area carefully and avoid placing hands and feet into concealed areas.
	Cut hazards	Wear adequate hand protection.
	Falling objects	Hardhat, stay alert and clear of materials suspended overhead, steel-toed boots
Equipment to	Inspection	Training Requirements

Activity	Potential Hazards	Recommended Controls
to be Used	Requirements	
Drum Dolly/Grappler PPE Hoisting Equipment	<ul style="list-style-type: none"> ● Pre-post maintenance ● Visual prior to use 	<ul style="list-style-type: none"> ● Tailgate safety meeting ● Site specific orientation ● Hazardous waste operations ● Hazard communication ● Drum handling

ACTIVITY HAZARD ANALYSIS DRUM HANDLING

Activity	Potential Hazards	Recommended Controls
Staging equipment	Contact with moving equipment/vehicles	Area around drums will be barricaded/demarcated.
		Equipment will be laid out in an area free of traffic flow.
	Cut hazards	Use care when handling any glassware.
Wear adequate hand protection		
Collect samples	Chemical contamination	Drum sampling will be performed in Level B PPE.
	Hazard communication	Label all containers as to contents.
	Cuts	Use care when handling glassware.
		Wear adequate hand protection.
Drum opening	Fire/Explosion	All equipment and tools will be of the type to prevent sources of ignition.
		Only essential personnel will be in drum opening area.
		Suspect drums will be opened using a beryllium or bronze spike.
		Bungs will be opened slowly without excessive pressure.
		Fire extinguishers will be available to control small fires.
		Only intrinsically safe equipment will be used to transfer contents of suspect drums.
		Real time monitoring will take place before and during drum opening/handling.
Drum handling	Spills	Absorbent and overpack drums will be kept available where leaks, spills, or ruptures may occur.
	Contact with potentially contaminated materials	Drum handling will be performed in Level B PPE.
Drum handling	Sprain/strains	Use caution when removing drum lids.
		Use the proper tool for the task being performed.
		Get assistance if required.
		Avoid twisting/turning while pulling on tools or drums.
	Heavy lifting	Lift with your legs, not your back.
		Lifts greater than 60 lbs. require assistance or mechanical equipment; size up the lift.
	Pinch points	Keep feet and hands clear of moving materials and equipment.

Activity	Potential Hazards	Recommended Controls
		Beware of contact points.
		Stay alert at all times.
	Cut hazards	Wear adequate hand protection
Drum transfer	Noise	Noise levels above 85 dBA mandates hearing protection.
	Heavy equipment operations	Before any machinery or mechanized equipment is placed into service, it shall be inspected and tested by a competent mechanic and certified to be in safe operating condition.
		Equipment shall be inspected before being placed into service and at the beginning of each shift.
		Preventive maintenance procedures recommended by the manufacturer shall be followed.
		A lockout - tagout procedure shall be used for equipment found to be faulty or undergoing maintenance.
		Machinery and mechanized equipment shall be operated only by designated personnel.
		Getting on or off any equipment while it is in motion is prohibited.
		Machinery or equipment requiring an operator shall not be permitted to run unattended.
		Machinery or equipment will not be operated in a manner that will endanger persons or property nor will the safe operating speeds or loads be exceeded.
Drum transfer	Heavy equipment operations	All machinery or equipment will be shutdown and positive means taken to prevent its operation while repairs or manual lubrications are being done.
		All repairs on machinery or equipment will be made at a location which provides protection from traffic for repair persons.
		All self-propelled construction equipment shall be equipped with a back-up alarm.
	Fire	Equipment will be equipped with at least one dry chemical fire extinguisher having a minimum UL rating of 1A5BC.
	Truck and Equipment Traffic	Site personnel will wear orange safety vests to identify themselves to traffic.
		Load out area will be properly demarcated.
	Slip, trip and fall hazards	Good housekeeping, keep work area picked up and as clean as feasible. Continually inspect the work area for slip, trip, and fall hazards. Look where you step, ensure safe footing when climbing on/off equipment

