

Site Specific Safety and Health Plan

Date: 9/18/2014

JOB NUMBER: 1409-100

SITE DESCRIPTION:

A truck carrying petroleum crude oil overturned after filling from a tank battery. The contents were released into a field and followed natural drainage to a nearby low lying area. Approx 60 bbls were released.

Oil Spill Operations

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Hazardous Waste Operations

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[Check]

Bio-Hazard/Decon

☐

Industrial Operations

☐

[One]

Company: Plains All American

OPERATIONS/ENTRY OBJECTIVES

Job Activity 1 Equipment set-up

Level of Protection D

Personal Protective Equipment

Hard hat, Safety glasses, Steel toe boots. Employees working on or within 10' of any waterway must don a Coast Guard approved PFD. Workers exposed to noise levels exceeding 85 db. must wear appropriate hearing protection. Safety vest are required while working around heavy machinery and near any road or railway.

Job Activity 2 Accessing Oil Spill site, utilizing heavy machinery and hand tools

Level of Protection D with protective clothing for chainsaw and swing blade use

Personal Protective Equipment

Job Activity 5 Decon

Level of Protection D

Personal Protective Equipment

Hard hat, Safety glasses, Steel toe rubber boots. Tyvek or Nexgen suit to protect workers skin and clothes from oil, PVC gloves. Employees working on or within 10' of any waterway must don a Coast Guard approved PFD. Workers exposed to noise levels exceeding 85 db. must wear appropriate hearing protection. Safety vest are required while working around heavy machinery and near any road or railway.

Personnel Decontamination Procedures:

Prior to entry into the exclusion area set decon up at the designated entry/exit point, this will include equipment such as: poly sheeting, decon pools, long and short handled brushes, buckets with prescribed decon solution, a garden hose for emergency decon, pump-up sprayers open head drum with drum liners. A tool drop shall be set up in an appropriate location. Gross Decon: The initial gross decon should concentrate on boot covers, outer gloves and the outer suit ensuring that all visible contaminants are removed by scrubbing with brushes soapy water or other prescribed solution followed by rinsing with clean water. Remove outer gloves and boot covers, remove protective clothing by turning inside out as they are removed and place in waste drum. Respirators shall be removed in area free of airborne hazards, cartridges removed and mask shall be washed with MSA Confidence Plus or equivalent solution, then double rinse and air dry. Retain all decon solutions used, do a final hand wash with soap and warm water after PPE removal.

Additional Decontamination Considerations:

ON-SITE ORGANIZATION AND COORDINATION

Complete Environmental Services:

Project Manager Kati Kelley

Supervisor Sonny Hughes

Foreman Paul Newton

Site Safety Officer Randy Mayer

Customer Representatives

Duane Nottingham - J. N. Taylor

Scobie Wilcox - Scobie Wilcox, Safety (Plains)

Regulatory Representatives (Name/Agency)

Lafram EPA/USC 9/15/2014

HAZARD EVALUATION

The following substance(s) are known or suspected to be onsite. The primary hazards of each are identified. Material Safety Data Sheets are attached for each substance.

<u>SUBSTANCE</u>	<u>CONCENTRATION</u>	<u>PRIMARY HAZARD</u>
Petroleum Crude oil		Contact with liquid, H2S, Benzene.

The following additional hazards are suspected to be present (Physical, environmental, etc.)

Flammable/Toxic atmospheres, lifting of heavy loads, hot work environment, slips, trips and falls on debris or steps, sharp sheet metal, working at heights, energized electrical equipment.

COMMUNICATION PROCEDURES

On-Site Cellular Phones

<u>NAME/NUMBER</u>	<u>NAME/NUMBER</u>
Kati Kelley / (601)323-9964	
Sunny Hughes / (601)940-0830	
Paul Newton / (251) 490-3152	
Randy Mayer / (225) 933-4534	

Radios

<u>NAME</u>	<u>CHANNEL/FREQUENCY</u>

Air Horn Signals

Single long blast: all team(s) shall evacuate the hazard area and assemble in designated safe refuge or decon as needed before proceeding to assembly point. All other site personnel will proceed to the designated assembly areas for the site.

