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REPORTS

DATE:

July 24, 2000

PHILIP ENVIRONMENTAL SERVICES CORPORATION
SITE SPECIFIC HEALTH AND SAFETY PLAN

Giant Industries Arizona, Inc.
Bloomfield Station Remediation
Bloomfield, New Mexico

Project #: 62800256
July 24, 2000

Philip Environmental Services Corporation
Industrial Services Group – Western Region
4000 Monroe Road
Farmington, NM 87401
(800) 326-2262

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1. INTRODUCTION

This Site Health and Safety Plan (HASP) has been developed to provide for a safe work environment for the contracted work to be performed for Giant Industries Arizona, Inc (Giant) in Bloomfield, New Mexico by Philip Environmental Services Corporation (Philip). Philip is contracted to perform non-hazardous waste remediation at Giant's Bloomfield Station.

This HASP is developed in accordance with Occupational Safety and Health Administration Standards, 29 CFR 1910.120 - Hazardous Waste Operations and Emergency Response, and applicable sections of 29 CFR 1910, 1926, and U. S. Environmental Protection Agency (USEPA) regulations.

The HASP establishes protocols that will minimize hazards to personnel performing the field activities, the environment, and the general public. The plan describes the site, scope of work, potential chemical and physical hazards, personal protective equipment, atmospheric monitoring requirements, decontamination procedures, emergency response procedures, medical surveillance program, personnel training requirements, and site control practices.

2. SITE DESCRIPTION

Philip will be performing remediation activities at Giant's Bloomfield Station located in a residential area in Bloomfield, NM. The site is completely fenced and will be monitored continuously to minimize entry by unauthorized personnel. Remediation activities will include installing two monitoring wells and excavating hydrocarbon impacted soil for disposal at Giant's landfarm located on the Bisti.

3. SCOPE OF WORK

Giant has contracted Philip to install two groundwater monitoring wells and abandon one groundwater monitoring well at its Bloomfield Station. The new wells will be developed and the groundwater sampled for the analyses stated in the New Mexico Oil Conservation Division's (NMOCD) letter to Giant dated May 19, 2000. In addition, Philip will excavate hydrocarbon-impacted soils and transport them to Giant's landfarm located on the Bisti for treatment. Impacted soils will be remediated to the NMOCD standards. At the completion of the above mentioned activities, Philip will submit to Giant a comprehensive report summarizing the investigation and remediation activities including conclusions and recommendations.

Air monitoring will be conducted at the perimeter of the site as well as onsite for vapor emissions generated during excavation activities to warn against exposure to the public and workers. Exposure limits for the contaminants of concern are listed in the Chemical Hazard Analysis section of this HASP. Actions to be taken if vapor emissions become elevated above the specified limits are discussed in the Ambient Air Monitoring section of this HASP.

Because the work site is in a residential area, Philip will take care to ensure that there is no exposure to the public.

Wind direction will be monitored constantly by the use of a wind sock. Down wind perimeter monitoring will be completed using 1) a photo-ionization detector that records concentrations of volatile constituents every 15 minutes and 2) a combustible gas indicator. The alarms on the safety monitoring equipment will be set to the action levels described in this plan. Data from perimeter monitoring will be maintained in the project files for a minimum of five years.

In the event that action levels are exceeded at the perimeter of the site, work will cease and the material from where the emissions are emanating will be covered with soil until conditions change or engineering controls can be implemented to mitigate concerns.

Extra care will be taken to ensure that site access is controlled. Gates will be kept locked at all times unless they are being used.

4. ORGANIZATIONAL STRUCTURE AND RESPONSIBILITIES

All Philip employees working on this project are expected to follow the safety protocols and organizational structure established by Philip's health and safety program and this site specific HASP. They will maintain vigilance at all times to ensure that the work is conducted in a safe and environmentally responsible manner. Subcontract employees are required to be oriented to the HASP and comply with the procedures covered in this document.

4.1. Philip Health and Safety Department

Philip's health and safety department has the responsibility and authority to oversee the development and implementation of this HASP, and to audit the equipment and training of the individuals working on this project. The project may not start without the approval and acceptance of this HASP by the Philip health and safety department. **Martin Nee**, Farmington Operations Manager, will oversee this project, and will act as the direct safety department contact for the duration of the job.

4.2. Project Manager

Robert Thompson is the designated project manager for this project. He is responsible for overall administration of the project for Philip. His duties include project planning, budgeting, communications, and operations coordination. The project manager is also responsible for the overall implementation of the HASP, and it is his responsibility to ascertain that the HASP is communicated to, understood by, and signed by the client, subcontractors, and all employees involved with this project.

Additional responsibilities of the project manager include: 1) project planning, 2) scheduling, 3) site documentation, 4) regulatory compliance, 5) personnel assignments, and 6) customer and subcontractor relations. Any or all of the project managers' responsibilities may be delegated to the project supervisor as is necessary during the course of the project.

4.3. Project Supervisor

Mike Hare or his designated representative is the project supervisor for the job. He or his designated representative is responsible for implementation of this HASP, and all on-site activities on a daily basis. His other responsibilities include, but are not limited to: 1) project planning, 2) scheduling, 3) site documentation, 4) regulatory compliance, 5) personnel assignments, and 6) customer and subcontractor relations. The project supervisor reports directly to the project manager or his designated representative.

From time to time, the project supervisor may delegate all or part of his responsibilities to experienced field personnel who will assume on-site project control in the absence of the project supervisor.

4.4. Site Health and Safety Officer

Mike Hare will be the site health and safety officer for the job. He is responsible for verification and overall compliance with this HASP.

His duties include, but are not limited to: 1) direction of the site monitoring to determine appropriate levels of PPE, 2) site surveillance, hazard identification, and health risk analysis, 3) implementation of procedures and programs to eliminate risk to site personnel, 4) implementation of site control measures, 5) conducting daily health and safety meetings, 6) verifying that all Philip site personnel understand the terms and conditions of this health and safety plan, and 7) HASP documentation. The site health and safety officer reports directly to the project manager.

4.5. Field Technicians and Equipment Operators

Field technicians and equipment operators use excavation machinery, take samples of soil and groundwater, and install and operate remediation equipment. They work under the direction of the project manager and operations manager. Field technicians and equipment operators receive extensive training in hazardous waste operations protocol and procedures.

4.6. Giant Project Manager

The designated Giant project manager for this project will be **Tim Kinney**. He is responsible for overall administration of the project for Giant. His duties include

project planning, inter-company communication, and direction of operations through Philip operations.

5. SITE HAZARD CHARACTERIZATION

As required by 29 CFR 1910.120 (c), all site personnel shall be aware of the nature, level, and potential degree of exposure as a result of participation in these field activities. All personnel shall be advised of and fully understand these conditions before entering the project site. **Prior to commencing work, a job task safety analysis must be performed. Forms to assist in this hazard analysis and control are provided in Appendix B.**

5.1. Chemical Hazard Analysis (Wastes)

Chemical hazards consist primarily of potential exposure to organic vapors and crude oil. Some areas could contain solidified wastes, which might indicate semi-volatile compounds. Common exposure routes for organic vapors are: inhalation, ingestion, and absorption. This waste may be designated as non-hazardous waste as relating to environmental regulations; however, these wastes contain many petroleum constituents, including low levels of benzene, toluene, ethyl benzene, xylene (BTEX), and other semi-volatile compounds (crude oil).

However, the likelihood of exposure to any of the BTEX volatiles or crude oil is highly unlikely, especially if good work practices are maintained. Monitoring requirements and action levels for total airborne organic vapors shall be consulted for PPE upgrading. High concentrations of contaminants can create a fire or explosion hazard. Monitoring requirements and action levels for total airborne organic vapors shall be consulted for PPE upgrading. The following is a brief summary of the hazardous constituents of crude oil and the organic constituents (BTEX):

5.1.1. Crude Oil

TLV/PEL.....None Established

PROPERTIES: Dark brown/black liquid with hydrocarbon/sulfide odor.

TARGET ORGANS: May cause severe eye irritation, conjunctivitis, moderate skin irritation, defatting, dermatitis, nasal and respiratory tract irritation, central nervous system effects, possible secondary infection, anemia, irregular heart rhythm and behavioral changes. Can be harmful or fatal if swallowed.

SAFETY PROFILE: Product will release flammable vapors which can burn in open or be explosive in comfined space. Improper use of water may cause frothing and spread fire over larger area. Vapor or gas may spread to distant ignition sources and flashback. Fires should be extinguished with foam, dry chemical, halon and carbon dioxide. Crude oil

has a flash point of –40 degrees to 200 degrees F. Avoid strong oxidizing agents (peroxide, dichromate, permanganate, chlorine, etc.), strong acids, caustics and halogens. Symptoms include eye irritation, redness, tearing, blurred vision, skin irritation, cracking, redness, itching, inflammation, excitation, euphoria, contracted eye pupils, dizziness, drowsiness, fatigue, nausea, headache, loss of reflexes, tremors, convulsions, seizures, loss of consciousness, coma, depression, diarrhea and vomiting.

EMERGENCY FIRST AID: Upon eye exposure wash eyes immediately with large amounts of water for at least 15 minutes. Skin should be washed thoroughly with mild detergent and water, be sure to wash hands before eating or smoking. Remove contaminated clothing promptly. Upon inhalation of large amounts of crude oil volatiles remove victim to fresh air and treat symptomatically. Perform artificial respiration if necessary and seek medical attention. Upon ingestion, do not induce vomiting. Give vegetable oil and seek medical attention immediately.

5.1.2. Benzene

TLV:	1 ppm
STEL:	5 ppm
IDLH:	500 ppm

PROPERTIES: Clear, colorless, flammable, aromatic, liquid.

TARGET ORGANS: Benzene is primarily an inhalation hazard, but under certain conditions skin absorption can be a significant route of entry into the body. Repeated skin rashes, blisters and dermatitis.

SAFETY PROFILE: Confirmed human carcinogen producing myeloid leukemia, Hodgkin's disease and lymphomas by inhalation. A human poison by skin contact. Moderately toxic by ingestion. A severe eye irritant. A dangerous fire hazard when exposed to heat or flame. To fight fire, use foam, carbon dioxide or dry chemical. The central nervous system anesthetic action of benzene is similar to that of other anesthetic gases, consisting of a preliminary stage of excitation followed by depression and if exposure is continued, death through respiratory failure. Signs of exposure include fatigue, headache, dizziness, nausea and loss of appetite.

EMERGENCY FIRST AID: Irrigate eyes immediately, wash skin with soap and water, provide respiratory support following inhalation and seek medical attention immediately. Seek medical attention immediately following ingestion.

5.1.3. Ethylbenzene

TWA:	100 ppm
STEL:	125 ppm

IDLH: 2,000 ppm

PROPERTIES: Clear, aromatic, flammable, liquid.

TARGET ORGANS: Central nervous system, skin, eyes and upper respiratory system.

SAFETY PROFILE: Moderately toxic by ingestion and intraperitoneal route. Mildly toxic by inhalation and skin contact. A teratogen. A very dangerous fire and explosion hazard when exposed to heat or flame; can react vigorously with oxidizing materials. To fight fire, use foam, carbon dioxide, or dry chemical. Exposure symptoms are similar to benzene exposure.

EMERGENCY FIRST AID: Irrigate eyes immediately, wash skin with soap and water, provide respiratory support following inhalation and seek medical attention immediately. Seek medical attention immediately following ingestion.

5.1.4. Toluene

TLV: 50 ppm
STEL: 150 ppm
IDLH: 2,000 ppm

PROPERTIES: Clear, aromatic, flammable, liquid.

TARGET ORGANS: Central nervous system, eyes, blood, gastrointestinal tract, liver, kidneys and skin.