Activity	Potential Hazards	Recommended Controls
		etc.
Drum storage	Incompatible drums	Segregate drums so that no incompatibles are stored next to each other.
Drum transfer	Pinch points	Keep feet and hands clear of moving/suspended materials and equipment.
		Beware of contact points. Stay alert at all times!
	Sprain/strains	Use proper lifting techniques. Lifts greater than 60 lbs require assistance or mechanical equipment. Size-up the lift. Recommend wearing a back support if possible. When pulling on materials, pull in a straight line. Do not twist and pull simultaneously.
	Ropes, slings, chains, and hooks	The use of ropes, slings, and chains shall be in accordance with the safe recommendations of their manufacturer.
		Rigging equipment shall not be loaded in excess of its recommended safe working load.
		The use of open hooks is prohibited in rigging to lift any load where there is danger of relieving the tension on the hook due to the load or hook catching or fouling.
Drum transfer	Ropes, slings, chains and hooks	Hooks, shackles, rings, pad eyes, and other fittings that show excessive wear or that have been bent, twisted, or otherwise damaged shall be removed from service.
		Rigging equipment for material handling shall be inspected prior to use on each shift and as necessary during its use to insure that it is safe. Defective rigging equipment shall be removed from service.
		Rigging equipment, when not in use, shall be removed from the immediate work area and properly stored so as not to present a hazard.
		Taglines shall be used to control the loads being handled by hoisting equipment.
	Hoisting Equipment	All hoisting equipment shall be capable of passing a performance (operating) test prior to being placed into service.
		At no time shall the hoisting equipment be loaded in excess of the manufacturers rating except during performance tests.
	Hoisting Equipment	While hoisting equipment is in operation, the operator shall not perform any other work and he/she shall not leave his/her position at the controls until the load has been safely landed or returned to the ground.
		A standard signal system shall be used on all hoisting equipment.
	Insects, spiders, and	Inspect work area carefully and avoid placing hands

Activity	Potential Hazards	Recommended Controls
	snakes	and feet into concealed areas.
	Cut hazards	Wear adequate hand protection.
	Falling objects	Hardhat, stay alert and clear of materials suspended overhead, steel-toed boots
Equipment to be Used	Inspection Requirements	Training Requirements
Drum Dolly/Grapppler PPE Hoisting Equipment	<ul style="list-style-type: none"> ● Pre-post maintenance ● Visual prior to use 	<ul style="list-style-type: none"> ● Tailgate safety meeting ● Site specific orientation ● Hazardous waste operations ● Hazard communication ● Drum handling

ACTIVITY HAZARD ANALYSIS SOIL/WATER SAMPLING

Activity	Potential Hazards	Recommended Controls
Staging equipment	Slip, trip and fall hazards	Determine best access route before transporting equipment.
		Good housekeeping, keep work area picked up and clean as feasible. Continually inspect the work area for slip, trip and fall hazards.
		Look before you step, insure safe and secure footing.
	Heavy lifting	Use proper lifting techniques. Lifts greater than 60 lbs. require assistance or mechanical equipment; size-up the lift.
	Falling objects	Stay alert and clear of materials suspended overhead. Use steel-toed boots and hard hat.
	Flying debris, dirt, dust etc.	Use safety glasses/goggles. Ensure that eye wash is in good working order.
	Pinch points	Keep hands, fingers, and feet clear of moving/suspended materials and equipment.
		Beware of contact points.
		Stay alert at all times!
	Insects, spiders and snakes	Inspect work area carefully and avoid placing hands and feet into concealed areas.
	Cut hazards	Wear adequate hand protection. Use care when handling glassware.
	Fire	Fire extinguishers shall be suitably placed, distinctly marked, readily accessible, and maintained in a fully charged and operable condition. See Table 3-6.
	Fire/chemical exposure	All solvents will be transported in UL/FM approved containers and sources of ignition will be prohibited.
		Initial real time air monitoring will take place.
Staging Equipment	Contact with moving equipment/vehicles	Work area will be barricaded/demarcated.
Staging Equipment	Contact with moving equipment/vehicles	Equipment will be laid out in an area free of traffic flow..
	Work in excavations	IT Policy and Procedure HS 307 - "Excavation and Trenching" will be adhered to at all times
	Hazard communication	Label all containers as to contents and dispose of properly.
		Obtain Material Safety Data Sheets for solvents, etc. that are being used.
	Noise	Sound levels above 85 dBA mandates hearing protection.
Sample Collection	Working at elevated heights/falls	Ladders will be secured by top, bottom, and intermediate fastenings as required.

