



Remediation Work Plan

PDC Unocal #3
SWNW Section 9 – T6S – R96W
Garfield County, Colorado

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March 1, 2011

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Introduction

HRL Compliance Solution, Inc. (HCSI) was contacted by Petroleum Development Corporation (PDC) to perform soil remediation oversight at the Unocal 3 well pad located in Garfield County Colorado. This work plan presents the scope and details of the proposed remediation program that will be used to remediate the impacted soil around the tank battery.

Site Location

The Unocal 3 well pad is located near Garden Gulch in Garfield County, Colorado. Specifically, the well pad is located in the SWNW of S9-T6S-R96W of the 6th Prime Meridian. The site is located approximately 7.5 miles northwest of Parachute, Colorado. It is located east of County Road 215 and approximately 1000 feet east of Parachute Creek.

Background

PDC contacted HCSI on December 28, 2010 about a release from a condensate tank at the Unocal 3 well pad (spill #2523636).

The release occurred when a bushing on the oil tank where the dumpline is connected cracked, most likely due to cold weather, which allowed oil and water to leak out of the bushing and into the lined containment. The fluids were not contained due to the fact that the liner was not securely sealed around the dumpline where it protrudes through the liner and enters the containment ring. Because the steel containment was not properly sealed, the fluids leaked into the underlying soils beneath the lined containment. Approximately 110 bbls of oil and 10 bbls of water were released. None of the fluids were retained or recovered. No waters, surface or groundwater, were impacted as a results of this release.

Site Investigation

HSCI conducted further site investigation of the release on January 4, 2011 at the PDC Unocal 3 well pad. A total of 12 boreholes were drilled within and around the containment of the condensate and produced water tanks to determine the vertical and lateral extent of the release. Each borehole was drilled to a depth of approximately 45 to 50 feet below the ground surface (bgs). The site investigation map is presented as Appendix A.

Hydrocarbon impacts were observed in six of the twelve boreholes drilled. Field screen results indicate that the majority of the impacted area lies directly beneath the containment to a depth of approximately 45 to 50 feet bgs. No groundwater was encountered during the development of the boreholes. Field screen results also indicate that the contamination moved laterally at depth in a westerly direction of the containment. The extent of the impacted soil along the hillside to the west of the containment could not be characterized due to the steep slope of this area. Attached is a map with borehole locations and estimated impacted area.

An estimated 4450 cubic yards of hydrocarbon impacted soil will be treated using *in-situ* bioremediation techniques.

Bio-Remediation Activities

HCSI personnel will oversee the treatment that will be conducted by DeepEarth Technologies, Inc. (DTI). DTI is an environmental remediation company specializing in the use of the patented Cool Ox™ technology for *in-situ* and *ex-situ* cleanup of contaminated soils

Cool-Ox™ Technology

The patented Cool-Ox™ process is an *in-situ* (and *ex-situ*) bioremediation technology that combines controlled chemical oxidation with accelerated biodegradation subsequent to the oxidation phase. The process is based on using hydrogen peroxide as the generator of the oxidizing radicals. The Cool-Ox™ process generates hydrogen peroxides from solid peroxygens that are injected into the soil in as aqueous solution. Once in place, the peroxygens react with water to produce hydrogen peroxide which promotes bioremediation of petroleum hydrocarbons.

Once injected, the Cool-Ox™ solution remains in the impacted media for an extended period of time before undergoing hydrolysis. This long term production of oxidizers enhance the probability of the oxidizing compounds contacting the contaminants. This provides an ongoing source of molecular oxygen for the enhancement of aerobic microbial proliferation. The low solubility coupled with the buffered solution and the process taking place at a slightly basic pH eliminates the need to inject iron salts which is used to instill greater control over the process. The Cool-Ox™ process effectively treats hydrocarbons due to the controlled nature of the process and the slightly alkaline pH.

In addition, the Cool-Ox™ technology can also be used as an investigative tool for delineating hydrocarbon impacts in soil outside the immediate area of treatment. When hydrocarbons are encountered, the Cool-Ox™ reacts on the ground surface at the injection port and if no hydrocarbons are encountered, no Cool-Ox™ reaction will occur or show on the surface.

