

HSE Program



ASSIGNMENT OF RESPONSIBILITY

In accordance with OSHA regulations,

ARM Environmental Services, Inc.

has assigned responsibility and accountability for the administration of our “HSE Program” to:

Andy Wilson

Depending on your location, this HSE Program may also be referred to as SHE or EHS Program.

The Federal OSHA designation is “HSE;” however, you will notice that all terms are used.

A copy of the HSE Program is available upon request for our employees’ review. Questions should be directed to supervision or management.



TABLE OF CONTENTS

CORE CHAPTERS

Safety Policy and Procedures	1-1
Safety Committees	2-1
Code of Safe Practices	3-1
Incident Investigation and Reporting.....	4-1
Behavior Based Safety	5-1
Short Service Employee	6-1

ELECTED CHAPTERS

AEGCP and GFCI.....	7-1
Benzene.....	8-1
Bloodborne Pathogens	9-1
Confined Spaces—Construction	10-1
Disciplinary Procedures and Methods.....	11-1
Electrical Safety—Qualified and Nonqualified.....	12-1
Fall Protection—Construction	13-1
Fire Protection	14-1
First Aid and CPR	15-1
General Waste Management	16-1
Hand and Power Tools	17-1
Hazard Communication	18-1
Hazwoper—Hazardous Waste Operations and Emergency Response	19-1
Hydrogen Sulfide	20-1
Ladders and Stairways	21-1
Lockout/Tagout—Control of Hazardous Energy	22-1
Noise Exposure	23-1
Personal Protective Equipment.....	24-1
Process Safety Management.....	25-1
Respiratory Protection Program.....	26-1
Spill Prevention and Response	27-1
Acknowledgement and Notes	

RESPONSIBILITIES

Andy Wilson is the designated Company Safety Coordinator.

POLICY

The Occupational Safety and Health Act of 1970 clearly defines the requirement to provide safe and healthful working conditions for all employees. Therefore, the safety and health of our employees is the first consideration in operating this business.

Safety and health in our business must be part of every operation. Without question, it is every employee's responsibility at all levels.

It is the intent of ARM Environmental Services, Inc. to comply with all laws. To do this, we must constantly be aware of conditions in all work areas that can produce injuries. No employees will be required to work at a job they know is not safe or healthful. Your cooperation in detecting hazards and, in turn, controlling them, is a condition of your employment. Inform your supervisor immediately of any situation beyond your ability or authority to correct.

The personal safety and health of each employee of ARM Environmental Services, Inc. is of primary importance. Prevention of occupationally induced injuries and illnesses is of such consequence that it will be given precedence over operating productivity, whenever necessary. To the greatest degree possible, management will provide all mechanical and physical activities required for personal safety and health, in keeping with the highest standards.

We will maintain an occupational safety and health program conforming to the best practices of organizations of this type. To be successful, such a program must embody proper attitudes towards injury and illness prevention on the part of supervisors and employees. It also requires cooperation in all safety and health matters, not only between supervisor and employee, but also between each employee and their co-workers. Only through such a cooperative effort, can a safety and health program, in the best interest of all, be established and preserved.

Our objective is a safety and health program that will reduce the number of injuries and illnesses to an absolute minimum, not merely in keeping with, but surpassing, the best experience of operations similar to ours. Our goal is zero accidents and injuries.

Our safety and health program includes:

- Providing mechanical and physical safeguards to the maximum extent possible
- Conducting a program of safety and health inspections to find and eliminate unsafe working conditions or practices, to control health hazards, and to fully comply with OSHA safety and health standards for every job
- Training all employees in good safety and health practices
- Providing necessary personal protective equipment, and instructions for proper use and care
- Developing and enforcing safety and health rules, and requiring that employees cooperate with these rules as a condition of employment
- Investigating, promptly and thoroughly, every accident to find out what caused it, and correct the problem so it will not happen again

We recognize that responsibilities for occupational safety and health are shared:

- This employer accepts responsibility for leadership of the safety and health program, for its effectiveness and improvement, and for providing the safeguards required to ensure safe work conditions
- Supervisors are responsible for developing proper attitudes toward safety and health in themselves and in those they supervise, and for ensuring that all operations are performed with the utmost regard for the safety and health of all personnel involved, including themselves
- Employees are responsible for wholehearted, genuine operations of all aspects of the safety and health program – including compliance with the rules and regulations – and for continuously practicing safety and health while performing their duties

Andy Wilson will ensure that all employees are properly instructed and supervised in the safe operation of any machinery, tools, equipment, process, or practice that they are authorized to use or apply while at work.

Production is never so urgent that we cannot take the time to do our work safely.

Program Goals

Why have a workplace “Safety and Health Plan”? Taking risks is part of running a business, particularly for small business owners. You take risks in product development, marketing, and advertising in order to stay competitive. However, some risks should never be taken. One of these is risking the safety and health of workers. Safety begins at the top and goes downward throughout The Company. The primary goal of ARM Environmental Services, Inc. is to continue operating a profitable business while protecting employees from injuries or illness. This can be achieved by delegating responsibility and accountability to all involved in ARM Environmental Services, Inc.’s operation.

Responsibility: Having to answer for activities and results

- Accountability: The actions taken by management to ensure the performance of responsibilities

In other words, to reach our goal of a safe workplace, everyone needs to take responsibility and be held accountable.

Benefits of achieving our goals are:

- Minimizing of injuries and accidents
- Minimizing the loss of property and equipment
- Elimination of potential fatalities
- Elimination of potential permanent disabilities
- Elimination of potential OSHA fines
- Reductions in Workers’ Compensation costs
- Reductions in operating costs
- Having the best “Safety and Health” conditions possible in the workplace

Management Commitment

ARM Environmental Services, Inc. is committed to building an effective injury and illness prevention plan, putting it in writing, and integrating it into the entire operation.

The management of ARM Environmental Services, Inc. is committed this safety policy, and to provide direction and motivation by:

- Appointing Safety Coordinator(s) and/or Safety Committee Chairmen
- Establishing Company safety goals and objectives
- Developing and implementing this written Safety and Health program
- Ensuring total commitment to the Safety and Health program
- Facilitating employees' safety training
- Establishing responsibilities for management and employees to follow
- Ensuring that management and employees are held accountable for performance of their safety responsibilities
- Establishing and enforcing disciplinary procedures for employees
- Reviewing the Safety and Health program annually, and revising or updating as needed

Labor and Management Accountability

All employees, both labor and management, need to understand their responsibilities under OSHA rules and be held accountable for complying with the rules as well as the Company's related policies.

It is the responsibility of ARM Environmental Services, Inc. to provide a safe and healthful work environment for their employees. However, holding everyone accountable for their part in workplace safety and health is critical for a successful injury and illness prevention plan.

Assignment of Responsibility

The Safety Coordinator(s) and/or Safety Committee Members ARM Environmental Services, Inc. has designated:

Safety Coordinator	Andy Wilson
Safety Coordinator	
Safety Committee Chair	
Safety Committee Vice-chairman	
Safety Committee Alternate Chair/Vice-chair	

Their cell phone and office phone numbers are:

Safety Person's Name	Office Phone #	Cell Phone #

Andy Wilson will assist managers in initiating, educating, and executing the safety program with:

- Introducing the safety program to new employees
- Following up on recommendations, suggestions, etc., made at the "Weekly" safety meetings. All topics of safety concerns must be documented accordingly
- Assisting the personnel in the execution of standard policies
- Conducting safety inspections on a periodic basis
- Addressing all hazards or potential hazards as needed
- Preparing monthly accident reports and investigations
- Maintaining adequate and available first aid supplies and safety equipment
- Ensuring an adequate number of qualified "First Aid Certified" people on the work site
- Becoming thoroughly familiar with OSHA regulations and local and state safety codes
- Defining the responsibilities for safety and health of all subordinates and holding each person accountable for their results through the formal appraisal system and where necessary, disciplinary procedures
- Emphasizing the unnecessary personal and financial losses of all accidents

Employee Involvement

Employees are required to work in compliance with the safety rules, report all accidents and near misses, and report all unsafe conditions or unsafe practices. To demonstrate ARM Environmental Services, Inc.'s commitment to support the employees in these responsibilities, ARM Environmental Services, Inc. will do the following:

Communication System:

- Encourage employees to inform ARM Environmental Services, Inc. about workplace hazards without fear of reprisal
- Establish and maintain a centrally located "Safety Bulletin Board" where current, relevant information may be easily reviewed by employees
- Schedule general employee meetings where safety is freely and openly discussed by those present. These meetings will be regular, scheduled, and announced to all employees and managers to achieve maximum attendance. The purpose of these meetings is safety, and the concentration will be on:
 - Occupational accident and injury history at our work sites, with possible comparison to other locations within The Company
 - Feedback from the Safety Committee
 - Guest speakers concerned with workplace safety and health
 - When possible, brief audio-visual materials that relate to our business
- Conduct training programs for communicating with employees
- Provide a safety suggestion box so that employees, anonymously if desired, can communicate their concerns with management
- Document all communication efforts to demonstrate that an effective communication system is in place

Hazard Identification and Control

Periodic inspections and procedures for correction provide methods of identifying existing or potential hazards in the workplace, and eliminating or controlling them. Hazard control is essential to an effective injury and illness plan. We will be sure to look at safe work practices and ensure that they are being followed, and that unsafe conditions or procedures are identified and corrected properly and promptly.

Employees are encouraged to report possible hazardous situations, knowing their reports will be given prompt and serious attention. Workplace equipment and personal protective equipment will be maintained in good, safe working condition.

Hazards, where possible, will be corrected as soon as they are identified. For those that cannot be immediately corrected, a target date for correction will be set. ARM Environmental Services, Inc. will provide interim protection for workers while hazards are being corrected. A written tracking system will be established to help monitor the progress of the hazard correction process.

Accident/Incident Investigation

Employers and safety committees are required to investigate or assign responsibility for investigating accidents. Trained individuals, with the primary focus of understanding why the accident or incident occurred, will investigate accidents/incidents and what actions can be taken to preclude recurrence. The focus will be on solutions and never on blame. They will be in writing, and adequately identify the causes of the accident or near miss occurrence.

Worker Training

Training is another essential element of any injury and illness prevention plan. OSHA rules require each employer to train workers for any job or task they are assigned.

Our plan includes training and instruction:

- For all employees when they are first hired
- For all new employees for each specific task
- For all employees given new job assignments for which training has not already been received
- Whenever new substances, processes, procedures, or equipment are introduced into the workplace and present a new hazard
- Whenever new personal protective equipment or different work practices are used on existing hazards
- Whenever ARM Environmental Services, Inc. is made aware of a new or previously unrecognized hazard
- For all supervisors to ensure they are familiar with the safety and health hazards to which employees under their immediate direction and control may be exposed

An effective safety and health plan requires proper job performance by everyone in the workplace.

It is the determination of ARM Environmental Services, Inc. to ensure that all employees are knowledgeable about the materials and equipment with which they work, what known hazards are present, and how they are controlled.

Program Evaluation

Regular reviews will be held to look at the components of our safety and health plan, to determine what is working well and what changes, if any, are needed. All employees are encouraged to participate by keeping ARM Environmental Services, Inc. informed of their concerns regarding the elements of this safety and health plan.

The success of this safety and health plan is dependent upon two things: First, ARM Environmental Services, Inc. must provide a safe and healthful environment in which the employee has the opportunity to work safe, and second, the employee must choose to work safe.

Supervisor/Foreman

The Supervisors and/or Foremen will establish an operating atmosphere to ensure that safety and health is managed in the same manner and with the same emphasis as production, cost, and quality control. This will be accomplished by:

- Regularly emphasizing that accident and health hazard exposure prevention are not only moral responsibilities, but also a condition of employment
- Identifying operational oversights that could contribute to accidents which often result in injuries and property damage
- Participating in safety and health related activities, (e.g. safety meetings, facility reviews, and correcting dangerous employee behavior)
- Explaining the safety policies and the hazards of each person's particular work
- Ensuring that initial orientation of "new hires" is properly carried out
- Making sure that if a "Competent Person" is required, that one is present to oversee, and instruct employees when necessary
- Never short-cutting safety for expediency, nor allowing workers to do so
- Consistently enforce safety rules and enforce discipline
- Conducting daily job-site inspections and correcting noted safety violations

Employees

It is the duty of all employees to know the safety rules, and conduct their work in compliance with these rules. Disregard of the safety and health rules shall be grounds for disciplinary action up to and including termination. It is also the duty of each employee to make full use of the safeguards provided for their protection. Every employee will receive an orientation when hired and receive a copy of any Company Safety and Health Programs. Employee responsibilities include the following:

- Reading, understanding and following safety and health rules and procedures
- Signing the Code of Safe Practices and any other policy acknowledgements
- Wearing Personal Protective Equipment (PPE) at all times when working in areas where there is a possible danger of injury
- Wearing suitable work clothes as determined by the supervisor/foreman
- Performing all tasks safely as directed by their supervisor/foreman
- Reporting ALL injuries, no matter how slight, to their supervisor/foreman immediately and seeking treatment promptly
- Knowing the location of first aid, firefighting equipment, and safety devices
- Attending any and all required safety and health meetings
- Not performing potentially hazardous tasks, or using any hazardous material until properly trained, and following all safety procedures for those tasks
- Stop and ask questions when unsure about how to safely do the work

CODE OF CONDUCT

All ARM Environmental Services, Inc. employees will abide by our company Code of Conduct when performing any company business activities. ARM Environmental Services, Inc. will further ensure that company employees adhere to all client requirements and safe practices when performing work at the client site.

ARM Environmental Services, Inc. employees will not:

- Engage in any unlawful or unethical activities
- Divulge any company or client confidential or proprietary information to unauthorized personnel
- Use or tolerate the use of, drugs or alcohol at the workplace
- Engage in any actions that constitute sexual harassment or workplace violence

Reporting Violations

Employees will be required to report any safety, health or ethical violations to the company as soon as possible.

The company will establish a method that allows employees to report any Code of Conduct violations anonymously and without fear of reprisal.

Communication

This Code of Conduct will be communicated to all employees at their times of hire, and will be reviewed at least annually, or when any changes are made.

Disciplinary Actions

The company will investigate all reports of violations, and any employees found to have violated our Code of Conduct will be subject to progressive disciplinary action according to our disciplinary policy, up to and including termination.

Any violations of our Code of Conduct deemed to be illegal or unlawful will be reported to the appropriate authorities.

Commitment

The goal of ARM Environmental Services, Inc. is to operate a profitable business with the highest possible standards of integrity. This can be achieved by ensuring that all employees abide by our Code of Conduct. We are committed to operating in a professional and courteous manner in all of our business practices.

Owner Name

Owner Signature

Date

ARM ENVIRONMENTAL SERVICES, INC. HSE

TRAINING RECORD

Trainer:	
Signature:	
Date:	
Content of Training:	
Attendees	
Print Name:	Signature:

POLICY

ARM Environmental Services, Inc. is committed to accident prevention in order to protect the safety and health of all our employees. Injury and illness losses due to hazards are needless, costly, and preventable. To prevent these losses, a joint management/worker safety committee will be established. Employee involvement in accident prevention and support of safety committee members and activities is necessary to ensure a safe and healthful workplace for all employees.

RESPONSIBILITIES

ARM Environmental Services, Inc. Safety Committee members are:

As designated

The Safety Committee will meet a minimum of zero time per year.

Committee Goal

Our Company will strive to meet the following goals:

- Minimize injury and illness in the workplace
- Open up the lines of communication between management and employees concerning safety at every level of The Company
- Improve safety of facilities(s) and equipment for a better work environment

Mission Statement

It is our Company and committee's goal to create clear avenues of communication among management and staff to create a safe working environment.

Company Commitment

ARM Environmental Services, Inc. is committed to excelling at safety, and will support the safety committee's purpose and recommendations.

Communication of Safety Matters

The committee will handle all safety issues with diligence. We hope to encourage an atmosphere where all employees report safety violations or concerns, ask questions, seek training, or come to us with any safety issues.

Purpose

The purpose of our safety committee is to bring workers and management together in a non-adversarial, cooperative effort to promote safety and health in the workplace. The safety committee will assist management and make recommendations for change.

Organization

There will be, in most cases, an equal number of employee and employer representatives. However, there may be more employee representatives than employer representatives, if both groups agree. Employee representatives shall be volunteers or elected by their peers. If no employees volunteer or are elected, then they may be appointed by management. Employer representatives will be appointed. Safety committee members will serve a continuous term of at least one year.

Committee membership terms will be staggered so that at least one experienced member is always on the committee.

Extent of Authority

It must be clearly understood that the safety committee advises management on issues that will promote safety and health in the workplace. Written recommendations are expected from the safety committee and they will be submitted to management. In turn, management will give serious consideration to the recommendations submitted and will respond in writing to the committee within a reasonable time.

Functions

- Committee meetings and employee involvement
- Hazard assessment and control
- Safety and health planning
- Evaluation of accountability system
- Evaluation of management commitment to workplace safety and health
- Evaluation of accident and incident investigation program
- Safety and health training

Recommendations

All recommendations submitted to management must be written and should be clear and concise; provide reasons for implementation; give recommended options; show implementation costs and recommended completion dates; list benefits to be gained.

Procedures

The committee's plan of action requires procedures by which the committee may successfully fulfill its role. Procedures developed should include but not be limited to:

- Meeting date, time, and location (Safety Committee Meeting Agenda)
- Election of chairperson and secretary
- Order of business
- Records (Safety Committee Meeting Minutes)

Duties of each member must include, but not be limited to:

- Reporting unsafe conditions and practices
- Attending all safety and health meetings
- Reviewing all accidents and near-misses
- Recommending ideas for improving safety and health
- Working in a safe and healthful manner
- Observing how safety and health is enforced in the workplace
- Completing assignments given to them by the chairperson
- Acting as a work area representative in matters of health and safety
- Others as determined by Company safety and health needs

The Safety Coordinator(s) and/or Safety Committee Members

ARM Environmental Services, Inc. has designated:

Safety Coordinator	Andy Wilson
Safety Coordinator	
Safety Committee Chair	
Safety Committee Vice-chairman	
Safety Committee Alternate Chair/Vice-chair	

Their cell phone and office phone numbers are:

Safety Person's Name	Office Phone #	Cell Phone #

It is the duty of Andy Wilson, the Safety Coordinator, to assist the Supervisor/Foreman and all other levels of Management in the initiation, education, and execution of an effective safety program.

PROCEDURES

The purpose of a safety committee is to bring workers and managers together to achieve and maintain a safe, healthful workplace. It is easy to start a safety committee, but developing an effective one – one that achieves and maintains a safe, healthful workplace – requires workers and managers who are committed to achieving that goal. Effective safety committees find solutions to problems that cause workplace accidents, illnesses, and injuries. Fewer accidents, injuries, and illnesses mean lower Workers' Compensation claims costs and insurance rates.

Understand a Safety Committee's Seven Essential Activities

Anyone can start a safety committee, but, to make it effective, the committee must be built on a foundation of management commitment and must be accountable for achieving its goals. The committee must do the following:

- Involve employees in achieving the committee's goals
- Identify workplace hazards
- Review reports of accidents and near misses
- Keep accurate records of committee activities
- Evaluate its strengths and weaknesses

Commitment

The committee will not survive without management support. Management demonstrates support by encouraging employees to get involved in achieving a safe, healthful workplace and by acting on the committee's recommendations. Representatives demonstrate commitment by attending committee meetings, following through on their assigned tasks, and encouraging other employees to get involved in identifying hazards.

Accountability

Representatives should understand that the committee expects them to contribute; each representative shares responsibility for accomplishing safety committee goals, which benefit everyone who works for The Company.

The safety committee is also responsible for monitoring how management holds employees accountable for working safely and for recommending ways to strengthen accountability.

Employee Involvement

To become effective, a safety committee needs help from everyone in The Company. The safety committee must have a method for employees to report hazards and to offer safety suggestions.

Ways the safety committee can encourage employees to get involved:

- Encourage employees to report hazards and unsafe work practices to a safety-committee representative
- Act on employee suggestions and recognize their contributions to a safer workplace
- Promote the committee's activities and accomplishments

Make sure employees know that you are starting a safety committee. Tell them why you are starting the committee, describe its role in The Company's safety-and-health program, and explain management's commitment to the committee.

You can inform employees in a memo or a newsletter, by e-mail, or – better yet – meet with them to promote the committee and to answer questions.

