

HAZWOPER - Hazardous Waste Operations and Emergency Response

POLICY

Hawk Energy, LLC has implemented this policy to ensure no employee is exposed to Hazardous Waste material at levels in excess of Permissible Exposure Limits (PEL). David Slim is responsible for enforcing this policy.

TRAINING

All employees working on site exposed to hazardous substances, health or safety hazards and their supervisors responsible for the site will be trained before starting hazardous waste work. David Slim is the assigned supervisor responsible for ensuring all employees receive the required training and certification required by OSHA regulations. All employees will receive review training as required.

Employees will not be permitted to participate in or supervise field activities until they have been trained to a level required by their job function and responsibility.

The training will thoroughly cover the following:

- Names of employees and alternates responsible for site safety and health.
- Safety, health and other hazards present on the site.
- Use of personal protective equipment (PPE).
- Work practices by which employees can minimize risks from hazards.
- Safe use of engineering controls and equipment on the site.
- Medical surveillance requirements.
- The contents of the site safety and health plan.

Hawk Energy, LLC employee training will be based on the duties and function to be performed by each employee responder. The skill and knowledge levels required for all new responders will be conveyed to them through training before they are permitted to take part in actual emergency operations on an incident. Employees who participate or are expected to participate, in emergency response, will be given the following training:

First Responders at the Awareness Level – are individuals who are likely to witness or discover a hazardous substance release and who have been trained to initiate an emergency response sequence by notifying the proper authorities of the release. They would take no further action beyond notifying the authorities of the release.

First Responders at the Operations Level – receive eight (8) hours training or have had sufficient experience to demonstrate competency in areas of responding to releases or potential releases of hazardous substance, to protect nearby persons, property or the environment from the effects of the release. Their function is to contain the release from a safe distance and help keep it from spreading. Training certification is required.

- Hazardous Materials Technicians – receive 24 hours of training equal to first responder operations level with knowledge of how to implement emergency response plan, know the classification, identification and verification of known or unknown substances, functions within an assigned role in the ICS, how to select and use of proper PPE, perform advanced containment, and understands decontamination and toxicology. Training certification is required.
- Hazardous Materials Specialist – in addition to the 24 hours of training for the technical level, the specialist will be able to develop a site safety and control plan. Training certification is required.
- On-Scene Incident Commander – is required to have at least 24 hours of training equal to the first responder operations level. This employee knows how to implement the program and system, PPE, hazard risks, state and Federal regulations and decontamination. Training certification is required.
- Trainers – who teach any of the above training subjects will have satisfactorily completed a training course for teaching the subjects they are expected to teach, such as the courses offered by the U.S. National Fire Academy or they will have the training and/or academic credentials and instructional experience necessary to demonstrate competent instructional skills and a good command of the subject matter of the courses they are to teach.
- Refresher Training – Employees trained in accordance with this plan will receive an annual refresher training. A record of the methods used will be maintained.

Initial Training

- Hawk Energy, LLC employees engaged in hazardous substance removal or other activities that expose or potentially expose, employees to hazardous substances and health hazards will receive a minimum of 40 hours of instruction off the site and a minimum of three (3) days actual field experience under the direct supervision of a trained, experienced supervisor.
- Company employees on site only occasionally for a specific limited task and who are unlikely to be exposed over published exposure limits will receive a minimum of 24 hours of instruction off the site and the minimum of one (1) day actual field experience under the direct supervision of a trained, experienced supervisor.
- Company employees who regularly work in areas on site that have been monitored and cleared, indicating that exposures are under published exposure limits, where respirators are not necessary and monitoring results indicate that there are no health hazards or the possibility of an emergency developing, will receive a minimum of 24 hours of instruction off the site and the minimum of one (1) day actual field experience under the direct supervision of a trained, experienced supervisor.
- Employees with 24 hours of training who become general site employees or who are required to wear respirators, will have the additional 16 hours and two (2) days of training necessary to total the required training.

Supervisor Training

— On-site supervisors who are directly responsible for or who supervise employees engaged in, hazardous waste operations will receive 40 hours of initial training and three (3) days of supervised field experience. Additionally, supervisors will receive at least eight (8) additional hours of specialized training upon job assignment, covering topics such as the Company's safety and health program, PPE program, spill containment program and health hazard monitoring procedures and techniques.

