

Site Health and Safety Plan

**Prepared for:
Alameda County Health Care Services Agency**

**Site Location:
2526- 2530 Blanding Avenue
Alameda, California**

**Prepared by:
DCM Construction & Services, Inc.**

DCM Project No.8041

August 7, 2000

HEALTH AND SAFETY PLAN
For
PETROLEUM AND SOLVENT CONTAMINATION SITES

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HEALTH AND SAFETY PLAN
For
PETROLEUM AND SOLVENT CONTAMINATION SITES

2530 Blanding Avenue, Alameda, California

1.0 GENERAL INFORMATION

1.1 INTRODUCTION:

This Health and Safety Plan shall provide the safety and health requirements for general site work taking place under a contract with ACC Environmental (ACC). This Plan provides the structure for a Site-Specific Health and Safety Plan, and provides information that will apply to all sites in this project. Together, they comprise the Site Safety and Health Plan (HASP). This Health & Safety Plan will be considered complete only with an associated Site-Specific Health and Safety Information for each site.

The purpose of this safety plan is to protect individuals, those working at the site, visitors, and the surrounding populous, and the environment during on site sampling and site characterization activities at petroleum contamination sites. This plan includes preventive and protective measures against health hazards, fire and explosion hazards, and mechanical hazards that may exist or occur during field activities.

1.2 SITE INFORMATION:

The General Information section of each Site-Specific Health and Safety Plan will provide the following information:

1. Name and Location of the Site;
2. Name of Individual Preparing the Plan, and Date of Preparation;
3. Brief Site History;
4. Investigative Objective and Work Plan;
5. Proposed Dates of Investigation, and;
6. Assessment of Overall Worker and Public Health Hazards.

1.3 REGULATORY REQUIREMENTS:

Occupational Safety and Health Administration (OSHA) standards 29 Code of Federal Regulations (CFR) 1910 and 1926 apply to work under this site-specific HASP. Title 8 of California Code of Regulations (General Construction Safety orders and General Safety Orders) must be complied with at California sites.

Additional requirements are contained in Code of Federal Regulations title 40, Protection of the Environment.

2.0 PERSONNEL REQUIREMENTS

2.1 ORGANIZATION:

The overall project organization as described in this document will be shown in the Site-Specific Health and Safety Plan, and will identify and show responsibilities for all key personnel, employees, and subcontractors.

2.2 DCM CONSTRUCTION & SERVICES HEALTH AND SAFETY POLICY AND RESPONSIBILITY:

It is the policy of the management of DCM Construction & Services (DCM) and also a contract requirement that a safety plan be implemented at hazardous material contamination sites to protect individuals and the environment. All DCM personnel involved in work on these sites will conform and comply with all aspects of this safety program. Each and every individual is, and therefore must regard and conduct him/herself as, a member of the safety team and adhere to the prescribed site safety plan to ensure his/her own safety as well as that of fellow workers, visitors, and the public.

A key element of this plan is the reliance upon the buddy system for all site activities at all times. This system requires that all activities at the site be conducted using a minimum of 2-person teams.

2.3 PERSONNEL RESPONSIBILITIES:

For each site, the responsibilities of the Project Manager include:

1. Preparing an effective site safety plan for the project;
2. Categorizing and identifying for the project staff the levels of potential exposure and dangerous levels of hazardous materials possibly encountered on site;
3. Ensuring that adequate and appropriate safety training and equipment are available for project personnel; and
4. Arranging for medical examinations for specified project personnel.
5. Ensuring a qualified on-site field person is designated Site Safety Officer (SSO) and is present when work is in progress. Alternates may also be designated as needed, however, the project manager must ensure the designated (SSO) is familiar with the safety plan and his/her responsibilities.
6. Ensuring any subcontractors (i.e. drillers, sawcutters) get an advance copy of the Health and Safety Plan and a start-up safety briefing is scheduled.
7. Determining appropriate level of protection and exposure monitoring strategy for the project by task or phase.

Overall responsibility for safety during the site investigative activities rests with the Project Manager. To assist the Project Manager, a qualified Site Safety Officer will be appointed for each site.

The Site Safety Officer's responsibilities include:

1. Implementing all safety procedures and operations on site.
2. Conducting start-up safety briefing with project personnel and subcontractors. Ensure all necessary equipment and procedures are in place before start-up. Addressing any substandard conditions requiring correction prior to start up.

3. Updating equipment or procedures based upon new information gathered during the site inspection.
4. Upgrading or downgrading the levels of personal protection based upon site observations and/or measurements.
5. Determining and posting locations and routes to medical facilities and arranging emergency transportation to medical facilities (as required).
6. Controlling site entry and notifying (as required) local public emergency officers (i.e., police and fire departments) of the nature of the team's operations and making emergency telephone numbers available to all team members.
7. Ensuring that at least one member of the field team is available to stay behind and notify emergency services if the Site Safety Officer must enter an area of maximum hazard or entering this area only after notifying emergency services (police department).
8. Observing work party members for symptoms of on-site exposure or stress.
9. Arranging for the availability of on-site emergency medical care and first aid, as necessary.
10. Documenting field activities and incidents. Keeping Project Manager informed. Consulting with Health and Safety Officer as needed.