Hazard Identification

The safety committee plays an important role in keeping the workplace hazard-free:

- Ensure that representatives know how to recognize hazards and understand basic principles for controlling them
- Focus on identifying hazards and unsafe work practices that are likely to cause serious injuries
- Conduct thorough workplace inspections at least quarterly
- Document hazards during quarterly inspections and discuss how to control them at regular safety-committee meetings
- Include employer and employee representatives on the inspection team

Accident Investigation

The committee must have a procedure for investigating all workplace accidents, illness, and deaths. It is not necessary for the committee to conduct accident investigations or to participate in investigations; however, the committee should ensure that management does so. The committee should also carefully review accident reports to help management identify accident causes and determine how to control them.

Recordkeeping

You may not think of record keeping as an essential activity, but accurate, well-organized records document the committee's accomplishments and can inform the committee what it needs to do to improve.

The following documents are required for the safety committee's file:

- Accurate minutes of each safety committee meeting
- Committee reports, evaluations, and recommendations
- Management's response to committee recommendations
- Employee safety suggestions and hazard concerns

Evaluation

Evaluation answers the question "Are we effective?" Effective safety committees periodically evaluate their strengths and weaknesses, and the evaluation helps them set new goals.

At least once a year, schedule a half-day safety-committee meeting to accomplish the following: identify the committee's achievements over the past 12 months, review essential activities, and set goals for the next 12 months.

ARM ENVIRONMENTAL SERVICES, INC. HSE

TRAINING RECORD

Trainer:	
Signature:	
Date:	
Content of Training:	
Attendees	
Print Name:	Signature:

POLICY

ARM Environmental Services, Inc. will maintain a “Safety and Health Program” conforming to the best practices of organizations of this type. To be successful, such a program must embody the proper attitudes toward injury and illness prevention on the part of supervisors and employees. It also requires cooperation in all safety and health matters, not only between supervisor and employee, but also between each employee and his or her co-workers. Only through such a cooperative effort, can a safety program in the best interest of all be established and preserved. Safety and health in our business must be a part of every operation.

Andy Wilson is responsible for the implementation and enforcement of the following safety rules. Disciplinary procedures will be enforced.

THE COMPANY SAFETY AND HEALTH PROGRAM INCLUDES:

- Providing mechanical and physical safeguards to the maximum extent possible
- Conducting a program of safety and health inspections to find and eliminate unsafe working conditions or practices, to control health hazards, and to comply fully with the safety and health standards for every job
- Training all employees in good safety and health practices
- Providing necessary personal protective equipment and instructions for its use and care
- Developing and enforcing safety and health rules and requiring that employees cooperate with these rules as a condition of employment
- Investigating, promptly and thoroughly, every accident to find out what caused it and to correct the problem so that it will not happen again
- Setting up a system of recognition and awards for outstanding safety service or performance

RESPONSIBILITIES

We recognize that the responsibilities for safety and health are shared:

- ARM Environmental Services, Inc. accepts the responsibility for leadership of the safety and health program, for its effectiveness and improvement, and for providing the safeguards required to ensure safe conditions
- Supervisors are responsible for developing the proper attitudes toward safety and health in themselves and in those they supervise, and for ensuring that all operations are performed with the utmost regard for the safety and health of all personnel involved, including themselves
- Employees are responsible for wholehearted, genuine operation with all aspects of the Safety and Health Program including compliance with all rules and regulations – and for continuously practicing safety while performing their duties

GENERAL SAFETY RULES

ARM Environmental Services, Inc. employees shall follow these safe practice rules, render every possible aid to safe operations, and report all unsafe conditions or practices to their supervisor.

- Failure to abide by the Code of Safe Practices may result in disciplinary action up to and including termination
- Supervisors shall insist that employees observe and obey every rule, regulation, and order necessary to the safe conduct of the work, and shall take such action necessary to obtain compliance.
- If you are unsure of the safe method to do your job, STOP and ask your supervisor. Ignorance is no excuse for a safety violation
- All employees shall be given frequent accident prevention instructions. Instructions, practice drills, or articles concerning workplace safety and health shall be given at least once every 5 working days
- No one shall knowingly be permitted to work while the employee's ability or alertness is impaired by fatigue, illness, and prescription or over the counter drugs. Employees who are suspected of being under the influence of illegal or intoxicating substances, impaired by fatigue or an illness, shall be prohibited from working
- Employees should be alert to see that all guards and other protective devices are in proper places and adjusted, and shall report deficiencies. Approved protective equipment shall be worn in specified work areas
- Horseplay, scuffling, fighting and other acts are prohibited
- Work shall be well-planned and supervised to prevent injuries when working with equipment and handling heavy materials
- Workers shall not handle or tamper with any electrical equipment, machinery, or air or water lines in a manner not within the scope of their duties, unless they have received instructions from their supervisor. Do not attempt operate equipment until you are fully trained and authorized
- Keep your work area clean, free of debris, electrical cords, and other hazards. Immediately clean up spilled liquids
- Always notify all other individuals in your area who might be endangered by the work you are doing
- A red tag system identifies equipment that is NOT to be operated, energized, or used. All lock-out/tag-out notices and procedures must be observed and obeyed
- Do not block exits, fire doors, aisles, fire extinguishers, first aid kits, emergency equipment, electrical panels, or traffic lanes
- Do not leave tools, materials, or other objects on the floor that might cause others to trip and fall.
- Do not distract others while working. If conversation is necessary, make sure eye contact is made prior to communicating
- Employees shall not enter manholes, underground vaults, chambers, tanks, silos, or other similar places that receive little ventilation, unless it has been determined that it is safe to enter. Confined space protocols will be followed
- Materials, tools, or other objects shall not be thrown from buildings or structures until proper precautions are taken to protect others from the falling objects
- Employees shall cleanse thoroughly after handling hazardous substances, and follow special instructions from authorized sources

- Gasoline or other flammable liquids shall not be used for cleaning purposes
- No burning, welding, or other source of ignition shall be applied to any enclosed tank or vessel, even if there are some openings, until it has first been determined that no possibility of explosion exists, and authority for the work is obtained from the foreman or superintendent
- Any damage to scaffolds, falsework, or other supporting structures shall be immediately reported to the foreman and repaired before use
- Possession of firearms, weapons, illegal drugs or alcoholic beverages on Company or customer property or the job site is strictly prohibited
- All injuries shall be reported promptly to your supervisor so that arrangements can be made for medical and/or first-aid treatment

ENFORCEMENT OF SAFETY POLICIES

The compliance of all employees with ARM Environmental Services, Inc. Safety and Health Program is mandatory and shall be considered a condition of employment. All safety rules, procedures, and plans in effect are to be followed as specified in the safety program. Employees found to be in violation of Company safety policy may be subject to penalty.

Andy Wilson is the supervisor for disciplinary actions and any employee in a position of management or supervisory capacity may initiate disciplinary action against any employee found to be in violation of Company policy. Not following verbal or written safety procedures, guidelines, rules, horseplay, failure to wear selected Personal Protective Equipment (PPE), and/or abuse of selected PPE, constitutes a safety violation.

The following outlines the disciplinary measures that will be taken against employees found to be in violation:

Periodic safety inspections of the workplace and equipment will be undertaken to ensure that all personnel, including supervisory positions, are demonstrating the required commitment to safety. A general neglect of safe work procedures, practices, and requirements in the workplace, or neglect of equipment safety, will be viewed as a lack of supervisory enforcement of safety policy and the appropriate supervisor/management personnel will be subject to the same disciplinary procedures described below.

The following programs will be utilized to ensure employee compliance with the safety program and all safety rules: training programs, retraining, optional safety incentive programs, disciplinary action.

Training Programs

The importance of safe work practices and the consequences of failing to abide by safety rules will be covered in the New Employee Safety Orientation and at Tailgate/Toolbox Safety Training. This will help ensure that all employees understand and abide by The Company's safety policies.

Retraining

Employees that are observed performing unsafe acts or not following proper procedures or rules will be retrained by their foreman or supervisor. A Safety Contact Report may be completed by the supervisor to document the training. If multiple employees are involved, additional safety meetings will be held.

SAFETY INCENTIVE PROGRAMS

Although strict adherence to safety policies and procedures is required of all employees, The Company may choose to periodically provide recognition of safety-conscious employees and jobsites without accidents through a safety incentive program.

DISCIPLINARY ACTION

The failure of an employee to adhere to safety policies and procedures established by ARM Environmental Services, Inc. can have a serious impact on everyone concerned. An unsafe act can threaten not only the health and well-being of the employee committing the unsafe act but can also affect the safety of his/her coworkers and/or customers. Accordingly, any employee who violates any of The Company's safety policies will be subject to disciplinary action.

When a "Safety Violation Notice" is issued, appropriate supervisory personnel will meet with employee(s) to discuss the infraction and inform individual(s) of the rule or procedure that was violated and the corrective action to be taken.

Note: Failure to promptly report any on-the-job accident or injury, on the same day as occurrence, is considered a serious violation of The Company's Code of Safe Practices. Any employee who fails to immediately report a work-related accident or injury, no matter how minor will be subject to disciplinary action.

Employees will be disciplined for infractions of safety rules and unsafe work practices that are observed, not just those that result in an injury. Often, when an injury occurs, the accident investigation will reveal that the injury was caused because the employee violated an established safety rule and/or safe work practice(s).

In any disciplinary action, the foreman should be cautious that discipline is given to the employee for safety violations, and not simply because the employee was injured on the job or filed a Workers' Compensation claim.

Violations of safety rules and the Code of Safe Practices are to be considered equal to violations of other Company policy. Discipline for safety violations will be administered in a manner that is consistent with The Company's system of progressive discipline. If, after training, violations occur, disciplinary action will be taken as follows:

1. Oral warning. Documented, including date and facts on the "Safety Warning Report" form. Add any pertinent witness statements. Restate the policy and correct practice(s)
2. Written warning. Retrain as to correct procedure/practice
3. Written warning with suspension
4. Termination

As in all disciplinary actions, each situation is to be carefully evaluated and investigated. The particular step taken in the disciplinary process will depend on the severity of the violation, employee history, and regard to safety. Foremen and superintendents should consult with the office if there is any question about whether or not disciplinary action is justified. Employees may be terminated immediately for willful or extremely serious violations. Union employees are entitled to the grievance process specified by their contract.

Note: Consistency in the enforcement of safety rules will be exercised at all times.

ARM ENVIRONMENTAL SERVICES, INC. HSE

TRAINING RECORD

Trainer:	
Signature:	
Date:	
Content of Training:	
Attendees	
Print Name:	Signature:

POLICY

ARM Environmental Services, Inc. is committed to appropriately investigating all near misses, accidents, and incidents according to their severity to find the root cause and make changes that prevent it from happening again.

RESPONSIBILITIES

Accident investigation and reporting is a responsibility shared between the Company and its employees. Andy Wilson is responsible for establishing the Incident Investigation and Reporting policy before there is an incident.

Employer Responsibilities

- Ensuring appropriate staff receive suitable training to carry out their role in hazard and incident reporting, investigation and recording
- Completing training for Incident Investigation
- Promptly investigating incidents
- Implementing identified risk control measures to prevent recurrence of incidents
- Consulting with staff in relation to the measures to be taken to prevent recurrence of incidents
- Reviewing hazard/incident reports to ensure that all recommendations are implemented
- Ensuring, as far as is reasonably practicable, that adequate financial provision and other resources are made available to institute the recommended actions

Safety Committee Responsibilities

Safety committee members are encouraged to participate in investigations of incidents and assist with the development of measures to prevent their recurrence.

- Personnel must be trained in their roles and responsibilities for incident response and incident investigation techniques
- Training requirements relative to incident investigation and reporting (Awareness, First Responder, investigation, and training frequency) should be identified in this program

Employee Responsibilities

- Not placing themselves or others at risk of injury
- Reporting incidents to their supervisor or manager, and health and safety representative (if applicable), as soon as possible after the event
- Participating in the development of appropriate risk control measures to prevent recurrence of similar incidents
- Using risk control measures as required and any other action taken, which is designed to protect health and safety

TRAINING

All personnel will receive, as part of their training in avoiding and preventing accidents and injuries, instruction concerning their roles and responsibilities in the event of an accident or incident. This training should include:

- What qualifies as reportable accidents or incidents (and near-misses)
- Who should be contacted in the event of a reportable incident
- An explanation of the accident/incident investigation plan
- Incident investigation techniques and employee responsibilities during and after an incident/accident

PROCEDURES

ARM Environmental Services, Inc. will investigate all lost-time injuries. Fatalities and catastrophes must be reported to OSHA within 8 hours. Serious accidents must be reported to OSHA within 24 hours. OSHA requires reporting of work related incidents resulting in the death of an employee or the hospitalization of one or more employees. Owner clients require all incidents to be reported including, but not limited to, injuries, spills, property damage, fires, explosions, and vehicle damage.

Accidents and near miss incidents that result in personal injury, property damage, chemical spill, or other emergencies will be immediately reported to the assigned supervisor at the time of the event and Emergency Medical Service, Fire Department, or Hazmat Services will be immediately summoned. Such events will be investigated and documented on the appropriate Company form. All forms will be fully completed and submitted to Andy Wilson for review and for discussion at the next scheduled Safety Committee meeting. These investigations demonstrate the company's commitment to providing a safe and healthful work environment. Disciplinary Policy will be enforced.

To ensure accidents will be reported, employees must be encouraged to participate in the "fact-finding" process. The point emphasized must be that "hazardous conditions" and "unsafe practices" are an indication of a much bigger problem with a breakdown in the safety and health policy. The purpose of the accident investigation then becomes one that will uncover these system problems and provide solutions that will result in long-term corrective action.

It is important to gather facts and interview witnesses as soon as possible after an accident to ensure the most accurate information is being recorded. The efficiency of the corrective measures is determined by the accuracy of the information gathered. The best place to conduct an interview is wherever the employee being interviewed feels most comfortable. The most important interviewing technique you can use to ensure accuracy is to "listen".

Note: Consider the event a "serious accident" if an employee is admitted to a hospital for treatment or observation because of injuries suffered from a workplace accident.

ARM Environmental Services, Inc. will report severe injuries and/or fatalities using one of the following methods:

- By telephone or in person to the OSHA Area Office that is nearest to the site of the incident,
- By telephone to the OSHA central telephone number, 1-800-321-OSHA (1-800-321-6742),
- By using the reporting application located on OSHA's web site at www.osha.gov.

On site first response

Employees who could be first responders should be trained and qualified in first aid techniques to control the degree of loss during the immediate post-incident phase.

Prevent further loss

After an immediate rescue, ARM Environmental Services, Inc. will take actions to prevent further loss. For example:

Maintenance personnel should be summoned to assess integrity of building and equipment, engineering personnel to evaluate the need for bracing of structures, and special equipment/response requirements such as safe rendering of hazardous materials or explosives employed.

Secure the Accident/Incident Scene

For a serious accident, the first action the accident team needs to take is to secure the accident scene so material evidence is not moved or removed. Material evidence has a tendency to walk off after an accident. If the accident is quite serious, OSHA may inspect and require that all material evidence be marked and remain at the scene of the accident

Reporting Requirements

Local reporting sequence of events

Injuries

If a fatal injury, illness, or hospitalization of one (1) or more employees occurs, the plant manager will immediately notify the following persons and agency:

- Corporate Environmental Health and Safety (EHS) Director
- Division Manager (or any superior in this level)
- Group Manager or Team Leader (or any superior in this level)
- The area OSHA office (must be notified within 8 hours)

Involving the Environment

If an environmental incident occurs that must be reported to local, state, and/or federal agencies, the following persons should be notified:

- Corporate EHS Director
- Division Manager (or any superior in this level)
- Group Manager or Team Leader (or any superior in this level)
- Appropriate local, state and/or federal agency

Time elements of when incident should be reported

ARM Environmental Services, Inc. is required to verbally report incidents to OSHA within 8 hours of discovery. Incidents must be reported to owner client as soon as possible (or within 24 hours).

Reportable Incidents

- injury, illness, death, hospitalization of employees
- spills, property damage, fires, explosions, vehicle damage

ACCIDENT/INCIDENT CAUSES

Accidents occur when hazards escape detection during preventive measures, such as a job or process safety assessment, when hazards are not obvious, or as the result of combinations of circumstances that were difficult to foresee. A thorough accident investigation may identify previously overlooked physical, environmental, or process hazards, the need for new or more extensive safety training, or unsafe work practices.

The primary focus of any accident investigation should be the determination of the facts surrounding the incident and the lessons that can be learned to prevent future similar occurrences. The focus of the investigation should NEVER be to place blame. The process should be positive and thought of as an opportunity for improvement.

WHEN ACCIDENT/INCIDENT INVESTIGATIONS ARE REQUIRED

As a rule, investigations should be conducted for:

- All injuries (even the very minor ones)
- All accidents with potential for injury
- Fires, explosions, SpillsProperty and/or product damage situations
- All “Near Misses” where there was potential for serious injury

Near-miss and incident reporting and investigation allow you to identify and control hazards before they cause a more serious incident. Accident/incident investigations are a tool for uncovering hazards that either were missed earlier or hazards where controls were defeated. However, it is important to remember that the investigation is only useful when its objective is to identify root causes. In other words, every contributing factor to the incident must be uncovered and recommendations made to prevent recurrence.

Accident/Incident Investigation Plan

When a serious accident occurs in the workplace, everyone will be too busy dealing with the emergency at hand to worry about putting together an investigation plan, so the best time to develop effective accident investigation procedures is before the accident occurs. Part of an effective Accident and Incident Investigation Plan is to assign responsibilities

The plan should include procedures that determine:

- Who should be notified of accident?
- Who is authorized to notify outside agencies? (fire, police, etc.)
- Who is assigned to conduct investigations? Training required for accident investigators:
- Who receives and acts on investigation reports?
- Timetables for conducting hazard correction.

GATHER INFORMATION

The next step is to gather useful information about what directly and indirectly contributed to the accident.

The proper equipment will be available to assist in conducting an investigation, writing equipment such as paper, pens, pens, measuring equipment, cameras, small tools, audio recorder, Personal Protective Equipment (PPE), marking devices such as flags, equipment manuals, etc.

The following tools should be used to gather as much information as possible:

- Locate witnesses, ensuring unbiased testimony, and obtain appropriate interviewing location
- To ensure detailed interviews, interviewers must be trained
- Interview eyewitnesses as soon as possible after the accident. Interview witnesses separately, never as a group. Statements must be collected
- Interview other interested persons such as supervisors, co-workers, etc.
- Follow-up interviews with all witnesses
- Review related records such as: training records, disciplinary records, medical records, maintenance records, OSHA 300 log, safety committee records

Document the scene with photographs, videotape, or sketches AND appropriate measurements.

Evidence

Initial Identification of evidence immediately following the incident will include a listing of People, equipment, and materials involved and a recording of factors such as weather, illumination temperature, noise, ventilation, Etc.

ARM Environmental Services, Inc. must keep a collection of evidence, and ensure that it is preserved and secure. Evidence such as people, positions of equipment, parts, and papers must be preserved, secured, and collected through, notes, photographs, witness statements, flagging, and impounding of documents and equipment.

Develop a Sequence of Events

Use the information gathered to develop a detailed description of the accident. Make sure the accident is documented in enough detail to enable an individual unfamiliar with the situation to envision the sequence of events. Do not just describe the accident itself; include a description of events that led up to the accident.

Analyze the Accident/Incident

The next step is to determine the cause(s) of the accident. This is the most difficult step because first, the events must be analyzed to discover surface cause(s) for the accident, and then, by asking "why" a number of times, the related root causes are uncovered. Remember, surface causes are usually obvious and not too difficult to determine. However, it may take a great deal more time to accurately determine the weaknesses in the management system, or root causes, that contributed to the conditions and practices associated with the accident.

SURFACE CAUSES

The surface causes of accidents are those hazardous conditions and individual unsafe employee/manager behaviors that have directly caused or contributed in some way to the accident.

Hazardous conditions may exist in any of the following categories:

- Materials
- Machinery
- Equipment
- Tools
- Chemicals
- Environment
- Workstations
- Facilities
- People
- Workload

It is important to know that most hazardous conditions in the workplace are the result of unsafe behaviors that produced them. Individual unsafe behaviors may occur at any level of the organization.

Some example of unsafe employee/manager behaviors include:

- Failing to comply with rules
- Using unsafe methods
- Taking shortcuts
- Horseplay
- Failing to report injuries
- Failing to report hazards
- Allowing unsafe behaviors
- Failing to train
- Failing to supervise
- Failing to correct
- Scheduling too much work
- Ignoring worker stress

ROOT CAUSES

The root causes for accidents are the underlying system weaknesses that have somehow contributed to the existence of hazardous conditions and unsafe behaviors that represent surfaces causes of accidents. Root causes always pre-exist surface causes. Inadequately designed system components have the potential to feed and nurture hazardous conditions and unsafe behaviors. If root causes are left unchecked, surface causes will flourish! Root causes may be separated into two categories:

System design weaknesses

Missing or inadequately designed policies, programs, plans, processes, and procedures will affect conditions and practices generally throughout the workplace. Defects in system design represent hazardous system conditions.