SAFETY PROFILE: Moderately toxic by intraperitoneal route. Mildly toxic by ingestion and inhalation. A teratogen. A common air contaminant. A very dangerous fire and explosion hazard when exposed to heat or flame; can react vigorously with oxidizing materials. To fight fire, use foam, carbon dioxide, or dry chemical. Exposure symptoms are similar to benzene exposure.

EMERGENCY FIRST AID: Irrigate eyes immediately, wash skin with soap and water, provide respiratory support following inhalation and seek medical attention immediately. Seek medical attention immediately following ingestion.

5.1.5. Xylene

TLV: 100 ppm
STEL: 1,000 ppm

PROPERTIES: Clear, aromatic, flammable, liquid.

TARGET ORGANS: Central nervous system, eyes, blood, gastrointestinal tract, liver, kidneys and skin.

SAFETY PROFILE: Moderately toxic by intraperitoneal route. Mildly toxic by ingestion and inhalation. A teratogen. A common air contaminant. A very dangerous fire and explosion hazard when exposed to heat or flame; can react vigorously with oxidizing materials. To fight fire, use foam, carbon dioxide, or dry chemical. Exposure symptoms are similar to benzene exposure.

EMERGENCY FIRST AID: Irrigate eyes immediately, wash skin with soap and water, provide respiratory support following inhalation and seek medical attention immediately. Seek medical attention immediately following ingestion.

5.2. Physical Hazard Analysis

The following potential physical hazards have been identified at the work site:

- Underground and overhead utility and electrical hazards
- Excavation hazards
- Confined space entry (excavations)
- Material handling hazards
- Manual labor exhaustion and associated first aid problems
- Tripping and slipping hazards
- Site equipment traffic
- Insect and snake bites
- Temperature stress and exhaustion
- TWA noise exposures which exceed 85 dBA (slow response)

Prior to performing work these hazards must be identified and controlled. Use of the Task Safety Analysis Sheets in Appendix B must be completed for the following tasks: general site work-noninvasive activities, excavation and loading of soils, decontamination, and sampling. Each of the above mentioned physical hazards must be identified and controlled for each of these tasks.

6. SITE CONTROL PROGRAM

During waste handling, all non-essential personnel shall remain out of the work area. Operations shall occur in downwind areas where feasible. The work area boundary is defined as the area where site contaminates and/or airborne contaminates are adequately protected from leaving the work zone and entering an otherwise public area. This area must be in sufficient size as to allow workers enough room to properly perform their work. The work area will encompass any confined spaces or excavations within them as to include them as part of the regulated work area.

6.1. Exclusion Zone

The exclusion zone contains any area(s) of potential contamination relating to the hazardous substances described above. All personnel entering the exclusion zone shall wear the prescribed PPE for the tasks they are to perform in that area as well as meet the training and medical surveillance requirements specified in this HASP.

The overall size and perimeter of the exclusion zone for each remediation area will be determined by the site health and safety officer based on the potential for airborne contamination and airborne chemical hazard assessments. The perimeter of the zone will be established following an on-site analysis of the planned work activities, current weather conditions, the physical features of the work site, and the principal contaminants of concern. There will be no smoking, drinking, or eating within the exclusion or contaminant reduction zones.

6.2. Contaminant Reduction Zone

The contaminant reduction zone is where hazardous substances are removed from site personnel and their protective equipment. Access to the contamination reduction zone from the clean zone is through control points. There will be no smoking, drinking, or eating within the exclusion or contaminant reduction zones.

6.3. Clean Zone

The clean zone is a non-contaminated area where support services, storage of non-hazardous materials and administrative activities generally occur. Clean zones will be equipped with potable water, first aid kits, safety equipment, and supplies of clean PPE. The clean zone shall be equipped with hand/face washing facilities and sanitary toilet(s).

6.4. Site Visitors and Inspections

Visitors to the sites will sign in with the site safety officer and/or project supervisor. The project supervisor and site health and safety officer will be consulted prior to visitors being permitted to enter the restricted work areas. Visitors will be escorted by a Philip representative at all times while at the site and a visitors log book will be kept by the site health and safety officer. Visitors

must meet the training, medical surveillance, and personal protective equipment requirements specified in this health and safety plan and 29 CFR 1910.120 prior to gaining access to the restricted work area. Local, state, and federal inspectors will also be required to meet the HASP requirements for site visitors prior to gaining access to the restricted work area.

6.5. Health and Safety Audits

In order to ensure compliance with regulatory requirements, 29 CFR 1910.120, the HASP, and specified procedures in the work plan, Philip's health and safety department may audit this work site as part of the Philip regulatory compliance program.

7. TRAINING AND INFORMATIONAL REQUIREMENTS

Before work on this site begins, and when visitors are to enter the site to perform work in or near the work zones, all involved personnel will be briefed on this site-specific HASP. This briefing will be conducted by the site health and safety officer or by a designated member of the health and safety department. This training will focus on the potential hazards present at the site and the health and safety procedures specific to this project. The training will include, but not be limited to, the following:

- Project introduction and orientation
- Station specific requirements and procedure
- Standard health and safety operating procedures
- Site characteristics and potential chemical and physical hazards
- Hazardous chemical communication
- Employee rights and responsibilities
- Rules and regulations concerning vehicle use
- Health and safety plan authorization and signatures
- Use of field equipment
- Handling, storage, and transportation of hazardous materials
- Use, care, and limitations of personal protective equipment
- Sampling techniques, and precautions
- Air monitoring purpose, methods, and interpretations
- Decontamination procedures
- Accident and emergency response procedures

All personnel attending this meeting will sign the "HASP Acceptance Form" in Section 14.

7.1. Hazardous Waste Operation Training

Documentation of training for all employees will be kept on file in the project trailer. All employees and site personnel entering the exclusion zone shall be trained in compliance with 29 CFR 1910.120(e) as follows:

Workers engaged in this hazardous waste operation will have a minimum of 40 hours of off-site instruction (or its equivalent) and three days of actual field experience under the supervision of a trained, experienced supervisor. In addition, they shall have annual eight-hour refresher training.

Supervisors and managers engaged in this hazardous waste operation shall have received the training equivalent to the workers they supervise plus an additional 8 hours of specialized training.

Equipment and transport vehicle operators engaged in this hazardous waste operation shall have a minimum of 40 hours of off-site training and three days actual experience under the supervision of a trained, experienced supervisor. Truck drivers will have a B-class Department of Transportation license or higher with a hazardous waste transporter endorsement.

Workers occasionally on site for certain limited tasks within the exclusion or contaminant reduction zones, who are unlikely to be exposed to hazardous substances over published permissible exposure limits, shall have a minimum of 24 hours of off-site training and one day of actual field experience under the direction of a trained and experienced supervisor.

7.2. American Red Cross Certification

Philip employees receive annual American Red Cross CPR instruction and certification in the proper first aid skills for adult victims of cardiac arrest, choking, and respiratory emergencies. American Red Cross training and certification for standard first aid to treat bleeding, burns, shock, poisoning, injuries to bones, muscles and joints, and other injuries is provided every three years. At least one person on site must maintain current certification.

7.3. Hazard Communication

Before work on this site begins, all involved personnel will be briefed on this HASP. This briefing will be conducted by the site health and safety officer, project manager, or by a designated representative of the health and safety department. This training will focus on the potential hazards present at the site and the safety and health procedures specific to this project.

All on-site employees, in accordance with 29 CFR 1910.1200 (Hazard Communication Standard), must be informed of any potential health and safety risks. Chemical, physical, and toxicological properties of each hazard known or expected to be present at this site will be communicated to employees prior to commencement of any work activities and whenever their is a revision in the HASP.

In accordance with 29 CFR 1910.1200, material safety data sheets (MSDSs) for all hazardous substances in the workplace will be maintained. Title III of the

Superfund Amendment and Reauthorization Act (SARA) of 1986 requires employers to maintain MSDSs and submit such information to the state emergency response commission, local emergency planning committee, and local fire department if amounts on site exceed reportable quantity guidelines. Consequently, if an emergency response to the site is necessary local and state agencies will already be aware of the hazardous substances potentially present.

7.4. Respiratory Protection Program

The health and safety department is responsible for providing annual respirator training, qualitative or quantitative fit tests, for ensuring that only respiratory equipment approved and accepted by the National Institute for Occupational Safety and Health and the Mine Safety and Health Association is used, and for ensuring that the corporate medical review officer has determined that the employees are physically capable of wearing a respirator.

Respirator fit testing will be conducted to determine, equipment suitability to the individual wearer. A positive/negative fit test will be conducted each time the respirator is donned. Personnel will be trained in the proper techniques to conduct this test. Records will be kept on all fit tests performed, stating size, mode, and type of respirator for each person wearing a respirator.

All equipment must be inspected before and after use by the user according to the procedures outlined in the training session. Additionally, the site health and safety officer will periodically inspect the equipment to verify its condition for use. It is the responsibility of the individual employee to clean and disinfect respiratory equipment. Appropriate cartridges should be used and replaced as necessary. Respirators should be stored in tagged, clean plastic bags, protected from excessive heat, cold, dust, sunlight, moisture, and damaging chemicals.

8. MEDICAL SURVEILLANCE REQUIREMENTS

Philip personnel who may be exposed to hazardous substances or health and safety hazards are required to participate in a medical surveillance program, which complies with 29 CFR 1910.120(f). This program requires a complete pre-employment physical and associated laboratory blood and urine tests.

All site personnel must have passed the physical examination to detect any medical condition that would place an individual at increased risk of impairment as a result of his or her participation in this project or the use of a respirator. An annual update exam or closure physical is also required for all personnel participating in this program.

9. ENGINEERING CONTROLS, WORK PRACTICES AND PERSONAL PROTECTIVE EQUIPMENT

The following engineering controls, work practices and personal protective equipment measures are in accordance with 29 CFR 1910 (General Industry Standards) and 29 CFR 1926 (Construction Site Standards).

9.1. Moving Equipment and Adjacent Traffic

All workers will be thoroughly trained and advised of the hazards of working around material handling and heavy excavation equipment. This will be emphasized in all health and safety meetings. All moving equipment will have warning devices such as back up bells, horns, and lights. Enclosed or pressurized cabs will be utilized when the potential for exposure to hazardous substances exists.

9.2. Machinery/Lockout/Tagout

All exposed moving parts on operating machinery shall be screened or guarded to prevent accidental contact with personnel, clothing or other equipment. Guards will not be removed in order to facilitate a specific task.

All energized systems (electrical, pneumatic, hydraulic, mechanical, etc.) will be locked out, tagged and the energy source tried, prior to commencing work in an area with hazardous machinery or utilities.

9.3. Sanitation

The work site must have a supply of potable water stored in tightly sealed, clearly labeled containers and equipped with a tap. Disposable cups and a receptacle for cup disposal must also be provided. Any unsafe outlets for drinking, washing or cooking must be clearly marked. No cross connection, open or potential, between a system furnishing potable water and a system furnishing non-potable water is permissible.

Toilet facilities will be supplied in accordance with 29 CFR 1910.120(n). Portable facilities will be provided unless prohibited by local codes if no sanitary sewers are located near or at the site. Employees shall be provided adequate facilities to properly wash their hands and face during the duration of the work day.

9.4. Combustible Liquids and Solids

It is not anticipated that bulk quantities of combustible/flammable liquid or solids will be maintained on-site. However, if there is a need for storage, all combustible liquids and solids shall be handled and labeled in accordance with state and federal fire codes and regulations. Liquids shall be stored and transported in approved United States Department of Transportation containers.

Spill prevention and control measures shall be implemented whenever liquids are being handled or stored. A fire extinguisher (ABC rated) will be immediately available for use in the area of combustible materials.

9.5. Drum Handling

Drums and containers will be handled in a manner consistent with 29 CFR 1910.120(j). All nonessential personnel shall be removed from the area of drum operations during opening procedures. Storage of drums on the premises will comply with Giant's compliance policy for the storage of drums containing hazardous materials.