A Material Safety Data Sheet is attached as Appendix B.

Cool-Ox™ Implementation

The Cool Ox™ reagents will be injected directly into the subsurface soils to treat the impacted area *in-situ*. Injection ports are placed using coring machines and the injection tools are then introduced to the subsurface. The Cool-Ox™ will be applied to the impacted area to remediate the impacted soils to a depth of approximately 50 feet bgs.

When onsite, DTI personnel will determine the locations of the injection points. An estimated 47 injection points will be installed throughout the impacted area with a proposed 8 foot spacing between each point. Because the shape of the treatment zone is irregular, DTI will lay out a matrix at the beginning of site work to attempt to conform to site specifications. GPS mapping will be used to plot each injection point.

Previous applications of the Cool-Ox™ solution have been used using the Deep Shot Rig™. The Deep Shot Rig™ is a self-contained mixing and pumping system in conjunction with a direct push rig for the application of DTI's specific oxidation products. The direct push rig injects the Cool-Ox™ at evenly spaced locations throughout the impacted area to ensure thorough and complete distribution.

The Cool Ox™ process works very well in tight sands, silty sands and heavy clays. During the site investigation, it was observed that the soil beneath the tank battery consisted of fill to a depth of approximately 25 feet bgs. Sand and clay were observed between approximately 25 to approximately 50 bgs. A bedrock layer was encountered at approximately 50 feet bgs.

Work will be performed in accordance with the attached Health and Safety Plan, Appendix C.

Sampling and Analysis of Soil

The soils impacted at the Unocal 3 well pad are an E&P waste and as such their management must meet the requirements of Section 907 of the COGCC Rules and Regulations. Rule 907 a. (1) indicates that the primary responsibility of the operator is to protect the environment and to comply with Table 910.1, which provides regulatory limits for metals, organics, and inorganics in soil and water. Upon completion of the bio-remediation, the soils must meet the limits and testing requirements for soils. Any exceptions will be requested through the submittal of a Sundry Form 4 to the COGCC.

At a yet to be determined time, HCSI is proposing to contract Odell Drilling to drill a number of boreholes within the impacted area to determine the progress of the treatment. Boreholes will be drilled within the impacted area to a depth of approximately 50 feet bgs. Samples and field screens will be collected and logged from each borehole at five foot intervals.

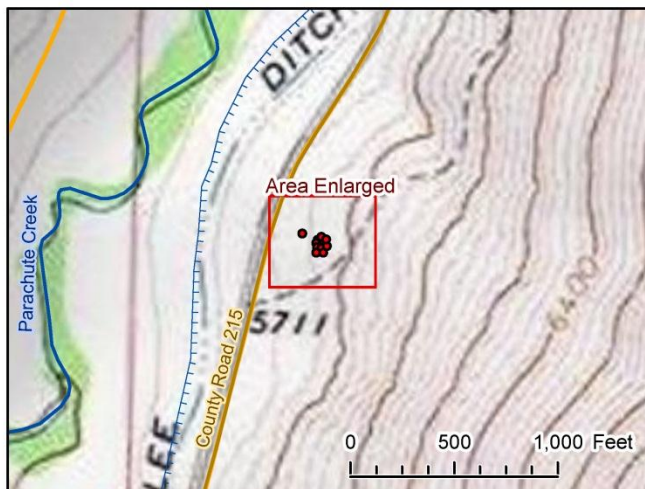
If field screen data indicates the hydrocarbon impacts have been remediated, confirmation samples will be collected and submitted to an accredited laboratory for analysis. The confirmation samples will be taken from separate locations throughout the treated area. The samples will be analyzed for Table 910.1 parameters. After confirmation analytical results are received, further action will be taken to either continue remediation or completion of the associated paperwork for project closure.

All sampling activities will be completed with the recommended protocol (sampling and shipping criteria) specified by the accredited laboratory, HCSI, PDC, and EPA.

Interim reports will be submitted throughout the remediation process. One report after the injection of the Cool-Ox™ treatment, summarizing the injection process. One after the investigative boreholes are drilled to determine the success of the Cool-Ox™ process. And a final summary report will be submitted upon completion of the project.