System implementation weaknesses

Failures to initiate, carry out, or accomplish safety policies, programs, plans, processes, and procedures. Defects in implementation represent ineffective management behavior.

System design weaknesses: missing or inadequate safety policies/rules; training program not in place; poorly written plans; inadequate process; no procedures in place; develop preventive actions.

System implementation weaknesses: safety policies/rules are not being enforced; safety training is not being conducted; adequate supervision is not conducted; incident/accident analysis is inconsistent; lockout/tagout procedures are not reviewed annually.

Corrective Actions

All of the work done to this point culminates with recommendations to prevent similar accidents from happening in the future. Recommendations should relate directly to the surface and root causes of the accident. These recommendations should include recommended actions such as:

- Assigned responsibilities relative to the corrective actions
- Actions should be tracked to closure
- Engineering controls (for example, local exhaust ventilation or use of a lift assisting device)
- Work practice controls (for example, pre-plan work, and remove jewelry and loose fitting clothing before operating machinery)
- Administrative controls (e.g., standard operating procedures or worker rotation)
- Personal protective equipment (for example, safety glasses or respirators)

It is crucial that, after making recommendations to eliminate or reduce the surface causes, that the same procedure is used to recommend actions to correct the root causes. If root causes are not corrected, it is only a matter of time before a similar accident occurs.

Written Incident report

Written incident reports should be prepared and include an incident report form and a detailed narrative statement concerning the event. The format of the narrative may include an introduction, methodology, summary of the incident, investigation board members names, narrative of the event, findings, and recommendations. Photographs, witness statements, drawings, etc. should be included

Documentation and Communications of lessons learned

Lessons learned should be reviewed and communicated. Changes to processes must be placed into effect to prevent reoccurrences or similar events.

SUMMARY

A successful accident investigation determines not only what happened, but determines how and why the accident occurred. Investigations are crucial as an effort to prevent a similar or perhaps more disastrous sequence of events.

Research has shown that a typical accident is the result of many related and unrelated factors that somehow all come together at the same time. Usually ten or more factors contribute to a serious accident. Although, this combination of factors normally makes an investigation very time consuming and resource intensive, the good news is that the accident can normally be prevented by removing only a few of the contributing factors.

EMPLOYEE INCIDENT REPORT

Work site: _____

Manager/Supervisor: _____

Employee name: _____ Date: _____

Job title: _____

Incident:

Action taken:

CODE OF CONDUCT:

- Proactive management includes Supervisory leadership and control to change unproductive activities. Conformance with safety policies, rules, and regulations is a necessary component of our Safety Program.
- Employee safety responsibilities are communicated during initial orientation. Safety rules and regulations are reviewed with employees by their supervisors and are part of the documented Employee Safety Training Process.
- Supervisors understand and enforce safety rules as a part of their job. This process may involve coaching, counseling, verbal, or written reprimands, and discipline in the form of suspension and/or termination. When appropriate, documented verbal warnings and reprimands are issued and carried out by supervisors.
- Failure to adhere to any of the Safety Rules and Safe Work Practices will result in disciplinary action. All discipline will be documented in the employee's folder. Discipline may be more severe depending on the offense.

Employee Signature: _____ Date: _____

Supervisor Signature: _____ Date: _____

Accident / Incident Report

Accident & Incident Report				PAGE 1
Date of Accident	Time	Day of Week <input type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> T <input type="checkbox"/> W <input type="checkbox"/> T <input type="checkbox"/> F <input type="checkbox"/> S	Shift <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	Department
INJURED PERSON				
Name:		Address:		
Age:	Phone:			
Job Title:		Supervisor Name:		
Length of Employment at Company:		Length of Employment at Job:		
Employee Classification: <input type="checkbox"/> Full Time <input type="checkbox"/> Part Time <input type="checkbox"/> Contract <input type="checkbox"/> Temporary				
Nature of Injury:		<input type="checkbox"/> Bruising	<input type="checkbox"/> Dislocation	<input type="checkbox"/> Other (specify) Injured Body Part :
<input type="checkbox"/> Strain/Sprain	<input type="checkbox"/> Scratch/Abrasion	<input type="checkbox"/> Internal		
<input type="checkbox"/> Fracture	<input type="checkbox"/> Amputation	<input type="checkbox"/> Foreign Body	Remarks:	
<input type="checkbox"/> Laceration/Cut	<input type="checkbox"/> Burn/Scald	<input type="checkbox"/> Chemical Reaction		
Treatment:		Name and Address of Treating Physician or Facility:		
<input type="checkbox"/> First Aid				
<input type="checkbox"/> Emergency Room				
<input type="checkbox"/> Dr.'s Office				
<input type="checkbox"/> Hospitalization				
DAMAGED PROPERTY				
Property, Equipment, or Material Damaged:		Describe Damage:		
Object or Substance Inflicting Damage:				
INCIDENT DESCRIPTION				
Describe what happened: (attach photographs or diagrams if necessary)				
ROOT CAUSE ANALYSIS (Check All that Apply)				
Unsafe Acts		Unsafe Conditions		Management Deficiencies
<input type="checkbox"/> Improper work technique	<input type="checkbox"/> Poor workstation design/layout	<input type="checkbox"/> Lack of written policies & procedures		
<input type="checkbox"/> Safety rule violation	<input type="checkbox"/> Congested work area	<input type="checkbox"/> Safety rules not enforced		
<input type="checkbox"/> Improper PPE or PPE not used	<input type="checkbox"/> Hazardous substances	<input type="checkbox"/> Hazards not identified		
<input type="checkbox"/> Operating without authority	<input type="checkbox"/> Fire or explosion hazard	<input type="checkbox"/> PPE unavailable		
<input type="checkbox"/> Failure to warn or secure	<input type="checkbox"/> Inadequate ventilation	<input type="checkbox"/> Insufficient worker training		
<input type="checkbox"/> Operating at improper speeds	<input type="checkbox"/> Improper material storage	<input type="checkbox"/> Insufficient supervisor training		
<input type="checkbox"/> By-passing safety devices	<input type="checkbox"/> Improper tool or equipment	<input type="checkbox"/> Improper maintenance		
<input type="checkbox"/> Guards not used	<input type="checkbox"/> Insufficient knowledge of job	<input type="checkbox"/> Inadequate supervision		
<input type="checkbox"/> Improper loading or placement	<input type="checkbox"/> Slippery conditions	<input type="checkbox"/> Inadequate job planning		
<input type="checkbox"/> Improper lifting	<input type="checkbox"/> Poor housekeeping	<input type="checkbox"/> Inadequate hiring practices		
<input type="checkbox"/> Servicing machinery in motion	<input type="checkbox"/> Excessive noise	<input type="checkbox"/> Inadequate workplace inspection		
<input type="checkbox"/> Horseplay	<input type="checkbox"/> Inadequate hazards guarding	<input type="checkbox"/> Inadequate equipment		
<input type="checkbox"/> Drug or alcohol use	<input type="checkbox"/> Defective tools/equipment	<input type="checkbox"/> Unsafe design or construction		
<input type="checkbox"/> Unnecessary haste	<input type="checkbox"/> Insufficient lighting	<input type="checkbox"/> Unrealistic scheduling		
<input type="checkbox"/> Unsafe act of others	<input type="checkbox"/> Inadequate fall protection	<input type="checkbox"/> Poor process design		
<input type="checkbox"/> Other:	<input type="checkbox"/> Other:	<input type="checkbox"/> Other:		

Accident & Incident Report

PAGE 2

ACCIDENT/INCIDENT ANALYSIS

Using the root cause analysis list on the previous page, explain the cause(s) of the incident in as much detail as possible.

Make sketches or illustrations to help describe incident:

How bad could the accident have been?

- Very Serious Serious Minor

What is the chance of the accident happening again?

- Frequent Occasional Rare

PREVENTIVE ACTIONS

Describe actions that will be taken to prevent recurrence:

Deadline

By Whom

Complete

Describe actions that will be taken to prevent recurrence:	Deadline	By Whom	Complete

INVESTIGATION TEAM

Name:

Signature:

Position:

ARM ENVIRONMENTAL SERVICES, INC. HSE

TRAINING RECORD

Trainer:	
Signature:	
Date:	
Content of Training:	
Attendees	
Print Name:	Signature:

POLICY

ARM Environmental Services, Inc. has adopted this Behavior-based Safety Program for the safety of our employees and help prevent occupational injuries and illness.

The elements of our program consist of:

- Common Goals - Employee and Managerial commitment to the process
- Creating a systematic, ongoing process that defines a set of behaviors that reduce the risk of work-related injury, derived from safety assessments
- Training personnel in the Observation Process
- Observation and data collection on the frequency of critical safety practices
- Feedback and reinforcement to encourage and support positive safety practices
- Action Plan - Team meetings to decide on how to proceed, based on the data
- Review - Monitoring the progress of the Action Plan on a regular basis

OBSERVATION

A critical element in our Behavior-based Safety (BBS) Program depends on site observation. Site observation includes direct and open communication with the employees involved. The observer will:

- Meet with the worker at the site and introduce himself and the job being done
- Observe and monitor the worker, noting his safe behaviors
- Monitor the At-risk behaviors the worker is putting himself in

Observation Process Training

Training in the observation process will be established and implemented to the proper personnel. These individuals will be experienced employees of the Company. Training will consist of either classroom or on the job training.

Elements of the Training Program include:

- Who is to be trained
- Ensuring employees know the basic elements of the Behavior-based Program
- Ensuring that all employees involved in the process are trained in the classroom or on the job

The types of training that will be provided are:

- Management training: to ensure the common goals and process of the program are being met
- New employee training: effectively communicating the program to all employees
- Refresher training: to be performed as needed or when changes are made to the policy or procedure of the program

This training will include:

- Program objectives and incident report reviews
- How to conduct the site observations
- The observer's knowledge of the job procedures they observe
- Knowledge of the correct work and safety procedures involved
- How to complete the observation form
- How to determine and analyze At-risk behaviors
- Feedback training and role play (mentoring and coaching)- Employees should be aware they may be observed at any time

This training process will be documented in order to keep on record those qualified to observe on site behaviors and effectively implement the program's elements.

FEEDBACK

Communication is a crucial element in a successful Behavior-based Safety Program. To effectively accomplish this, feedback is of key importance.

The observer will start by commending the safe behavior the worker was doing during his work. You then want to explain, one by one, the At-risk behaviors the worker was doing. Then the observer asks the worker why he was putting himself at risk. For example, if the worker is welding a piece of metal and the sparks are flying in the workers direction. The observer would then ask the worker why he was not wearing protective clothing, like flame-retardant apron.

At this time the observer and worker will discuss the at-risk behaviors until the worker agrees to try the suggested recommendation made by the observer. The worker might be aware of his at-risk behavior or maybe not. The worker may be doing the at-risk behavior for a long time.

The Observer's job here is to highlight this behavior, then explain the associated negative consequences with this behavior. The above discussion and agreement is the individual feedback which helps the worker to change his behavior. This feedback is considered as a form of reward since:

- The worker got commendable comments on his safe behavior.
- The worker understood his at-risk behavior without being reprimanded at site or reported to his superiors for further penalties.

Key elements for the observer to remember during the feedback process are:

- Reviewing the observation with the employee
- Start with positive comments on behavior and procedure
- Reinforce these behaviors
- Describe and discuss the unsafe portions observed
- Determine the reasons for the unsafe actions with open-ended questions to the worker.

Re-emphasize that there are no negative consequences at this stage, so long as the observer and worker agree on the change of behavior.

DATA COLLECTION

At the end of the observation, the Observer will:

- Fill out an Observation Form with the safe and at-risk behaviors he noticed
- Record the date, time and location of the observations
- Note the workers comments and reasons for the at-risk behavior
- Record recommended safe behavior

The worker's name or identification number are not noted in the Observation Form.

- These Company forms will be used by ARM Environmental Services, Inc. to summarize the observation process. Recording this interaction is important for later detailed analysis by the committee in charge of the program
- Data gathering and the Observation Form will be gathered and entered into an electronic database. Reports will be generated for the committee to analyze at risk behavior trends
- Information taken from the observation and feedback phase of the program will be compiled in useful data and implemented in the action plan

ELEMENTS OF THE ACTION PLAN

In order to address unsafe behaviors ARM Environmental Services, Inc. will construct its Action Plan based on Observation Reports, trend analysis and recommendations from the Observers and employees. Andy Wilson is responsible for the procedures of the Action Plan.

Action planning will include:

- Regularly scheduled meetings to analyze Behavior-based report findings
- Evaluating unsafe behaviors
- Designating responsible parties and time frames to complete the Action Plan
- Ensuring support of management

The committee will:

- Produce a set of recommendations to correct workers' behavior
- Recommendations may be as simple as providing Personal Protective Equipment (PPE) to workers in certain location, or increase work force in another location
- Some of the recommendations require site modification or costly machinery. Such recommendations are sent to top management for necessary approvals

The committee's responsibility is to ensure that recommendations will:

- Change the at-risk behaviors at the targeted location
- Eliminate hazards and risks caused by hardware or wrong design

FOLLOW-UP

Any Action Plans set out by ARM Environmental Services, Inc. at the direction of Andy Wilson will be completed in a time frame agreed upon by the entire committee.

Regularly scheduled meetings will be held to:

- Assign responsibility for the completion of the Action Plan
- Ensure that the guidelines of the Action Plan are being carried out
- To document the Action Plan and its progress

Behavior-Based Safety Program Employee Training Form

I, _____, have read or been informed of the Behavior-Based Safety Program and its elements.

- I am aware of the companies Safe Work procedures including the Company's Code of Safe Practices.
- I understand I may be observed in my job performance or assigned task by a designated Observer and this person will inform me that I am being observed.
- I understand that the Observer will communicate to me the positive and At-risk behaviors I may display on completion of his/her observation.
- I agree to do my utmost to implement any of the Observers' recommendations they make in order to improve my performance and safety.
- I understand my cooperation and communication is key to the success of the Behavior-based program.
- I understand that the Observations of my job performance will not include my name or identifying mark and is used only for statistical information in the program.
- I agree to follow the procedures of any Action Plan as set out by the Company.

Employee Signature: _____

Date: _____

BBS Training Form

Company Name:		
Date of Training:		
Trainer's Name:		
Trainee:	<input type="checkbox"/> Initial Training	<input type="checkbox"/> Refresher Training
The trainee (observer) named above has been trained to observe the following jobs:		
Work Type/Job	Trained	Not Trained
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>

I, _____, understand that my training in the above listed jobs qualifies me to observe employees while doing their job(s), conduct feedback with employee(s) and implement the established goals of the Behavior-based Safety Program. I have also displayed the required knowledge in the following areas:

- Knowing the BBS Program objectives
- How to conduct observations
- Knowledge of the jobs being observed
- The correct safety procedures of these jobs
- Filling out the Observation Form
- How to identify At-risk behaviors

Signature: _____ Date: _____

POLICY

ARM Environmental Services, Inc. has adopted the following program to ensure that short service employees are identified, appropriately supervised, trained, mentored, and managed. This program is adopted in order to prevent accidents such as personal injury, injury to others, environmental damage, and/or property damage by the short service employee.

RESPONSIBILITIES

We recognize that the responsibilities for safety and health are shared:

- ARM Environmental Services, Inc. accepts the responsibility for leadership of the safety and health program, for its effectiveness and improvement, and for providing the safeguards required to ensure safe conditions.
- Supervisors are responsible for developing the proper attitudes toward safety and health in themselves and in those they supervise, and for ensuring that all operations are performed with the utmost regard for the safety and health of all personnel involved, including themselves.
- Employees are responsible for wholehearted, genuine operation with all aspects of the Safety and Health Program including compliance with all rules and regulations – and for continuously practicing safety while performing their duties.

DEFINITION

ARM Environmental Services, Inc. defines a short service employee (SSE) as any person or personnel with less than six (6) months experience in his/her current position or with one's current employer. A person or persons can also be classified as an SSE if they change jobs within the company they are working for or as a new hire for the same type of position for another company.

WORK CREW ASSIGNMENTS AND RESTRICTIONS

- A SSE may not work alone
- When crew/group sizes of less than five (5) are assembled, no more than one (1) SSE per group/crew is allowed
- When working with crew/group sizes larger than five (5) members, the SSE's will not exceed 20% of the crew/group make up. When the crew/groups exceed the twenty percent (20%) make up of SSE's, this will only be permitted with a written variance form, which will serve as the mitigation plan; approved by the Supervisor and/or Manager in charge of the project.

COMMUNICATION AND NOTIFICATION

The following procedure will be followed to ensure the host facility knows when a SSE is working at their site. The processes for the proposed crew/group, when using an SSE, are outlined in the Short Service Employee Form. Prior to beginning the job assignment the Supervisor/Manager in charge will submit to the projects coordinator, on-site supervisor, or contractor; the completed SSE form for all the jobs that will contain SSE personnel. The work owner or supervisor/person in charge will decide SSE approval status and will keep the original completed form in the project files.

IDENTIFICATION

All SSE personnel will be visibly identified. This will be done by employing one of the following methods:

- Wearing a uniquely colored high-visibility Hard Hat or
- Wearing a uniquely colored high-visibility Vest
- Any method which clearly identifies the employee as an SSE to anyone onsite

MONITORING SSE

The supervisor will monitor their employees, which includes the SSE personnel for Health, Environment and Safety (HES) awareness.

The identifier marking the SSE may be removed from the SSE Program at the discretion of the supervisor at the end of the required six-month period if he/she has:

- Worked safely
- Adhered to all HES policies
- Had no recordable incidents attributed to him/her

The supervisor shall require the employee that fails to complete the six-month period free of recordable incidents, to get the operator to approve in writing prior to allowing the person to return to the operator's property.

MENTORING PROCESS

This will be done by assigning all SSE's a mentor for the first six (6) months of employment. A mentor's responsibility is to provide guidance and develop the SSE personnel. A mentor may only be assigned one (1) SSE per crew/group. The mentor must be onsite with the SSE to monitor the SSE at all times.

The mentor must meet the following requirements:

- Be familiar with the SSE's job, have the oversight responsibilities required, and all hazards accompanied with the job
- Have up to date orientation training
- Be familiar with all site policies, procedures, and any required specialized actions with the work to be done
- Show the ability to recognize any hazards and/or unsafe acts
- Are able and willing to challenge their personnel on the job if they do not meet site procedures, policies, or other requirements and will see that the stop work authority is enforced
- Participate actively in the behavior-based safety process

Note: A mentor must keep a helpful eye on new hire's in your crew. Take time to describe the layout of the project, the best method to access the work, or how to work a tool they have never used before.

SUBCONTRACTOR MANAGEMENT

Subcontractors working on site will have assigned mentors that monitor their employees only. Mentoring of outside employees will be done on an individual basis, and as required. They will also be managed following this policy.

HIGH HAZARD AREAS

SSE's may in certain situations be prohibited from entering into and working in high hazard areas, these may include:

- Naturally occurring radioactive material (NORM)
- H₂S areas
- Confined spaces
- High Voltage environments, etc

PROCEDURES

ARM Environmental Services, Inc. has set forth these procedures to verify all work is being carried out under the guidelines of this chapter by having:

- The supervisors communicate the SSE policy and procedure at all pre-job meetings
- The supervisor submits the crew/group makeup and all SSE form(s) to the on-site representative of the work owner for approval
- The supervisor will have the on-site representative validate the crew/group makeup and experience level
- The supervisor will see that the on-site representative approves the SSE variance form
- The supervisor will make sure the on-site representative posts the forms to the appropriate database, if required

PROGRAM REVIEW

ARM Environmental Services, Inc.'s Short Service Employee Program will ensure the following practices are kept up to date on a regular basis when using and working with SSE's:

- Continuous monitoring of the SSE
- Ensuring all changes/updates to the forms are submitted prior to beginning work and whenever a change may occur thereafter

Contractor Short-Service Employee Form & Variance

Supervisor must complete and submit this form to work owner supervision for approval prior to arrival on location. The work owner supervision must approve the individual SSE before he/she arrives on location.