9.6. General Housekeeping

All employees will practice good housekeeping at the job site in accordance with 29 CFR 1926. Litter and debris will be removed from the work area. Philip will procure a rental dumpster if the volume of litter and debris warrants. Slippery floor surfaces will be wiped and sprinkled with adsorbents. Hoses, wires, pipes and other equipment will be kept in control so as not to be a tripping hazard.

9.7. Line Disconnection

It is not anticipated that Philip personnel shall have the need to disconnect process or product lines. However, if the need should arise, Philip will contact Giant to disconnect any line, flange, or seal from a piping system, which shall be done in accordance with established procedures. The line will be depressurized or emptied under the supervision of the project supervisor or other trained professional. Workers will be suited in appropriate PPE and make the initial disconnection slowly so that any residual material can be released into containers in a controlled manner. A line-breaking permit is required for all unbroken lines or vessels too small to be entered. The project supervisor or site safety officer shall consult with Giant prior to any line disconnection or line break. Giant shall verify that lines are safe to be broken, and that all product /energy remaining in the line have been adequately removed.

9.8. Personal Protective Equipment

Personal protective equipment (PPE) is to be used in situations where work practices, engineering controls, or administrative measures are not feasible for controlling hazards. Each situation requires assessment in order to determine if PPE is needed. As a general rule, it must be assumed that worst case conditions exist until an adequate assessment is obtained.

In the event that airborne contaminates can not be controlled via engineering controls or administrative measures, each employee shall use adequate personnel protective equipment as a control method.

The project manager and site health and safety officer will be responsible for the administration of the respiratory protection program. This includes ensuring that clean, inspected, and approved respiratory equipment will be available for use and that all Philip employees have been properly trained in the use and limitations of the equipment.

In accordance with 29 CFR 1910.95, Philip employees participate in a hearing conservation program and wear hearing protection when exposed to average noise levels that exceed 85 dBA (slow response) for an eight-hour work shift. The majority of the machinery and heavy equipment used at the hazardous waste site operations generate high noise levels in short duration. Philip provides employees with a choice of at least three different noise attenuation devices to be used separately or combined.

9.8.1. Level B Protection

Potential Work Tasks Involving Protection: Excavation activities where airborne emissions can not be controlled and are exceeding set action levels.

- NIOSH/MSHA approved air-supplying respirator, operated in the demand/positive pressure mode, or self contained breathing apparatus operated in the demand/positive pressure mode
- Standard issue work uniform
- Disposable coveralls (i.e. - Tyvek® (solids) or Poly-Tyvek® (liquids/sludges))
- Chemical-resistant outer and inner gloves
- Chemical-resistant boots with steel toe and shank
- Hard hat and optional long underwear, coolant vest, and inner coveralls
- Safety glasses
- Hearing protection in noisy areas

9.8.2. Level C Protection

Potential Work Tasks Involving Protection: Excavation activities where airborne emissions can not be controlled and are exceeding set action levels.

- NIOSH/MSHA approved air-purifying respirator, with appropriate approved cartridges **(MSA- OV/HEPA cartridges - or equivalent)**.
- Standard issue work uniform
- Disposable coveralls (i.e. - Tyvek® (solids) or Poly-Tyvek® (liquids/sludges))
- Chemical-resistant outer and inner gloves

- Chemical-resistant boots with steel toe and shank
- Hard hat and optional long underwear, coolant vest, and inner coveralls
- Safety glasses
- Hearing protection in noisy areas

9.8.3. Level D Protection

Work Tasks Involving Protection: General work tasks, all excavation work, decontamination, mobilization/demobilization/set-up activities.

- Hard hat and safety glasses
- Work gloves
  - ⇒ Leather or cotton for general usage
  - ⇒ Chemical resistant gloves (Butyl Rubber) when in contact with contaminated materials
- Leather steel-toed work boots
  - ⇒ Chemical resistant boot covers (booties) or steel toed chemical resistant "rubber" boots when in contact with contaminated materials or free products
- Standard issue work uniform
  - ⇒ Disposable coveralls (i.e. - Tyvek® (solids) or Poly-Tyvek® (liquids/sludges))
- Hearing protection in noisy areas
- High visibility orange safety vests (when near traffic, moving equipment, or roadways)

9.8.4. Respirator Limitations

The use of air purifying respirators (APRs) is prohibited in atmospheres containing less than 19.5% oxygen by volume. APRs are only allowed in environments up to 10 times the permissible exposure limit (PEL) as defined by OSHA in 29 CFR 1910.1000 - APRs are prohibited in areas where the type and quantity (ppm) of the contaminate have not been identified.

Full face APRs offer additional protection over ½ mask APRs. They provide a more secure seal and additional eye protection. Respiratory usage is to be closely monitored by the SSO at all times. Full face respirators will be used in contaminated environments where there is a potential for eye irritation. Chemical cartridge respirators will not be used in environments where the potential contaminants have poor warning properties (odor or irritation).

Chemical cartridge air-purifying respirators will only be used for those contaminants and concentrations for which they are certified. Chemical cartridge respirators will not be used in the presence of any of the following materials: acrolein, aniline, arsine, bromine, dimethylaniline, dimethyl sulfate, hydrogen cyanide, hydrogen fluoride, hydrogen selenide, hydrogen sulfide, hydrazine, methanol, methyl bromide, methyl chloride, methylene biphenyl isocyanate, nickel carbonyl, nitrobenzene, nitrogen oxides, nitroglycerin, nitromethane, ozone, phosgene, phosphorus, stilbene, radioactive gases, sulfur chloride, toluene diisocyanate, and vinyl chloride.

9.9. Utilities and Structures Clearance

It is not anticipated that any underground utilities are present in excavation area. Giant shall be directly involved with the delineation of the pit's excavation limits as to verify that boundaries will not involve any underground utilities. If excavations commence outside of the anticipated boundaries, Giant and One Call shall be notified so that any utilities can be marked. All excavations will be cleared for utilities and other structures prior to commencing work. Work may not proceed until those obstacles have been clearly identified and marked at the site. At a minimum, 24 hour notification to One-Call and the client shall be conducted, and they shall communicate their knowledge of any existing utilities or lines on the property. All utilities and lines shall be flagged or staked as of their location, and mechanical excavation shall not be allowed within 2 feet of each side of these lines.

9.10. Excavations and Trenching

Excavations are defined as any man made depression in the earth. Trenches are excavations where the depth of the excavation is greater than the width of the excavation. Any excavation over 4 feet in depth requiring entry shall be considered as a confined space, and atmospheric testing for oxygen content, explosive gases, and toxic gases shall be performed. Where possible, non-entry methods shall be used when work is to be performed inside of excavations greater than 4 feet. Site personnel shall comply with 29 CFR 1926, Subpart P when entering excavations. For the purposes of this HASP and Scope of Work, excavations greater than 4 feet in depth are not anticipated to be entered

9.11. Electrical

Electrical wiring and apparatus safety procedures will be conducted in accordance with 29 CFR 1910.137. Tools and extension cords will be equipped with appropriate ground receptacles and ground fault circuit interrupters. All electrical installations will comply with the National Electrical Safety Code.

9.12. Noise Level

Philip employees shall wear approved attenuation devices in excessively noisy environments. As a general rule, if you can not carry on a normal conversation without elevating your voice, then hearing protection is required. Some examples of high noise areas might occur near heavy equipment operation and adjacent operations.

9.13. Heat Related Disorders

Heat exhaustion is the physical response to heat-caused fatigue, weakness due to body overheating, and collapse due to an inadequate intake of water necessary to compensate for water lost through excessive perspiration.

Heat stroke is a response to heat characterized by an extremely high body temperature to the point where the body can no longer cool and failure of the sweating mechanism. Heat stroke is an immediate, life threatening emergency for which medical care is urgently needed.

Heat cramps involve muscular pains and spasms caused from loss of electrolytes through sweating. Any person exhibiting symptoms of a heat-related disorder must exit the work area and take a break until the symptoms subside and must drink plenty of fluids during the break. All workers must drink fluids at frequent intervals throughout the work day to prevent heat-related disorders.

A heat stress monitoring program shall be instituted whenever personnel are working in protective coveralls, respirators, or other protective garments, and ambient temperature exceeds 70 degrees F. Any team member who exhibits symptoms of heat stress may be monitored by way of radial pulse rate. The heart rate at the beginning of the break should not exceed 100 beats per minute. If the heart rate is in excess of 100 beats per minute, the duration of the next work period will be shortened by 10 minutes, while the rest period remains the same. If the pulse rate is in excess of 100 beats per minute at the beginning of the next break period, the following work cycle will be reduced by another 10 minutes.

Body temperature may also be monitored as directed by the site health and safety officer. A temperature sensitive strip placed on the worker's forehead will measure the body temperature as early as possible in the break period. The strip temperature should not exceed 100.5 degrees F. If the forehead temperature exceeds 100.5 degrees F, the next work period will be decreased by 10 minutes. The forehead temperature will also be measured at the end of the rest period to assure that it has decreased to below 100.5 degrees F.

Any team member who persistently experiences symptoms of heat stress, or whose symptoms get worse will be required to exit the work zone, shower and take an extended break. Should symptoms continue to persist the worker will be required to seek medical attention.

Good personal hygiene practices will be maintained at all times, including daily showers, use of clean, dry clothes, washing before meals, etc. Any employee that

notices a skin problem will report it immediately to the site health and safety officer. Employees should be encouraged to abstain from leisure alcohol consumption and be directed to obtain plenty of rest, as failure to perform these activities will augment heat related disorders.

10. AMBIENT AIR MONITORING

Personnel, work area, and perimeter monitoring strategies have been devised to ensure the identification of areas for which engineering, administrative, and personal protective equipment are required. These strategies are to ensure the public and workers exposure below action levels set herein.

Philip will perform real-time sampling and integrated sampling methodologies. Air monitoring will be conducted at the perimeter and onsite to assess airborne concentrations of suspected contaminates and relate their potential exposure to the public and site workers. The following is a list of direct-reading instruments Philip will have available for use on site and their intended use:

- Photoionization Detector (with a 10.0 eV lamp minimum) or Flame Ionization Detector
- Combustible Gas Indicator and Oxygen Meter

The instruments will be operated only by personnel with appropriate training in the care, calibration, operation, and limitations of the equipment. All instruments will be inspected regularly and field calibrated/checked to determine background concentrations prior to use. Each instrument shall be calibrated or inspected as recommended by the manufacturer of the instrument.

Action level air contaminant concentrations are based on standard industry practices incorporating safety factors to maintain exposures well below the OSHA permissible exposure limit or ACGIH threshold limit value for each contaminant. If air samples indicate that personal exposures are potentially greater than the action levels; then engineering, administrative, and personal protection controls will be reviewed according to the procedures outlined below. **Philip's Site Health and Safety Officer will record all significant monitoring data and records will be maintained at the site.**

The following action levels and environmental monitoring strategies have been established to confirm that levels of personal exposure are safe for contracted employees, the environment, and the general public.

10.1. Volatile Organic Vapor Levels

Monitoring Instrument: Photoionization detector with 10.0 eV lamp or greater.

Sampling Strategies: Monitoring to be performed prior to each shift or as indicated by action levels. Monitoring to be representative of the worker's breathing zones.