Qualifications for Trainers

Company trainers are qualified to instruct employees about the subject matter they are teaching. Such trainers have satisfactorily completed a training program for teaching the subjects they teach or they have the academic credentials and instructional experience necessary for teaching the subjects.

Training Certification

Company employees that have successfully completed the training and field experience required are certified by their instructor and field-training supervisor as having completed the necessary training. A written certificate is given to each employee who has completed training. Any employee who is not certified or who does not meet the above stated requirements, is prohibited from engaging in hazardous waste operations.

Emergency Response

Employees who are engaged in responding to emergencies at hazardous waste sites that may expose them to hazardous substances are trained in how to respond to such expected emergencies.

Refresher Training

All employees will receive eight (8) hours of annual refresher training consisting of any critique of incidents that have occurred in the past year that can serve as training examples of related work, as well as other relevant topics.

Equivalent Training

Employers who can demonstrate through documentation or certification that an employee's work experience and/or training has met the equivalent of the required initial training will not need to provide it.. Equivalent training may include academic coursework or prior from actual hazardous waste site experience. Hawk Energy, LLC will provide a copy of the certification or documentation to our employees upon request.

All employees new to the site will receive appropriate, site-specific training and supervised field experience before entering the new site.

HAZWOPER (EMERGENCY RESPONSE)

An emergency response plan will handle anticipated emergencies before beginning emergency response operations. The plan is in writing and available for inspection by employees, their representatives and OSHA.

Elements of the Hawk Energy, LLC Emergency Response Plan include:

- Pre-emergency planning and coordination with outside parties.
- Employees roles, lines of authority, training and communications.
- Emergency recognition and prevention.
- Safe distances and places of refuge.
- Site security and control.
- Evacuation routes and procedures.
- Decontamination.
- Emergency medical treatment procedures.
- Emergency alerting and response procedures.
- Critiques of response and clean up.
- PPE and emergency equipment.
- Use of local or state emergency plans to avoid duplications.

The senior official responding to an emergency will become the individual in charge of a site-specific Incident Command System (ICS) for controlling the operations at the site. Initially it is the senior officer on the first-due piece of responding emergency apparatus to arrive on the incident scene. As more senior officers arrive (i.e., battalion chief, fire chief, state law enforcement official, site coordinator, etc.) the position is passed up the line of authority which has been previously established.

The person in charge of the ICS will:

- Identify hazardous substances or conditions present.
- Implement appropriate emergency operations and assure that PPE is worn.
- Limit the number of emergency response employees at that site to those who are actively performing emergency operations.
- Designate a safety officer with specific responsibility to identify and evaluate hazards and to provide direction.
- Begin decontamination procedures after emergency operations have terminated.

Emergency response employees with signs or symptoms that may be from exposure to hazardous substances during an emergency will be provided with medical consultation.

Specific requirements for chemical protective clothing/equipment to be used by hazardous material specialists are found in §1910.120 – Appendix B.

Post-Emergency Response Operations

Upon completion of the emergency response, if it is necessary to remove hazardous substances, health hazards and materials contaminated with them (such as contaminated soil or other elements of the natural environment) from the site of the incident, Hawk Energy, LLC or the responsible party conducting the clean-up, will meet all the requirements of OSHA 1910.120 – HAZWOPER, paragraphs (b) through (o).

HAZWOPER (RCRA)