SSE Information			
Contractor Company name:			
Request Date:			
SSE Name:			
Date of Employment:		Current Job Title:	
Years Related Experience:	Experience in Current Position:	Yrs	Months
Is this employee in compliance with your Substance Abuse Policy?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Have site owner, contractor and HES policies (including Stop Work Authority) been reviewed with SSE?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Who has been assigned as the SSE's mentor?			
Mentor's Experience:		Yrs	Months
List all training provided to the SSE:		List any previous special training:	
SSE(s) identified by: <input type="checkbox"/> Hard Hat -High Visibility <input type="checkbox"/> Vest -High Visibility			
<input type="checkbox"/> Other: _____ Color: _____			

Contractor Short-Service Employee Form & Variance Page 2

II. SSE Crew Composition Requirements	
Choose one of the crew types below. If any of the stated limitations are exceeded, proceed to the variance form on next page.	
<input type="checkbox"/> Single person crew-cannot be an SSE (Variance Required)	
<input type="checkbox"/> 2-4 person crew-no more than one SSE	
<input type="checkbox"/> 5 or more person crew-no more than 20% SSE(s) per crew	
<input type="checkbox"/> Exceeding 20% SSE per crew (Variance Required)	
III. SSE Review and Approval	
<input type="checkbox"/> Contractor Supervising Manager:	Date:
<input type="checkbox"/> CPL Work Location Supervisor:	Date:
<input type="checkbox"/> Work Owner:	Date:
IV. Contractor SSE Form Repository	
<input type="checkbox"/> CSM Data Base:	Date:
<input type="checkbox"/> CPL Work location	Date:
<input type="checkbox"/> Work Owner file:	Date:

Contractor Short-Service Employee Form & Variance Page 3

This form is to be filled out whenever the conditions on this form or any other element of the Short Service Employee Policy cannot be met.

IV. Variance Information	
Variance Justification (What are the current circumstances and what will be done to ensure an acceptable level of risk?)	
Alternatives to Variance (If the variance is denied, what are the alternatives to completing the scope of the work? Briefly detail the cost and operational impact of the alternatives.)	

List the steps to be taken to manage/mitigate the SSE risk to an acceptable level:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

V. Variance Review and Approvals

Variance Expiration Date: _____

Contractor Manager/Supervisor

Approves Denies

Signed: _____ Date: _____

Work Owner's Onsite Representative

Approves Denies

Signed: _____ Date: _____

Note: For large jobs, please use a separate sheet to list all SSEs on the crew by name and job title.

ARM ENVIRONMENTAL SERVICES, INC. HSE

TRAINING RECORD

Trainer:	
Signature:	
Date:	
Content of Training:	
Attendees	
Print Name:	Signature:

POLICY

ARM Environmental Services, Inc. will use Ground Fault Circuit Interrupters (GFCI) on all jobsites when possible. When GFCI equipment is infeasible, the Assured Equipment Grounding Conductor Program (AEGCP) with the following guidelines, procedures, engineering controls, and work practices will be enforced to eliminate injuries from malfunctions, improper grounding and defective electrical tools and systems

RESPONSIBILITIES

Andy Wilson is the Competent Person in charge of the AEGCP.

TRAINING

Andy Wilson will provide training to ensure that the grounding requirements, purpose, function, and proper use of tools to be used in the normal function of their jobs is understood by employees and that the knowledge and skills required for the safe application, and usage is acquired by employees.

PROCEDURES

- A written description of this program, are available on the jobsite for inspection or copying by OSHA and any affected employee from Andy Wilson upon request.
- This AEGCP applies to all ARM Environmental Services, Inc. sites, covering all cord sets and receptacles that are not part of the building or structure, and equipment connected by cord and plug which are available for use or used by employees.
- ARM Environmental Services, Inc. will not provide or allow employees to use equipment that does not meet the AEGCP requirements.

Installation

Equipment grounding conductors shall be installed as follows:

All 120-volt, single-phase, 15- and 20-ampere receptacles shall be of the grounding type and their contacts shall be grounded by connection to the equipment-grounding conductor of the circuit supplying the receptacles in accordance with the applicable requirements of the National Electrical Code.

All 120-volt cord sets (extension cords) shall have an equipment-grounding conductor that shall be connected to the grounding contacts of the connector on each end of the cord.

The exposed noncurrent-carrying metal parts of 120 volt cord and plug connected tools and equipment that are likely to become energized shall be grounded in accordance with the applicable requirements of the National Electrical Code.

Inspections and Tests

Each day, before use, employees are required to visually inspect each extension cord, or other device, and any equipment connected by cord and plug, for external defects, such as deformed or missing pins or insulation damage, and for signs of possible internal damage. Cord sets, devices, and receptacles that are fixed and not exposed to damage are exempt from this inspection. Employees are prohibited from using damaged or defective equipment. Any equipment found to be damaged or defective will be immediately tagged “DO NOT USE” and removed from service.

Inspections and tests performed as required by this program will be recorded as to the identity of each receptacle, cord set, and cord and plug connected equipment that passed the test and will indicate the last date tested or interval for which it was tested. This record will be kept by means of logs, color-coding, or other effective means and will be maintained until replaced by a more current record. These records will be made available at the jobsite for inspection by OSHA and any affected employees.

Testing Schedule

All required tests must be performed by a competent person:

- Before first use
- Before equipment is returned to service following any repairs
- Before equipment is used after any incident which can be reasonably suspected to have caused damage (for example, when a cord set is run over)
- At intervals not to exceed 3 months, except that cord sets and receptacles which are fixed and not exposed to damage shall be tested at intervals not exceeding six months

Test Records

- A log will be kept on the job-site of all tests performed. These records will be kept until replaced by a newer record. The log will include:
 - Pass/Fail record of each receptacle, cord set, and cord- and plug-connected equipment that was tested
 - Date of testing or test intervals
 - The equipment will be marked with the test date or a color-coded tape will delineate the most recent test, for example

WINTER	White
SPRING	Green
SUMMER	Red
FALL	Orange

POLICY

ARM Environmental Services, Inc. has implemented this policy to ensure that no employee is exposed to Benzene past the permissible exposure limits (PELs). Andy Wilson is responsible for enforcing these engineering controls and work practices:

- Employees with information and training at their initial assignment to a work area where Benzene is present. Annual training If exposures are above the action level
- When any exposures are over the PEL, a written program will be established and implemented to reduce employee exposure to or below the PEL primarily through engineering and work practice controls
- A schedule for development and implementation of the engineering and work practice controls. These plans will be reviewed and revised based on the most recent exposure monitoring data
- Written compliance programs will be given upon request for to OSHA, affected employees and designated employee representatives
- Employees will be informed of all regulated areas and are properly trained in entrance procedure, safety requirements, and practices when in regulated areas

TRAINING

ARM Environmental Services, Inc. will institute, and enforce participation, a training program for all employees potentially exposed to benzene.

ARM Environmental Services, Inc. conduct training for employees who are assigned to workplaces where there is a potential for exposure to benzene. This training must occur prior to or at the time of initial assignment, and whenever a new exposure to benzene is introduced into the work area. The training will be repeated annually thereafter if exposures are above the action level.

The training program will be conducted in a manner which the employee is able to understand and will include:

- Requirements of OSHA's Benzene Standard and information available in Appendices A and B of the standard as well as how to access or obtain a copy of it in the workplace
- Description of the medical surveillance program and the information contained in Appendix C of OSHA's Benzene Standard
- Information on the quantity, location, manner of use, release and storage of benzene and the specific operations in the workplace that could result in exposure to benzene

The supervisor will inform all affected employees of the location of written training materials and will make these materials readily available, without cost, to the affected employees.

Employees will be instructed as to potential locations where they may be exposed to Benzene including: petroleum refining sites, tank gauging (tanks at producing, pipeline, and refining operations), field maintenance, confined spaces.

Training will be provided before initial assignment and at least annually.

EXPOSURE MONITORING

It is the policy of ARM Environmental Services, Inc. that determination of airborne exposure levels will be made from air samples that are representatives of each employee’s exposure to benzene over an eight (8) period.

The PEL for benzene is 1 part benzene per million parts air (ppm). Since this is an 8-hour average, short-term exposures above the PEL are permitted as long as the average exposure over an 8-hour period does not exceed the PEL.

However, OSHA has set a Short Time Exposure Limit (STEL) for benzene that cannot be exceeded. The STEL is the greatest concentration of benzene in air to which exposure may occur for a fifteen-minute period. The current STEL is 5 ppm.

The action level is 0.5 ppm, measured over 8 hours. At this level, certain provisions of the standard, such as employee exposure monitoring and medical surveillance, are initiated. The action level is set lower than the PEL to better protect against overexposure. ARM Environmental Services, Inc. will continue monitoring at the required frequency until at least two consecutive measurements, taken at least seven (7) days apart, are below the action level at which time ARM Environmental Services, Inc. may discontinue monitoring.

Results	Frequency
Less than the action level (0.5 ppm) twice within 7 days	May discontinue monitoring
At or above the action level (0.5 ppm), and at or below the PEL (1 ppm)	Annual
Above the PEL	Semi-annual

Employee Notification

ARM Environmental Services, Inc. within 15 working days after the receipt of the results of any monitoring performed under this section, notify each affected employee of these results either individually in writing or by posting the results in an appropriate location that is accessible to affected employees.

Whenever the results indicate that the representative employee exposure exceeds the permissible exposure limit, ARM Environmental Services, Inc. shall include in the written notice a statement that the permissible exposure limit was exceeded and a description of the corrective action taken to reduce exposure to or below the permissible exposure limit.

METHODS OF COMPLIANCE

ARM Environmental Services, Inc. will establish and implement a written program to reduce exposures to or below the permissible exposure limit by means of engineering and work practice controls.

Written plans for these compliance programs shall include at least the following:

- A description of each operation in which benzene is used; e.g. machinery used, material processed, controls in place, crew size, employee job responsibilities and maintenance practices
- Engineering plans and studies used to select methods to control benzene exposure
- A report of the technology considered in meeting the permissible exposure limit
- Monitoring data
- A detailed schedule for implementation of the engineering controls and work practices that cannot be implemented immediately and for the adaption and implementation of any additional engineering and work practices necessary to meet the permissible exposure limit
- Whenever the employer will not achieve the permissible exposure limit with engineering controls and work practices, the employer must include in the compliance plan an analysis of the effectiveness of the various controls, shall install engineering controls and institute work practices on the quickest schedule feasible, and shall include in the compliance plan and implement a program to minimize the discomfort and maximize the effectiveness of respirator use

Written plans for the program will be submitted upon request to the Assistant Secretary and the Director, and will be available at the worksite for examination and copying by the Assistant Secretary, Director, or any affected employee or authorized employee representatives.

ARM Environmental Services, Inc. will review and update the program annually or more often to reflect the current status.

RESPIRATORY PROTECTION

ARM Environmental Services, Inc. has implemented and will maintain a Respiratory Protection Program in accordance with §1910.134. The Respiratory Protection Program and respiratory protective equipment is provided for all employees with potential for exposure to Benzene.

For employees who use required respirators, ARM Environmental Services, Inc. will provide respirators that comply with the Respiratory Protection Program and OSHA. Respirators will be used during periods necessary to install or implement feasible engineering and work practice controls and emergencies.

For air-purifying respirators, Andy Wilson will ensure the replacement of the air-purifying element when it expires or at the beginning of each shift in which it is used, whichever comes first. An air-purifying element with a National Institute of Occupational Safety and Health (NIOSH) approved end-of-service-life indicator for benzene may be used until the indicator shows no further useful life.

ARM ENVIRONMENTAL SERVICES, INC. HSE

Andy Wilson will select approved respirators according to the table below:

Airborne concentration of benzene or condition of use	Respirator type
(a) Less than or equal to 10 ppm	(1) Half-mask air-purifying respirator with organic vapor cartridge.
(b) Less than or equal to 50 ppm	(1) Full facepiece respirator with organic vapor cartridges.
	(1) Full facepiece gas mask with chin style canister ¹ .
(c) Less than or equal to 100 ppm	(1) Full facepiece powered air-purifying respirator with organic vapor canister ¹ .
(d) Less than or equal to 1,000 ppm	(1) Supplied air respirator with full facepiece in positive-pressure mode.
(e) Greater than 1,000 ppm or unknown concentration	(1) Self-contained breathing apparatus with full facepiece in positive pressure mode.
	(2) Full facepiece positive-pressure supplied-air respirator with auxiliary self-contained air supply.
(f) Escape	(1) Any organic vapor gas mask; or
	(2) Any self-contained breathing apparatus with full facepiece.
(g) Firefighting	(1) Full facepiece self-contained breathing apparatus in positive pressure mode.
¹ Canisters must have a minimum service life of four (4) hours when tested at 150 ppm benzene, at a flow rate of 64 LPM, 25 oC, and 85% relative humidity for non-powered air purifying respirators. The flow rate shall be 115 LPM and 170 LPM respectively for tight fitting and loose fitting powered air-purifying respirators	

Employees who can't use a negative-pressure respirator will be allowed to use a respirator with less breathing resistance, such as a powered air-purifying respirator or supplied-

PERSONAL PROTECTIVE EQUIPMENT

Personal protective clothing and equipment shall be worn where appropriate to prevent eye contact and limit dermal exposure to liquid benzene. Protective clothing and equipment shall be provided by the employer at no cost to the employee and the employer shall assure its use where appropriate. Eye and face protection shall meet the requirements of 29 CFR 1910.133. Protective clothing and equipment will be provided by ARM Environmental Services, Inc. at no cost to the employee and ARM Environmental Services, Inc. will assure its use where appropriate.

VENTILATION

Adequate ventilation will be ensured in all enclosed work areas.

Regular monitoring of air quality in work areas will be provided to ensure that PELs are not being exceeded. Records of all monitoring tests will be kept available at the Company office.

SIGNS AND LABELS

All containers or vessels containing Benzene will be appropriately labeled to indicate the contents and the hazards of the contents ARM Environmental Services, Inc. will post signs demarcating regulated areas bearing the legend:

DANGER
BENZENE
CANCER HAZARD
FLAMMABLE
NO SMOKING
AUTHORIZED PERSONNEL ONLY
RESPIRATOR REQUIRED

MEDICAL SURVEILLANCE

ARM Environmental Services, Inc. will institute medical surveillance programs for all employees exposed to benzene at concentrations at or exceeding the action level on 30 or more days per year, or exceeding the PEL or STEL for 10 or more days per year.

All medical procedures, including administration of medical disease questionnaires, will be performed by or under the supervision of a licensed physician and will be provided without cost to the employee, without loss of pay, and at a reasonable time and place. An accredited laboratory will conduct all laboratory tests.

Initial medical surveillance must occur prior to assignment to a job. The initial examination must consist of the following elements:

A detailed occupational history which includes:

- Past work exposure to benzene or any other hematological toxins
- A family history of blood dyscrasias including hematological neoplasms
- Blood dyscrasias including genetic hemoglobin abnormalities, bleeding abnormalities, abnormal function of formed blood elements
- Renal or liver dysfunction
- Medicinal drugs routinely taken
- Previous exposure to ionizing radiation
- Exposure to marrow toxins outside of the current work situation
- A complete physical examination
- Laboratory tests, which must consist of a complete blood count including a leukocyte, count with differential, a quantitative thrombocyte count, hematocrit, hemoglobin, erythrocyte count, and erythrocyte indices (mean corpuscular volume (MCV), mean corpuscular hemoglobin (MCH), and MCH concentration (MCHC)). The examining physician will review the results of these tests
- Additional tests the examining physician deems necessary

The physical examination must pay special attention to the cardiopulmonary system and shall include a pulmonary function test for all employees required to wear respirators for at least 30 days a year.

ARM ENVIRONMENTAL SERVICES, INC. HSE

ARM Environmental Services, Inc. will provide each affected employee with a medical examination annually following the initial examination. These periodic examinations must include at least the following elements:

- A brief history regarding any new exposure to potential marrow toxins, changes in medicinal drug use and the appearance of physical signs relating to blood disorders
- A complete blood count including a leukocyte count with differential, quantitative thrombocyte count, hemoglobin, hematocrit, erythrocyte count and erythrocyte indices (MCV, MCH, MCHC)
- Appropriate additional tests as necessary, in the opinion of the examining physician, in consequence of alterations in the components of the blood or other signs which may be related to benzene exposure

In addition to the monitoring required above, if an employee is exposed to benzene in an emergency, the ARM Environmental Services, Inc. will have the employee provide a urine sample at the end of the employee's shift and have a urinary phenol test performed on the sample within 72 hours. The urine specific gravity shall be corrected to 1.024. If the result of the urinary phenol test is below 75 mg phenol/L of urine, no further testing is required. If the result of the urinary phenol test is equal to or greater than 75 mg phenol/L of urine, the ARM Environmental Services, Inc. will provide the employee with a complete blood count including an erythrocyte count, leukocyte count with differential and thrombocyte count at monthly intervals for a duration of three (3) months following the emergency exposure.

- If the results of the complete blood count required for the initial, periodic and emergency examinations indicate any of the following abnormal conditions exist, then the blood count shall be repeated within 2 weeks
- The hemoglobin level or the hematocrit falls below the normal limit [outside the 95% confidence interval (C.I.)] as determined by the laboratory for the particular geographic area and/or these indices show a persistent downward trend from the individual's pre-exposure norms, provided these findings cannot be explained by other medical reasons
- The thrombocyte (platelet) count varies more than 20 percent below the employee's most recent values or falls outside the normal limit (95% C.I.) as determined by the laboratory; and the leukocyte count is below 4,000 per mm³ or there is an abnormal differential count

The referred hematologist's or internist's evaluation shall include a determination as to the need for additional tests, and the ARM Environmental Services, Inc. will assure that these tests are provided. Supervisors will provide the following information to the examining physician:

- A copy of OSHA's Benzene Standard and Appendix A, B, and C of the standard
- A description of the affected employee's duties related to benzene
- The employee's actual or representative exposure level
- A description of any personal protective equipment used or to be used
- Information from previous employment-related medical examinations of the affected employee which is not otherwise available to the examining physician

The examining physician must provide a written opinion that contains the results of the affected employee's medical examination within 15 days of the examination, limited to the following information:

- The occupationally pertinent results of the medical examination and tests
- The physician's opinion concerning whether the employee has any detected medical condition(s) that would place the employee's health at increased risk of material impairment from exposure to benzene

- Any recommended limitations upon the employee's exposure to benzene, including removal from benzene exposure, or upon the employee's use of respirators, protective clothing, or other protective equipment
- A statement that the employee has been informed by the physician of the results of the medical examination and any medical conditions resulting from benzene exposure which require further explanation or treatment

ARM Environmental Services, Inc. will not reveal specific records, findings, and diagnoses in the written opinion with no bearing on the employee's ability to work in a benzene-exposed workplace.

Medical Removal Plan

When referred to a hematologist/internist, the employee will be removed from areas where exposure may exceed the action level until evaluated. Following the examination, a decision will be made with the primary physician to allow the employee to return to areas where benzene exposure is above the action level or remove the employee. This decision will be reported, in writing, to the employee. The physician will state the required probable duration of removal from occupational exposure to benzene above the action level and the requirements for future medical examinations to review the decision.

For any removed employee, ARM Environmental Services, Inc. will provide a follow-up examination where the physician, in consult with the hematologist/internist, will decide within six months of the date the employee was removed as to whether the employee will be returned to the usual job or whether the employee should be removed permanently.

Whenever an employee is temporarily removed from benzene exposure, the ARM Environmental Services, Inc. will transfer the employee to a comparable job for which the employee is qualified (or can be trained for in a short period) and where benzene exposures are as low as possible, but in no event higher than the action level. The ARM Environmental Services, Inc. will maintain the employee's current wage rate, seniority and other benefits. If there is no such job available, the ARM Environmental Services, Inc. will provide medical removal protection benefits until such a job becomes available or for 6 months, whichever comes first.

In the case that an employee is removed permanently from benzene, the employee shall be given the opportunity to transfer to another position which is available or later becomes available for which the employee is qualified (or can be trained for in a short period) and where benzene exposures are as low as possible but in no event higher than the action level. ARM Environmental Services, Inc. will assure that such employee suffers no reduction in current wage rate, seniority or other benefits as a result of the transfer.

Medical Removal Protection Benefits

ARM Environmental Services, Inc. will provide to the affected employee six months of medical removal protection benefits immediately following each occasion an employee is removed from exposure to benzene because of hematological findings, unless the employee has been transferred to a comparable job where benzene exposures are below the action level. Those benefits include the current wage rate, seniority and other benefits of an employee as though the employee had not been removed.

ARM Environmental Services, Inc. obligation to provide medical removal protection benefits to a removed employee will be reduced to the extent that the employee receives compensation for earnings lost during the period of removal either from a publicly or employer-funded compensation program, or from employment with another employer made possible by virtue of the employee's removal.