The Health and Safety Officer (HSO) is responsible for:

1. Assisting Project Manager with development of the site specific Health and Safety Plan.
2. Providing technical support during normal operations and upsets for hazard assessment, exposure monitoring, level of protection changes.
3. Reviewing and approving the site-specific safety plan.

The responsibilities of all other on site personnel include:

1. Complying with all aspects of the project Safety plan, including strict adherence to the buddy system.
2. Obeying the orders of the Site Safety Officer.
3. Notifying the Site Safety Officer of hazardous or potentially hazardous incidents or working situations.

Subcontractors and other non-DCM site personnel are also responsible for complying with this plan and all applicable federal, state and local safety and environmental regulations and codes.

2.4 TRAINING:

All DCM site personnel working on the hazardous material contamination site investigations will have completed a safety and health training course for hazardous waste site work meeting the requirements of 29CFR1910.120 and have worked at least 3 days of supervised on the job training. The course consists of an initial 40-hour session and annual refreshers of 8 hours. Subcontractors and visitors are required to provide proof of equivalent training. The field team leader will have completed an additional 8 hours of waste site supervisory training. For each location, specific training is given by the Project Manager or Site Safety Officer to inform employees of site-specific hazards.

At least one field team member will be trained to perform cardiopulmonary resuscitation (CPR) and first aid.

2.5 MEDICAL MONITORING PROGRAM:

All DCM on site personnel, subcontractors, and visitors for this project will be required to have the medical examination outlined in Table 1. This examination is given annually and more often if specified by the attending physician. All medical examinations include certification by the physician of the employee's ability to wear a negative-pressure respirator and to perform strenuous work. If a person sustains an injury or contracts an illness related to work on site that results in lost work time, he must obtain written approval from a physician to regain access to the site.

Table 2.1

Medical Examination--Monitoring Program

Basic physical exam

Heart status and functions (EKG) baseline only except if >40

Chest X-ray (Roentgenogram posterior-anterior)

Pulmonary function--forced vital capacity, forced expiratory volume at 1 second and reserve volume

Blood--full SMAC Series

Hemoglobin--cell counts, protein levels

Liver function--full enzyme profile

Renal function--BUN, Creatinine, Creatine/Creatinine ratio, lipoprotein count and differential, uric acid

Urinalysis

Audiometry--audio spectrum response of ear

Eye--physical condition, visual acuity

Other laboratory tests may be ordered depending on actual or expected exposures and physician recommendations.

The individuals listed in the Site-Specific Plan organization chart will be certified to wear respirator protection in accordance with criteria from the ANSI Z88.2 and 29 CFR 1910.134.

2.6 RECORDS DOCUMENTATION:

Air monitoring data generated during the project will become part of the written record. Both medical and air monitoring data will be retained for the time period required by OSHA in various standards [29 CFR 1910.20(D)(i), 1910.20(D)(ii), 1910.1018, 1910.1025]. Training records are maintained in project files and on DCM's personal identification cards and are available for inspection at all times. Subcontractors are required to have similar documents available for inspection as required.

All personnel associated with work at a site will be required to sign a statement indicating that they have read, and will comply with the site safety plan. This signature page will also include information on their training and medical surveillance status.

3.0 HAZARD EVALUATION

3.1 CHEMICAL CONTAMINANTS:

Potential site contaminants at petroleum contamination sites include gasoline, gasohol, motor oil, fuel oils (including kerosene, diesel fuel), and aviation grade gasoline. These materials may exist as free product in soil or on groundwater, and/or as contaminants to soil and water, and/or in tanks, piping, and systems. Fuel products include materials in and around storage tanks, such as gasoline, kerosene, diesel, and their derivatives, xylene, toluene, benzene, tetraethyl lead (TEL), and lead.

3.2 PHYSICAL AND MECHANICAL HAZARDS:

Activities on site may include site visits, installation of free product recovery systems, installation of groundwater recovery systems, installation of soil venting systems, installation of biological treatment systems, installation of air strippers, installation of carbon absorption units, removal and installation of tanks, piping, and systems, and removal of contaminated soil.

Hazards associated with these activities are varied and include vehicle/pedestrian collisions, fire, collapse of excavation and trenching, handling of heavy materials and equipment operations resulting in contact and crushing type injuries, and use of air- and electrically-powered tools which may result in abrasions, contusions, lacerations, etc.

3.3 JOB HAZARD ANALYSIS AND RISK ASSESSMENT:

The chemical contaminants that may be present and the hazardous activities that may be performed at the site will be identified through preliminary site assessment activities, such as site visits or records search. Based on this preliminary information, initial risk assessments will be made by the Site Safety Officer, in consultation with a DCM Company Health and Safety Officer, defining hazards (both chemical and physical) to workers and other on site personnel, the surrounding populace, and the environment.