Action Levels	Actions
Less than 5 ppm	- Continue periodic monitoring at least once per 2-3 hours.
Between 5-50 ppm *(Sustained average over a 5 minute period **or** more than 4 excursions during the work shift)*	- Continue with caution. - Identify source of airborne contamination and apply controls to reduce levels. - Upgrade to Level C - Periodically monitor with PID at least every 1/2 hour. - Notify site health and safety officer.
Between 50-500 ppm *(Sustained average over a 5 minute period **or** more than 4 excursions during the work shift)*	- Continue with caution - Level C PPE required. Full Face APRs required as minimum Level C respiratory protection. - If action levels are exceeded at the work zone boundary, **stop work immediately**. Implement engineering controls to reduce emissions to the public. If unable to reduce emissions at the work zone boundaries, increase size of zone to encompass emissions area. If still unable to reduce airborne concentrations below the 50 ppm action level, immediately notify the safety department. - Notify project manager and safety department. Project manager to notify client representative of airborne emissions.
Greater than 500 ppm *(Sustained average over a 5 minute period **or** more than 4 excursions during the work shift)*	- Level B protection with mandatory supplied-air respirators required in exclusion zone. - Monitor entire work zone or exclusion area. If action levels are exceeded at the work zone boundary, **stop work immediately**. Implement engineering controls to reduce emissions to the public. If unable to reduce emissions at the work zone boundaries, increase size of zone to encompass emissions area. If still unable to reduce airborne concentrations below the 500 ppm action level, immediately notify the safety department. - Notify project manager and safety department - Begin backfilling excavation immediately to reduce emissions output.

10.2. Combustible Gases and Oxygen Levels

Monitoring Instrument: Oxygen and Combustible Gas Indicator.

Sampling Strategies: Monitoring to be performed prior to each shift in confined spaces (excavations included) or as indicated by action levels. Monitoring to be representative of the work space atmosphere.

Action Levels	Actions
Less than 10 % LEL and Between 19.5 and 23% Oxygen	- Continue work and periodic monitoring once every 4 hours.
Less than 10 % LEL and Less than 19.5% Oxygen	- Evacuate work space immediately – oxygen deficient atmosphere. - Allow space to ventilate if outdoors. If space does not adequately ventilate to safe levels, or if the space is not configured to ventilate, then mechanical ventilation is required. If mechanical ventilation fails to reduce the hazard, work may commence only in supplied air respirators as specified in Section 9.8.1, "Level B Protection." - Continuous monitoring required while working in oxygen deficient atmospheres.
Greater than 10 % LEL or Greater than 21% Oxygen	- Evacuate and **cease work immediately** – explosion hazard. - Allow space to ventilate if outdoors. If space does not adequately ventilate to safe levels, or if the space is not configured to ventilate, then mechanical ventilation is required. If mechanical ventilation fails to reduce the hazard, work may commence only in supplied air respirators as specified in Section 9.8.1, "Level B Protection."and the work space must be inerted to lower the oxygen levels to below 2% by volume. - Continuous monitoring required while working in oxygen deficient atmospheres.

10.3. Personal Sampling for Personal Exposure Assessments

Previous site work involving the excavation and handling of site contaminates associated with oil and gas production sites has indicated that time-weighted average samples are well below existing threshold limit values (TLVs) and permissible exposure limits (PELs) for BTEX. However, personal monitoring will be required to verify negative exposures to production pit contaminates. The exact air monitoring strategies and target compounds will be evaluated as site work progresses. An amendment to this HASP will be required to incorporate these strategies as they are developed.

11. DECONTAMINATION

Decontamination of personnel and equipment will be done, as directed by the site health and safety officer, based on the level of contamination encountered.

Personnel leaving the exclusion zone will proceed to the decontamination stations prior to entering the clean zone or leaving the site. All equipment, tools, and supplies that have been inside the exclusion zone or in contact with contaminated materials will be decontaminated. Coveralls, gloves, boot covers, respirator cartridges, and other disposable PPE will be disposed of if they cannot adequately be cleaned.

All personnel in the contaminant reduction zone shall be wearing the same level of PPE as those in the exclusion zone. Scrub brushes, tubs, water sprayers, and wipe cloths will be set up to effectively manage the decontamination process. Personnel decontamination will not be conducted in the equipment decontamination zone.

11.1. Equipment Decontamination Procedure

Contaminated equipment that has the potential to cross-contaminate unaffected soil will be decontaminated to the extent that that potential is removed.

Small equipment will be placed on plastic sheets, in supplied containers, or in a wash tub. These items will be washed and scrubbed in soapy potable water to remove gross contamination. They will then be sprayed or wiped with a suitable solvent to remove residual contamination then rinsed in potable water. Decontaminated items will be placed in a separate container for transfer into the clean zone.

Heavy machinery and vehicle decontamination poses an additional inhalation, ingestion and dermal absorption hazard. Decontamination personnel will wear appropriate personal protective equipment, remove loose materials from vehicle wheels and the undercarriage before moving them to the decontamination zone, clean contaminated heavy machinery with either a steam or high pressure washer using an appropriate detergent (Alconox), then finish with a potable water rinse.

11.2. Personnel Decontamination Procedures For Level C and B Activities

Disposable protective equipment will be used on this project. The proper doffing procedure will be followed in this order: 1) tape removal; 2) suit removal; 3) boot or boot cover removal; 4) outer glove removal; 5) respirator removal and cleaning; and finally 6) inner glove removal. This procedure shall be done under the control and supervision of the SSO. All clothing shall be used only once and will be discarded as part of the contaminated waste. Respirators are to be maintained in a clean manner at all times. A wash station shall be provided to properly wash the respirator of all exterior contamination.

11.3. Decontamination Waste Containment

The site safety and health officer will monitor all decontamination procedures. Any permeable clothing contaminated with hazardous materials or substances will be immediately removed for disposal and the individual wearing the clothing decontaminated. All decontamination supplies or generated contaminated wastes shall be disposed of or stored as directed by GIANT.

12. EMERGENCY RESPONSE AND CONTINGENCY PLAN

Site personnel shall adhere to the requirements of this HASP. In addition to this HASP, all site personnel shall abide by Giant's safety rules.

12.1. Pre-Emergency Planning and Spill Prevention Control

Prior to commencing work on this project, Philip personnel will be oriented to site specific emergency response procedures, as required by 29 CFR 1910.119.
All site personnel will be instructed in the site topography, layout and points of ingress or egress. Weather and wind directions will be noted daily to identify safe routes of evacuation in case of emergency. The locations of communications equipment such as cellular phones and radios will be noted. Specific hazards or conditions that may affect the health and safety of workers and the procedures for mitigating personnel exposure will be reviewed and discussed. Special emphasis will be placed on any changes in site characteristics or procedures that are a result of project activities. Emergency response procedures will be reviewed and understood by all personnel before commencing work at the site.

A daily health and safety meeting will be conducted by the site health and safety officer. The topics discussed and the names of personnel in attendance will be recorded on the Philip health and safety department form or a comparable form. Copies of this record will be retained at the job site. The intent of this meeting is for site personnel to assess current work objectives, and to identify specific safety hazards associated with performing the work.

12.2. Emergency Equipment

At a minimum, the following emergency equipment shall be at the work site and available for immediate use:

- Dry chemical fire extinguisher (20 # A-B-C rated)
- First aid kits, including burn and bloodborne pathogen kits
- Emergency eye wash station (if unavailable at site)
- Site appropriate hand tools
- Emergency PPE
- Mobile telephone

12.3. Emergency Recognition and Prevention

All site personnel will be trained in the site characteristics, procedures, work plan, and project tasks. They will maintain surveillance over the work that is being done around them, as well as their own assigned tasks and report any unexpected conditions to the site health and safety officer immediately. All personnel will observe safe working practices and procedures to protect themselves and fellow workers.

12.4. Emergency Alarm System

Several warning systems may be used to sound an alarm in an emergency situation. The type of system used depends on the nature of the emergency:

- **Verbal Communications-** Used to convey specific instructions and may be amplified by use of a bull horn or public address system.
- **Hand Signals-** Used to convey specific instructions and messages among workers, while wearing PPE and between workers in the exclusion and contamination reduction zones.
- **Air Horns-** Used to convey specific instructions and messages among workers, while wearing PPE and between workers in the exclusion and contamination reduction zones.
- **Portable Radios-** Used to convey specific instructions and messages among workers, while wearing PPE and between workers in the exclusion, contamination reduction and clean zones.
- **Cellular Telephones-** Used to convey specific instructions and messages among workers in the clean zone and emergency response workers.
- **Installed Telephones-** Used to convey specific instructions and messages among workers in the clean zone and emergency response workers.

12.5. Emergency Evacuation

In the event that the area must be evacuated due to the release of gas, smoke, site contaminates, or poisonous fumes, site personnel will move off site via the nearest upwind route. Safe distances and places of refuge will be determined by air monitoring. Emergency response teams will be notified by phoning 911 or emergency response telephone number on cellular or installed telephones. No one will re-enter the site without approval from the site safety officer or project supervisor.

Site personnel will discuss the correct evacuation procedures prior to any site work and the site health and safety officer must ascertain that they are understood and followed. Evacuation procedures will be altered and reviewed periodically to reflect the current work areas and tasks. This will be documented by the site health and safety officer. All personnel will familiarize themselves with points of egress and be aware of wind patterns that will affect dispersion of hazardous fumes or smoke in an emergency.

Philip personnel must be familiarized with site specific evacuation procedures. During an emergency, Philip personnel will congregate in a predetermined rally point so as to account for all people as quickly as possible. If visitors are on-site, visitor sign-in sheets will be taken to the congregation area.

12.6. Emergency Response Procedures

In case of emergency or a hazardous situation, the individual or individuals that observe the situation shall immediately give the alarm. Upon hearing the alarm, all non-essential communication shall cease. The individual(s) who sounded the alarm shall notify the supervisor of the situation. Immediate actions that will be taken to correct the situation shall be dictated by the specific emergency. These actions may be one or more of the following:

- **Spills or Hazardous Substance Release-** Contain the spill as quickly as possible. Remove contaminated material and seal in drums. Notify the project manager, the site health and safety officer, and the appropriate authorities if spill is not contained.
- **Fires-** Extinguish fire with fire extinguishers or blankets if possible. Control the source of combustible material. Evacuate the area and immediately notify the fire department if fire is uncontrolled.
- **Gas or Fume Release-** Evacuate the area until the fumes have dispersed. Remove all ignition sources. Perform continuous perimeter monitoring downwind. Notify the site health and safety officer and appropriate authorities if fumes threaten to escape the exclusion zone.
- **Personnel Injury-** Administer first aid and seek medical attention as appropriate. Notify the site health and safety officer.

12.7. Hazardous Substance Release

Should a hazardous substance be released, all personnel will immediately evacuate the area to a safe area upwind. Upon completion of the recovery operations, air monitoring and environmental sampling will be conducted. When the results of the monitoring indicates complete decontamination, site work may resume.

12.8. Injury or Exposure

In the event of significant physical injury, hazardous exposure, fire or explosion notification will be made immediately to the appropriate local, state, and federal regulatory agencies. Any job related injury or illness must be reported to the Health and Safety Officer and Operations Manager, Martin Nee in 24 hours.

If an injury should occur, stabilize the injured individual and administer first aid. If the person is in the exclusion zone they should be decontaminated or contained in uncontaminated materials prior to removal from the zone. Medical aid may be summoned by dialing 911 on cellular or installed telephones. Be sure and describe the nature of the injury and location of the victim to the emergency response team.

12.9. Emergency Medical Treatment and First Aid

Adequate facilities and personnel will be provided to assure prompt and efficient first aid in the event of injury or exposure. First aid kits will consist of individually sealed items within a weather proof container. Each first aid kit will be OSHA approved, inspected and fully equipped before being deployed to the project. Approved bloodborne pathogen kits and a list of *Universal Precautions* will be included with each kit. Any expended items will be replaced after use.

General first aid practices that may be employed in the event of personal injury or exposure are:

- **Eyes-** Irrigate immediately with pressurized eye/face wash unit.
- **Skin-** Wash with soap and warm water.
- **Breathing-** Move victim to fresh air at once and begin CPR. Phone 911 to obtain emergency medical attention.
- **Swallowing-** Identify the item swallowed. Follow appropriate first aid procedures and obtain medical attention immediately.