Record Keeping

ARM Environmental Services, Inc. will maintain an accurate record of:

- Exposure monitoring data, which must be maintained for at least thirty years, including the dates, number, duration, and results of each of the samples taken, including a description of the procedure used to determine representative employee exposures
- A description of the sampling and analytical methods used
- A description of the type of respiratory protective devices worn, if any
- The name, social security number or company ID number, job classification and exposure levels of the employee monitored and all other employees whose exposure the is intended to represent. Medical surveillance records, which will be maintained for the at least the duration of the employment plus thirty years, including:
 - The name and social security number or ARM Environmental Services, Inc. ID number of the employee
 - The copy of the physicians written opinion on the initial, periodic and special examinations, including results of medical examinations and all tests, opinions and recommendations;
 - Any employee medical complaints related to benzene exposure;
 - A copy of the information provided to the physician; and
 - A copy of the employee's medical and work history related to exposure to benzene or any other hematologic toxins.

Upon request, ARM Environmental Services, Inc. will provide records maintained as a requirement of this policy for examination and copying to OSHA. Employee exposure and medical records required by this policy shall be provided upon request for examination and copying, to the subject employee or former employee or to anyone having the specific written consent of the subject employee or former employee.

BENZENE AWARENESS

All employees who may be exposed to benzene need to know the following characteristics, health effects and safety precautions including when to wear the needed Personal Protective Equipment (PPE), not smoking and even when to use the available fire extinguishers and what to do in an emergency.

Benzene characteristics

Benzene is a flammable, clear colorless liquid with a pleasant sweet odor. The smell is not enough warning of the hazardous presence of benzene and should not be relied upon alone. Exposure to high concentrations can cause a breathless, irritable, euphoric or giddy experience with eye nose and respiratory irritation and even a headache, dizziness, nausea or a drunk feeling. Long term exposure to low concentrations can cause blood disorders that show now symptoms (e.g. anemia, leukemia).

PPE

When employees are instructed to wear certain types of PPE such as eye and face protection, boots, gloves, sleeves and aprons it is because their work environment has been analyzed and it's been determined that type of PPE is necessary to provide an acceptable level of safety from Benzene's characteristics.

This is why employees always have to wear and properly maintain the PPE according to the steps described in their training.

Fire Extinguishers

Fire extinguishers of the carbon dioxide, dry chemical, or foam type will be readily available. Employees will know where they are located and how to operate them. Benzene is classified as a 1 B flammable liquid and is highly flammable and vapors may form explosive mixtures in air. Locations where Benzene may be present in quantities sufficient to produce explosive or ignitable mixtures are considered Class I Group D locations.

Smoking

Smoking is prohibited in areas where Benzene is used or stored.

Emergency Response Plans

Before any employees begin work they will know the site specific emergency plans including how to recognize and warn others of a benzene related emergency, how to recognize there is an emergency, what to do and where to go including who to report to at primary and secondary meeting locations.

POLICY

ARM Environmental Services, Inc. is committed to the safety and health of our employees and to preventing the spread of bloodborne pathogens by eliminating occupational exposure to blood and other potentially infectious materials (OPIM). Therefore, ARM Environmental Services, Inc. adheres to the following bloodborne pathogen policy and Exposure Control Plan (ECP).

To eliminate occupational exposure to OPIM, all employees will follow the policy of universal precautions, which is assuming all blood and body fluids are infectious and taking the necessary precautions to not contact them without the proper personal protective equipment (PPE), and properly disinfecting themselves and the environment afterwards.

This written exposure control plan will be available to all employees that request it.

If employees — such as those designated as responsible for first aid and medical assistance, or those doing work in certain medical or sanitation facilities — are exposed to bloodborne pathogens, all measures within this program will be taken to prevent the spread of disease.

Andy Wilson is responsible for evaluating the effectiveness of the program and maintaining all records.

RESPONSIBILITIES

Employer Responsibilities

- Enact and enforce an exposure control plan to prevent occupational exposure to potentially infectious materials
- Identify employees who may reasonably be anticipated to come into contact with blood and other potentially infectious materials
- Provide for post-exposure evaluation and follow-up should an employee be exposed to potentially infectious materials
- Ensure employees receive appropriate bloodborne pathogens training
- Ensure an adequate supply of Personal Protective Equipment
- Ensure that all records required by this section shall be made available upon request of employees, Assistant Secretary & the Director for examination & copying. Medical records must have written consent of employee before being released

Safety Committee Responsibilities

- Develop and implement a site-specific exposure control plan
- Identify employees who may reasonably be anticipated to come into contact with blood and other potentially infectious materials
- Develop, conduct, and document training for bloodborne pathogens safety
- Investigate exposure incidents and recommend work-practice changes
- Make exposure determinations without regards to the use of (PPE)
- Recommend personal protective equipment (PPE), if necessary

Employee Responsibilities

- Offer input on ECP as appropriate, including identification, evaluation, and selection of new control methods
- Follow all elements of the bloodborne pathogens policy and training
- Notify a supervisor if they encounter any problems or concerns related to this policy

TRAINING

ARM Environmental Services, Inc. will ensure employees who may reasonably be exposed to potentially infectious materials participate in a BBP training program. ARM Environmental Services, Inc. will provide this training at no cost to the employee during working hours.

Training will be provided: at the time of assignment to/prior to working on tasks where occupational exposure may take place; and at least annually. ARM Environmental Services, Inc. will provide additional training when tasks or procedures are added or changed that affect the employee's occupational exposure. It is acceptable for additional training to be limited to addressing only the changes or additions to the employees' exposure. ARM Environmental Services, Inc. will use only training material that is appropriate in content and vocabulary to educational level, literacy, and language of employees.

Training Components

The training program will contain, at a minimum, the following elements:

- An accessible copy of the regulatory text of CFR 1910.1030, this bloodborne pathogen policy and exposure control plan, and an explanation of its contents
- A general explanation of the epidemiology and symptoms of bloodborne diseases
- An explanation of the modes of transmission of bloodborne pathogens
- An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials
- An explanation of the use and limitations of methods to prevent or reduce exposure, including engineering controls, work practices, and personal protective equipment
- Information on the types, proper use, location, removal, handling, decontamination, and disposal of personal protective equipment
- An explanation of the basis for selection of personal protective equipment (PPE)
- Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine and vaccination will be offered free of charge to employees who face occupational exposure
- Information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials
- An explanation of the procedures to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available
- Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident
- An explanation of the applicable signs, labels, and/or color coding
- An opportunity for interactive questions and answers with the person conducting the training session
- The person conducting the training will be knowledgeable in the subject matter of the training program as it relates to the workplace

Training Records

Andy Wilson is responsible for maintaining all ARM Environmental Services, Inc. training records. Training records will include the following information:

- Dates of the training sessions
- Contents or a summary of the training sessions
- Names and qualifications of persons conducting the training
- Names and job titles of all persons attending the training sessions
- Employee training records will be maintained for three years from the date on which the training occurred

SAFE PRACTICES

Exposure Determination

It is crucial to determine which jobs expose an employee to blood and other potentially infectious material, as well as the means by which that exposure might occur. Accordingly, the ARM Environmental Services, Inc. safety committee or management will determine which job classifications can reasonably expect occupational exposure to potentially infectious material. The following will be determined and documented:

- Job classifications in which all employees have occupational exposure
- Job classifications in which some employees have occupational exposure
- Tasks and procedures in which occupational exposure occurs
- Further, input from non-managerial employees exposed to contaminated sharps and infectious material is vital to the success of this exposure control plan, and every employee is encouraged to offer suggestions that will help the effectiveness of the exposure control plan

Methods of Compliance

All body fluids will be treated as infectious and employees will take steps against contact.

Engineering and Work Practice Controls

As part of this exposure control plan, ARM Environmental Services, Inc. will seek methods to eliminate occupational exposure to the greatest extent possible. ARM Environmental Services, Inc. will examine regularly, and maintain or replace, engineering controls to ensure their effectiveness.

Handwashing

- ARM Environmental Services, Inc. will provide accessible handwashing facilities to every employee. If providing handwashing facilities is not feasible, ARM Environmental Services, Inc. will provide antiseptic towelettes or an appropriate antiseptic hand cleanser in conjunction with clean cloth/paper towels
- For construction projects, employers must: provide onsite general washing facilities (one per 20 employees), keep them in sanitary condition, and provide suitable cleaning agents/towels for the removal of hazardous and other substances
- In addition to basic workplace hygiene requirements, employees will wash their hands as soon as possible after removing gloves or other PPE
- Should an employee's skin or mucous membrane be exposed to potentially infectious materials, the employee will immediately wash their skin with soap and water or flush their mucous membranes with water

Sharps

- Employees will handle and dispose of contaminated sharps in a way that prevents unnecessary exposure to hazards. Employees will not bend, recap, or remove contaminated sharps unless no alternative is feasible and it can be done using a mechanical device or one-handed technique
- As soon as possible after use, contaminated reusable sharps will be placed in a container that is: puncture resistant, labeled or color-coded appropriately, leak-proof on the sides and bottom, and made so employees can't reach into it

Other Engineering and Work-Practice Controls

- Don't store food or drink, eat, drink, smoke, apply cosmetics or handle contact lenses near possible exposures
- Employees may not use their mouths to suck up potentially infectious materials
- Containers used to store or transport potentially infectious materials should be closable, prevent leaks, be appropriately labeled or color-coded, and puncture resistant
- Employees will examine any equipment that may be contaminated before servicing or shipping, and will decontaminate it as necessary and feasible. If decontamination is impossible, the employee will attach a label to the equipment, and inform all appropriate personnel of the contamination to ensure they take proper precautions

Personal Protective Equipment (PPE)

- Where the possibility of occupational exposure exists, ARM Environmental Services, Inc. will provide PPE appropriate to the hazards and the work. Appropriate PPE is impermeable to blood or OPIM under normal conditions and durations
- PPE will be provided and maintained free to employees in appropriate sizes, and provisions will be made should an employee be allergic to gloves normally provided
- An employee may decline using appropriate PPE under “rare and extraordinary circumstances” when PPE use might prevent the delivery of health care or public safety services. These exceptions will be investigated and documented to prevent future occurrences
- PPE will be removed as soon as feasible before leaving the general work area. After removal, the employee will place contaminated PPE in an appropriate area or container to be stored, washed, decontaminated, or disposed of

Gloves

Employees must wear gloves if they anticipate hand contact with OPIM. Do not reuse single-use gloves, and replace as quickly as possible if torn, punctured, or compromised.

Masks, Eye Protection, and Face Shields

Employees will wear masks, together with proper eye-protection devices whenever splashes, spray, spatter, or droplets of blood or other potentially infectious materials may be generated and eye, nose, or mouth contamination can be reasonably anticipated.

Gowns, Aprons, etc.

Employees will wear appropriate protective clothing like gowns or clinic jackets when appropriate; the type of protective clothing is determined by the nature of exposure, and will be sufficient to protect against occupational exposure.

Housekeeping

- Employees will keep the workplace clean and sanitary. ARM Environmental Services, Inc. will implement a written schedule for cleaning and decontamination based on the demands of the site
- Employees will use an appropriate disinfectant to clean and decontaminate contaminated or potentially contaminated work surfaces after any spill of infectious materials, and at the end of the work shift. ARM Environmental Services, Inc. will replace protective surface coverings as soon as possible if they are contaminated. Bins, cans, pails or other receptacles that may become contaminated should be inspected and decontaminated regularly, in addition to being decontaminated as soon as feasible after visible contamination. Employees must not pick up, by hand, any broken glassware that may be contaminated. Use a brush/dustpan or tongs

Laundry

Employees will handle any contaminated laundry as little as possible. They must put such laundry into a color-coded or labeled container at the site where it was used. Wet laundry should be placed into a leak-proof container. Employees handling contaminated laundry must use appropriate PPE. Employees must never take or wear contaminated clothing outside of the work site.

HEPATITIS B VACCINATION

ARM Environmental Services, Inc. will make available the hepatitis B vaccination series at no cost to any ARM Environmental Services, Inc. employee who faces occupational exposure. If not vaccinated, employees will be informed of the opportunity to be vaccinated within 24 hours of an exposure incident.

An employee occupationally exposed to potentially infectious material may decline the hepatitis B vaccine, but must sign a declination statement to be kept on file. Anyone who declines vaccination may request and receive the vaccination later at no cost.

Medical records relating to employees' hepatitis B vaccination status and post-exposure evaluation and follow-up must be kept for 30 years plus the duration of employment.

POST-EXPOSURE EVALUATION AND FOLLOW UP

Should an exposure incident occur, the employee should contact Andy Wilson (or designate) immediately.

In Case of Exposure

A licensed health care professional will conduct a confidential medical evaluation and follow-up, and will provide a medical opinion on diagnosis/course of action, as soon as possible following an exposure incident. After administering initial first aid (cleaning the wound, flushing the eyes or other mucous membranes, etc.), follow the procedure below:

1. Document the routes of exposure and how the exposure occurred
2. Identify and document the source individual (unless the employer can establish that identification is infeasible or prohibited by state or local law)
3. Obtain consent and arrange to have the source individual tested as soon as possible to determine human immunodeficiency virus (HIV), hepatitis C virus (HCV), and hepatitis B virus (HBV) infectivity; convey and document conveyance of the source individual's test results to the employee's health care provider. If the source individual is known to be HIV, HCV, and/or HBV positive, new testing is not necessary
4. Provide the exposed employee with the source individual's test results and with information about applicable disclosure laws and regulations concerning the identity and infectious status of the source individual (e.g., laws protecting confidentiality)
5. After obtaining consent, collect the exposed employee's blood as soon as feasible after an exposure incident, and test the blood for HBV and HIV serological status. This will establish a baseline for periodic testing over the next six months. Depending upon the circumstances of the exposure, post-exposure prophylaxis may be recommended to reduce the risk of infection from HIV or HBV
6. If the employee does not give consent for HIV serological testing during collection of blood for baseline testing, preserve the baseline blood sample for at least 90 days; if the exposed employee elects to have the baseline sample tested during this waiting period, perform testing as soon as feasible

Administrative Responsibilities Following Exposure

ARM Environmental Services, Inc. will ensure that the health care professional responsible for post-exposure evaluation and follow-up receives the following:

Counseling

ARM Environmental Services, Inc. will ensure that post-exposure counseling will be given to employees following an exposure incident. Counseling should include Centers for Disease Control and Prevention (CDC) recommendations for prevention and transmission of bloodborne infections including HIV, HBV, and HCV. Counseling must be made available regardless of the employee's decision to accept serological testing.

RECORDKEEPING

Medical Records

ARM Environmental Services, Inc. will maintain a confidential medical record for every employee with occupational exposure that will include at least the following:

- Name and social security number of the employee
- Copy of the employee's HBV status (with dates of all Hep B vaccinations)
- Copy of all post-exposure documentation and healthcare professional's written opinion
- Copy of the information provided to the healthcare professional
- Do not share or report this record unless the employee provides written consent

Andy Wilson is responsible for maintaining all ARM Environmental Services, Inc. training records. Training records will include the following information:

Sharps Injury/Exposure Incident Log

A Sharps Injury Log is a record of each exposure incident involving a sharp. The purpose of the Sharps Injury Log is to generate a record of exposure incidents that will include enough information about the cause of the incidents to allow the company to analyze them and take preventive action.

The Sharps Injury Log must include:

- The date and time of the sharps-related exposure incident
- The type and brand of the sharp involved in the incident
- A description of the incident including:
 - The job classification of the exposed employee
 - The department or work area where the incident occurred
 - The procedure being performed
 - How the incident occurred
 - The body part injured
 - For sharps with engineered sharps injury protection (ESIP), if the safety mechanism was activated
 - If the incident occurred before action, during activation or after activation of the mechanism; for sharps without ESIP, the employee's opinion if ESIP could have prevented the injury

Sharps injuries/exposures must be recorded on the log within 14 working days of when the incident was reported to the employer.

The Sharps Injury Log must be maintained for five years from the date of the occurrence of the exposure incident.

HAZARD COMMUNICATION

Label containers of regulated biological waste, any container used to store or transport potentially infectious material, as well as contaminated equipment, to prevent exposure. Labels for such containers will include the legend depicted in Figure 1.

All such labels will be fluorescent orange or orange-red and be attached on, or as close as feasible to, the container.



Figure 1

REVIEW AND UPDATE OF EXPOSURE CONTROL PLAN (ECP)

The ARM Environmental Services, Inc. safety committee will review this ECP and update it at least annually, and whenever necessary, to reflect new or changed tasks and procedures that affect occupational exposure.

Reviews and updates will:

- Reflect changes in technology that eliminate or reduce exposure to bloodborne pathogens
- Document the annual consideration and implementation of effective medical, and commercially available, devices and services designed to eliminate or minimize occupational exposure

ARM Environmental Services, Inc. will seek the input of non-managerial employees to identify, evaluate, and select controls to reduce occupational exposure. This input will be documented as part of this ECP.

ATTACHMENTS

- Exposure Control Plan Documentation
- Declination Statement
- Exposure Incident Report
- Evaluating Physician's Written Opinion
- Sharps Injury Log

These forms may be reproduced for the purposes of implementing and maintaining a safety and health program.

ARM ENVIRONMENTAL SERVICES, INC. HSE

EXPOSURE CONTROL PLAN DOCUMENT FORM

Exposure Determination	
Jobs in which all employees have occupational exposure to potentially infectious materials	Task or procedure where exposure occurs
Jobs in which some employees have occupational exposure to potentially infectious materials	Task or procedure where exposure occurs
Engineering controls and work practice controls:	
The following types of PPE are available in the following locations:	
Personal Protective Equipment	Location

ARM ENVIRONMENTAL SERVICES, INC. HSE

HEPATITIS B DECLINATION STATEMENT FORM

DECLINATION STATEMENT	
<p>I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring Hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with Hepatitis B vaccine, at no charge to myself. However, I decline Hepatitis vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring Hepatitis B, a serious disease. If in the future, I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with Hepatitis B vaccine, I can receive the vaccination series at no charge to me.</p>	
Employee Signature:	Date:

DECLINATION STATEMENT	
<p>I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring Hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with Hepatitis B vaccine, at no charge to myself. However, I decline Hepatitis vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring Hepatitis B, a serious disease. If in the future, I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with Hepatitis B vaccine, I can receive the vaccination series at no charge to me.</p>	
Employee Signature:	Date:

DECLINATION STATEMENT	
<p>I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring Hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with Hepatitis B vaccine, at no charge to myself. However, I decline Hepatitis vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring Hepatitis B, a serious disease. If in the future, I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with Hepatitis B vaccine, I can receive the vaccination series at no charge to me.</p>	
Employee Signature:	Date:

ARM ENVIRONMENTAL SERVICES, INC. HSE

EXPOSURE INCIDENT REPORT FORM

(Routes and Circumstances of Exposure Incident)—Please Print				
Employee's Name		Date		
Date of Birth		SS#		
Telephone (Business)		(Home)		
Job Title				
Date of Exposure		Time of Exposure		AM PM
Hepatitis B Vaccination Status				
Location of Incident				
Describe job duties you were performing when the exposure incident occurred				
Describe the circumstances under which the exposure incident occurred				
What happened that resulted in the incident?				
What body fluid(s) were you exposed to?				
What was the route of exposure? (e.g., mucosal contact, contact with non-intact skin, percutaneous)?				
Describe any personal protective equipment in use at time of exposure incident				
Did PPE fail?		If yes, how?		
Identification of source individual(s) (names)				
Other pertinent information				

ARM ENVIRONMENTAL SERVICES, INC. HSE

EVALUATING PHYSICIAN'S WRITTEN OPINION FORM

To the Evaluating Physician:

This employee may have suffered an exposure incident to a Bloodborne Pathogen. In accordance with OSHA standards covering post-exposure evaluation and follow up, the following documents are provided for you:

- A copy of OSHA regulations covering Occupational Exposure to Bloodborne Pathogens
- A description of the exposed employee's duties as they relate to the exposure incident
- Documentation of the routes of exposure and circumstances under which exposure occurred
- Results of the source individual's blood testing, if available
- All medical records relevant to this employee's appropriate treatment, including vaccination status

After you have determined whether there are contra-indications to vaccination of this employee with Hepatitis B vaccine, please state in the space below if:

Vaccine was indicated		Vaccine was received	
-----------------------	--	----------------------	--

(All other findings are to remain confidential and are not to be included on this page.)

Please return this sheet to this employee.

Thank you for your evaluation of this employee.

Physician's Name (printed)		Date	
Physician's Signature			

ARM ENVIRONMENTAL SERVICES, INC. HSE

SHARPS INJURY LOG

Facility/Location					Year	
Address						
City		State		ZIP		
Date	Time	Type, Brand, Model of Sharp Device	Department/ Work Area	Description of How Incident Occurred		

(RETAIN AT LEAST 5 YEARS)

ARM ENVIRONMENTAL SERVICES, INC. HSE

TRAINING RECORD

Trainer:	
Signature:	
Date:	
Content of Training:	
Attendees	
Print Name:	Signature:

POLICY

This confined spaces policy is designed to ensure the safety and health of ARM Environmental Services, Inc.'s employees by limiting exposure to the hazards present while working in construction, in and around confined spaces. There are new components in the Confined Spaces in Construction regulations that reflect different challenges present at a construction worksite to include: higher employee turnover, changing worksites, and multiple contractors (controlling and subcontractors).