Hand / Other Signals

- Grip Buddy's Wrist or Waist - Leave Area Immediately
- Both Hands Atop Head - Need Assistance
- Finger Touching Nose or Respirator, Can Smell Contamination/Breakthrough
- Thumbs Up - OK, I'm All Right, I Understand
- Thumbs Down - No, Negative

CONTINGENCY PLAN

Personnel Qualified in Standard First Aid and CPR

<u>NAME</u>	<u>1st AID</u>	<u>CPR</u>
Paul Newton	X	X
Misty Waller	X	X

First Aid Equipment is available at the following locations:

First Aid Kit On the table in the Decontamination area and in All Trucks and Response Trailers

Emergency Eye Wash On the table in the Decontamination area and in All Trucks and Response Trailers

Emergency Shower

Other

	<u>NAME</u>	<u>TELEPHONE</u>
Hospital	HC Watkins Memorial Hospital	601-776-6925
Ambulance		911
Air Evacuation		911
Fire Department		911
Site Phone		

Address, Directions to Hospital

Turn right onto Hwy 18, continue to Hwy 145 (S. Archusa Ave). Turn north on Hwy 145 and continue approx 1.5 miles. HC Watkins Memorial Hospital will be on the right. 605 S. Archusa Avenue, Quitman, MS 39355

Additional Site Specific Information:

EMERGENCY PROCEDURES

1. The Site Safety Officer will be notified immediately of any injury occurring on site and is responsible for ensuring that the appropriate procedures are followed.

a. Injury Inside Hazardous Work Area.

The withdrawal signal will be sounded immediately and all personnel in the hazardous area will withdraw and assemble at a safe distance from the hazardous area. The Site Safety Officer will direct the rescue of the injured person. NO RESCUE ATTEMPT SHALL BE MADE WITHOUT AUTHORIZATION FROM THE SITE SAFETY OFFICER. No re-entry will be made following an injury until a complete determination of the cause has been made.

b. Fire and/or Explosion.

The withdrawal signal will be sounded and all personnel will proceed to the following designated assembly area:

Proceed up wind if possible and assemble in location TBD in toolbox safety meetings.

c. Personal Protective Equipment Failure.

The person who experienced the failure and his buddy/partner will exit the hazardous area until the deficiencies have been corrected and he/she has been checked and found to be safe to return by his/her supervisor or the Site Safety Officer. At no time shall a person be left alone in the hazardous area.

d. Other Equipment Failure.

If any other safety equipment fails to operate properly, the Supervisor and the Site Safety Officer shall be notified. They shall determine the effect of the failure on continuing operations. If the failure affects safety at the site, the entire project will be shut down until corrective measures can be taken that do not compromise the safety or health of any personnel.

e. In All Situations.

When the on-site emergency requires the evacuation of the hazardous area, personnel shall not re-enter until:

1. The conditions resulting in the evacuation have been corrected.
2. The hazards have been reassessed.
3. The Site Safety Plan has been revised to correct for the emergency.
4. Site personnel have been briefed on any changes to the Site Safety Plan.

f. Additional Instructions/Comments.

Be aware of potential ignition sources, use non-sparking tools as necessary, ground and bond containers prior to making transfers. Employees that are required to work four feet or higher off the main working surface will have approved fall protection on, and tied off at all times.

- All smoking, eating, and drinking will be prohibited in the work areas.
- Only experienced and qualified operators will be permitted to operate heavy equipment;
- All non-essential individuals will be prohibited from entering any work area.
- Frequent (daily) inspections of equipment and operating methods should be performed and repairs/revisions done as necessary.
- Orderly work will be maintained whenever possible;
- Work zones will be observed and the buddy system employed.
- Equipment and vehicles will be refueled only within safe areas and with equipment shut off.

SITE DIAGRAM

<u>DIAGRAM KEY</u>		
1	EXCLUSION ZONE	5 _____
2	DECONTAMINATION ZONE	6 _____
3	SUPPORT ZONE	7 _____
4	_____	8 _____



SITE HAZARD ANALYSIS

Physical Hazards

Physical hazards encountered at a work site may include anything from vehicle and rail traffic to “slips, trips and falls” from walking on wet surfaces, rocks and debris, overhead hazards, cuts, sprains and strains. The primary safeguards for these types of hazards are to be aware of the surroundings and to remain focused on the particular aspect of the job at hand. Inadequate lighting, high noise levels around pumps and other equipment can cause hearing loss and inhibit communications. Pressure washing activities must be confined to limited areas separate from other vehicle and foot traffic. Any extremely unusual or hazardous condition not addressed in the SOPs should be reported immediately to the Corporate Health and Safety Director.