All activities in the field will be thoroughly documented. Documentation will include written records and photographs of the activities performed. GPS mapping will be used when applicable. Any and all safety measures will be taken to ensure the work is completed in accordance with applicable safety protocol specified by any federal, county, or entities.

Appendix A
Site Investigation Map



Site Investigation Map
Location: Unocal 3
 Petroleum Development Corporation

- Bore Hole Location
- Estimated Impacted Area



Appendix B
Material Safety Data Sheet



Material Safety Data Sheet

1. Chemical Product and Supplier Identification		
Product Name:	Cool-Ox™	Cool-Ox is a registered trademark of DeepEarth Technologies, Inc., all rights reserved.
Chemical Name:	Oxidizer	
Chemical Family:	Peroxygens	
Trade Names:	Cool-Ox™	
Formulator:	DeepEarth Technologies, Inc. 12635 South Kroll Drive Alsip, IL 60803	Toll free: 1-877-Cool-Ox-1 Emergency: 1-312-909-3667 1-850-206-3260
MSDS Number:	PB-01	
Issue Date:	January 1, 2010	
Patented Product:	This product is protected under USPTO Patent # 6,843,618	
2. Composition/Information on Ingredients		
Components:	Compound	CAS Number
	Calcium Peroxide	1305-79-9
	EDTA	60-00-4
	DTPA	67-43-6
	EDDHA	1170-02-1
	Potassium Phosphate	7778-77-0
	Ammonium Phosphate	7783-28-0
3. Hazards Identification		
Emergency Overview:	Oxidizer - Contact with combustibles may under extreme circumstances, cause fire. In fire, material decomposes, releasing oxygen that may intensify the fire.	
Potential Health Effects:	Irritating to the mucous membrane and eyes. If product contacts eyes and face, treat eyes first. Submerge contaminated clothing in water prior to drying. Do not dry near open flame or heat source.	
Inhalation:	At high concentrations, slight nose and throat irritation with cough. In case of repeated or prolonged exposure, there is a risk of sore throat and nose bleeds.	
Eye contact:	Severe eye irritation with watering and redness. Risk of serious or permanent eye lesions.	
Skin contact:	In case of prolonged contact; irritation.	
Ingestion:	Irritation of the mouth and throat with nausea and vomiting.	
4. First-Aid Measures		
Inhalation:	Remove the subject from dusty environment. Consult with a physician in case of respiratory symptoms.	
Eye contact:	Flush eyes with running water for 15 minutes, while keeping the eyelids wide open. Consult with ophthalmologist in all cases.	
Skin contact:	Wash the affected skin with running water. Remove and clean clothing. Consult with a physician in case of persistent pain or redness.	
Ingestion:	If the victim is conscious, rinse mouth and administer fresh water. DO NOT induce vomiting. Consult a physician in all cases.	

5. Fire-Fighting Measures	
Flash point:	Not applicable
Flammability:	Not applicable
Auto-flammability:	Not applicable
Danger of explosion:	Non-explosive
Common extinguishing methods:	Large quantities of water, water spray. In case of fire in close proximity, all means of extinguishing are acceptable.
Inappropriate extinguishing methods:	No restriction.
Special precautions:	Evacuate all non-essential personnel. Intervention only by capable personnel who are trained and aware of the hazards of the product. If safe to do so, remove unaffected product to a safe area.
Specific hazards:	Oxidizing substance. Oxygen released on exothermic decomposition may support combustion in case of surrounding fire. Pressure burst may occur due to decomposition in confined spaces/containers. Contact with flammables may cause fire or explosion.
Fire fighting instructions:	Personnel should wear full bunker gear and positive-pressure, self-contained breathing apparatus. Apply cooling water to sides of transport or storage vessels that are exposed to flames until fire is out. Do not approach hot vessels containing product.
6. Accidental Release Measures	
Precautions:	Observe the protection measures given in Sections 5 and 8. Avoid materials and products which are incompatible with the product (see Section 10). Avoid direct contact of the product with water. Immediately notify the appropriate authorities in case of reportable discharge.
Cleanup methods:	Collect the product with a means suitable to avoid dust formation. All the receiving equipment should be clean, vented, dry, labeled and made of material that is compatible with the product. Because of the contamination risk, the collected material should be isolated in a safe place. Clean the area with large quantities of water. For disposal methods, refer to Section 13.
7. Handling and Storage	
Handling:	Clean and dry process piping and equipment before any operation. Never return unused product to storage container. Keep away from incompatible products. Containers and equipment used to handle this product should be used exclusively for this material. Avoid any contact with water or humidity.
Storage:	Store in a dry area, protected from heat sources and direct sunlight.
Other precautions:	Warn personnel about the dangers of the product.