The identities of potential hazards and resultant initial risk assessments will be included in the Hazard Evaluation section of the Site-Specific Plan, will be reviewed daily, and will be updated as necessary by the Site Safety Officer. Updated information will be communicated to all other on site personnel immediately.

3.4 AIR-MONITORING:

An air-monitoring program is fundamental to the safety of on site and off site personnel. Total organic vapor (TOV) levels associated with on site activities will be monitored with a Photoionization Detection (PID) instrument (OVM or HNU PI-101). This instrument will be the primary source of information for upgrading personal protection. Calibration and maintenance of monitoring equipment will be in accordance with manufacturer recommendations.

The Site Safety Officer, or designee, will establish daily a background TOV prior to initiating on site activities. Under most circumstances, taking multiple readings at representative locations along the perimeter of the site and averaging the results of sustained measurements can determine this level. (A sustained measurement is defined as the arithmetic average of six readings taken at 10-second intervals) If, due to site conditions, it appears that perimeter readings will not yield a truly representative background level, the Site Safety Officer or the DCM Company Health and Safety Officer will be consulted for guidance.

Decisions to upgrade personal protection will be based on sustained breathing zone TOV that exceeds background levels. Breathing zone refers to the area from the top of the shoulders to the top of the head.

Explosivity levels associated with on site activities will be monitored with a combustible gas meter. This will be the primary source of information for determining the potential hazard due to explosion or fire in confined spaces and other enclosed areas with little or no ventilation.

Prior to entry of any area that may contain an explosive or flammable atmosphere, the Site Safety Officer or designee will take representative readings of the suspect area. Representative readings include readings from top, middle, and lower levels of the area, and at various points at each level in larger areas. Areas in which any one reading exceeds 20% of the lower flammable limit will be considered potentially explosive, and will be vented to below 20% of the lower flammable limit before the introduction of any personnel or non-explosion proof powered equipment.

4.0 PERSONAL PROTECTIVE EQUIPMENT

Personal protective equipment to be used at petroleum contamination sites will consist of several components. These components will protect the respiratory system, eyes and face, hands, feet, body, and head from a variety of chemical and physical hazards. Levels of personal protection will be categorized in accordance with the criteria described in accordance with the guidelines given in Section 3, Air Monitoring. Additional guidance for personal protective equipment can be found in the DCM Company Respiratory Protection Program, or can be obtained from the DCM Company Health and Safety Officer.

Action levels for upgrading to the various protective levels and levels of personal protection required for the various tasks to be performed on each site, as well as any special site requirements, will be given in the Personal Protective Equipment section of the Site-Specific Plan.

PERSONAL PROTECTIVE EQUIPMENT—LEVEL A

1. Open-circuit, pressure-demand, self-contained breathing apparatus (SCBA);
2. Totally encapsulated suit;
3. Gloves, inner (surgical type);
4. Gloves, outer, chemical protective;
5. Boots, chemical protective, steel toe and shank; and
6. Booties, chemical protective.

CRITERIA

1. Sites known to contain hazards which:
 - a. Require the highest level of respiratory protection (as previously stated),
 - b. Will cause illness as a result of personal exposure,
 - c. Permit a reasonable determination that personal exposure could occur to any part of the body; or
2. Sites for which the Project Manager and/or Site Safety Officer make a reasonable determination that, based on the lack of information to the contrary, the site may be described as previously stated.

PERSONAL PROTECTIVE EQUIPMENT—LEVEL B

1. Open-circuit, pressure-demand SCBA;
2. Chemical protective
 - a. Overalls and long-sleeved jacket, or
 - b. Coveralls;
3. Gloves, inner (surgical type);
4. Gloves, outer, chemical protective;
5. Boots, chemical protective, steel toe and shank; and
6. Booties, chemical protective.

CRITERIA

1. Sites known to contain hazards which:
 - a. Require the highest level of respiratory protection (as previously stated),
 - b. Will cause illness as a result of personal exposure.
 - c. Permit a reasonable determination that personal exposure to areas of the body not covered by Level B protective clothing is unlikely; and
2. Sites for which the Project Manager and/or Site Safety Officer make a reasonable determination that, based on the lack of information to the contrary, the site may be described as previously stated

PERSONAL PROTECTIVE EQUIPMENT—LEVEL C

1. Full face-piece, air-purifying respirator (high-efficiency particulate/organic vapor cartridges);
2. Emergency escape oxygen pack (carried);
3. Chemical protective (Tyvek is the minimum protection)
 - a. Overalls and long-sleeved jacket, or
 - b. Coveralls, or
 - c. Apron;
4. Gloves, inner (surgical type) (Latex);
5. Gloves, outer, chemical protective (Nitrile);
6. Boots, chemical protective (neoprene or NBR), steel toe and shank; and
7. Booties, chemical protective.

CRITERIA

1. Sites known to contain hazards which:
 - a. Do not require a level of respiratory protection greater than the level afforded by air-purifying respirators (nominal protection of 10), as previously stated;
 - b. Will cause illness as a result of personal exposure; or
 - c. Permit a reasonable determination that personal exposure to areas of the body not covered by Level C protective clothing is unlikely; and
2. Sites for which the Project Manager and/or Site Safety Officer make a reasonable determination that, based on the lack of information to the contrary, the site may be described as previously stated.