12.10. Emergency Telephone Numbers

The site safety officer and project manager shall ensure that appropriate provisions are made to provide emergency services to site personnel at all times. Emergency aid provisions shall be made, and the emergency contact numbers shall be written down and provided to the site personnel for all sites. Hospitals and/or care must be located within 30 minuets of each work site. If this is impracticable, then additional contingency planning measures must be implemented to ensure that workers are provided with care per 29 CFR 1926.50. As a minimum, at least one employee at each site will be certified in First Aid and CPR. **The following telephone numbers will be conspicuously posted at each work site:**

Fire - Police - Ambulance	**911**
Hospital – San Juan Regional Medical Center	
	(505) 325 - 5011
Project Manager – Robert Thompson	
Office:	(800) 326 - 2262
Pager/Mobil:	(505) 320 - 9671
Home:	(505) 334 - 9198
Project Sprvsr/Site H&S Officer – Mike Hare	
Office:	(505) 326 - 2262
Pager/Mobil:	(505) 320 - 9687
Home:	(505) 632 - 8454
Operations Manager/Safety Officer – Martin Nee	
Office:	(800) 326 - 2262
Pager/Mobil:	(505) 320 - 9675
Home:	(505) 334 - 1464
Giant Project Manager – Tim Kinney	
Office:	(505) 632 - 4001
Pager:	( )
Home:	( )

13. HEALTH AND SAFETY PLAN AUTHORIZATION

By their signature, the following undersigned persons certify that this health and safety plan has been read, or otherwise communicated to them. They further certify that they understand the plan and will follow the procedures that have been developed for the protection of the health and safety of the general public and all persons entering upon the work site:

Name	Date
Philip's Health and Safety Officer	
Philip's Project Manager	
Philip's Site Health and Safety Officer	
Client Representative	

14. HEALTH AND SAFETY PLAN CERTIFICATION

By their signature, the following undersigned persons certify that this health and safety plan has been read, or otherwise communicated to them. They further certify that they understand the plan and will follow the procedures that have been developed for the protection of the health and safety of the general public and all persons entering upon the work site:

Name	Date

Appendix A

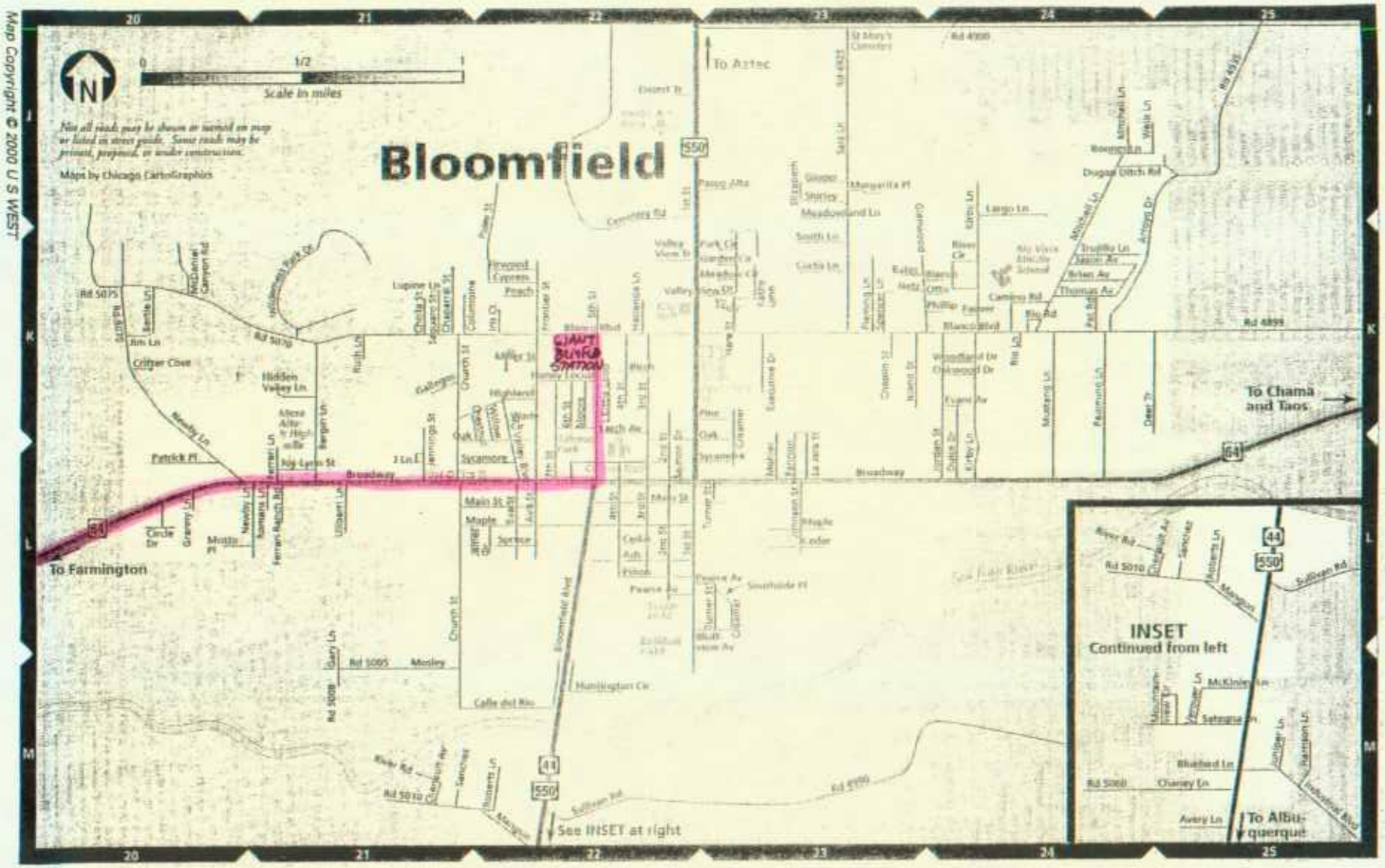
Hospital Route Map & Hospital Route Directions

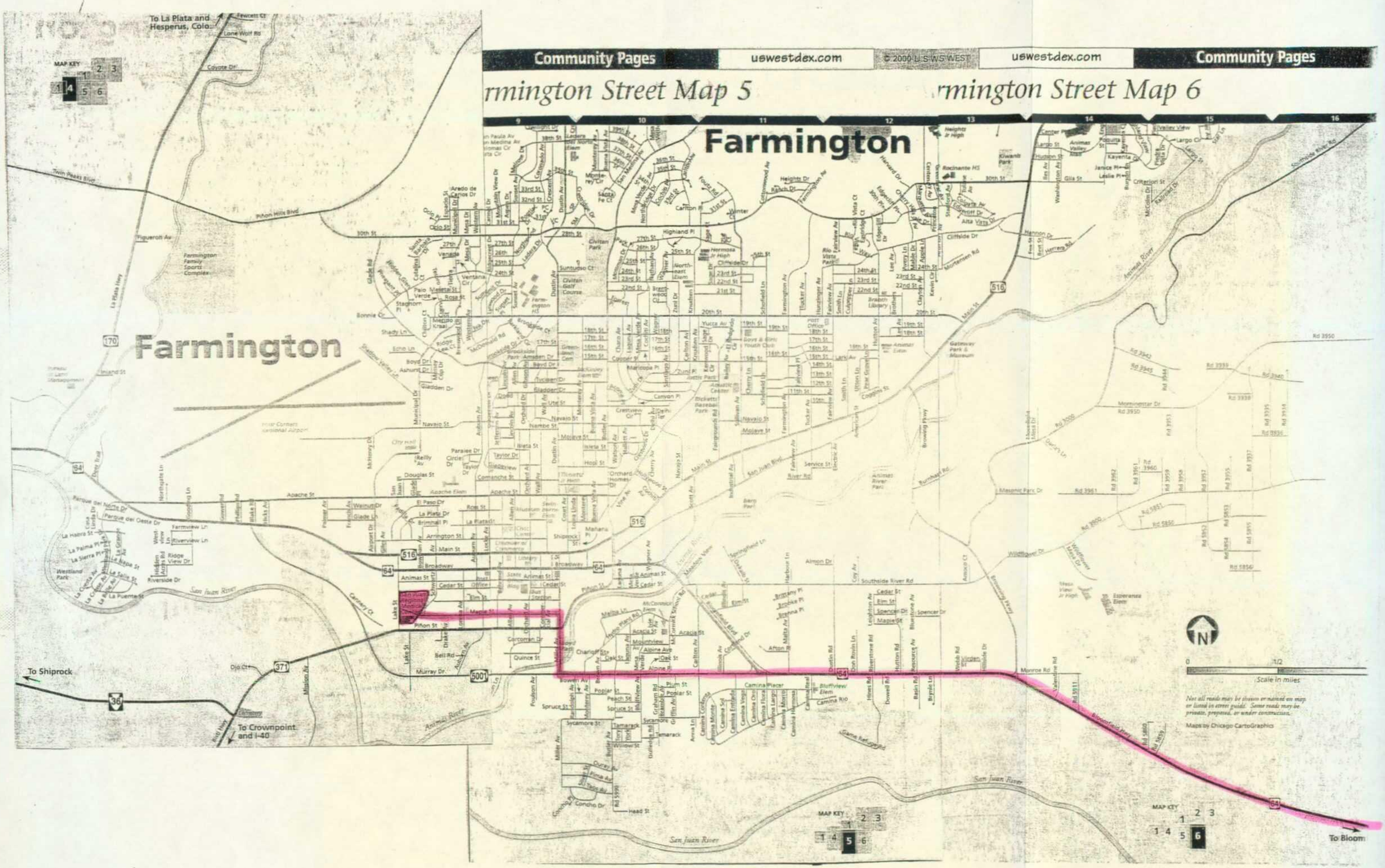
Complete the following form(s). This form and it's information should be discussed with the site personnel prior to admitting to the job site. For multiple job sites, this form must be updated any time that emergency response procedures have changed.

Hospital Directions:

From Giant's Bloomfield Station, travel south on 5th street to Hwy 64 (Broadway). Turn right (west) onto Hwy 64 and travel to Farmington. Continue on Hwy 64 to Murray Drive. Travel Murray Drive to Miller Avenue. Turn right on Miller Avenue and travel to Maple Street. Turn left on Maple Street and travel to Hospital.