8. Exposure Controls/Personal Protection	
Engineering controls:	Provide ventilation in work areas to keep dust below the following applicable limits:
ACGIH TM TLV TM (1996) 5 mg/m ³ TWA	OSHA PEL Total dust - 15 mg/m ³ TWA Respirable fraction - 5 mg/m ³ TWA
	NIOSH REL (1994) 5 mg/m ³ TWA
ACGIH TM and TLV TM are registered trademarks of the American Conference of Governmental Industrial Hygienists.	
Eye/face protection:	Dust proof chemical goggles.
Hand protection:	Impervious protective gloves made of nitrile, natural rubber, or neoprene.
Skin protection:	For brief contact, few precautions other than clean body-covering, clothing should be needed. When prolonged or frequently repeated contact could occur, use protective, full body clothing impervious to this material.
Respiratory protection:	For many conditions, no respiratory protection may be needed; however, in dusty or unknown atmospheres use a NIOSH approved dust respirator.
Other precautions:	Safety shower and eyewash stations. Consult your industrial hygienist or safety manager for the selection of personal protective equipment suitable for the working conditions.
9. Physical and Chemical Properties	
Appearance:	White to pale amber powder
Odor:	Odorless
pH:	7 - 9 (saturated solution)
Melting Point:	527 °F (275 °C) - Decomposes
Vapor Pressure:	Not applicable
Vapor Density:	Not applicable
Boiling point:	Not applicable
Bulk Density:	0.5 - 0.65 g/mL (Loose Method)
Solubility in Water:	Moderate
10. Stability and Reactivity	
Chemical Stability:	Stable under certain conditions (see below).
Conditions to avoid:	Heat and moisture
Materials to avoid:	Water, Acids, Bases, Salts of heavy metals, Reducing agents, Organic materials, Flammable substances
Hazardous decomposition products:	Oxygen, hydrogen peroxide, steam and heat.
Hazardous polymerization:	Does not occur.

11. Toxicological Information	
Acute toxicity:	Oral route, LD ₅₀ , rat, 7340 mg/kg
Chronic toxicity:	No data
Irritation:	Rabbit (eyes), severe irritant
Sensitization:	No data
Target Organ Effects:	Eyes and respiratory passages.
12. Ecological Information	
Acute ecotoxicity:	Fish, Cyprinus carpio, 48 hours, LC ₅₀ , 25.6 mg/L
Chronic ecotoxicity:	No data
Mobility:	Low solubility and mobility.
Abiotic degradation:	Air - Not applicable Water - Slow hydrolysis Water/Soil - Complexation/precipitation Carbonates/phosphates present at environmental concentrations. Degradation products: carbonates/phosphates sparingly soluble.
Biotic degradation:	Not applicable
Potential for bioaccumulation:	Not applicable
Comments:	Observed effects are related to alkaline properties of the product. Hazard to the environment is limited due to the product properties a) No bioaccumulation. b) Weak solubility and precipitation as carbonate or phosphate in aquatic environment. c) rapid neutralization at environmental pH.
13. Disposal Considerations	
Waste Disposal Method:	Consult current federal, state and local regulations regarding the proper disposal of this material and its emptied containers.
14. Transport Information	
D.O.T. Proper Shipping Name:	Oxidizing substances, solid, n.o.s.
UN Number:	UN 1479
Hazard Class:	5.1
Label(s):	5.1 (Oxidizer)
Packing Group:	III
STCC Number:	4918717
Emergency Response Guide #:	140

15. Regulatory Information

TSCA Inventory List: Not Listed

CERCLA Hazardous Substance (40 CFR Part 302)

Listed substance: No
Unlisted substance: Yes
Reportable Quantity (RQ): Not Listed
Characteristic(s): Ignitability
RCRA Waste Number: D001