PERSONAL PROTECTIVE EQUIPMENT—LEVEL D

1. Long pants;
2. Steel toed boots/shoes, safety;
3. Safety glasses;
4. Hard hat with optional face shield (where overhead hazards exist); and
5. Air-purifying respirator (readily available).

CRITERIA

Sites where the Project Manager and/or Site Safety Officer make a reasonable determination that hazards due to exposure to hazardous materials are unlikely.

ADDITIONAL PERSONAL PROTECTION

In addition to personal protective equipment, field personnel having duties on or near the hazard site should have ready access to:

1. A fully stocked industrial-size first aid kit;
2. An eyewash kit; and
3. At least 6 gallons of potable water in a pressurized container to permit decontamination in event of accidental skin or eye contact with chemicals.

5.0 STANDARD WORK PRACTICES

5.1 GENERAL SAFETY RULES:

In addition to the specific requirements of the Site-Specific Plan, common sense should prevail at all times. The following general safety rules and practices will be in effect at the site.

1. The site will be suitably marked or barricaded as necessary to prevent unauthorized visitors, but will not hinder emergency services if needed.
2. All open holes, trenches, and obstacles will be properly barricaded in accordance with local site needs. Proximity to traffic ways, both pedestrian and vehicular, and site of the excavation, trench, or obstacle will determine these needs. If excavations that are required to be left open during non-working hours, they will be adequately covered or barricaded and sufficiently lighted.
3. Prior to conducting any digging or boring operations, underground utility locations will be identified. The site representative and local utility authorities will be contacted to provide locations of underground utility lines and product piping. All boring, excavation, and other site work will be planned and performed with consideration for underground lines.
4. Smoking and ignition sources in the vicinity of flammable or contaminated material are prohibited.
5. Drilling, boring, movement and use of cranes and drilling rigs, erection of towers, movement of vehicles and equipment, and other activities will be planned and performed with consideration for the location, height, and relative position of above ground utilities and fixtures, including signs, lights, canopies, buildings, and other structures and construction, and natural features such as trees, boulders, bodies of water, and terrain.
6. When working in areas where flammable vapors may be present, particular care must be exercised with tools and equipment that may be sources of ignition. All tools and equipment so provided must be properly bonded and/or grounded.
7. Approved and appropriate safety equipment, as specified in this site-specific HASP, such as eye protection, hard hats, foot protection, and respirators, must be worn in areas where required by the site-specific HASP. In addition, eye protection must be worn when handling free product, contaminated soil or water, or fill dirt.
8. Beards that interfere with respirator fit are not allowed within the site boundaries. This is necessary because all site personnel may be called upon to use respirator protection in some situations, and beards do not allow for proper respirator fit.
9. No smoking, eating, or drinking will be allowed in the contaminated areas.
10. Tools and hands must be kept away from the face.
11. Personnel must shower at the end of the shift or as soon as possible after leaving the site.
12. Each sample must be treated and handled as though it was extremely toxic.
13. Tank pit excavations must be sampled cautiously, using a remote sampling device or securing samples from excavated soil, and the pit should be entered only as a last resort and only if it is properly shored or sloped. The pit may meet the criteria for a confined space, in which case any entry must be made in accordance with NIOSH recommended Confined Space Entry Procedures. No confined space entry except by written procedure approved by the Health and Safety Officer.
14. Persons with long hair and/or loose-fitting clothing that could become entangled in power equipment are not permitted in the work area.
15. Horseplay is prohibited in the work area.
16. Working while under the influence of intoxicants, narcotics, or controlled substances is prohibited.

5.2 WORK LIMITATIONS:

HOURS

Work shall be limited to daylight hours and during normal weather conditions. Extremes in temperature and weather condition (i.e., wind and lightning) will restrict working hours.

HEAT STRESS

For monitoring the body's recuperative ability toward excess heat, the following techniques will be used as a screening mechanism. Monitoring of personnel wearing protective clothing will commence when the ambient temperature is 70 degrees Fahrenheit (°F) or above. When temperatures exceed 85°F, workers will be monitored after every work period. Monitoring will include visual observations for signs of heat stress and measurement of radial pulse rate for 30 seconds at the beginning of each rest period. If the heart rate exceeds 110 beats per minute (beats/min) at the beginning of a rest period, the next work period will be shortened by 10 minutes, and the rest period stays the same. If the pulse rate is 100 beats/min at the beginning of the next rest period, the following work cycle will be shortened another 10 minutes.

Also, good hygienic standards must be maintained by frequent change of clothing and daily showering. Clothing should be permitted to dry during rest periods. If skin problems occur, consult medical personnel.