Bloomfield Street Map





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rmington Street Map 5

rmington Street Map 6

Appendix B

Task Safety/Hazard Analysis Sheets

PHILIP SERVICES CORP.
HAZARD ANALYSIS

Meeting Conducted by: _____ Date: _____
Signature: _____ Job Number: _____
Supervisor: _____
Facility: _____ Phone Number: _____
Specific Location: _____
Equipment Number: _____
Description of Work: _____

☐ MSDS Product Name: _____

CHEMICAL CONTAMINANT
- ☐ Corrosive ☐ Poison ☐ Hi Tox ☐ Skin Abs
- ☐ Flammable Liquid ☐ Flammable Solid ☐ Water Reaction ☐ Oxidizer
- ☐ Other _____

PERSONAL PROTECTIVE EQUIPMENT
- ☐ Half Face Respirator
- ☐ Full Face Respirator
- ☐ Airline Respirator
- ☐ SCBA
- ☐ 5 Min. Escape Pack
- ☐ Other _____

TYPES OF CARTRIDGES
- ☐ Organic Vapor
- ☐ Acid Gas
- ☐ Organic Vapor/Acid Gas
- ☐ HEPA
- ☐ Dust Pre-filter
- ☐ Other _____

PROTECTIVE CLOTHING
- ☐ Nomex ☐ Paper Tyvek ☐ PVC Gloves ☐ Tyvek Booties
- ☐ Hard Hat ☐ Poly Tyvek ☐ Neoprene Gloves ☐ Chem Boots
- ☐ PVC Boots ☐ Saranex ☐ Viton Gloves ☐ _____
- ☐ Hearing Protection ☐ Rain Gear ☐ Surgical Gloves ☐ _____
- ☐ Safety Glasses ☐ Acid Suit ☐ Cotton Gloves ☐ _____
- ☐ Goggles ☐ Face Shields ☐ Leather Gloves ☐ _____

DISPOSAL OF MATERIAL
- ☐ Vacuum Truck ☐ Bill of Lading ☐ On-Site Transfer
- ☐ Roll-Off Box ☐ Manifest ☐ Off-Site Transfer _____
- ☐ Barrel ☐ Profile ☐ Other _____

PHYSICAL HAZARDS
- ☐ Walk Thru Locked/Tagged Out ☐ Surface Condition (Slippery)
- ☐ Equipment Grounded ☐ Ladders Secured
- ☐ Work Area Isolated ☐ Scaffolding Rails in Place
- ☐ Safety Harness and Lines ☐ Subgrade Excavation
- ☐ Walk Thru Work Area Isolated/Barricaded ☐ Other _____

WEATHER
- ☐ Wind Direction _____ ☐ Conditions _____

JOB CLASSIFICATION/CHECKLIST/PERMIT
- ☐ Asbestos ☐ Confined Space ☐ Lab Pack ☐ Vacuum
- ☐ Hydroblasting ☐ Steam Cleaning ☐ Acid Cleaning ☐ Other: _____
- ☐ Tank Cleaning ☐ Site Remediation ☐ PCB ☐ Other: _____
- ☐ Confined Space Entry Permit Completed By: _____

JOB SAFETY ANALYSIS

Job # _____ Job Supervisor _____

Date _____ Customer Location _____

Time _____ Auditor _____

Rating System: 5 - Excellent 4 - Good 3 - Fair 2 - Poor 1 - Dangerous

PERSONAL PROTECTIVE EQUIPMENT (PPE)

1. Respiratory PPE _____
2. Housekeeping _____
3. Eye Protection _____
4. Hand Protection _____
5. Foot Protection _____
6. Fall Protection _____
7. Head Protection _____
8. Fire Ret. Clothing _____

MECHANICAL EQUIPMENT (Trucks, Power Units, & Pumps)

1. Pre-Service Inspection _____
2. Leaks (oil, air, water) _____
3. Appearance _____
4. Signs/Logos _____
5. Safety Equipment _____
6. Tires _____
7. Hoses _____
8. Horn _____
9. Lights _____
10. Ground _____
11. Guards _____

PERMITS (Hot, Cold, Confined Space Entry)

1. Possession _____
2. Signed _____
3. Proper _____
4. Visual _____

HAND TOOLS

1. Condition _____
2. Storage _____
3. Proper _____

HIGH PRESSURE WATER CLEANING

1. Barricades _____
2. Ruptured Disc _____
3. Gauges _____
4. Stingers _____
5. PRV _____
6. Parts _____

Appendix C

Safety Meeting Records

TOOL BOX SAFETY MEETING

Date _____

Customer _____ Project Location _____

Conducted By _____ Contract No. _____
(Name)

Title _____

AGENDA (Topics To Be Discussed)

_____

_____

_____

_____

Topics or Items Initiated By Attendees:

_____

_____

_____

_____

Action to be taken to correct above items, naming responsible individual for follow-up.

_____

_____

_____

Signed _____
Leader of Meeting

Duration 20 minutes

-Over-

Appendix D

Accident Investigation and Reporting

PHILIP SERVICES CORP.

Supervisor's Incident Investigation Report

Incident #_____

Region_____

GENERAL INFORMATION

Company_____ Time of Incident ☐AM ☐PM

Employee Name_____ Date of Incident ____-____-____

Last First MI Month Day Year

Job Title_____ SSN____-____-____ Date Hired ____-____-____

Month Day Year

Employee's History
Is this the employee's first incident?
Yes:____ No:____
If not, how many?: ____
Date of last incident
_____

Location of Incident
____ On Philip property?
____ In transit to/from job
____ On Customer property
____ Specific plant & unit
_____
_____

Hrs. on Duty Prior
____ 0 - 3 Hours
____ 3 - 6 Hours
____ 6 - 9 Hours
____ 9 - 12 Hours
____ Over 12 Hours

Incident Classification
____ Near Miss
____ First Aid Only (non-OSHA Recordable)
____ Medical Treatment (OSHA Recordable)
____ Restricted Workdays (No lost workdays)
____ Lost Workdays
____ Fatality

DESCRIPTION OF INCIDENT (Who, What, and How)

INCIDENT DATA

Operation:
____ Mechanical
____ Industrial Services
____ Transportation
____ Environmental
____ Specialty Groups
____ Container Services
____ Automotive
____ Fixed Facilities
____ Other:(Specify)
_____
_____
_____
_____
_____

Possible Unsafe Conditions:
____ Inadequate guards or barriers
____ Inadequate or improper protective equipment
____ Defective tools, equipment, or materials
____ Congested area
____ Restricted movement
____ Inadequate warning system
____ Uncontrolled fire and explosion hazards
____ Hazardous atmosphere (e.g., gases, dusts, fumes, vapors, lack of oxygen, etc.)
____ Poor housekeeping
____ Noise exposure
____ Radiation exposure
____ High or low temperature exposure
____ Inadequate or excess illumination
____ Inadequate ventilation
____ Other: _____

Body Part Injured:
____ Eye(s)
____ Head/Neck
____ Face
____ Arm
____ Elbow
____ Wrist
____ Hand
____ Finger(s)
____ Foot
____ Back
____ Lungs/Throat/Mouth
____ Chest/Ribs
____ Abdomen
____ Groin/Genitals
____ Leg
____ Knee
____ Ankle
____ Toe(s)

Possible Unsafe Acts:
____ Operating equipment without authority
____ Failure to follow procedures
____ Failure to warn
____ Failure to secure
____ Operating at an unsafe speed
____ Operating at an unsafe capacity
____ Removing or making safety devices inoperable
____ Using defective equipment
____ Failure to use personal protective equipment
____ Using equipment improperly
____ Improper loading
____ Improper placement
____ Improper lifting
____ Improper position for task
____ Servicing equipment in operation
____ Horseplay
____ Under the influence of alcohol or drugs
____ Other:_____

Nature of Injury:
____ Foreign Object
____ Cut
____ Bruise/Contusion
____ Sprain/Strain
____ Fracture
____ Burn (Chemical)
____ Burn (Thermal)
____ Chemical Irritation
____ Amputation
____ Puncture Wound
____ Hernia
____ Dermatitis
____ Smashed/Pinched
____ Abrasion
____ Infection
____ Other:_____

Incident Type:
____ Struck By/Against
____ Caught In/Out/Between
____ Fall (same level)
____ Fall (different level)
____ Slipping/Tripping
____ Vehicle Incident
____ Other:_____
____ Temp. Exposure
____ Repetitious Trauma
____ Over Exertion
____ Chemical Exposure
____ Skin
____ Inhalation

Protective Equipment:
____ Required but NOT in Use
____ Required and IN Use
____ Not required (may have reduced injury)
____ Not required (would NOT have effect inj.)
____ Specify Protective Equipment in Use
_____
_____
_____

ACTIONS TO PREVENT INCIDENT RE-OCCURRENCE

____ Revise Pre-Job Instructions
____ Reevaluate Job Safety Analysis
____ Revise Standard Operating Procedure
____ Improve Design or Re-Engineer
____ Improve Construction
____ Improve Worksite Layout
____ Replace or Repair Equipment
____ Install Guard or Safety Device
____ Improve Inspection/Monitoring Methods
____ Improve training program
____ Reevaluate PPE
____ Retrain Person(s) Involved
____ Request Safety Observations
____ Discipline Person(s) Involved
____ Other_____

Continued on Next Page

Appendix E

Real Time VOC Air Monitoring Data Sheets

PHILIP SERVICES CORPORATION

Air Monitoring Log For Organic Vapor Assessment

(Calibration Record on Back)

Project Name: ____________________ Project Number: ______________ Date: ______________________

Project Description: ____

Name of Person Conducting Assessment (Print Please): ______________________________________

Please check applicable items.......

Monitoring For:

☐ Personal Exposure Assessment (breathing zone) ☐ Environmental Sample ☐ Other: ___________________________

Time	VOC Level High	VOC Level Low	VOC Level Avg.		Time	VOC Level High	VOC Level Low	VOC Level Avg.
______	______ppm	______ppm	______ppm		______	______ppm	______ppm	______ppm
______	______ppm	______ppm	______ppm		______	______ppm	______ppm	______ppm
______	______ppm	______ppm	______ppm		______	______ppm	______ppm	______ppm
______	______ppm	______ppm	______ppm		______	______ppm	______ppm	______ppm
______	______ppm	______ppm	______ppm		______	______ppm	______ppm	______ppm
______	______ppm	______ppm	______ppm		______	______ppm	______ppm	______ppm
______	______ppm	______ppm	______ppm		______	______ppm	______ppm	______ppm

PSC PHILIP SERVICES CORP.

Philip Services Corporation - Industrial Services Division, Environmental Services, 1440 Sens Road, LaPorte, Texas 77571
(281) 470-1388 phone
(281) 470-1399 fax

rev. 2/98

Appendix F

LEL/O_2 Air Monitoring Data Sheets

PHILIP SERVICES CORPORATION

Air Monitoring Log For LEL/Oxygen Assessment

(Calibration Record on Back)

Project Name: ____________ Project Number: ____________ Date: ____________

Project Description: ____________

Name of Person Conducting Assessment (Print Please): ____________

Please check applicable items.......

Monitoring For:

☐ Tank Entry (Confined Space) ☐ Excavation Entry (Confined Space) ☐ UST/AST Removal ☐ Hot Work in Enclosed Space

☐ **Other:** ____________

Time	LEL Level	Oxygen Level	Toxic 1	Toxic 2	Time	LEL Level	Oxygen Level	Toxic 1	Toxic 2
	%	%	ppm	ppm		%	%	ppm	ppm
	%	%	ppm	ppm		%	%	ppm	ppm
	%	%	ppm	ppm		%	%	ppm	ppm
	%	%	ppm	ppm		%	%	ppm	ppm
	%	%	ppm	ppm		%	%	ppm	ppm
	%	%	ppm	ppm		%	%	ppm	ppm
	%	%	ppm	ppm		%	%	ppm	ppm

I state that the information on this form is correct to the best of my knowledge. ____________

Signature of Person Conducting Assessment

<OVER>

Appendix G

Material Safety Data Sheets

Any hazardous chemical brought on-site must be accompanied by a material safety data sheet. Some examples of this are: common over the counter paints, solvents, lubricants, fuels (storage only), insecticides, herbicides, etc.

Appendix H

Personnel Training Records

BASIC HEALTH AND SAFETY TRAINING

Woodward-Clyde Consultants

This certifies that

Martin Nee

has successfully completed

Forty hours training fulfilling initial training requirements for hazardous waste workers under OSHA 1910.120

Phillip L. Jones, C.I.H.
Woodward-Clyde Consultants

May 31-June 3, 1988
Seminar Date

This certifies successful

completion of the approved 8 hour training course.

Martin J. Nee

[redacted]

Hazardous Waste Operations and Emergency Response Refresher

For the purposes of training required under
OSHA 29 CFR 1910.120

Conducted by

Acme Environmental Inc.

4007 Carlisle NE
Albuquerque, NM 87107
(505) 872-ACME

course date: *02/19/99*

course director:

exam date:

expires on: *02/19/00*

certificate number: *021999-02*

Philip Enviromental Services Corporation

Health and Safety Program

Certification of On-The -Job Training

This form has been prepared to document compliance with the requirement of 29 CFR 1910.120 that field employees working on Philip Environmental Services Corp. projects have received the required three (3) days of supervised on-the-job training in health and safety protection.