Sara, Title III, Sections 302/303 (40 CFR Part 355- Emergency Planning and Notification)

Hazard category: Eye and skin irritant
Threshold planning quantity: Not Listed

Sara, Title III, Sections 311/312 (40 CFR Part 370- Hazardous Chemical Reporting: Community Right-To-Know)

Extremely hazardous substance: No
WHMIS Classification: C Oxidizing Material
Material Causing Other Toxic Effects - Eye and skin irritant

Canadian Domestic Substances List: Listed, DSL/NDSL Record number - 3929

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

16. Other Information**HMISTM Rating:**

Health - 2 Flammability - 0 Reactivity - 1 PPE - Required

HMISTM is a registered trademark of the National Paint and Coating Association.

NFPATM Rating:

Health - 2 Flammability - 0 Reactivity - 1 OX

NFPATM is a registered trademark of the National Fire Protection Association.

Disclaimer

The information contained in this document is believed to be true and correct. However, the formulator makes no warranty, either expressed or implied, as to its authenticity, accuracy or to the use of this product and this document is subject to change or revision without prior notice.

Appendix C
Health and Safety Plan

INTRODUCTION

The purpose of this Site Safety and Health Plan (SSHP) is to provide health and safety procedures for personnel to follow while performing field activities associated with the remediation operations at: (the "Site"). This SSHP was prepared for use by DTI personnel. The health and safety protocols established in this plan are based on the site conditions and chemical hazards known and/or anticipated to be present at the Site. This document shall be included in and become a subordinate document to the Consultants H&SP.

Other contractors performing work at the Site are responsible for developing their own Health and Safety Plans that are to be followed for their specific work activity.

STANDARD OPERATING PROCEDURES

Personal Precautions

1. Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of hand-to-mouth turnover and ingestion of material is prohibited in any area designated as potentially being contaminated.
2. Hands and face must be thoroughly washed upon leaving the work area. (For the purposes of this SSHP, the Work Area is defined as the area within the property boundaries of the Site.)
3. Whenever decontamination procedures for outer garments are in effect, the entire body should be thoroughly washed as soon as possible after the protective garment is removed.
4. No facial hair that interferes with satisfactory fit of the mask-to-face seal is allowed on personnel who may be required to wear respirators.
5. Contact with contaminated or suspected contaminated surfaces should be avoided. Whenever possible, do not walk through puddles, leachate or discolored surfaces, kneel on ground, lean, sit or place equipment on drums, containers or the ground.
6. Medicine and alcohol can heighten the effects from exposure to toxic chemicals. Personnel should not take prescribed drugs while performing hazardous waste operations where the potential for absorption, inhalation, or ingestion of toxic substances exists, unless specifically approved by a qualified physician. Alcoholic beverage intake should be avoided throughout the duration of this project.
7. Site workers must be familiar with standard operating safety procedures and any additional instructions and information contained in the Site Safety and Health Plan.

8. Site workers must adhere to the information contained in the Site Safety and Health Plan, which can only be amended by the Site Safety Officer under the direction of the Project Manager.
9. Contact lenses cannot be worn when respirator protection is required or when the hazard of a splash exists. When the hazard of a splash exists, eye protection in the form of a full-face respirator, safety glasses or goggles must be worn.
10. Site workers will be aware of symptoms from exposure to toxic chemicals on-site and for heat or cold stress.
11. Respirators shall be cleaned and disinfected after each day's use or more often if necessary.
12. Prior to donning, respirators will be inspected for worn or deteriorated parts. Emergency respirators or self-contained devices will be inspected at least once a month and after each use.