COLD STRESS

The human body "senses" cold as a result of two factors, the air temperature and the wind velocity. Cooling of the flesh increases rapidly as wind velocity goes up. Frostbite can occur at relatively mild temperatures if wind penetrates the body insulation. For example, when the air temperature is 40°F and the wind velocity is 30 miles per hour (mph), the exposed skin would perceive an equivalent still air temperature of 13°F. Table 5-1 illustrates windchill indices and the associated hazards to exposed flesh. Precautions will be taken to minimize exposed flesh, and layered clothing will be provided, as appropriate.

Table 5-1.

Windchill Index

Windspeed (mph)	Actual Thermometer Reading (°F)									
	50	40	30	20	10	0	-10	-20	-30	-40
Calm	50	40	30	20	10	0	-10	-20	-30	-40
5	48	37	27	16	6	-5	-15	-26	-36	-47
10	40	28	16	4	-9	-21	-33	-46	-58	-70
15	36	22	9	-5	-18	-36	-45	-58	-72	-85
20	32	18	4	-10	-25	-39	-53	-67	-82	-96
25	30	16	0	-15	-29	-44	-59	-74	-88	-104
30	28	13	-2	-18	-33	-48	-63	-79	-94	-109
35	27	11	-4	-20	-35	-49	-67	-82	-98	-113
40	26	10	-6	-21	-37	-53	-69	-85	-100	-116

Source: National Safety Council, 1982.

5.3

ACCIDENT PREVENTION PLAN/ACCIDENT REPORTING:

The purpose of the Safety Plan is to prevent accidents and minimize the impact of an accident if one should occur.

All accidents must be reported to the Site Safety Officer immediately. Prompt reporting is essential to the prevention of future incidents in addition to the well being of the affected individual or individuals. The Site Safety Officer will notify the Project Manager of any serious accidents. The Site Safety Officer or other key members of the field team will be trained in first aid and CPR. First aid will be administered to affected personnel under the direction of the Site Safety Officer. For serious accidents, the nearest ambulance service will be contacted for transport of injured personnel to the nearest medical facility (see Section 6.0). The Site Safety Officer will have established contact and liaison with medical authorities (see Section 6.0) whose personnel will be knowledgeable of the activities of the field team. Telephone numbers and addresses of ambulance and medical services will be posted on site.

A formal report of any OSHA-recordable accident will be filed with DCM. All reports must be received within 2 working days.

5.4

WORK ZONES AND DECONTAMINATION PROCEDURES:

Work zones will be established in accordance with guidance provided in Figure 5-1. These zones may be modified to fit applicable field conditions; however, the Project Manager and Site Safety Officer prior to being implemented in the field must approve proposed modifications.

Personnel decontamination will be initiated on site. Disposable clothing will be removed and stored in designated containers. If additional decontamination is necessary, based on preliminary or subsequent risk assessment by the Site Safety Officer in consultation with DCM Company Safety and Health Officer, additional decontamination procedures will be implemented. Site-specific decontamination procedures will be listed in the Site-Specific Plan.

All heavy equipment will be decontaminated on site. Water in the form of steam cleaning and/or pressure washing may be used to remove any visual contamination from drilling and soil moving equipment.

5.5

SITE SECURITY AND ENTRY:

Site security measures, including barricading, fencing, and lighting, and any special site entry procedures will be described in the Section 5 of the Site-Specific Plan.

6.0 EMERGENCY INFORMATION AND CONTINGENCY PLANS

All emergency information, including phone numbers, site resources, and routes to emergency medical care, will be maintained on site in the Site-Specific Plan by each field team.

The phone list will include the following numbers:

AMBULANCE:
FIRE DEPARTMENT:
HOSPITAL (primary):
HOSPITAL (secondary):
POISON CONTROL CENTER:
POLICE:
TOXIC WASTE AND OIL SPILL:
CLIENT CONTACT:
AGENCY CONTACT:
PROJECT MANAGER:
COMPANY SAFETY AND HEALTH OFFICER:

The list of site resources will include fire extinguishers, first aid equipment, eyewash units, communications (telephone), emergency personal protective equipment, spill containment equipment and materials, and any other special equipment, supplies or resources.

6.1 INJURY CONTINGENCY PLAN:

First aid equipment will be kept on site during all site activities. Additionally, one member of the field team will be trained in first aid. Emergency telephone numbers for ambulance and poison control will be maintained on site in a readily accessible location. Names, addresses, and routes to two emergency medical care providers (hospitals or emergency clinics) will be verified prior to any site activity, and will be listed in the Site-Specific Plan. Maps showing the location of the site, the emergency medical care providers, and hotels and restaurants (if any) used by the field team should be provided in each vehicle. In the event of an injury that cannot be treated on site, the Site Safety Officer, Project Manager, and/or first aid provider will immediately transport the injured person to the medical provider either by support vehicle or ambulance on determination.

6.2 FIRE CONTROL AND CONTINGENCY PLAN:

No smoking will be allowed during field activities. Fire extinguishers will be available at sites for use on small fires.

All samples must be treated as flammable or explosive. The Site Safety Officer will have available the telephone number of the nearest fire station and local law enforcement agencies in case of a major fire emergency.