Except where another policy states otherwise, this written confined space policy will be followed whenever and wherever the company's employees could enter or be exposed to confined space hazards for all construction work including modifications and upgrades. This program will be available to any employee and their representative at any time.

RESPONSIBILITIES

Confined space safety is a responsibility shared between ARM Environmental Services, Inc. and its employees.

Employer Responsibilities

- Develop and implement a written permit space program — available onsite for inspection by employees or their representatives — if employees are directed to enter permit spaces
- Involve affected employees on this policy, ensuring they are educated on the elements of confined space safety and trained in worksite specific procedures.
- Seek employee input during an annual review of this policy.
- Provide all necessary information to ensure employees work safely in and around confined spaces.
- Determine that employees can proficiently perform their assigned duties.
- Document training and keep training records for all current employees.
- Keep cancelled permits until an annual review can be conducted.
- Provide all documents to the Secretary of Labor upon request.
- Reevaluate confined spaces whenever an employee requests it.

Each employer who identifies, or receives notice of a permit space and has not authorized employees it directs to work in that space, must take effective measures to prevent those employees from entering that permit space.

Employee Responsibilities

- Follow all OSHA rules and regulations.
- Follow established safe work policy and procedures.
- Participate in the development and implementation of the permit required confined space entry program
- Participate in all required training.
- Be aware of potential hazards and request a reevaluate when a new hazard is suspected.

STANDARDS AND REGULATIONS

- Subpart AA — Confined Spaces in Construction 29 CFR 1926.1201 - 1213
- Federal OSHA General Duty Clause, Section 5(a)(1)

DEFINITIONS

Attendant means an individual stationed outside one or more permit spaces who assesses the status of authorized entrants and who must perform the duties specified in § 1926.1209.

Authorized entrant means an employee who is authorized by the entry supervisor to enter a permit space.

Competent person means one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has the authorization to take prompt corrective measures to eliminate them.

Confined space means a space that: 1. Is large enough and so configured that an employee can bodily enter it; 2. Has limited or restricted means for entry and exit; and 3. Is not designed for continuous employee occupancy.

Controlling Contractor is the employer that has overall responsibility for construction at the worksite.

Entry means the action by which any part of a person passes through an opening into a permit-required confined space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space, whether or not such action is intentional or any work activities are actually performed in the space.

Entry Employer means any employer who decides that an employee it directs will enter a permit space.

Entry supervisor means the qualified person (such as the employer, foreman, or crew chief) responsible for determining if acceptable entry conditions are present at a permit space where entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry as required by this standard.

Host employer means the employer that owns or manages the property where the construction work is taking place.

Permit-required confined space (permit space) means a confined space that has one or more of the following characteristics: 1. Contains or has a potential to contain a hazardous atmosphere; 2. Contains a material that has the potential for engulfing an entrant; 3. Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross section; or 4. Contains any other recognized serious safety or health hazard.

Rescue service means the personnel designated to rescue employees from permit spaces.

Test or testing means the process by which the hazards that may confront entrants of a permit space are identified and evaluated. Testing includes specifying the tests that are to be performed in the permit space.

Ventilate or ventilation means controlling a hazardous atmosphere using continuous forced-air mechanical systems that meet the requirements of § 1926.57 (Ventilation).

General Safety Considerations

The company must:

- Implement the measures necessary to prevent unauthorized entry
- Identify and evaluate the hazards of permit spaces before employees enter them
- Develop and implement the means, procedures, and practices necessary for safe permit space entry operations
- Provide entry equipment at no cost to each employee, maintain that equipment properly, and ensure that each employee uses that equipment properly.

For permit required pre-entry testing and periodic monitoring, the company will provide an early-warning system that continuously monitors for non-isolated engulfment hazards, and continuously monitor atmospheric hazards.

In an emergency or failed non-entry rescue, the attendant will summon rescue and emergency services. No unauthorized personnel may attempt a rescue.

Andy Wilson will be consulted for all permit required matters, including preparation, issuance, use, and cancellation of entry permits under both planned and emergency conditions.

When the measures taken under the permit space program may not protect employees, the program will be revised to correct deficiencies found to exist before subsequent entries are authorized. Examples of circumstances requiring the review of the permit space program include, but are not limited to: any unauthorized entry of a permit space, the detection of a permit space hazard not covered by the permit, the detection of a condition prohibited by the permit, the occurrence of an injury or near miss during entry, a change in the use or configuration of a permit space, and employee complaints about the effectiveness of the program. The company will review the permit space program, using the canceled permits within 1 year after each entry. It is permitted to perform a single annual review covering all entries performed during a 12-month period. If no entry is performed during a 12-month period, no review is necessary.

Before permit required entry is authorized, each entry employer must document the completion of measures for safe entry. The documentation must be made available at the time of entry to all authorized entrants by posting it at the entry portal or by any other equally effective means. The permit may not exceed the time required. The permit will be cancelled when the entry operations is completed; suspended or cancelled when conditions dictate. The permit must be fully reassessed before allowing re-entry. The entry employer must retain each canceled entry permit for at least 1 year to facilitate the review of the permit-required confined space program. It is permitted to perform a single annual review covering all entries performed during a 12-month period. If no entry is performed during a 12-month period, no review is necessary.

Training will be at no cost to the employee, and the company will ensure that the employee possesses the understanding, knowledge, and skills necessary for the safe performance of the duties assigned. Training must be in both a language and vocabulary that the employee can understand. Training must be conducted: before the employee is assigned confined space entry work; before there is a change in assigned duties; whenever there is a change in permit space entry operations that presents a hazard about which an employee has not previously been trained; whenever there is any evidence of a deviation from the permit space entry procedures or there are inadequacies in the employee's knowledge or use of these procedures. The training must establish employee proficiency in their assigned duties and must introduce new or revised procedures. The company must maintain training records: contain each employee's name, the name of the trainers, and the dates of training. The documentation must be available for inspection by employees and their authorized representatives, for the period of time the employee is employed by that employer.

IDENTIFYING CONFINED SPACES AND HAZARDS

A confined space is an area a worker can enter, but isn't designed for continuous occupancy and doesn't have an unrestricted entry or exit. A permit required confined space (PRCS) has a serious health or safety hazard, such as the possibility for a hazardous atmosphere, material that can engulf a person, or is in a shape that can trap or asphyxiate a person (e.g. converging or sloping walls or floor).

To help provide an understanding for determinations OSHA has provided a limited list of work sites that could have a confined space: bins, boilers, pits, elevators, escalators, pumps, manholes, and tanks (containers).

The company will ensure that a competent person will identify all confined spaces an employee might work in, before the work begins, and determine which requires permits. Employees and the controlling contractor will be informed directly of the location and danger in each permit space. Signs that effectively warn of the danger and prohibit entry will be placed at permit space entrances.

Each entry employer will have a competent person evaluate non-permit spaces initially and when there are changes to the use or configuration that might increase entrant hazards to decide whether to reclassify it.

Work will be scheduled as much as reasonably possible to avoid confined spaces by finishing tasks in areas before they become confined spaces.

Andy Wilson will identify permit-required confined spaces in ARM Environmental Services, Inc. workplaces. If the workplace contains permit spaces, Andy Wilson will inform exposed employees, by posting danger signs or by any other equally effective means, of the existence and location of and the danger posed by the permit spaces.

NOTE: A sign reading DANGER -- PERMIT-REQUIRED CONFINED SPACE, DO NOT ENTER or using other similar language would satisfy the requirement for a sign.

COMMUNICATING BETWEEN EMPLOYERS

As the host employer, all details (e.g. entry employer's entry program, known hazards, new hazards, and hazard elimination/isolation procedures) about confined spaces at the worksite will be communicated with the controlling contractor before and after entry. Where the company has contracted with the property owner to manage it and transmit all confined space details, it will be considered the host employer.

As the controlling contractor, all details (e.g. employer's entry program, location of confined spaces and PRCS, known hazards, new hazards, and hazard elimination/isolation procedures) will be communicated with the host employer and all entry employers (i.e. subcontractors) before and after entry, ensuring that information is transferred to the different entry employers (e.g. posting signs) before and during entry so they don't create additional hazards for other entry employers' workers. Details will be communicated with other non-entry employers so that their workers do not create hazards or go into the confined space.

As the entry employer, all details (e.g. entry program, known hazards, new hazards, and hazard elimination/isolation procedures) about confined spaces at the worksite will be communicated with the controlling contractor before and after entry.

As a non-entry employer, essential details about confined spaces will be communicated with the controlling contractor to determine where the confined spaces are and the necessary steps to prevent employees from accessing them or creating hazards for other workers. Employees will be instructed to not enter the identified confined spaces.

NON-PERMIT SPACES

Alternate Entry

The employer will use alternate procedures to enter a non-permit required space if the employer can demonstrate each of the following conditions are addressed:

- All physical hazards in the space are eliminated or isolated through engineering controls so that the only hazard posed by the permit space is an actual or potential hazardous atmosphere;
- Continuous forced air ventilation is utilized to maintain safe for entry;
- The space should have continuous monitoring unless the employer has supporting data that demonstrates continuous monitoring is unnecessary)

Non-Permit Space Re-Evaluation

When there are changes in the use or configuration of a non-permit required confined space that might increase the hazards to entrants (or some indication that the initial evaluation of the space may not have been adequate), each entry employer must have a competent person reevaluate that space and, if necessary, reclassify it as a 'permit-required' confined space.

CONFINED SPACES WITH ONLY ATMOSPHERIC HAZARDS

The following procedures and conditions are for entering a confined space with only atmospheric hazards that can be made safe to enter through forced air ventilation during entry.

To be more specific, all physical hazards have to be eliminated or isolated through engineering controls, and the forced air ventilation has to keep the space safe for entry, and entrants must be able to exit safely if ventilation stops working.

If the above can be proven and documented with monitoring and inspection where the data is available to each entrant, the space can be entered without a permit, attendant, or rescue and emergency equipment once the company certifies that:

- Entrance covers can be safely removed.
- Entrance openings are immediately guarded by a railing, temporary cover or barrier that prevents accidental falls into the opening and protects entrants from foreign objects falling into the space.
- The internal atmosphere is tested with a calibrated direct-reading instrument in the following order: oxygen content, flammable gases and vapors, and potential toxic air contaminants. The testing procedure is evaluated to ensure it is appropriate for the possible atmospheric hazards. This may mean identifying the possible toxic air contaminants and ensuring the gas detector can detect it, and testing at the top, middle, and bottom of the space to account for different gases' density.
- Testing and continuous monitoring ensures there is no hazardous atmosphere.
- Continuous forced air ventilation from a clean source directed — to the lowest spot or furthest corner — so that it eliminates any hazardous atmosphere from the space while anyone is in there.
- Continuously monitoring the atmosphere in the space with monitoring equipment, unless necessary monitoring equipment isn't commercially available, that will sound an alarm notifying all entrants if a hazard exceeds the atmospheric thresholds.
- Where the preferred continuous monitoring is not used because of equipment limitations, or that periodic monitoring is demonstrably sufficient, periodic monitoring will be often enough to detect a hazardous atmosphere is building up and that entrants have time to exit.
- Once a hazard is observed everyone will immediately leave the space. The hazard source is then found — and the company will take steps that protect employees before they enter that space again.
- There is a safe way to enter and exit the space, including a personnel hoist made for that purpose, or a job hoist approved ahead of time in writing by a registered professional engineer.

The written certificate must contain the date, location of the space and the signature of the person certifying the above conditions have been met. The certification must be made before anybody enters and be available to every employee entering the space. The employer will reevaluate the space if there is a change to the space that may increase hazards or there is indication the current evaluation is incorrect.

RECLASSIFYING PRCS FOR ENTRY

Permit required confined spaces without any potential atmospheric hazard can be reclassified as non-permit required once the entry employer certifies that:

- The Space poses no actual or potential atmospheric hazards and if the hazards can be eliminated or isolated without entering the space.
- If the entry employer can show they have to enter the space to remove the hazard, then they can do that following the permit process.
- Testing and inspection during that entry demonstrate that the hazards within the permit space have been eliminated or isolated
- Forced air ventilation does not constitute elimination or isolation of the hazards
- Document the basis for determining that all hazards in a permit space have been eliminated or isolated
- Through a certification that contains the date, the location of the space, and the signature of the person making the determination
- If hazards arise within a permit space that has been reclassified as a nonpermit space, each employee in the space must exit the space. The entry employer must then reevaluate the space and reclassify it as a permit space.

The written certificate must contain how all the hazards have been eliminated or isolated, the date, location of the space, and the signature of the person certifying the above conditions have been met. The certification must be made before anybody enters and be available to every employee entering the space. If new hazards are identified everyone must leave the space, and the entry employer will reevaluate.

ENTRY EMPLOYER RESPONSIBILITIES

As an entry employer, the company will create and put into action the following measures to protect its and other employees both inside and outside confined spaces.

- Prevent unauthorized entry. Using covers, signs, or an attendant at the entrance etc.
- Ensure safe permit space entry operations.
- Provide the necessary equipment.
- Evaluate permit spaces during entry.
- Provide attendants outside permit spaces during entry.
- Describe how the attendant monitoring multiple spaces will respond to emergencies.
- Assign a role to every person in an entry, identify their duties and provide required training.
- Rescue and emergency services for PRCS.
- Entry permits.
- Coordinate entry operations when more than one entity performs permit space entry at the same time and/or entry is performed at the same time that any activities that could foreseeably result in a hazard in the permit space are performed.
- The Controlling Coordinator must debrief each entity that entered a permit space regarding the permit space program followed any hazards confronted or created in the permit space(s) during entry operations
- Review this policy annually and following any incidents or near misses

SAFE PERMIT SPACE ENTRY OPERATIONS

A competent person will identify and evaluate permit space hazards before any employees enter it and establish all the elements to ensure safe work in the area, especially:

- Citing the acceptable entry conditions.
- Authorized entrants can observe space testing and monitoring.
- Isolating the space and its hazards.
- Controlling atmospheric hazards through purging, inerting, flushing, or ventilating.
- Reducing the atmosphere to below 10 percent of its Lower Flammable Limit (LFL) or inerting the atmosphere so that it is entirely non-combustible and addressing the other atmospheric hazards like oxygen deficiency through PPE.
- Ensuring monitoring procedures will detect atmospheric hazard level increases quickly enough for entrants to exit, in case ventilation stops working.
- Having necessary barriers to protect entrants from outside hazards, namely pedestrian and vehicle barriers.
- Conditions continue to allow safe entry the entire time.
- The necessary PPE effectively protects every employee, and that they have the PPE before entering a hazardous atmosphere.
- Conditions, like high pressure, that can make removing an entrance cover unsafe are eliminated.

EVALUATING PERMIT SPACE CONDITIONS

The entry employer will take the following steps to check out the PRCS when conducting entry.

Test the conditions in the PRCS before entering or making any additional ventilation if the atmosphere can be isolated. Oxygen will be tested first, followed by combustible gases and vapors, and finally toxic gases and vapors.

If it is part of a larger continuous system and can't be isolated, pre-entry testing will be done, and conditions will be continuously monitored unless necessary monitoring equipment isn't commercially available. Work in large or continuous systems also requires a sufficient early-warning system continuously monitoring for engulfment hazards.

Continuously monitoring the atmosphere in space with monitoring equipment, unless necessary monitoring equipment isn't commercially available, that will sound an alarm notifying all entrants if a hazard exceeds the atmospheric thresholds.

Authorized entrants will be allowed to observe the pre-entry and all other testing and monitoring, and the results will be posted with the permit at the entry to the confined space.

ENTRY PERMITS

Each entry employer will ensure conditions are safe for entry in permit spaces through establishing, suspending and cancelling entry permits. If there are multiple entry employers in a confined space during the same entry, then one permit will be completed by coordinating with the controlling contractor and all entry employers. The permit will be made available (e.g. posted at the entry) for all entry employers to document the completion of necessary safety measures.

Through completing an entry permit all measures needed to make the PRCS safe for entry will be documented. The entry supervisor on the permit will sign the entry permit authorizing that these necessary measures have been taken. The permit's duration will be the amount of time needed to complete the task as identified on the permit. Every entry permit will be kept for at least one year and addressed in the annual review. The entry supervisor will terminate the permit when the task identified is completed, suspended, or will cancel the permit when necessary.

A permit will be suspended when a temporary condition not allowed in the permit occurs in or near the PRCS and doesn't change its configuration or creates any new hazard. The entry supervisor needs to reevaluate the PRCS before lifting any suspension or cancelling the permit. A permit will be canceled when a condition not allowed in the permit occurs in or near the PRCS and isn't temporary or, changes its configuration or creates any new hazard.

Items on an Entry Permit

In order to identify everything needed to make a permit safe for entry the following items will be addressed:

- The permit space's location.
- The reason for entry.
- Date and duration of the entry.
- Authorized entrants identified so the attendant can easily track who is inside the PRCS.
- How any hazardous atmospheric levels will be tracked should ventilation stop.
- The name of every attendant.
- The name of every entry supervisor and the signature of the one that authorized entry.
- Hazards in the PRCS.
- How the hazards will be isolated, eliminated or controlled before entry (e.g. lockout tagout, purging, inerting, ventilating, and flushing).
- Acceptable entry conditions.
- Results and times of appropriate testing and monitoring, including the names or initials of who did the test.
- Rescue and emergency services and how they will be called.
- How entrants and attendants will communicate during entry.
- The necessary equipment.
- Additional permits needed to complete the task in the confined space.

EQUIPMENT

As an entry employer, the company will provide suitable equipment needed to safely enter, exit from, and conduct rescues in confined spaces. The equipment will also be properly maintained and all employees will know how to and be expected to use it correctly. Any equipment must also meet the regulations specific to it. For example respiratory equipment must meet the respiratory regulations, 1926.103, and barriers are governed by the rules for guardrails, 1926.502(b). The following equipment is specifically mentioned by OSHA:

- Adequate testing and monitoring equipment.
- Ventilating equipment that makes entering possible.
- Communication equipment that allows attendant to talk to entrants, assess status, and tell them to evacuate.

- PPE that meets any other applicable regulations where engineering and administrative controls do not give enough protection.
- Lighting that meets construction's minimum illumination in foot-candles (1926.56), that won't ignite the specific gas, vapor, dust or fiber present, and that enables employees to work safely and exit during emergencies.
- Barriers and shields that effectively isolate the confined space.
- Ladders needed to enter and exit the confined space.
- Rescue and emergency equipment that is called for in the company's emergency rescue policy.

AUTHORIZED ENTRANTS

Authorized entrants will know and understand which potential hazards are in each confined space such as: how they could be exposed, signs, symptoms, and consequences.

Entrants are expected to properly use all equipment, communicate with attendant, and be ready to exit any permit space quickly.

Communication includes working with the attendant to instill awareness of personal health in light of the potential hazards. This awareness includes sharing information with the attendant about any symptoms, warning signs or prohibited conditions.

The entrant must exit permit spaces when: told to by the attendant or entry supervisor; there is an exposure warning sign or symptom; they detect a prohibited condition; or an evacuation alarm is activated.

ATTENDANT RESPONSIBILITIES

An attendant's primary responsibility is to evaluate and protect authorized entrants inside permit required confined spaces. These responsibilities include:

- Be familiar with and understands the hazards that may be faced during entry, signs or symptoms, and consequences of the exposure
- Be aware of possible behavioral effects of hazard exposure in authorized entrants
- Continuously maintain an accurate count of authorized entrants in the permit space
- Know the means used to identify authorized entrants
- Remain outside the permit space during entry operations until relieved by another attendant
- Communicate with authorized entrants as necessary to assess entrant status and to alert entrants of the need to evacuate the space
- Assess activities and conditions inside and outside the space to determine if it is safe for entrants to remain in the space
- Order the authorized entrants to evacuate the permit space immediately if conditions warrant from inside or outside the entry space
- If the attendant cannot effectively and safely perform all the duties required under this section
 - Summon rescue and other emergency services as soon as the attendant determines that authorized entrants may need assistance to escape from permit space hazards
 - Takes appropriate actions when unauthorized persons approach or attempt to enter a permit space
- Inform the authorized entrants and the entry supervisor if unauthorized persons have entered the permit space

- Perform non-entry rescues as specified by the employer's rescue procedure
- Perform no duties that might interfere with the attendant's primary duty to assess and protect the authorized entrants.)