- The written Safety and Health Program for our employees identifies, evaluates, controls safety and health hazards and provides for emergency response. The program details a specific chain of command, addresses tasks and objectives of the operations and addresses site-specific procedures.
- The Medical Surveillance Program is provided to Hawk Energy, LLC employees at no cost. Employees who may be exposed to health hazards for 30 days or more a year or wear a respirator 30 or more days a year are covered under the Medical Surveillance Program. The Medical Surveillance Program also covers employees who are injured or develop symptoms due to exposure to hazards. Members of Company HAZMAT teams are also covered by the Medical Surveillance Program.
- Engineering controls, safe practices and PPE will be used to reduce and maintain employee exposures below the PEL established by OSHA. Feasible engineering controls include the use of pressurized cabs or control booths on equipment and/or the use of remotely operated material handling equipment.
- Air monitoring is used to identify and qualify airborne levels of hazardous substances. The monitoring will address initial entry, periodic monitoring, possible Immediately Dangerous to Life and Health (IDLH) conditions and wherever exposure may be a possibility. The task-specific conditions, duration and the hazards and potential hazards will be identified, including a guide for PPE assessment.
- Decontamination procedures are developed, communicated to employees and implemented before any employees or equipment may enter areas on site where potential for exposure to hazardous substances exists. The procedures minimize employee contact with hazardous substances or with equipment that has contacted hazardous substances.
- All Company employees leaving a contaminated area will be appropriately decontaminated. All contaminated clothing and equipment leaving a contaminated area will be appropriately disposed of or decontaminated.
- Decontamination procedures will be monitored by the site Safety and Health Supervisor to determine their effectiveness. When such procedures are found to be ineffective, appropriate steps will be taken to correct any deficiencies.
- Decontamination will be performed in geographical areas that will minimize the exposure of uncontaminated employees or equipment to contaminated employees or equipment.
- PPE and equipment will be decontaminated, cleaned, laundered, maintained or replaced as needed to maintain their effectiveness. Employees whose non-impermeable clothing becomes wetted with hazardous substances, will immediately remove that clothing, and proceed to shower. The clothing will be disposed of or decontaminated before it is removed from the work zone.

- Unauthorized employees will not remove protective clothing or equipment from change rooms.
- Where the decontamination procedure indicates a need for regular showers and change rooms outside of a contaminated area, such facilities will be provided and meet the requirements of OSHA §1910.141 – Sanitation – (d) Washing Facilities and (e) Change Rooms.
- Other effective means for cleansing will be provided and used if temperature conditions prevent the effective use of water.

SAFETY AND HEALTH PROGRAM

Hawk Energy, LLC has developed and implemented this Safety and Health Program for our employees involved in hazardous waste operations. The program identifies, evaluates and controls safety and health hazard and provides for emergency response for hazardous waste operations.

The program includes the following:

- An organizational structure.
- A comprehensive work-plan.
- CA site-specific safety and health plan which does not repeat standard operating procedures.
- The safety and health training program.
- The medical surveillance programs.
- The Company's standard operating procedures for safety and health.
- Any necessary interface between general program and site-specific activities.

SITE EXCAVATION

Site excavations created during initial site preparation or during hazardous waste operations will be shored or sloped as appropriate to prevent accidental collapse in accordance with OSHA Regulations.

CONTRACTORS AND SUBCONTRACTORS

In the event a contractor or sub-contractor services are retained for work in hazardous waste operations, Hawk Energy, LLC will inform those contractors, subcontractors or their representatives of the site emergency response procedures and any potential fire, explosion, health, safety or other hazards of the operation that have been identified by our Company's information program.

PROGRAM AVAILABILITY

This written Safety and Health Program will be made available to any contractor or subcontractor or their representative who will be involved with the hazardous waste operation; to employees; to employee designated representatives; to OSHA employees and to employees of other Federal, state or local agencies with regulatory authority over the site.

ORGANIZATIONAL STRUCTURE OF THE SITE-SPECIFIC PROGRAM

The organizational structure establishes a specific chain of command and specifies the overall responsibilities of supervisors and employees. It includes the following elements:

- A general supervisor who has the responsibility and authority to direct all hazardous waste operations.
- A site safety and health supervisor who has the responsibility and authority to implement the site safety and health plan and verify compliance.
- All other employees needed for hazardous waste site operations and emergency response and their general functions and responsibilities.
- The lines of authority, responsibility and communication.

The organizational structure will be reviewed and updated as necessary to reflect the current status of waste site operations.