Operations

1. If directed by the project manager, site workers must wear fire retardant protect clothing, hard hats, double gloves, disposable booties over steel-toed boots, hearing protection and respirators fit with particulate cartridges while working at the Site. If the contaminants of concern require special protective equipment, such personal protective equipment shall be designated by the Project Manager.
2. Site workers must be adequately trained and thoroughly briefed on anticipated hazards, personal protective equipment to be worn, safety practices to be followed, emergency procedures, and communications. An initial site safety meeting (pre-entry briefing) will be held prior to commencement of site investigation activities. In addition, follow-up meetings may be held as necessary.
3. All on-site workers must have documentation of their initial OSHA 40-hour training and yearly 8-hour refresher certificates prior to working on-site. One site worker will have completed the OSHA 8-Hour Hazmat Supervisor Training program. OSHA 40-hour training certificates of DTI. Personnel who are anticipated to be on-site are on file at DTI, 12635 So. Kroll Drive, Alsip, IL 60803. DTI on-site workers have received SafelandUSA training and carry on their person an official photo ID badge indicating they have completed the Safeland orientation.
4. Site workers should practice unfamiliar operations prior to performing the actual procedure.
5. Entrance and exit locations must be designated and emergency escape routes delineated when appropriate. Warning signals for site evacuation must be established.
6. Communications using radios, hand signals, or other means must be maintained between initial

entry members at all times. Emergency communications should be prearranged in case of radio failure, necessity for evacuation of site, or other reasons.

7. Personnel and equipment in the contaminated area should be minimized, consistent with effective site operations.
8. Work areas for various operational activities must be established.
9. Procedures for leaving a contaminated area must be planned and implemented prior to going on-site. Work areas and decontamination procedures must be established based on expected site conditions.
10. Frequent and regular inspections of site operations will be conducted by DTI. to ensure compliance with the Site Safety and Health Plan. If any changes in operation occur, this Site Safety and Health Plan must be modified to reflect changes.
11. All electrical equipment (power tools, extension cords, instruments, radios, etc.) shall conform to the appropriate section of OSHA 29 CFR 1926.400 Subpart K.
12. Fire prevention and protection (appropriate signs for flammable liquids, smoking areas, storage areas of combustible or flammable materials, etc.) shall be in accordance with OSHA 29 CFR 1926.150 Subpart F.
13. Prior to any intrusive activities, appropriate utility companies will be contacted so that the utility companies can determine if they have any underground utilities at the site. In addition, the site owner will be asked to provide all information in their possession on any underground utility or object.
14. If any unexpected tank, pipe, wiring or other potentially dangerous unexpected object is encountered while drilling or excavating, drilling or excavating will be stopped, and the hole consultant notified until the necessary precautions can be taken to investigate the situation.

EMPLOYEE SAFETY TRAINING AND MEDICAL SURVEILLANCE

All DTI employees working at the site have completed the 40-hour safety training required by OSHA, 29 CFR 1910.120(e), three days of field experience and an 8-hour refresher course, if necessary. Copies of appropriate training certificates for OSHA 29 CFR 1910.120(e) and 8-hour refresher courses for DTI, Inc. personnel are on file at DTI, Inc., 12635 South Kroll Drive, Alsip, Illinois.

DTI has a medical surveillance program that conforms to 29 CFR 1910.120(f). All personnel enrolled in the medical monitoring program have undergone a baseline physical examination prior to any hazardous materials site work. Annual examinations are performed following the baseline examination. No site-specific medical surveillance is planned for this site.

CHEMICAL COMPOUND AND HEALTH RISK

The chemical compounds which potentially will be encountered at the site during injection and sampling activities generally include CVOCs.

AIR MONITORING

When the project manager deems necessary, workers will wear respirators while working with the soil. The respirators will be fit with particulate and/or solvent filter cartridges to prevent ingestion and/or inhalation of air-borne particulates.

PERSONAL PROTECTIVE EQUIPMENT

Due to site activities, skin absorption, inhalation, and ingestion of hazardous substances although unlikely, could be possible. Therefore, at the time of commencement of the work the appropriate level of personal protection equipment (PPE) required will be determined.

ON-SITE SAFETY EQUIPMENT

Specific safety equipment will be available on-site during all activities. A first aid kit meeting the requirements of 29 CFR 1926.50 will be located in the field vehicle. Clean water shall be available in the field vehicle in a sufficient quantity to rinse eyes and skin. Any personal protective equipment required by this SSHP will be brought on-site and made available to all personnel involved in the site work. Fire extinguishers will be available at the field vehicle should the need arise for their use.