6.3 SPILL CONTROL AND CONTINGENCY PLAN:

In the event of a spill, the Site Safety Officer will be notified immediately. The important factors are that no personnel are overexposed to vapors, gases, or mists and that the liquid does not ignite. Waste spillage must not be allowed to contaminate any local water source. Small dikes will be erected to contain spills, if necessary, until proper disposal can be completed. Subsequent to cleanup activities, the Site Safety Officer will survey the area to ensure that no toxic or explosive vapors remain.

6.4**OFF SITE INCIDENT CONTINGENCY PLAN:**

The Site Safety Officer will provide field team members with emergency medical care information similar to that kept on site in event of an off site emergency, such as a motor vehicle accident, food poisoning, or other injury sustained off the site.

6.5**COMMUNITY THREAT CONTINGENCY PLAN:**

The potential for exposure to the surrounding community will be assessed in conjunction with the preliminary site assessment.

The Site Safety Officer will consult with a representative of the local emergency services agency (police or fire department, in accordance with local governmental procedures), and will outline procedures in the Site-Specific Plan to be followed in the event of an emergency threat to the surrounding populace. Situations requiring specified procedures include fire, explosion, accidental ingestion, large spills consisting of free product, and accumulation of potentially explosive vapors off site.

The Site-Specific Plan will identify individuals who will respond to reports of non-emergency community threats arising from site activities. This non-emergency response will include sampling of air, wells and ground water, and soil. Situations requiring specified procedures include small spills and presence of existing concentrations of potentially explosive vapors on site.

APPENDIX A
SITE-SPECIFIC
HEALTH & SAFETY
INFORMATION

DCM CONSTRUCTION & SERVICES, INC.

7172 Regional Street, No. 139

Dublin, CA 94568

Office (925) 803-6969 Fax (925) 803-1557

HASP APPROVAL

Project: 2530 Blanding Avenue

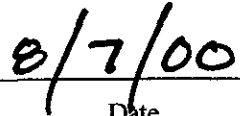
Site: 2530 Blanding Avenue

Project Number: 8040

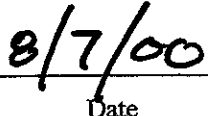
Site Location: Alameda, CA

We have reviewed the attached HASP for the above referenced site. We recognize that when this form is completed, the attached HASP is approved for field activities on the above referenced site. Changes to this HASP shall be documented in writing.


Project Manager Signature


Date


Site Health & Safety Officer Signature


Date

Signature of Client Reviewer

Date

Signature of Subcontractor

Date

DCM CONSTRUCTION & SERVICES, INC.

HASP ACKNOWLEDGEMENT

Project	Location	Project Number
2530 Blanding Ave.: UST Removal	2530 Blanding Avenue Alameda, CA	8040

Project Manager: Jay Carpenter
Supervisor/Foreman: John Catterall
Site Health & Safety Officer: Jay Carpenter

I acknowledge that I understand the requirements of the HASP, and agree to abide by the procedures and limitations specified. I also acknowledge that I have been given an opportunity to have my questions concerning the HASP and its requirements answered prior to performing field activities. Health and safety training, and medical surveillance requirements applicable to my field activities at this site are current and will not expire during on-site activities.

SIGNATURE

NAME

DATE

_____	_____	_____
_____	_____	_____
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_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

I have provided subcontractors who will be performing field activities on this site with a copy of this HASP. I have also informed the subcontractors that OSHA ' 29 CFR 1910.120 applies to their site field activities.

Project Manager Signature _____ Date _____

DCM CONSTRUCTION & SERVICES. INC.

EMERGENCY CONTACTS

Contact	Address	Phone Numbers
Police		911
Fire		911
EMR		911

MEDICAL FACILITIES

Primary Medical Facility: Alameda Hospital, 2070 Clinton Ave., Alameda, CA 94501
Route: Proceed northwest on Blanding Ave., turn left (west) on Park Street to Clinton Ave., and turn right Hospital on left.
Phone Number: (510) 522-3700
Secondary Medical Facility:
Route:
Phone Number:
*Route map attached

REGIONAL RESOURCES

Poison Control Center:
Chemtrec:
Waste Clean-up Contacts: DCM Construction & Service, Inc.

SITE RESOURCES

Equipment	Location
First Aid: Industrial First Aid Kit w/Eye Wash Kit	Foreman's Vehicle
Fire Control: ABC 5lb. fire extinguisher	Foreman's Vehicle

Transportation: Foreman's vehicle shall be in safe zone and available to transport injured to hospital

Communication: Verbal

Other:

EMERGENCY CONTACTS

	Phone Numbers
DCM John Catterall	(925) 803-6969, (925) 570-4636
DCM: Jay Carpenter	(925) 803-6969, (925) 570-4635
ACC: Dave DeMent	(510) 638-8400