COMPREHENSIVE WORK-PLAN OF THE SITE-SPECIFIC PROGRAM

The comprehensive work-plan addresses the tasks and objectives of the site operations and the logistics and resources required to reach those tasks and objectives. The comprehensive work-plan will:

- Define anticipated clean-up activities as well as normal operating procedures that need not repeat procedures available elsewhere.
- Define work tasks and objectives and identify the methods for accomplishing those tasks and objectives.
- Establish employee's requirements for implementing the plan.
- Provide for the implementation of the required training.
- Provide for the implementation of the required informational programs.
- Provide for the implementation of the required medical surveillance program.

SITE-SPECIFIC SAFETY AND HEALTH PLAN

The Site-specific Safety and Health Plan is kept on site and addresses the safety and health hazards of each phase of site operation, including the requirements and procedures for employee protection. The Site-specific Safety and Health Plan include the following minimum elements:

- A safety and health risk or hazard analysis for each site task and operation found in the work-plan.
- Employee training assignments to assure compliance with regulations.
- PPE to be used by employees for each of the site tasks and operations being conducted as required by OSHA standards.
- Medical surveillance requirements in accordance with regulations.
- Frequency and types of air monitoring, employees monitoring and environmental sampling techniques and instrumentation to be used, including methods of maintenance and calibration of monitoring and sampling equipment to be used.

- Site control measures in accordance with the required site control program.
- Decontamination procedures in accordance with OSHA standards.
- An emergency response plan meeting the requirements for safe and effective responses to emergencies, including the necessary PPE and other equipment.
- Confined space entry procedures.
- A spill containment program meeting OSHA requirement.

The Site-specific Safety and Health Plan provides for pre-entry briefings to be held before initiating any site activity and at such other times as necessary to ensure that employees are apprised of this Plan and that it is being followed. The information and data obtained from required site monitoring analysis work is used to update this Plan.

Inspections will be conducted by the site safety and health supervisor or the general supervisor as necessary to determine the effectiveness of the Plan. Any deficiencies in the effectiveness of the Plan will be corrected without delay.

MEDICAL SURVEILLANCE PROGRAM

Employees handling hazardous substances may be exposed to toxic chemicals, safety hazards, biologic hazards and radiation. Therefore, a Medical Surveillance Program is essential to assess and monitor employees health and fitness for employment in hazardous waste operations and during the course of work; to provide emergency and other treatment as needed; and to keep accurate records for future reference.

Hawk Energy, LLC has instituted a Medical Surveillance Program to cover the following categories of employees engaged in hazardous waste operations:

- All employees who are or may be exposed to hazardous substances or health hazards at or above the established permissible exposure limits for these substances, without regard to the use of respirators, for 30 days or more a year.
- All employees who wear a respirator for 30 days or more a year or as required by HAZWOPER regulations.
- All employees who are injured, become ill or develop signs or symptoms due to possible overexposure involving hazardous substances or health hazards from an emergency response or hazardous waste operation.
- Members of HAZMAT teams.

Hawk Energy, LLC has made medical examinations and consultations available to the above-named employee categories on the following schedules:

- Before job assignment.
- At least once every twelve months for each employee covered unless the attending physician believes a longer interval (not greater than biennially) is appropriate.
- At termination of employment or reassignment to an area where the employee would not be covered if the employee has not had an examination within the last six (6) months.
- As soon as possible, upon notification by an employee that the employee has developed signs or symptoms indicating possible overexposure to hazardous substances or health hazards or that they have been injured or exposed above the permissible exposure limits in an emergency situation.
- At more frequent times, if the examining physician determines that an increased frequency of examination is medically necessary.

Employees who may have been injured, received a health impairment, developed signs or symptoms resulting from exposure to hazardous substances from an emergency incident or exposed without the necessary PPE being used: as soon as possible will receive follow-up examinations or consultations, if the examining physician determines that are medically necessary.

Elements of Medical Examinations and Consultations

Medical examinations include a medical and work history (or updated history if one is in the employee's file) with special emphasis on symptoms related to the handling of hazardous substances and health hazards and to fitness for duty, including the ability to wear any required PPE under conditions (i.e., temperature extremes) that may be expected at the work site.

The content of medical examinations or consultations made available to employees will be determined by the attending physician.

All medical examinations and procedures will be performed by or under the supervision of, a licensed physician knowledgeable in occupational medicine and will be provided without cost to our employees, without loss of pay and at a reasonable time and place.