I, Bud Dehner, certify that I have

supervised Martin Nee for at least three days

in the performance of on-the-job activities meeting the requirements for health and safety established by the Occupation Health and Safety Administration for workers at hazardous waste operations and emergency response activities. I certify that I am qualified to provide such training through a combination of field experience and classroom training.

This on-the-job training was provided on the following three (3) dates:

March 22, 1993

March 23, 1993

March 24, 1993

A copy of this certification is being forwarded to the Director of Health, Safety, and Compliance for inclusion into the training file for this employee.

Signature: Bud Dehner

N12

Acme Environmental, Inc. Agent for *LOFLIN ENVIRONMENTAL SERVICES, INC*

Respirator Fit-Test Form

Name: MARTIN NEE
Social Security Number: [redacted]
Test Performed By: M. O'ROURKE

Type of respirator: 1/2 FACE
Manufacturer: MSA
Model: COMFO ELITE
Size: LARGE

Type of Fit Test: Qualitative or (Quantitative)
Testing Agent: Isoamyl Acetate, Saccharin Solution Aerosol, Irritant Fume
(banana oil) (sodium saccharin) (stannic oxychloride)

Fit Test Exercise:	Pass	Fail
1. Normal Breathing	9810	
2. Breathe deeply	6860	
3. Turn head side to side (inhale at each side)	144	
4. Nod head up and down (inhale with head up)	5850	
5. Read rainbow passage	5100	
6. Grimace	849	
7. Bend and touch toes	155	
8. Normal Breathing	495	
Overall fit factor	464	

Test subject: [signature]
Date:
Test Conductor: Meghan ORourke
Fit-Test Expiration Date: 1/04/01

4007 Carlisle Blvd. Northeast Albuquerque, NM 87107 505.872.2263

Certificate of Completion

This is to certify that

RYAN LEFEBRE

Has successfully completed the

29 CFR 1910.120

40-HOUR HAZARDOUS WASTE OPERATIONS AND EMERGENCY RESPONSE

On this 21st day of April 2000

Steve Oller
Trainer

Mike Stahle
Asst. Operations Mgr.

Philip Environmental Services Corporation

Health and Safety Program

Certification of On-The -Job Training

This form has been prepared to document compliance with the requirement of 29 CFR 1910.120 that field employees working on Philip Environmental Services Corporation projects have received the required three (3) days of supervised on-the-job training in health and safety protection.

I, Mike Stahle, certify that I have

supervised Ryan Lefebre for at least three days

in the performance of on-the-job activities meeting the requirements for health and safety established by the Occupation Health and Safety Administration for workers at hazardous waste operations and emergency response activities. I certify that I am qualified to provide such training through a combination of field experience and classroom training.

This on-the-job training was provided on the following three (3) dates:

February 28,2000

February 29, 2000

March 1, 2000

A copy of this certification is being forwarded to the Director of Health, Safety, and Compliance for inclusion into the training file for this employee.

Signature: Mike Stahle Date: March 1, 2000

SAFETY ALLIANCE, INC.

"Partnerships for Safe Working Environments"

RESPIRATOR FIT TEST RECORD

1 EMPLOYEE INFORMATION

Employee: Ryan LeFebre Date: 07-13-2010

Social Security #: [redacted]

Employer: Phillips Services

Location, Address: 4000 Monroe Rd.

Employee Job Title/Description: Drillers Helper

2 RESPIRATOR INFORMATION TC 84A - 0121

Respirator selected/Mask type: (circle one) FULL MASK (HALF MASK)

NIOSH Approval Number: ~~P100 — 42 CFR 84 P100 MSA~~

Manufacturer/Model: MSA / Comfo Elite

Use: (circle one) (POSITIVE PRESSURE) NEGATIVE PRESSURE

Size: (circle one) ~~SMALL~~ MEDIUM (LARGE) X-LARGE

3 CONDITIONS WHICH COULD AFFECT RESPIRATOR FIT

- ☐ Clean-shaven
- ☒ 1-2 day growth
- ☐ 2+ growth
- ☐ Mustache
- ☐ Facial scar
- ☐ Dentures absent
- ☐ Glasses
- ☐ None

Comments: Generally Clean Shaven

4 FIT CHECKS

Negative Pressure:
- ☒ Pass
- ☐ Fail

Positive Pressure:
- ☒ Pass
- ☐ Fail

5 FIT TESTING:

- ☒ Isoamyl Acetate
- *Qualitative*
- ☒ Pass
- ☐ Fail

- ☒ Irritant Smoke
- *Qualitative*
- ☒ Pass
- ☐ Fail

Fit Factor: Good. 100

Employee Signature: Ryan LeFebre

Test Conducted By: Cruz Delgado / Cruz Delgado operations MGR.

1678 Bloomfield Blvd. • P.O. Box 15147 • Farmington, NM 87401 • 505-325-SAFE (7233) • Fax: 505-325-1905

SAFETY ALLIANCE, INC.

"Partnerships for Safe Working Environments"

For office use only:
OR No. 16403
Cards: 7/13

Training Program: Respiratory Fit test	29CFR 1910 .134
Company: Philip Services	Date: 7/18/00
Training Location (Classroom): Safety Alliance, Inc.	Instructor: Cruz Delgado
Training Location (Hands-on): "	Start Time: 2pm
Company Contact:	End Time: 3pm

PARTICIPANTS

PLEASE PRINT LEGIBLY!

	Employee Name (printed)	Signature	Social Security No.	Supervisor
1	Ryan LeFebre		[redacted]	
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				

PLEASE CONTINUE SIGNING IN ON THE BACK WHEN THIS SIDE IS FULL!

1678 Bloomfield Blvd. • P.O. Box 15147 • Farmington, NM 87401 • 505-325-SAFE (7233) • Fax: 505-325-1905

SAFETY ALLIANCE, INC.

"Partnerships for Safe Working Environments"
Farmington, New Mexico

hereby acknowledges that

Danny Padilla

has succesfully completed the

Hazardous Waste Operations & Emergency Response for Supervisors

Training Program

Dated this eighteenth *day of* September *, 19* 98

29 CFR 1910.120
Course Number

[redacted]
Social Security Number

Donald R. Smith
Instructor

President

This certifies successful

completion of the approved 8 hour training course.

Danny Padilla

[redacted]

Hazardous Waste Operations and Emergency Response Refresher

For the purposes of training required under
OSHA 29 CFR 1910.120

Conducted by

Acme Environmental Inc.

4007 Carlisle NE
Albuquerque, NM 87107
(505) 872-ACME

course date: *01/04/00*

course director:

exam date:

expires on: *01/04/01*

certificate number: *010400-11*

Philip Environmental Services Corporation

Health and Safety Program
Certification of On-The -Job Training

This form has been prepared to document compliance with the requirement of 29 CFR 1910.120 that field employees working on Philip Environmental Services Corporation projects have received the required three (3) days of supervised on-the-job training in health and safety protection.

I, Mike Stahle, certify that I have

supervised Danny Padilla for at least three days

in the performance of on-the-job activities meeting the requirements for health and safety established by the Occupation Health and Safety Administration for workers at hazardous waste operations and emergency response activities. I certify that I am qualified to provide such training through a combination of field experience and classroom training.

This on-the-job training was provided on the following three (3) dates:

September 14, 1998

September 15, 1998

September 16, 1998

A copy of this certification is being forwarded to the Director of Health, Safety, and Compliance for inclusion into the training file for this employee.

Signature: Mike Stahle

FIT TEST REPORT

Fit test information

ID NUMBER [redacted]
LAST NAME PADILLA
FIRST NAME DANNY
COMPANY
LOCATION
NOTE

CUSTOM1
CUSTOM2
CUSTOM3
CUSTOM4

TEST DATE 01/18/1999
TEST TIME 11:07
DUE DATE 01/18/2000

PORTACOUNT S/N 16261
N95 COMPANION N

RESPIRATOR
MANUFACTURER MSA
MODEL COMFO CLASSIC
MASK STYLE 1/2 FACE
MASK SIZE MEDIUM
APPROVAL
EFF. < 99% N

PROTOCOL DEFAULT 29CFR1910.134
PASS LEVEL 100

EXERCISE	DURATION (SEC)	FIT FACTOR	PASS
NORMAL BREATHING	60	6310	Y
DEEP BREATHING	60	1050	Y
HEAD SIDE TO SIDE	60	4130	Y
HEAD UP AND DOWN	60	5670	Y
TALKING	60	2570	Y
GRIMACE	30	344	X
BEND AND TOUCH TOES	60	1880	Y
NORMAL BREATHING	60	7900	Y

OVERALL FF 2720 Y

FIT TEST OPERATOR _____ DATE 1/18/99
WOODBURY

NAME _____ DATE _____
DANNY PADILLA

Presented By

CONDOR

This is to certify

MIKE E. STAHLE

has completed a 40 hour course in
Hazardous Materials and Site Investigations
required by OSHA 29 CFR 1910.120(e)

Presented this 9th Day of January 1992
CONDOR GEOTECHNICAL SERVICES, INC.

Marian S. Fournier

This certifies successful

completion of the approved 8 hour training course.

Mike Stahle

[redacted]

Hazardous Waste Operations and Emergency Response Refresher

For the purposes of training required under
OSHA 29 CFR 1910.120

Conducted by

Acme Environmental Inc.

4007 Carlisle NE
Albuquerque, NM 87107
(505) 872-ACME

exam date:

course date: *01/04/00*

expires on: *01/04/01*

course director:

certificate number: *010400-13*

Burlington Environmental, Inc.
Health and Safety Program
Certification of On-The -Job Training

This form has been prepared to document compliance with the requirement of 29 CFR 1910.120 that field employees working on Burlington Environmental, Inc. projects have received the required three (3) days of supervised on-the-job training in health and safety protection.

I, Robert Thompson, certify that I have

supervised Mike Stahle for at least three days

in the performance of on-the-job activities meeting the requirements for health and safety established by the Occupation Health and Safety Administration for workers at hazardous waste operations and emergency response activities. I certify that I am qualified to provide such training through a combination of field experience and classroom training.

This on-the-job training was provided on the following three (3) dates:

September 14, 1992

September 15, 1992

September 16, 1992

A copy of this certification is being forwarded to the Director of Health, Safety, and Compliance for inclusion into the training file for this employee.

Signature: Robert Thompson

Acme Environmental, Inc. Agent for *LOFLIN ENVIRONMENTAL SERVICES, INC.*

Respirator Fit-Test Form

Name: MIKE E. STAHLE Social Security No#: [redacted]
Test performed by: MEE, DAVID

Type of Respirator: 1/2 FACE Approval Number: _____
Manufacturer: MSA Model: COMFO II Size: LARGE

Type of Fit Test: Qualitative or Quantitative
(circle one)

Qualitative Testing

Testing Agent: Isoamyl Acetate, Saccharin Solution Aerosol, Irritant Fume
(circle one) (banana oil) (sodium saccharin) (stannic oxychloride)

Fit Test Exercise:	Pass	Fail
i. Breathe normally	1410	_____
ii. Breathe deeply	1850	_____
iii. Turn head side to side (Inhale at each side)	15100	_____
iv. Nod head up and down (Inhale with head up)	2540	_____
v. Read Rainbow Passage	805	_____
vi. Grimace	36100	_____
vii. Bend and Touch Toes	5580	_____
Normal	994	_____
O/A	1690	_____

Rainbow Passage

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach, his friend say he is looking for the pot of gold at the end of the rainbow.