Chemical Hazards

The primary hazards are petroleum crude oil. All chemicals on a work site should be handled with caution and with the proper PPE. Material Safety Data Sheets for all chemicals stored onsite and used during the site decontamination operations shall be included in the Site Health and Safety Plan and be made available to all personnel.

Biological Hazards

Insects, snakes, poison plant life, may be abundant in the area. Personnel may use insect repellent, snake chaps, and good hygiene to combat these. Notification to the supervisor and Health and Safety Manager will be made as soon as possible if personnel have an adverse encounter with any biological hazard.

Contact Threats

Liquid may be absorbed through the skin if large amounts of skin are exposed repeatedly. Irritation of the skin may occur if contact is prolonged.

Ingestion Threats

Ingestion may cause gastrointestinal disturbances including irritation, nausea, vomiting and diarrhea.

Airborne Threats

May cause respiratory and nasal irritation. Central nervous system effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure, and death.

Monitoring and Sampling

During initial site entry, a more detailed evaluation of site-specific characteristics will be performed by the site health and safety officer to further aid in the selection of personal protective equipment and engineering controls for the tasks to be performed. Based on the preliminary evaluation, air monitoring will be conducted to identify any Immediately Dangerous to Life and Health (IDLH) or other potentially dangerous conditions such as; the presence of flammable atmospheres, oxygen-deficient environments, and toxic levels of airborne contaminants. The monitoring will be performed with direct-reading instruments such as; combustible gas, oxygen, or hydrogen sulfide meters, colorimetric detector tubes, photoionization detectors or flame ionization detectors. This monitoring will be repeated when contaminants change, work begins on a different portion of the site, a different type of operation is initiated (i.e., drum opening instead of pressure washing), or operating gasoline/propane powered equipment or when employees begin handling leaking drums or containers, or working in areas with obvious free liquid contamination (i.e., spills, ponds).

PERSONNEL EXPOSURE CONTROL PLAN

The results of air monitoring and sampling will be compared with OSHA Permissible Exposure Limits (PELs), ACGIH Threshold Limit Values (TLVs), and NIOSH Recommended Exposure Limits (RELs). If these results are outside acceptable limits, job tasks will be reexamined to identify and control the source of exposure. Control methods may include engineering and administrative measures, or changes in personal protective equipment and respirators. To minimize exposure to these products all employees having direct contact with the product must follow good industrial hygiene practices including but not limited to:

- Avoid direct contact with potentially contaminated surfaces whenever possible.
- Limit access to exclusion zone to essential personnel only.
- Lay out traffic patterns and work areas on-site to minimize travel between clean and contaminated areas.
- Enter and exit exclusion zones through the decontamination zone.
- Use tools and heavy equipment to avoid hand and body contact with contaminated materials.
- Use disposable personal protective equipment (PPE) to minimize the need to clean reusable items.
- Cover potentially-exposed instruments and tools with polyethylene or other protective materials whenever possible.

SPILL, FIRE OR ACCIDENT RESPONSE PROCEDURES

Upon discovering an emergency situation, personnel notify the site safety officer or their supervisor, who will evaluate available information and initiate an appropriate response. Site workers are alerted to emergencies through the use of an employee alarm system using a single long blasts on an air horn.

Stop leak if possible and can be done safely. Keep material out of water sources. Build dikes to contain flow as necessary. Use inert, non-combustible absorbant material to pick up any spilled materials (soda ash, chem-pads, gel sorbent, vermiculite, dry sand, and earth) Sweep and/or scoop up using non-sparking tools. Wet down and dispose of immediately or recover free product with suction hoses, wash down the affected area with soap and water solution.

Fire Plan:

Upon discovering a fire or if the fire alarm is sounded all personnel shall immediately evacuate the area and proceed to the designated area of safe refuge designated in the daily tailgate safety meeting and perform a head count.

Report all injuries, First aid for cuts or punctures would include: debriefing, washing with soap and water, irrigating with hydrogen peroxide or alcohol and applying an antibiotic paste before bandaging.

Heavy Equipment Operations

Heavy equipment may be utilized extensively onsite. These include but do not limit to: Wreckers, Vacuum Trucks, Dozers, Excavators, Skid Steer loaders, Large Trucks, Pick-up Trucks, Pumps, Generators and Light Plants. Hearing protection will be utilized as needed. Unnecessary personnel will stay clear of the swing radius of excavators. Ensure that the operator sees you. Hand signals between spotters and operators will be discussed prior to work starting. During night operations, spotters will utilize a reflective safety vest and flashlight.