Attendants will know and understand which potential hazards are in each confined space such as: how entrants could be exposed, signs, symptoms, and consequences. This includes knowing how the hazard could affect entrants' behavior.

Attendants will also continuously track authorized entrants in the permit space, and accurately document it on the permit.

Attendants will know and understand which potential hazards are in each confined space such as: how entrants could be exposed, signs, symptoms, and consequences. This includes knowing how the hazard could affect entrants' behavior. Attendants will also continuously track authorized entrants in the permit space, and accurately document it on the permit.

In the event of an emergency, if more than one confined space is monitored by a single attendant, the attendant must:

- Immediately call for help over the radio
- Request backup
- Order the evacuation of all entrants
- Keep in contact with affected entrants
- Remain on scene until help arrives

An attendant must stay outside the permit space during an entry, even during emergencies regardless of whether entrants can escape, until relieved by another attendant. Once another attendant is on the scene, the attendant still can only try an entry rescue if they have the necessary equipment, are trained to do so, and the entry permit allows for it.

Communication includes working with the entrant to instill awareness of personal health in light of the potential hazards, the confined space conditions and when to evacuate.

The attendant is responsible for determining when a confined space is no longer safe and ordering entrants to evacuate whenever: there is a prohibited condition, the entrant is showing behavioral effects of exposure, something outside the confined space could be dangerous to entrants, or if the attendant can't focus on all required responsibilities.

As soon as the attendant assesses that entrants need help to evacuate the permit space, he/she will immediately call rescue and emergency services as described in the permit and start non-entry rescue established in the permit.

When an unauthorized person approaches a confined space, the attendant will tell he/she to exit immediately. The attendant will tell the entrants and supervisor there is an unauthorized person in the permit space.

Attendants will not be assigned or allowed to do any work that takes their attention away from their focus on the confined space and the safety of people inside and outside it. This means attendants can do tasks that add to their knowledge of permit space conditions, like monitoring atmospheric conditions or passing tools to entrants from outside the space. Although this knowledge can be part of the job description, tasks that do not require continued attention away from or leaving the permit-required confined space are not included. An attendant will not monitor more than one confined space at a time.

ARM Environmental Services, Inc.'s program includes the means and procedures that are used if more than one confined space is monitored by a single attendant in order to enable the attendant to respond to emergencies in one or more permit spaces that he/she is monitoring without distraction from all responsibilities.

ENTRY SUPERVISOR RESPONSIBILITIES

For every permit-required confined space entry, the entry employer will assign an entry supervisor who has the ability to complete the following responsibilities:

- Knowing the hazards of the confined space.
- Verifying the permit is completed correctly.
- Ordering evacuation and cancelling or suspending the permit.
- Communicating with and verifying the availability of emergency and rescue services.
- Removing anyone unauthorized who tries to go into a permit space.
- Assessing the permit-confined space when taking over responsibility and periodically as needed.

Entry supervisors will know and understand which potential hazards are in each confined space such as: how entrants could be exposed, signs, symptoms, and consequences. The entry supervisor will be someone who knows at least as much as the authorized entrants and attendants, and should be someone who knows even more about the space and hazards.

Before signing it, the supervisor will check the completed permit to be sure everything identified in the permit is correct: tests completed, procedures followed, and equipment in place.

The entry supervisor is responsible for deciding when there are unsafe conditions for an ongoing permit entry, terminating the entry, and then cancelling or suspending a permit. A permit can be cancelled when the entry permit is completed or there is a new condition not addressed in the permit. The supervisor can also suspend a permit if a condition requires temporary evacuation, and the space soon returns to acceptable conditions in the permit. After reevaluating the permit space, the entry supervisor can remove the suspension but will record it on the permit.

The entry supervisor will check that needed emergency and rescue services are available, can be reached, and can themselves respond in a timely manner during the permit-required confined space entry.

The entry supervisor is responsible for preventing unauthorized entry into a permit space and immediately removing from the worksite any unauthorized person who has entered a permit space.

When taking over responsibility of a permit space entry, the new entry supervisor will check the confined space conditions to make sure they are within safe levels and consistent with the permit. The entry supervisor is also responsible for periodically assessing the hazards and work within a confined space as often determined necessary according to the nature of the possible hazards and expected change of conditions.

TRAINING

Each employee will be trained in a vocabulary and language they understand so that they are proficient in their expected responsibilities. This training will occur:

- Before they are assigned duties covered in this policy.
- Before a change in assigned duties.
- When a change in permit space operations (e.g. new equipment, techniques, promotions, reassignments) introduces a new hazard the employee hasn't trained for.
- When a departure from, or a lack of knowledge in the established procedures is noticed.

Assigned duties include: authorized entrant, attendant, entry supervisor, and emergency rescue. Employees not authorized to enter confined spaces will also be trained on the hazards of the confined spaces at the worksite, and what they need to know to avoid them.

The company will determine that training has effectively taught the employee to proficiently perform their assigned duties.

The training and determination of proficiency will be documented and kept for all current employees. This documentation will be available to all employees who ask for it, and the Secretary of Labor upon request.

RESCUE AND EMERGENCY SERVICES FOR PRCS

Rescue and emergency service procedures are a necessary component of the permit and include the preferred non-entry and entry rescues. The non-entry can be initiated immediately by the attendant and entry supervisor who remains outside the PRCS. Entry rescues need to be either from a designated outside source or a team of selected employees, and each has their own requirements. Unauthorized personnel shall not attempt a rescue.

Before any employee enters a permit space, there must be established specific procedures for summoning rescue and emergency services to respond to emergencies that may occur during entry.

Any injured entrant that is exposed to a hazardous substance at the worksite will bring the associated Safety Data Sheet (SDS) and provide it to the facility where the medical treatment takes place.

Non-entry Rescue

The company will establish non-entry rescue procedures for all permit-required confined spaces, unless it can demonstrate that the necessary retrieval equipment (e.g. body harness, retrieval lines, block and tackle, winch system) increases the risk or does not help rescue.

Non-entry retrieval systems will include a chest or full body harness with the retrieval line at the center of the back where it creates a small profile to successfully remove the entrant. This can be at the shoulder level or above the entrant's head. When the chest or body harness won't work or creates a greater hazard, wristlets or anklets may be used.

The line will be attached outside the permit space so that it can be used to pull entrants out as soon as they need to be rescued. This can either be a mechanical device like a block and tackle or winch system, or a fixed point. Vertical entrances more than five feet deep call for a mechanical device to assist rescue.

Circumstances described by OSHA that increase risk of or hamper rescue include anything that can catch onto or entangle the retrieval line like: physical obstructions, airlines, electric cords, and additional retrieval lines from multiple entrants. The distance entrants have to go into the space and how much they will have to move around can also affect the decision that a retrieval system is too dangerous.

Outside Rescue and Emergency Services

Outside rescue and emergency services will be evaluated to ensure they can respond quickly, and have both the equipment and ability to provide rescue when considering each PRCS and the identified hazards.

The company will provide hazard information about its confined spaces and allow the service to go to the PRCS and develop rescue plans. The service selected must have the training, equipment, ability, and willingness to perform rescues. The service also has to agree to tell the company when it will be unable to perform rescues.

The time it takes the service to reach the permit space, enter and retrieve entrants will also be considered, along with the rescue requirements of other regulations. In particular, if the PRCS could have an atmosphere that is immediately dangerous to life or health (IDLH), the respiratory protection standard requires standby rescue personnel equipped with respiratory protection. A response time of 15 minutes may be determined adequate for mechanical hazards that could cause broken bones or abrasions.

Employee Rescue and Emergency Services

When selecting a team of employees to provide rescue and emergency services, they will: have the necessary equipment and PPE; be trained to be proficient as entrants and rescuers, correct PPE use, basic first aid and cardiopulmonary resuscitation (CPR); and practice attempting the type of rescue needed at least once every 12 months. At least one member of the rescue team will have current basic first aid and CPR certifications.

If a rescue operation is correctly performed in the last 12 months, then practice is not necessary.

REVIEW

This policy will be reviewed annually and when measures may not protect employees, such as after any incidents or near misses. Any deficiencies will be corrected before entering any additional PRCS.

Some examples of situations that may require a review are:

- An unauthorized person enters a PRCS.
- A new hazard not covered by the permit is detected in a PRCS.
- A new condition prohibited by the permit is detected in a PRCS.
- An injury takes place during entry.
- A change in the PRCS configuration or use.
- An employee issues a complaint.

The annual review will ensure that all cancelled permits are included in the review within one year after entry. This review will evaluate the policy's effectiveness of providing protection to all affected employees.

Definitions

Confined space: Is large enough for an employee to enter fully and perform assigned work; which is not designed for continuous occupancy by the employee; and has a limited or restricted means of entry or exit. These spaces may include underground vaults, tanks, storage bins, pits and diked areas, vessels, silos and other similar areas.

Permit-required confined space: Has one or more of these characteristics: Contains or has the potential to contain a hazardous atmosphere; contains a material with the potential to engulf someone who enters the space; has an internal configuration that might cause an entrant to be trapped or asphyxiated by inwardly converging walls or by a 3 floor that slopes downward and tapers to a smaller cross section; and/or contains any other recognized serious safety or health hazards.

Entry: The action by which a person passes through an opening into a permit-required confined space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space.

Entry supervisor: The person (such as the employer, foreman, or crew chief) responsible for determining if acceptable entry conditions are present at a permit space where entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry as required by this section.

Inerting: The displacement of the atmosphere in a permit space by a noncombustible gas (such as nitrogen) to such an extent that the resulting atmosphere is non-combustible.

Isolation: The process by which a permit space is removed from service and completely protected against the release of energy and material into the space by such means as: blanking or blinding; misaligning or removing sections of lines, pipes, or ducts; a double block and bleed system; lockout or tagout of all sources of energy; or blocking or disconnecting all mechanical linkages.

FORMS AND ATTACHMENTS

Evaluate the documents on the following pages along with their source material from the General Industry Regulation's appendixes, and consider using them to implement and maintain your safety program.

- Confined-Space Entry Permit
- Confined Space Entry Training Record Sheet
- Initial Evaluation of Confined Space Rescue Plans
- Evaluation of Confined Space Rescue Program
- Planning Confined Space Rescue Drills

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CONFINED SPACES ENTRY PERMIT (1 OF 3)

GENERAL INFORMATION				CONTROLS AND EQUIPMENT					
Permit Space Location				<input type="checkbox"/> ISOLATION <input type="checkbox"/> Lockout/Tagout <input type="checkbox"/> Blanking/Blinding <input type="checkbox"/> Double Block and Bleed <input type="checkbox"/> Line Breaking/Misalignment <input type="checkbox"/> Other: _____					
Purpose of Entry									
Permit Valid For	Date		To						
	Time		To						
PERMIT SPACE HAZARDS			Y	N	<input type="checkbox"/> INERTING <input type="checkbox"/> PURGE/CLEAN <input type="checkbox"/> METHOD FOR SAFE COVER REMOVAL AND SECURING AREA <input type="checkbox"/> ATMOSPHERIC TESTING <input type="checkbox"/> Periodic (give interval) _____ <input type="checkbox"/> Continuous <input type="checkbox"/> VENTILATION <input type="checkbox"/> Natural <input type="checkbox"/> Continuous Forced Air <input type="checkbox"/> Local Exhaust <input type="checkbox"/> ENTRY EQUIPMENT <input type="checkbox"/> Ladders <input type="checkbox"/> Other: _____ <input type="checkbox"/> PERSONAL PROTECTIVE EQUIPMENT <input type="checkbox"/> Respiratory (SCBA, SAR, air purifying) <input type="checkbox"/> Clothing <input type="checkbox"/> Eye and Face Protection <input type="checkbox"/> Hearing Protection <input type="checkbox"/> RESCUE and RETRIEVAL EQUIPMENT <input type="checkbox"/> Full Body Harness <input type="checkbox"/> Lifeline <input type="checkbox"/> Tripod w/Mechanical Wench <input type="checkbox"/> Explosion-Proof Lighting <input type="checkbox"/> NON-SPARKING TOOLS <input type="checkbox"/> SAFE ELECTRICAL EQUIPMENT and GFCI <input type="checkbox"/> COMMUNICATION EQUIPMENT <input type="checkbox"/> Radio <input type="checkbox"/> Phone <input type="checkbox"/> Other: _____ <input type="checkbox"/> HOT WORK PERMIT <input type="checkbox"/> FIRE EXTINGUISHERS				
ATMOSPHERIC	Oxygen Deficient			<input type="checkbox"/>				<input type="checkbox"/>	
	Oxygen Enriched			<input type="checkbox"/>				<input type="checkbox"/>	
	Explosive (Gas/Vapor)			<input type="checkbox"/>				<input type="checkbox"/>	
	Explosive Dust			<input type="checkbox"/>				<input type="checkbox"/>	
	Carbon Monoxide			<input type="checkbox"/>				<input type="checkbox"/>	
	Hydrogen Sulfide			<input type="checkbox"/>				<input type="checkbox"/>	
	Other Toxic Vapors			<input type="checkbox"/>				<input type="checkbox"/>	
ENGULFMENT								<input type="checkbox"/>	<input type="checkbox"/>
CONFIGURATION (ENTRAPMENT)								<input type="checkbox"/>	<input type="checkbox"/>
MECHANICAL					<input type="checkbox"/>	<input type="checkbox"/>			
ELECTRICAL					<input type="checkbox"/>	<input type="checkbox"/>			
SUBSTANCE HAZARD TO SKIN/EYES					<input type="checkbox"/>	<input type="checkbox"/>			
HEAT STRESS					<input type="checkbox"/>	<input type="checkbox"/>			
OTHER POTENTIAL HAZARDS (radiation, noise, etc, list)					<input type="checkbox"/>	<input type="checkbox"/>			
					<input type="checkbox"/>	<input type="checkbox"/>			
					<input type="checkbox"/>	<input type="checkbox"/>			

CONFINED SPACES ENTRY PERMIT (2 OF 3)

PERSONNEL							
Entrant(s)		Time In		Time Out			
Attendant(s)							
Entry Supervisor(s)							
COMMUNICATION PROCEDURES							
Visual	<input type="checkbox"/>	Voice	<input type="checkbox"/>	Rope	<input type="checkbox"/>	Radio	<input type="checkbox"/>
Other							
RESCUE AND EMERGENCY SERVICES				RESCUE PROCEDURES			
Name			Phone				
Name			Phone				
Summoning Procedure							

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CONFINED SPACES ENTRY PERMIT (3 OF 3)

ATMOSPHERIC TESTING RECORD										
Condition	Acceptable Level	Record continuous monitoring results every 2 hours								
OXYGEN	19.5% - 23%									
EXPLOSIVE (GAS/VAPOR)	<10% LFL									
EXPLOSIVE DUST	<LFL (5ft Visibility)									
CARBON MONOXIDE	50ppm									
HYDROGEN SULFIDE	10ppm									
OTHER (Specify)										
NAME(S) OF TESTER(S)										
TESTING EQUIPMENT	Type									
	Serial #									
ENTRY AUTHORIZATION (ENTRY AUTHORIZED BY)										
Signature		Date		Time						
ENTRY SUSPENSION (ENTRY SUSPENDED BY)										
Signature		Date		Time						
Resumed after Reevaluation		Date		Time						
Description										
ENTRY CANCELLATION (ENTRY CANCELLED BY)										
Name							Date			
Signature							Time			
Reason for Cancellation	<input type="checkbox"/>	Entry Operations Completed			<input type="checkbox"/>	Prohibited Condition Arose				
Problems Encountered										

ARM ENVIRONMENTAL SERVICES, INC. HSE

TRAINING RECORD

Trainer (include qualifications):	
Date:	
Content of Training:	
Attendees	
Print Name:	Signature:

INITIAL EVALUATION OF CONFINED SPACE RESCUE PLANS

Use this worksheet to determine if a permit-required confined space rescue plan is sufficient. This plan could be a response team of employees trained by the employer or calling 911. Both must pass muster. Answering “no” to any question means an alternative must be considered to satisfy the requirements in this guide.

Tasks	Results
<p>1. Determine the rescue response time needed for permit-required confined spaces. In other words, how long can a person remain trapped in the confined space? Consider any PEL, REL time limits (e.g. H₂S has an NIOSH REL 10 ppm ceiling for 10 minutes)</p> <p>If there is a possible IDLH, a rescue team needs to be standing by. If the hazards are only physical (e.g. broken bones, abrasions) a longer response time can be tolerated.</p>	<p>Needed rescue response time _____ minutes</p>
<p>2. Calculate the time required for the rescue service by adding the needed time to: get the notification, arrive at the scene, set-up and be ready to enter. Consider the rescue team’s distance from each worksite, quality of roads and traffic, reliability and training of the drivers.</p> <p>Then subtract the needed response time. The answer must be a positive number to continue.</p>	<p>Receive notification _____ minutes + Arrive at the scene _____ minutes + Set up and be ready for entry _____ minutes - Needed rescue response time _____ minutes = _____ minutes Must result in a positive number</p>
<p>3. Determine the rescue response service availability:</p> <p>a) Is the rescue service available when workers will enter the permit-required confined space?</p> <p>b) Are key rescue members available at these times?</p> <p>c) Can the rescue service notify the attendant when they are unavailable so entries can be prevented or stopped?</p>	<p><input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p><input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p><input type="checkbox"/> YES <input type="checkbox"/> NO</p>
<p>4. Has the rescue service passed the most recent performance requirement evaluations?</p>	<p><input type="checkbox"/> YES <input type="checkbox"/> NO</p>
<p>5. Is the planned 911 service willing to perform rescues:</p> <p>a) If you call 911, is a responder available?</p> <p>b) Is the 911 responder willing to perform rescue and first aid?</p> <p>c) Are the 911 responders able to perform rescues at the worksite?</p>	<p><input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p><input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p><input type="checkbox"/> YES <input type="checkbox"/> NO</p>
<p>6. Can the attendant immediately request a rescue?</p>	<p><input type="checkbox"/> YES <input type="checkbox"/> NO</p>

EVALUATION OF CONFINED SPACE RESCUE PLANS

Follow this checklist to determine if a permit-required confined space rescue plan meets all performance requirements. This critique should occur during any periodic drills or following a successful rescue. Answering “no” to any question, means an appropriate corrective action must be considered.

Tasks	Results
1. Has the entire team been trained as entrants, and know the potential hazards of at least the types of spaces they may have to perform a rescue?	<input type="checkbox"/> YES <input type="checkbox"/> NO
2. Can the team recognize signs, symptoms, and consequences of hazardous atmospheres possible in the permit confined space?	<input type="checkbox"/> YES <input type="checkbox"/> NO
3. Is every team member: a) Provided with and trained in PPE necessary to perform rescues? b) Trained to perform rescues and use rescue equipment (e.g. ropes, backboards)?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> NO
4. Is every team member trained in first-aid and medical skills to treat victims injured or overcome by possible hazards?	<input type="checkbox"/> YES <input type="checkbox"/> NO
5. Do team members perform duties safely and efficiently?	<input type="checkbox"/> YES <input type="checkbox"/> NO
6. Do team members focus on their own safety before the victim's?	<input type="checkbox"/> YES <input type="checkbox"/> NO
7. If necessary, can the rescue service test the air identifying entry conditions?	<input type="checkbox"/> YES <input type="checkbox"/> NO
8. Can team members find information that applies to rescues? a) Entry permits b) Hot work permits c) Safety Data Sheets	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> NO
9. Does the rescue service know of any hazards from outside the permit area (e.g. nearby construction)?	<input type="checkbox"/> YES <input type="checkbox"/> NO
10. If necessary, can the rescue service safely rescue victims from: a) A limited size opening (less than 2 ft. in diameter)? b) Limited internal space? c) Internal obstacles or hazards?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> NO
11. If necessary, can the rescue service safely perform an elevated rescue?	<input type="checkbox"/> YES <input type="checkbox"/> NO
12. Does the rescue service have a plan for each type of rescue needed? a) A plan for each kind of permit space rescue operation at the worksite? b) Does the plan cover all types of possible necessary rescue operations?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> NO

PLANNING CONFINED SPACE RESCUE DRILLS

Follow this worksheet to check off that the rescue team’s periodic drills – at least once every 12 months when a successful rescue has not been completed – covers all possible scenarios and worksite characteristics. Practices may occur in representative spaces or in the “worst-case” environment with the most restrictive access, entrance size, and configurations.