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Welcome, jay_maxie

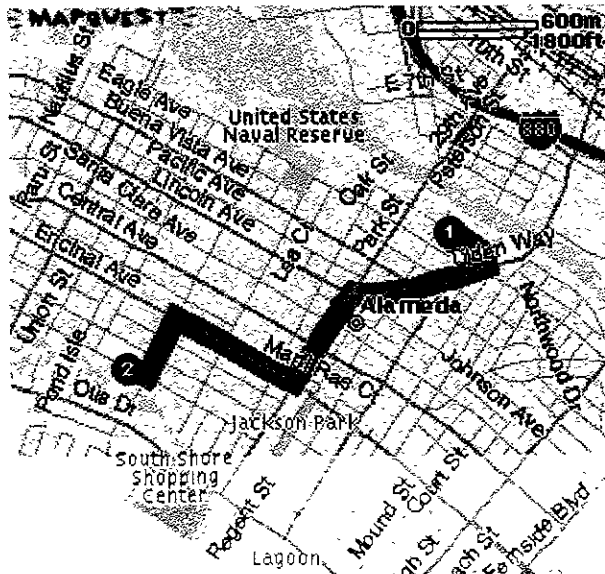
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[Email Directions](#) [New Location](#)

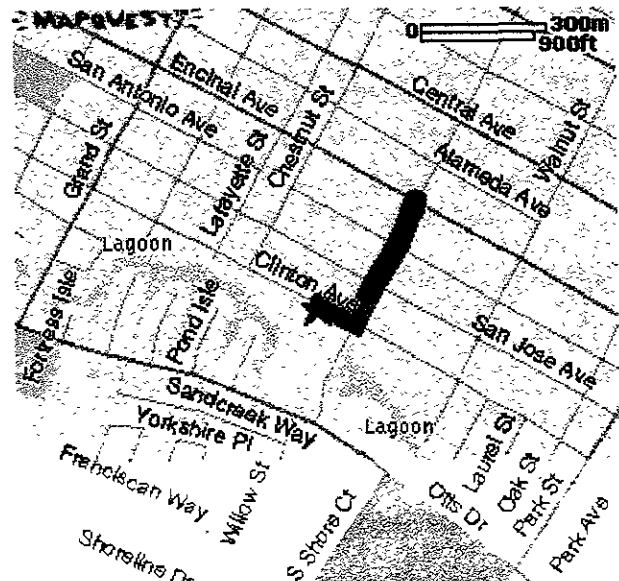
Starting From:	Arriving At:	Distance:	Approximate Travel Time:	
2530 Blanding Ave. Alameda, CA 94501- 1506	2070 Clinton Ave. Alameda, CA 94501- 4320	1.6 miles	4 mins	Reverse Driving Directions

- | Directions | Miles |
|---|-------|
| 1. Start out going Southeast on BLANDING AVE towards BROADWAY by turning right. | 0.2 |
| 2. Turn RIGHT onto TILDEN WAY. | 0.4 |
| 3. Turn LEFT onto PARK ST. | 0.3 |
| 4. Turn RIGHT onto ENCINAL AVE/CA-61. | 0.4 |
| 5. Turn LEFT onto WILLOW ST. | 0.2 |
| 6. Turn RIGHT onto CLINTON AVE. | 0.1 |



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Full Route



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Destination

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DCM CONSTRUCTION & SERVICES, INC.

ESSENTIAL ELEMENTS OF HASP

SITE CONTAMINANTS/MONITORING INFORMATION

FOR ALL IDENTIFIED OR SUSPECTED SITE CONTAMINANTS, PROVIDE THE INFORMATION REQUESTED.

Project Name: 2530 Blanding Ave.

Project Number: 8040

Date Completed: 8/05/00

CONTAMINANT NAME (SYNONYMS)	APPEARANCE AND PHYSICAL FORM	EXPOSURE LIMIT OSHA PEL (ppm)	ROUTE OF ENTRY	IDLH (ppm)	PID IONIZATION POTENTIAL	HEALTH EFFECTS ACUTE/CHRONIC	FIRST AID	PHYSICAL HAZARDS
Benzene	Colorless to light yellow liquid with aromatic odor.	1 (TWA) 5 (STEL)	Inhalation, Skin absorption, Ingestion.	3000	9.24	Carcinogen irritates mucous membranes, headache, fatigue, nausea, and	Irrigate and/or wash area immediately, medical attention.	Incompatible with strong oxidizers, flash point 12EF
Toluene	Colorless liquid with a sweet pungent odor.	100 (TWA) 150 (STEL)	Inhalation, Skin absorption, Ingestion.	2000	8.82	Dermatitis, narcotic effects.	Irrigate and/or wash area immediately, medical attention.	Incompatible with strong oxidizers, flash point 40EF.
Ethyl Benzene	Colorless liquid with an aromatic odor.	100 (TWA) 125 (STEL)	Inhalation, Ingestion, Skin contact.	2000	8.76	Irritates eyes and mucous membranes, dermatitis, narcotic effects.	Irrigate and/or wash area immediately, medical attention.	Incompatible with strong oxidizers, flash point 55EF.
Xylenes	Colorless liquid with an aromatic odor.	100 (TWA) 150 (STEL)	Inhalation, Skin absorption, Ingestion.	1000	8.56	Dermatitis, irritates mucous membranes, narcotic effects.	Irrigate and/or wash area immediately, medical attention.	Incompatible with strong oxidizers, flash point 63-81EF.
Lead	Metal; a heavy, ductile, soft gray solid.	50 ug/m ³ (TWA)	Inhalation, Skin contact and/or absorption, Ingestion.	700 mg/m ³	N/A	Insomnia, apathy, anorexia, constipation, abdominal pain, tremors, spasms.	Wash area immediately, respiratory support, medical attention	Incompatible with strong oxidizers, hydrogen peroxide, acids

DCM CONSTRUCTION & SERVICES, INC.