Test date: 5-12-99 Fit -Test expiration date: 5-12-99
Test subject: _____ Test conductor: [illegible]

Presented By

CONDOR

This is to certify

THEODORE NEZ

has completed a 40 hour course in
Hazardous Materials and Site Investigations
required by OSHA 29 CFR 1910.120(e)

Presented this 9th Day of January 1992
CONDOR GEOTECHNICAL SERVICES, INC.

Marian S. Fournier

BRADFORD PUBLISHING

NO. B.-R. 5

This certifies successful

completion of the approved 8 hour training course.

Theodore Nez

[redacted]

Hazardous Waste Operations and Emergency Response Refresher

For the purposes of training required under
OSHA 29 CFR 1910.120

Conducted by

Acme Environmental Inc.

4007 Carlisle NE
Albuquerque, NM 87107
(505) 872-ACME

course date: *01/04/00*

course director:

exam date:

expires on: *01/04/01*

certificate number: *010400-09*

Philip Enviromental Services Corporation

Health and Safety Program

Certification of On-The -Job Training

This form has been prepared to document compliance with the requirement of 29 CFR 1910.120 that field employees working on Philip Environmental Services Corp. projects have received the required three (3) days of supervised on-the-job training in health and safety protection.

I, Mike Stahle, certify that I have

supervised Theodore Nez for at least three days

in the performance of on-the-job activities meeting the requirements for health and safety established by the Occupation Health and Safety Administration for workers at hazardous waste operations and emergency response activities. I certify that I am qualified to provide such training through a combination of field experience and classroom training.

This on-the-job training was provided on the following three (3) dates:

July 7,1997

July 8, 1997

July 9, 1997

A copy of this certification is being forwarded to the Director of Health, Safety, and Compliance for inclusion into the training file for this employee.

Signature: Mike Stahle

Acme Environmental, Inc. Agent for *LOFLIN ENVIRONMENTAL SERVICES, INC*

Respirator Fit-Test Form

Name: THEODORE NER
Social Security Number: [redacted]
Test Performed By: M. O'ROURKE

Type of respirator: 1/2 FACE
Manufacturer: MSA
Model: COMFO CLASSIC
Size: MEDIUM

Type of Fit Test: Qualitative or (Quantitative)
Testing Agent: Isoamyl Acetate, Saccharin Solution Aerosol, Irritant Fume
(banana oil) (sodium saccharin) (stannic oxychloride)

Fit Test Exercise:	**Pass**	**Fail**
1. Normal Breathing	3180	
2. Breathe deeply	1680	
3. Turn head side to side (inhale at each side)	1860	
4. Nod head up and down (inhale with head up)	4860	
5. Read rainbow passage	1500	
6. Grimace	3530	
7. Bend and touch toes	1590	
8. Normal Breathing	3450	
Overall fit factor	2270	

Test subject: [signature]
Date: 1-4-00
Test Conductor: Meaghan ORourke
Fit-Test Expiration Date: 01/04/01

4007 Carlisle Blvd. Northeast Albuquerque, NM 87107 505.872.2263

SAFETY ALLIANCE, INC.

"Partnerships for Safe Working Environments"
Farmington, New Mexico

hereby acknowledges that

MARSHALL D. HOLDEN

has succesfully completed the

40 HOUR HAZARDOUS WASTE OPERATIONS & EMERGENCY RESPONSE
for the COMPETENT SUPERVISOR PERSON
Training Program

Dated this 5th *day of* January , 19 97

29 CFR 1910.120 40 HR
Course Number

[redacted]
Social Security Number

Instructor

President

This certifies successful

completion of the approved 8 hour training course.

Dale Holden

[redacted]

Hazardous Waste Operations and Emergency Response Refresher

For the purposes of training required under OSHA 29 CFR 1910.120

Conducted by

Acme Environmental Inc.

4007 Carlisle NE
Albuquerque, NM 87107
(505) 872-ACME

course date: *01/04/00*

course director:

exam date:

expires on: *01/04/01*

certificate number: *010400-04*

Philip Enviromental Services Corporation

Health and Safety Program

Certification of On-The -Job Training

This form has been prepared to document compliance with the requirement of 29 CFR 1910.120 that field employees working on Burlington Environmental, Inc. projects have received the required three (3) days of supervised on-the-job training in health and safety protection.

I, Mike Stahle, certify that I have

supervised Dale Holden for at least three days

in the performance of on-the-job activities meeting the requirements for health and safety established by the Occupation Health and Safety Administration for workers at hazardous waste operations and emergency response activities. I certify that I am qualified to provide such training through a combination of field experience and classroom training.

This on-the-job training was provided on the following three (3) dates:

May 19, 1998

May 20, 1998

May 21, 1998

A copy of this certification is being forwarded to the Director of Health, Safety, and Compliance for inclusion into the training file for this employee.

Signature: Mike Stahle

(DR)

Acme Environmental, Inc. Agent for *LOFLIN ENVIRONMENTAL SERVICES, INC*

Respirator Fit-Test Form

Name: Marshall Dale Holden
Social Security Number: [redacted]
Test Performed By: M. O'ROURKE

Type of respirator: 1/2 FACE
Manufacturer: MSA
Model: COMFO CLASSIC
Size: LARGE

Type of Fit Test: Qualitative or (Quantitative)
Testing Agent: Isoamyl Acetate, Saccharin Solution Aerosol, Irritant Fume
(banana oil) (sodium saccharin) (stannic oxychloride)

Fit Test Exercise:	Pass	Fail
1. Normal Breathing	900	
2. Breathe deeply	1120	
3. Turn head side to side (inhale at each side)	843	
4. Nod head up and down (inhale with head up)	1060	
5. Read rainbow passage	690	
6. Grimace		014
7. Bend and touch toes	720	
8. Normal Breathing	1170	
Overall fit factor	104	

Test subject: Marshall D. Holden
Date: 1-4-00
Test Conductor: Meaghan O'Rourke
Fit-Test Expiration Date: 01/04/01

4007 Carlisle Blvd. Northeast Albuquerque, NM 87107 505.872.2263

United Science Industries, Inc.
P.O. Box 21 · Carlyle, Illinois 62231 · (618) 594-4023

Mike Hare

Has attended and satisfactorily passed an examination covering the contents of a course entitled

40-HOUR HAZARDOUS MATERIALS WORKER

(Designed to meet the requirements of 29 CFR 1910.120)

HM-0515	February 2, 1992
Certificate Number	Exam Date
January 30 - February 2, 1992	Belinda Prigo
Dates of the Course	Course Director
February 1, 1993	
Expiration Date	Exam Administrator

This certifies successful

completion of the approved 8 hour training course.

Mike Hare

[redacted]

Hazardous Waste Operations and Emergency Response Refresher

For the purposes of training required under OSHA 29 CFR 1910.120

Conducted by

Acme Environmental Inc.

4007 Carlisle NE
Albuquerque, NM 87107
(505) 872-ACME

course date: *01/04/00*

course director:

exam date:

expires on: *01/04/01*

certificate number: *010400-03*

Burlington Environmental, Inc.
Health and Safety Program
Certification of On-The -Job Training

This form has been prepared to document compliance with the requirement of 29 CFR 1910.120 that field employees working on Burlington Environmental, Inc. projects have received the required three (3) days of supervised on-the-job training in health and safety protection.

I, Bud Dehner, certify that I have

supervised Mike Hare for at least three days

in the performance of on-the-job activities meeting the requirements for health and safety established by the Occupation Health and Safety Administration for workers at hazardous waste operations and emergency response activities. I certify that I am qualified to provide such training through a combination of field experience and classroom training.

This on-the-job training was provided on the following three (3) dates:

January 27, 1992

January 28, 1992

January 29, 1992

A copy of this certification is being forwarded to the Director of Health, Safety, and Compliance for inclusion into the training file for this employee.

Signature: 

M12

Acme Environmental, Inc. Agent for *LOFLIN ENVIRONMENTAL SERVICES, INC*

Respirator Fit-Test Form

Name: Mike Hare
Social Security Number: [redacted]
Test Performed By: M. ORourke

Type of respirator: 1/2 FACE
Manufacturer: MSA
Model: COMFO ELITE
Size: LARGE

Type of Fit Test: Qualitative or (Quantitative)
Testing Agent: Isoamyl Acetate (banana oil), Saccharin Solution Aerosol (sodium saccharin), Irritant Fume (stannic oxychloride)

Fit Test Exercise:	Pass	Fail
1. Normal Breathing	14,000	
2. Breathe deeply	2340	
3. Turn head side to side (inhale at each side)	179	
4. Nod head up and down (inhale with head up)	169	
5. Read rainbow passage	424	
6. Grimace	797	
7. Bend and touch toes	142	
8. Normal Breathing	521	
Overall fit factor	325	

Test subject: Mike Hare
Date: 1-4-00
Test Conductor: Meghan ORourke
Fit-Test Expiration Date: 01/04/01

4007 Carlisle Blvd. Northeast Albuquerque, NM 87107 505.872.2263

UNITED SCIENCE INDUSTRIES

Rural Route 1 • Box 207
Woodlawn, Illinois 62898
Phone (618) 735-2411 • FAX (618) 735-2907

Kelly Padilla

Has attended and satisfactorily completed the course entitled

40-HOUR HAZARDOUS MATERIALS WORKER

(Designed to meet the requirements of 29 CFR 1910.120)

HM 0996
Certificate Number

March 31 - April 3, 1993
Dates of the Course

April 3, 1994
Expiration Date

Course Director

April 3, 1993
Exam Date

Administrated by Director
Exam Administrator

This certifies successful

completion of the approved 8 hour training course.

Kelly Padilla

[redacted]

Hazardous Waste Operations and Emergency Response Refresher

For the purposes of training required under OSHA 29 CFR 1910.120

Conducted by

Acme Environmental Inc.

4007 Carlisle NE
Albuquerque, NM 87107
(505) 872-ACME

course date: *01/04/00*

course director:

exam date:

expires on: *01/04/01*

certificate number: *010400-12*

Philip Environmental Services Corporation

Health and Safety Program

Certification of On-The -Job Training

This form has been prepared to document compliance with the requirement of 29 CFR 1910.120 that field employees working on Philip Environmental Services Corporation projects have received the required three (3) days of supervised on-the-job training in health and safety protection.

I, Mike Stahle, certify that I have

supervised Kelly Padilla for at least three days

in the performance of on-the-job activities meeting the requirements for health and safety established by the Occupation Health and Safety Administration for workers at hazardous waste operations and emergency response activities. I certify that I am qualified to provide such training through a combination of field experience and classroom training.

This on-the-job training was provided on the following three (3) dates:

March 25,1993

March 26, 1993

March 27, 1993

A copy of this certification is being forwarded to the Director of Health, Safety, and Compliance for inclusion into the training file for this employee.

Signature: Mike Stahle

Acme Environmental, Inc. Agent for *LOFLIN ENVIRONMENTAL SERVICES, INC*

Respirator Fit-Test Form

Name: Kelly Padilla
Social Security Number: [redacted]
Test Performed By: M. ORourke

Type of respirator: 1/2 FACE
Manufacturer: MSA
Model: COMFO CLASSIC
Size: MEDIUM

Type of Fit Test: Qualitative or (Quantitative)
Testing Agent: Isoamyl Acetate, Saccharin Solution Aerosol, Irritant Fume
(banana oil) (sodium saccharin) (stannic oxychloride)

Fit Test Exercise:	Pass	Fail
1. Normal Breathing	333	
2. Breathe deeply	355	
3. Turn head side to side (inhale at each side)	273	
4. Nod head up and down (inhale with head up)	363	
5. Read rainbow passage	218	
6. Grimace	285	
7. Bend and touch toes	316	
8. Normal Breathing	422	
Overall fit factor	309	

Test subject: Kelly Padilla
Date: 1/4/2000
Test Conductor: Meaghan ORourke
Fit-Test Expiration Date: 01/04/01