Activity	Potential Hazards	Recommended Controls
		Personnel working at heights of 6 feet or more must be secured with fall protection (safety belt/lanyard).
	Electrical shock	All electrical circuits will be deenergized and locked out.
	Insects, spiders and snakes	Inspect work areas carefully and avoid placing hands and feet into concealed areas.
	Cross-contamination and contact with potentially contaminated materials	Sampling technicians will wear proper protective clothing and equipment to safeguard against potential contamination.
		Only essential personnel will be in the work area.
		Initial real-time air monitoring will take place before and during sampling activities.
		All personnel will follow good hygiene practices.
		Proper decontamination procedures will be followed.
		All liquids and materials used for decontamination will be contained and disposed of in accordance with Federal, State and Local regulations.
	Cut hazards	Use care when handling glassware.
		Wear adequate hand protection.
Sample Collection	Hazard communication	Label all containers as to contents.
	Strains/sprains	Use the proper tool for the job being performed.
Sample Collection	Strains/sprains	Get assistance if needed.
		Avoid twisting/turning while pulling on tools, grates, manway covers, etc.
	Spills/residual materials	Absorbent material and containers will be kept available where leaks or spills may occur.
	Lighting	Adequate lighting will be provided to insure a safe working environment.
	Unattended worker	"Buddy System" - visual contact will be maintained with the sampling technician during sampling activities.
	Confined spaces	IT Policy and Procedure HS300 - "Confined Spaces" will be adhered to at all times.
	Contact with potentially contaminated materials	Real-time air monitoring will take place. Appropriate PPE will be utilized.
		Good housekeeping will be stressed to safeguard against cross contamination of nearby areas and eliminate safety hazards.
		All site personnel will practice good personal hygiene by utilizing the decon facility on site.
		The work area will be demarcated. All

Activity	Potential Hazards	Recommended Controls
		unnecessary personnel will be kept out of the work area and in an upwind location.
		IT Policy and Procedure HS601 - "Respiratory Protective Devices" will be adhered to at all times.
		Maintain MSDS's for any preservatives such as HCl acid. Follow protection procedures.
Equipment decontamination	Chemical exposure	Maintain MSDS's for all chemicals such as methanol or hexane and follow protection procedures.
On-site sample analysis	Various	On-site laboratory will develop and adhere to a site specific chemical hygiene plan (CHP). The CHP will be submitted to the Program CIH for review and acceptance.
Moving and shipping collected samples	Heavy lifting	Use proper lifting techniques. Lifts greater than 60 lbs. require assistance or mechanical equipment; size-up the lift.
	Pinch points	Keep hands, fingers, and feet clear of moving/suspended materials and equipment.
		Beware of contact points.
		Stay alert at all times!
	Cut hazards	Wear adequate hand protection. Use care when handling glassware.
	Hazard communication	Label all containers as to contents and associated hazards.
Equipment to be Used	Inspection Requirements	Training Requirements
<ul style="list-style-type: none"> ● Hand tools ● PPE ● Sampling equipment 	<ul style="list-style-type: none"> ● Pre-postmaintenance ● Visual prior to use 	<ul style="list-style-type: none"> ● Tailgate Safety Meeting ● Site specific orientation ● Hazardous waste operations ● Hazard communication