ESSENTIAL ELEMENTS OF A HASP (continued)

SITE CONTAMINANTS/MONITORING INFORMATION

FOR ALL IDENTIFIED OR SUSPECTED SITE CONTAMINANTS, PROVIDE THE INFORMATION REQUESTED.

Project Name: 2530 Blanding Ave.

Project Number: 8040

Date Completed: 8/05/00

CONTAMINANT NAME (SYNONYMS)	APPEARANCE AND PHYSICAL FORM	EXPOSURE LIMIT OSHA PEL (ppm)	ROUTE OF ENTRY	IDLH (ppm)	PID IONIZATION POTENTIAL	HEALTH EFFECTS ACUTE/CHRONIC	FIRST AID	PHYSICAL HAZARDS
Hydraulic Fluid	Liquid	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Carbon Monoxide	Colorless, Odorous gas	35 ppm	Inhalation	1500	14.01	Headache, dizziness, nausea	Move to fresh air, medical attention	Incompatible with strong oxidizers

DCM CONSTRUCTION & SERVICES, INC.

HAZARD EVALUATION AND CONTROLS

For each task to be performed on-site list any associated hazards and potential hazards.
For each task hazard or potential hazard, provide the control method and/or the level of protection that shall be used to control that hazard.

TASK	DESCRIPTION OF HAZARD	CONTROL METHOD
Remove UST	Equipment operation, open excavation, kerosene, paint thinner	Level D, fencing, no smoking

SITE CONDITIONS AND LEVELS OF PROTECTION

Specific Condition	Contaminants	PPE Level	Level of Protection or Action
UST Removal	Heating Oil	D	Normal - LEL/O ₂ Levels

Note: Monitoring Comments (e.g. Breathing Zone). Obtain pertinent Training Certificates and MSDS. Noise levels above 85 dba will require hearing protection. Historical data indicates heavy equipment operations exceed 90dba; therefore hearing protection will be required during use of Heavy Equipment. [29 CFR 1910.95.7]

Physical Hazard Control:	X	Excavation	X	Equipment	X	Noise Exposure
Chemical Hazard Control:	X	Level D PPE				
Personnel Protective Equipment:	X	Hard hats	X	Steel toed boots	X	Hearing/Eye protection as needed

DCM CONSTRUCTION & SERVICES, INC.

HAZARD EVALUATION AND CONTROLS (continued)

Site Control Methods and Procedures:

Monitoring Equipment:	PID --10.6 ev Lamp	FID	X	LEL/O ₂ meter	H ₂ S
Instrument Calibrated:	Daily	Date:	Documented:	Log book and/or field forms	
Instrument Calibrated:		Date:	Documented:		

Personnel and Area Monitoring Tasks and Frequency: Not Required

Personal breathing zone measurements periodically with OVM (10.6 ev Lamp). Upwind and downwind measurements every hour. Supervisor/Foreman shall document these measurements on each employee's Personnel Monitoring log.

Decontamination Procedures: Not Required

If contact with contaminants are made the following, decontamination procedures will be as follows:

- Station 1: Segregated equipment drops; drop equipment onto plastic liner.
- Station 2: Boot cover, outer garment, and outer glove, wash/rinse and removal; wash and rinse boot covers and discard into plastic bag. Wash and rinse outer gloves with detergent water and rinse. Remove outer gloves and discard into plastic bag for disposal.
- Station 3: Remove Inner Gloves: Remove inner gloves and discard in plastic bag for disposal. Inner gloves will not be reused.
- Station 4: Field Wash: Wash hands and face with tap water.
- Station 5: Dress.

Equipment Required: Two bristle brushes; two pressurized containers, one for TSP wash water and one for rinse water, plastic; containers for disposal of clothing and cartridges. Two tubs, one for TSP wash step and one for rinse step.

Site Specific Training: Site worker documentation will show they meet the training requirements. [29CFR 1910.120] Prior to starting fieldwork the Super./Foreman shall brief site workers on contents of this HASP and hazards and control of temperature extreme. Each DCM employee shall sign HASP acknowledgment form, and site-specific training log attached to hasp.

Site Specific Medical Requirements: Obtain pertinent MSDS's and Personnel Training Certificates.

APPENDIX B
CERTIFICATES
OF
TRAINING

APPENDIX C
MATERIAL
SAFETY DATA
SHEETS