Hawk Energy, LLC will provide one (1) copy of the HAZWOPER standard (§1926.120) and its appendices to the attending physician and in addition the following for each employee:

- A description of the employee's duties as they relate to the employee's exposures.
- The employee's exposure levels or anticipated exposure levels.
- A description of any PPE used or to be used.
- Information from previous medical examinations of the employee that is not readily available to the examining physician.
- Information required by §1910.134 – Respiratory Protection.

Physician's Written Opinion

Hawk Energy, LLC will obtain and furnish the employee with a copy of a written opinion from the examining physician containing the following:

- The physician's opinion as to whether the employee has any detected medical conditions that would place the employee at increased risk of material impairment of health from work in hazardous waste operations, emergency response or from respirator use.
- The physician's recommended limitations on the employees assigned work.
- The results of the medical examination and tests, if requested by the employees.
- A statement that the employee has been informed by the physician of the results of the medical examination and any medical conditions that require further examination or treatment.
- This written opinion will not reveal specific findings or diagnoses unrelated to occupational exposure.

RECORDKEEPING

Accurate records of required medical surveillance will be retained for the period specified and meet the criteria of 29 CFR 1910.1020 (d) Preservation of Records.

The required record will include at least the following information:

- The name and social security number of the employee.
- Physicians' written opinions, recommended limitations and results of examinations and tests.
- Any employee medical complaints related to exposure to hazardous substances
- A copy of the information provided to the examining physician by Hawk Energy, LLC, with the exception of the HAZWOPER standard and its appendices.

ENGINEERING CONTROLS, WORK PRACTICES, AND PPE FOR EMPLOYEE PROTECTION

Engineering controls, work practices, PPE or a combination of these, will be implemented to protect employees from exposure to hazardous substances and safety and health hazards.

- Engineering controls and work practices are instituted to reduce and maintain employee exposure to or below the permissible exposure limits for substances regulated by OSHA 1910, Subpart Z, except when such controls and practices are not feasible.
- Engineering controls include the use of pressurized cabs or control booths on equipment and/or the use of remotely operated material handling equipment.
- Work practices include removing all non-essential employees from potential exposure during the opening of drums, wetting down dusty operations and positioning employees upwind of possible hazards.

- Whenever engineering controls and work practices are not feasible or not required, any reasonable combination of engineering controls, work practices and PPE will be used to reduce and maintain to or below, the permissible exposure limits for substances regulated by OSHA 1910, Subpart Z.
- Hawk Energy, LLC will not implement a schedule of employee rotation as a means of compliance with permissible exposure limits except when there is no other feasible way of complying with the airborne or dermal dose limits for ionizing radiation.
- Hawk Energy, LLC will comply with the provisions of OSHA 1910, Subpart G – Occupational Health and Environmental Control.

An appropriate combination of engineering controls, work practices and PPE will be used to reduce and maintain employee exposure to or below permissible exposure levels for hazardous substances and health hazards not regulated by OSHA 1910, Subparts G and Z.

PPE

Hawk Energy, LLC's PPE program, will meet requirements in §1910.120 – Appendix B:

- PPE selection based upon site hazards.
- PPE use and limitations of the equipment.
- Work mission duration.
- PPE maintenance and storage.
- PPE decontamination and disposal.
- PPE training and proper fitting.
- PPE donning and doffing procedures.
- PPE inspection procedures before, during and after use.
- Evaluation of the effectiveness of the PPE program.
- Limitations during temperature extremes, heat stress and other appropriate medical considerations.

Selection of PPE

- PPE is selected and used to protect employees from the hazards and potential hazards identified during site evaluations.
- The selection of PPE is based on assessments of its performance characteristics relative to the site's requirements and limitations, the task-specific conditions and durations and the identified hazards and potential hazards.
- Positive pressure self-contained breathing apparatus or positive pressure air-line respirators equipped with an escape air supply will be used when chemical exposure levels present will create a substantial possibility of immediate death, immediate serious illness or injury or impair the ability to escape.
- Totally encapsulating chemical protective suits (Level A) will be used in conditions where skin absorption of a hazardous substance will result in a substantial possibility of immediate death, serious illness or injury or impair the ability to escape.