PERSONAL AND EQUIPMENT DECONTAMINATION

A partial or complete decontamination may occur. Partial decontamination may occur when leaving a temporary exclusion zone (i.e., excavation/sampling location). Complete decontamination will occur prior to leaving the site or entering the site office. Standard decontamination procedures will be followed to ensure that cross contamination does not occur and no contaminants leave the site via personnel or equipment.

EMERGENCY RESPONSE PLAN

The purpose of this emergency response plan is to identify roles of authority and general procedures to respond to an emergency situation. Generally, the objective of any emergency response will be to 1) ensure the safety of the personnel on-site; 2) notify the appropriate emergency contacts of the nature of the emergency; and 3) if it is determined by the site supervisor to be appropriate and safe, to try to stabilize the emergency conditions.

Pre-emergency Planning

Before beginning work on the site and again at the pre-entry briefing, all individuals will be informed about emergency procedures, including emergency phone numbers, the route to the hospital and accident reporting procedures.

Roles of Authority

For site operations, roles of authority have been established to determine persons responsible for decisions concerning activities. The order of authority is as follows:

Project Manager:	Wes Wiley
Safety Officer:	Wesley Wiley
Site Supervisor:	James Gainey.

During an emergency, communication will flow from the Project Manager (PM) (or the highest available person in the order of authority). The PM will designate a person to telephone the appropriate emergency contacts. Other individuals will be responsible for ensuring that all on-site personnel are aware of emergency conditions and have properly evacuated the area, if appropriate.

Emergency Recognition and Prevention

The key to prevention of emergency situations is to perform good planning of activities prior to site entry and to follow the Site Safety and Health Plan. Should an on-site emergency develop, the authority in charge will determine proper procedures to follow, depending on the conditions of the emergency. The safety officer will designate personnel to contact the agencies needed to respond (i.e., fire department, police, ambulance, etc.). Procedures performed to resolve the emergency will be designated to personnel by the authority in charge to ensure that said authority is on-site for the duration.

In the event evacuation of the remediation location is necessary, personnel should be decontaminated, if possible. However, personal safety is the overriding priority. Personnel should move upwind and a sufficient distance (minimum 100 feet) from the source of concern which necessitated the evacuation.

Emergency Alerting and Response Procedures

In the event that personnel exposure to chemical products occurs, the following procedures should be used:

1. Eye Contact: Flush eye(s) immediately with a copious amount of water. Water will be available in the field vehicle. Repeat until irritation is eliminated. If irritation occurs for more than 15 minutes, take person to hospital emergency room.
2. Skin Contact: Wash affected area with clean water and soap. If irritation or severe reddening occurs, take person to hospital emergency room.
3. Inhalation: Move person into fresh air upwind from contaminant source. If any symptoms of the exposure occur for more than 15 minutes, take person to hospital emergency room.
4. Ingestion: Do not induce vomiting, take person to hospital emergency room.

In case of an evacuation, personnel should decontaminate to the extent possible, taking into account the urgency of the conditions causing the evacuation, and immediately evacuate the facility. Should extremely urgent evacuation be called for, personnel may move away from the problem in an upwind or crosswind direction to reach a safe distance. In the event of emergency and/or evacuation, the appropriate emergency contacts (listed on the attached “Site Safety Hot Sheet”) should be made.

Emergency Medical Treatment and First Aid

In the event of a medical emergency, a person will first be identified who will have the responsibility to call for an ambulance and the fire department. Emergency first aid will be administered by the site supervisor or other qualified on-site person. The objective of the emergency first aid is to stabilize the patient until an ambulance arrives.

Emergency Equipment

Equipment on-site will include the personal protective equipment and safety equipment discussed above. Emergency response actions called for in this plan are to ensure the safety of the employees at the site and notify appropriate emergency contacts of the emergency. No specialized equipment is necessary for these functions.

Local Emergency Contacts

See attached “Site Safety Emergency Hot Sheet”

SITE SAFETY EMERGENCY HOT SHEET

Under no circumstances should anyone transport an injured person to a hospital or trauma center. Transport should only be done by an ambulance and under the supervision of their trained personnel.

Ambulance	911
Fire Dept.	911
Poison Control Center	(800) 942-5969
DTI	(877) 266-5691
Local Hospital/Trauma Center:	See Consultant H&SP
Telephone:	See Consultant H&SP
See attached map	See Consultant H&SP