- The level of protection provided by PPE selection will be increased when additional information or site conditions show that increased protection is necessary to reduce employee exposures below permissible exposure limits.

NOTE: The level of protection may be decreased when additional information or site conditions show that such action will not result in hazardous exposures.

- PPE will be selected and used to meet the OSHA requirements of §1910.132 – Personal Protective Equipment and additional requirements specified in HAZWOPER regulations.

Totally encapsulating Chemical Protective Suits

- Totally encapsulating suits will protect employees from the particular hazards which are identified during site evaluations.
- Totally encapsulating suits will be capable of maintaining positive air pressure.
- Totally encapsulating suits will be capable of preventing inward test gas leakage of more than zero point five (0.5) percent.

MONITORING

Monitoring is performed in areas where there may be a question of employee exposure to hazardous concentrations of hazardous substances to ensure proper selection of engineering controls, work practices and PPE so that employees are not exposed to levels which exceed permissible exposure limits, if there are no permissible exposure limits, for hazardous substances.

Air monitoring is utilized to identify and quantify airborne levels of hazardous substances and safety and health hazards, determining the appropriate level of protection required for employees on site.

Upon initial entry, air monitoring will be conducted to identify any immediately dangerous to life or health (IDLH) conditions, exposures over permissible exposure limits, exposure above radioactive material dose limits or other dangerous conditions such as the presence of flammable atmospheres or oxygen-deficient environments.

Periodic monitoring is conducted when the possibility of an IDLH condition or flammable atmosphere developing or when there is indication that exposures have increased beyond permissible exposure limits since the last monitoring. Situations where it will be considered whether the possibility that exposures have risen are as follows:

- When work begins on a different portion of the site.
- When contaminants other than those previously identified are being handled.
- When a different type of operation is initiated (e.g., drum opening as opposed to exploratory well drilling).
- When employees are handling leaking drums or containers or working in areas with obvious liquid contamination (e.g., a spill or lagoon).
- After the actual clean-up phase of any hazardous waste operation commences, Hawk Energy, LLC will monitor those employees likely to have the highest exposures to those hazardous substances and health hazards likely to be present above permissible exposure limits by using personal sampling frequently enough to characterize employee exposures. If the employees likely to have the highest exposure are over permissible exposure limits, then monitoring will continue to determine all employees likely to be above those limits.

DECONTAMINATION

Procedures for all phases of decontamination have been implemented as follows:

- A decontamination procedure will be developed, implemented and communicated to employees before any employees or equipment may enter areas on-site where potential for exposure to hazardous substances exists.
- Standard operating procedures will be developed to minimize employee contact with hazardous substances or with equipment that has been in contact with hazardous substances.
- All employees leaving a contaminated area will undergo appropriate decontamination. All contaminated clothing and equipment leaving a contaminated area will be properly disposed of or decontaminated.
- Decontamination procedures will be monitored by the site safety and health supervisor to assess their effectiveness. Ineffective procedures will be promptly revised to address any deficiencies.

Decontamination will be performed in geographical areas that minimize the exposure of uncontaminated employees or equipment to contaminated employees or equipment. All equipment and solvents used for decontamination will be decontaminated or disposed of in accordance with proper protocols.

Personal protective clothing and equipment:

- Protective clothing and equipment will be decontaminated, cleaned, laundered, maintained or replaced as needed to maintain their effectiveness.
- Employees whose non-impermeable clothing becomes wetted with hazardous substances will immediately remove that clothing and proceed to shower. The clothing will be disposed of or decontaminated before removal from the work zone.

Unauthorized employees will not remove protective clothing or equipment from change rooms. Commercial laundries or cleaning establishments that decontaminate protective clothing or equipment will be informed of the potentially harmful effects of exposures to hazardous substances.

Where the decontamination procedure indicates a need for regular showers and change rooms outside of a contaminated area, they will be provided and meet the requirements OSHA 1910.141 - Sanitation. If temperature conditions prevent the effective use of water, then other effective means for cleansing will be provided and used.