Tasks	Results
1. Horizontal Access. The entrance is located on the side of the permit space. Using retrieval lines may be difficult.	Is this a possibility at the worksite? <input type="checkbox"/> YES <input type="checkbox"/> NO Description attached? <input type="checkbox"/>
2. Vertical Access. The entrance is located: a) On the top of the permit space so rescuers must climb down, or b) On the bottom of the permit space so rescuers must climb up to enter.	Is this a possibility at the worksite? <input type="checkbox"/> YES <input type="checkbox"/> NO Description attached? <input type="checkbox"/>
3. Restricted Entrance Size. Smallest diameter entrance is 2 ft. or less. These are too small for rescuers to enter with a SCBA, or allow normal spinal immobilization of an injured employee.	Is this a possibility at the worksite? <input type="checkbox"/> YES <input type="checkbox"/> NO Description attached? <input type="checkbox"/>
4. Unrestricted Entrance Size. Smallest diameter entrance is 2 ft. or more, and allows relatively free movement into and out of the permit space.	Is this a possibility at the worksite? <input type="checkbox"/> YES <input type="checkbox"/> NO Description attached? <input type="checkbox"/>
5. Open Internal Configuration. The space has no barriers, obstacles, or obstruction (e.g. a water tank).	Is this a possibility at the worksite? <input type="checkbox"/> YES <input type="checkbox"/> NO Description attached? <input type="checkbox"/>
6. Obstructed Internal Configuration. The space has an obstacle that requires the rescuer to maneuver around it (e.g. baffle, mixing blades). Equipment brought into the space (e.g. ladder, scaffold) can be an obstruction if its position or size increases the rescue difficulty.	Is this a possibility at the worksite? <input type="checkbox"/> YES <input type="checkbox"/> NO Description attached? <input type="checkbox"/>
7. Elevated Entrance Configuration. The entrance is 4 ft. or more above grade, requiring high angle rescue procedures because of the difficulty transporting victims from the entrance to the ground.	Is this a possibility at the worksite? <input type="checkbox"/> YES <input type="checkbox"/> NO Description attached? <input type="checkbox"/>
8. Non-elevated Entrance Configuration. The entrance is less than 4 ft. above grade, and the rescue team can normally transport victims.	Is this a possibility at the worksite? <input type="checkbox"/> YES <input type="checkbox"/> NO Description attached? <input type="checkbox"/>

POLICY

The compliance of all employees with ARM Environmental Services, Inc. Safety and Health Program is mandatory and shall be considered a condition of employment. All safety rules, procedures, and plans in effect are to be followed as specified in the safety program. Employees found to be in violation of Company safety policy may be subject to penalty.

RESPONSIBILITIES

Andy Wilson is the supervisor for disciplinary actions and any employee in a position of management or supervisory capacity may initiate disciplinary action against any employee found to be in violation of Company policy. Not following verbal or written safety procedures, guidelines, rules, horse play, failure to wear selected Personal Protective Equipment (PPE), abuse of selected PPE, and etc. constitutes a safety violation.

TRAINING

The importance of safe work practices and the consequences of failing to abide by safety rules will be covered in the New Employee Safety Orientation and at Tailgate/Toolbox Safety Training. This will help ensure that all employees understand and abide by The Company's safety policies.

Employees that are observed performing unsafe acts or not following proper procedures or rules will be retrained by their foreman or supervisor. A Safety Contact Report may be completed by the supervisor to document the training. If multiple employees are involved, additional safety meetings will be held.

PROCEDURES

The following outlines the disciplinary measures which will be taken against employees found to be in violation:

Periodic safety inspections of the workplace and equipment will be undertaken to ensure that all personnel, including supervisory positions, are demonstrating the required commitment to safety. A general neglect of safe work procedures, practices, and requirements in the workplace, or neglect of equipment safety, will be viewed as a lack of supervisory enforcement of safety policy and the appropriate supervisor/management personnel will be subject to the same disciplinary procedures described below.

These programs will be used for employee compliance with the safety program and all safety rules: training programs; retraining; optional safety incentive programs; disciplinary action.

Safety Incentive Programs

Although strict adherence to safety policies and procedures is required of all employees, The Company may choose to periodically provide recognition of safety-conscious employees and jobsites without accidents through a safety incentive program.

Disciplinary Action

The failure of an employee to adhere to safety policies and procedures established by ARM Environmental Services, Inc. can have a serious impact on everyone concerned. An unsafe act can threaten not only the health and well-being of the employee committing the unsafe act but can also affect the safety of his/her coworkers and/or customers. Accordingly, any employee who violates any of The Company's safety policies will be subject to disciplinary action.

When a "Safety Violation Notice" is issued, appropriate supervisory personnel will meet with employee(s) to discuss the infraction and inform individual(s) of the rule or procedure that was violated and the corrective action to be taken.

Note: Failure to promptly report any on-the-job accident or injury, on the same day as occurrence, is considered a serious violation of The Company's Code of Safe Practices. Any employee who fails to immediately report a work-related accident or injury, no matter how minor shall be subject to disciplinary action.

Employees will be disciplined for infractions of safety rules and unsafe work practices that are observed, not just those that result in an injury. Often, when an injury occurs, the accident investigation will reveal that the injury was caused because the employee violated an established safety rule and/or safe work practice(s).

In any disciplinary action, the foreman should be cautious that discipline is given to the employee for safety violations, and not simply because the employee was injured on the job or filed a Workers' Compensation claim.

Violations of safety rules and the Code of Safe Practices are to be considered equal to violations of other Company policy. Discipline for safety violations will be administered in a manner that is consistent with The Company's system of progressive discipline. If, after training, violations occur, disciplinary action will be taken as follows:

1. Oral warning. Documented, including date and facts on the "Safety Warning Report" form. Add any pertinent witness statements. Restate the policy and correct practice(s)
2. Written warning. Retrain as to correct procedure/practice
3. Written warning with suspension
4. Termination

As in all disciplinary actions, each situation is to be carefully evaluated and investigated. The particular step taken in the disciplinary process will depend on the severity of the violation, employee history, and regard to safety. Foremen and superintendents should consult with the office if there is any question about whether or not disciplinary action is justified. Employees may be terminated immediately for willful or extremely serious violations. Union employees are entitled to the grievance process specified by their contract.

Note: Consistency in the enforcement of safety rules shall be exercised at all times.

Employee Safety Warning Report

Employee's Name:		Position:	
Date of Warning:	Violation Time:	<input type="checkbox"/> am <input type="checkbox"/> pm	Violation Date:
Supervisor:		Department:	
Type of Warning:	<input type="checkbox"/> Verbal <input type="checkbox"/> Written	<input type="checkbox"/> Serious	<input type="checkbox"/> Other
Type of Violation:	<input type="checkbox"/> Unsafe Act <input type="checkbox"/> Improper Safety Attire	<input type="checkbox"/> Unsafe condition	<input type="checkbox"/> Other
Supervisor's Statement:			
Employee's Statement: (Check Proper Box)			
<input type="checkbox"/> I agree with the Supervisor's statement. <input type="checkbox"/> I disagree with the Supervisor's statement because:			
List all previous warnings and retraining below.			
When warned and by whom:		I have read and understand this warning decision.	
First Warning: (Describe reason)			
		Employee's Signature: Date:	
Date:	Date retrained:	Supervisor's Signature: Date:	
Second Warning: (Describe reason)		Copy Distribution:	
Date:	Date retrained:	<input type="checkbox"/> Employee	
Third Warning: (Describe reason)		<input type="checkbox"/> Employee's Supervisor	
		<input type="checkbox"/> Personnel Department	
		<input type="checkbox"/> Safety Committee	
Date:	Date retrained:		
The Supervisor must complete this form immediately after the employee has been interviewed. A decision must be made on the following to ensure violators <u>will not</u> participate in the current safety incentive program.			
<input type="checkbox"/> No further action <input type="checkbox"/> Suspension <input type="checkbox"/> Other:			
<input type="checkbox"/> Suspension from current safety incentive program <input type="checkbox"/> Dismissal			
Submit this form for review at the next Safety Committee meeting.			
Safety Committee Notes:			

ARM ENVIRONMENTAL SERVICES, INC. HSE

TRAINING RECORD

Trainer:	
Signature:	
Date:	
Content of Training:	
Attendees	
Print Name:	Signature:

POLICY

ARM Environmental Services, Inc. has implemented this policy to ensure no employee is exposed to electrical hazards in the workplace. Andy Wilson is the supervisor responsible for ensuring the following policy for controls, training, personal protective equipment, and safe work practices are enforced:

RESPONSIBILITIES

Electrical safety is a responsibility shared between the Company and its employees.

Employer Responsibilities

ARM Environmental Services, Inc. is responsible for:

- Ensuring that only Qualified persons perform electrical work on de-energized equipment that has been locked-tagged out
- Training personnel in how to perform a job hazard analysis
- Responding quickly to eliminate workplace hazards
- Ensuring all equipment is kept in good repair
- Ensuring employees follow safe job procedures
- Reviewing job hazard analysis whenever there is a significant change to any element of the job or there has been an injury or illness

Safety Committee Responsibilities

It is the responsibility of the safety committee to:

- Assist in ensuring lockout-tagout is followed when necessary
- Assist in training employees to recognize and control workplace hazards
- Monitor the workplace for hazards
- Encourage employees to report hazards
- Implement appropriate controls
- Ensure corrective action is taken promptly

Employee Responsibilities

All employees are expected to:

- Perform electrical work on de-energized equipment that has been locked-tagged out only if qualified
- Qualified Persons are responsible for maintaining qualifications
- Follow safe job procedures
- Report hazards to a supervisor immediately

TRAINING

Andy Wilson will ensure all employees exposed to work involving electrical systems or energized parts will be trained in and familiar with the safety-related work practices required by OSHA regulation and the National Fire Protection Association NFPA 70E that pertain to their respective job assignments.

Andy Wilson will ensure that all employees exposed to work involving electrical systems will be trained in, and familiar with, the following:

- The requirements of NFPA 70E Standards for Electrical Safety in the Workplace
- The skills and techniques necessary to distinguish exposed live parts from other parts of electric equipment
- The skills and techniques necessary to determine the nominal voltage of exposed live parts
- The clearance distances specified in §1910.333(c) and the corresponding voltages to which the qualified person will be exposed

The training required will be of the classroom or on-the-job type. The degree of training provided will be determined by the risk to the employee based upon the NFPA 70E - Standards for Electrical Safety in the Workplace.

- The training requirements apply to employees who face a risk of electric shock that is not reduced to a safe level by the electrical installation requirements
- Other employees who also may reasonably be expected to face comparable risk of injury due to electric shock or other electrical hazards will also be trained
- Employees will be trained in and familiar with the safety-related work practices required that pertain to their respective job assignments
- Employees who are not qualified persons will also be trained in and familiar with any electrically related safety practices not specifically addressed by regulations but which are necessary for their safety

Qualified persons (i.e. those permitted to work on or near exposed energized parts) will, at a minimum, be trained in and familiar with the following:

- The skills and techniques necessary to distinguish exposed live parts from other parts of electric equipment
- The skills and techniques necessary to determine the nominal voltage of exposed live parts
- The specified clearance distances and the corresponding voltages to which the qualified person will be exposed
- Qualified persons whose work on energized equipment involves either direct contact or contact by means of tools or materials will also have the required training

SAFE PRACTICES

- Only qualified personnel are authorized to perform work, service, or maintenance on energized electrical parts or systems at ARM Environmental Services, Inc.
- Non-qualified personnel are prohibited by Company Policy from working on or near exposed energized electrical circuits or systems. If a work task requires unqualified personnel, any exposed electrical systems will be de-energized and lockout/tagout procedures adhered to, per Company Policy, before unqualified personnel are allowed access to the work areas. Non-qualified personnel will be trained in the recognition and avoidance of electrical hazards in the work area
- Safe work practices will be employed to prevent electric shock or other injuries resulting from either direct or indirect electrical contacts, when work is performed near or on equipment or circuits that are or may be energized. The specific safe work practices will be consistent with the nature and extent of the associated electrical hazards
- Live parts to which an employee may be exposed will be de-energized before the employee works on or near them, unless Andy Wilson can demonstrate that de-energizing introduces additional or increased hazards or is infeasible due to equipment design or operational limitations. Live parts that operate at less than 50 volts to ground need not be de-energized if there will be no increased exposure to electrical burns or to explosion due to electric arcs
- Live parts of electrical equipment operating at 50 volts or more will be guarded against accidental contact by cabinets or other forms of enclosures that only qualified persons will be able to access. Other examples might include:
 - Enclosing in a room or vault
 - Screens or partitions
 - Elevations of at least 8 feet
- Entrances to rooms and other guarded locations containing live parts will be marked with conspicuous warning signs forbidding unqualified persons to enter
- If the exposed live parts are not de-energized for reasons of increased or additional hazards or infeasibility, other safe work practices will be used to protect employees who may be exposed to the electrical hazards involved. Such work practices will protect employees against contact with energized circuit parts directly with any part of their body or indirectly through some other conductive object. The work practices that are used will be suitable for the conditions under which the work is to be performed and for the voltage level of the exposed electric conductors or circuit parts
- NFPA 70E and OSHA require employers to prove that working in a de-energized state creates more or worse hazards, or is not practical because of equipment design or operational limitations. Examples include: working on life-support systems; emergency alarm systems; ventilation equipment for hazardous locations; work on circuits that are part of a continuous process that cannot be completely shut down
- All electrical conductors and equipment will be acceptable, certified, listed, labeled, or otherwise determined to be safe by a qualified testing laboratory
- Electrical equipment will be free from recognized hazards that are likely to cause death or serious physical harm to employees

- Electrical equipment will not be used unless the manufacturer's name, trademark, or other descriptive marking is placed on the equipment providing voltage, current, wattage, or other ratings as necessary. The marking will be of sufficient durability to withstand the environment involved
- Sufficient access and working space will be provided and maintained about all electric equipment to permit ready and safe operation and maintenance of such equipment
- When normally enclosed live parts are exposed for inspection or servicing, the working space, if in a passageway or general open space, will be guarded

De-Energized Electrical Equipment

- All de-energized exposed parts will be treated as live throughout the work process
- Conductors and parts of electric equipment that have been de-energized but have not been locked out or tagged will be treated as energized parts
- While any employee is exposed to contact with parts of fixed electric equipment or circuits which have been de-energized, the circuits energizing the parts will be locked out or tagged or both

Lockout-Tagout Procedures

Andy Wilson will maintain a written copy of these procedures and will make them available for inspection by employees and OSHA

De-energizing equipment

- Safe procedures for de-energizing circuits and equipment will be determined before circuits or equipment are de-energized
- The circuits and equipment to be worked on will be disconnected from all electric energy sources. Control circuit devices, such as push buttons, selector switches, and interlocks, may not be used as the sole means for de-energizing circuits or equipment. Interlocks for electric equipment may not be used as a substitute for lockout and tagging procedures
- Stored electric energy which might endanger personnel will be released. Capacitors will be discharged and high capacitance elements will be short-circuited and grounded, if the stored electric energy might endanger personnel
- Stored non-electrical energy in devices that could reenergize electric circuit parts will be blocked or relieved to the extent that the circuit parts could not be accidentally energized by the device

Application of locks and tags includes

- A lock and a tag will be placed on each disconnecting means used to de-energize circuits and equipment on which work is to be performed. The lock will be attached so as to prevent persons from operating the disconnecting means unless they resort to undue force or the use of tools
- Each tag will contain a statement prohibiting unauthorized operation of the disconnecting means and removal of the tag
- If a lock cannot be applied, or if Andy Wilson can demonstrate that tagging procedures will provide a level of safety equivalent to that obtained by the use of a lock, a tag may be used without a lock
- A tag used without a lock will be supplemented by at least one additional safety measure that provides a level of safety equivalent to that obtained by use of a lock. Examples of additional safety measures include the removal of an isolating circuit element, blocking of a controlling switch, or opening of an extra disconnecting device

- A lock may be placed without a tag only under the following conditions: only one circuit or piece of equipment is de-energized; the lockout period does not extend beyond the work shift; employees exposed to the hazards associated with reenergizing the circuit or equipment are familiar with this procedure
- Verification of de-energized condition requirements will be met before any circuits or equipment can be considered and worked as de-energized
- A qualified person will operate the equipment operating controls or otherwise verify that the equipment cannot be restarted
- A qualified person will use test equipment to test the circuit elements and electrical parts of equipment that employees will be exposed to, and will verify that the circuit elements and equipment parts are de-energized. The test will also determine if any energized condition exists as a result of inadvertently induced voltage or unrelated voltage backfeed even though specific parts of the circuit have been de-energized and presumed to be safe. If the circuit to be tested is over 600 volts, nominal, the test equipment will be checked for proper operation immediately after this test
- Reenergizing equipment requirements will be met before circuits or equipment are reenergized, even temporarily
- A qualified person will conduct tests and visual inspections to verify that all tools, electrical jumpers, shorts, grounds, or other devices have been removed, so that the circuits and equipment can be safely energized
- Employees exposed to the hazards associated with reenergizing the circuit or equipment will be warned to stay clear of circuits and equipment
- Each lock and tag will be removed by the employee who applied it or under his or her direct supervision. However, if this employee is absent from the workplace, then the lock or tag may be removed by a qualified person designated to perform this task provided that: Andy Wilson ensures that the employee who applied the lock or tag is not available at the workplace. Andy Wilson ensures that the employee is aware that the lock or tag has been removed before he or she resumes work at that workplace
- There will be a visual determination that all employees are clear of the circuits and equipment

Energized Electrical Equipment

Only qualified personnel may work on electric circuit parts or equipment that has not been de-energized under the previously stated procedures. Such personnel will be capable of working safely on energized circuits and will be familiar with the proper use of special precautionary techniques, personal protective equipment, insulating and shielding materials, and insulated tools.

- If work is to be performed under or near overhead lines, the lines will be de-energized and grounded, or other protective measures will be provided before work is started. If the lines are to be de-energized, arrangements will be made with the person or organization that operates or controls the electric circuits involved to de-energize and ground them. If protective measures, such as guarding, isolating, or insulating, are provided, these precautions will prevent employees from contacting such lines directly with any part of their body or indirectly through conductive materials, tools, or equipment

- When an unqualified person is working in an elevated position near overhead lines, the location will be such that the person and the longest conductive object he or she may contact cannot come closer to any unguarded, energized overhead line than the following distances:
 - For voltages to ground 50kV or below – 10 feet
 - For voltages to ground over 50kV – 10 feet plus 4 inches for every 10kV over 50kV
- When an unqualified person is working on the ground in the vicinity of overhead lines, the person may not bring any conductive object closer to unguarded, energized overhead lines than the distances given above. For voltages normally encountered with overhead power line, objects which do not have an insulating rating for the voltage involved are considered to be conductive
- When a qualified person is working in the vicinity of overhead lines, whether in an elevated position or on the ground, the person may not approach or take any conductive object without an approved insulating handle closer to exposed energized parts than shown in Table S-5 unless:
 - The person is insulated from the energized part (gloves, with sleeves if necessary, rated for the voltage involved are considered to be insulation of the person from the energized part on which work is performed)
 - The energized part is insulated both from all other conductive objects at a different potential and from the person
 - The person is insulated from all conductive objects at a potential different from that of the energized part

TABLE S-5—APPROACH DISTANCES FOR QUALIFIED EMPLOYEES—ALTERNATING CURRENTS

Voltage range (phase to phase)	Minimum approach distance
300V and less	Avoid Contact
Over 300V, not over 750V	1 ft. 0 in.
Over 750V, not over 2kV	1 ft. 6 in.
Over 2kV, not over 15kV	2 ft. 0 in.
Over 15kV, not over 37kV	3 ft. 0 in.
Over 37kV, not over 87.5kV	3 ft. 6 in.
Over 87.5kV, not over 121kV	4 ft. 0 in.
Over 121kV, not over 140kV	4 ft. 6 in.

- Any vehicle or mechanical equipment capable of having parts of its structure elevated near energized overhead lines will be operated so that a clearance of 10 ft. is maintained. If the voltage is higher than 50kV, the clearance will be increased 4 in. for every 10kV over that voltage. However, under any of the following conditions, the clearance may be reduced
- If the vehicle is in transit with its structure lowered, the clearance may be reduced to 4 ft. If the voltage is higher than 50kV, the clearance will be increased 4 in. for every 10 kV over that voltage

- If insulating barriers are installed to prevent contact with the lines, and if the barriers are rated for the voltage of the line being guarded and are not a part of or an attachment to the vehicle or its raised structure, the clearance may be reduced to a distance within the designed working dimensions of the insulating barrier
- If the equipment is an aerial lift insulated for the voltage involved, and if the work is performed by a qualified person, the clearance (between the uninsulated portion of the aerial lift and the power line) may be reduced to the distance given in Table S-5
- Employees standing on the ground will not contact the vehicle or mechanical equipment or any of its attachments, unless:
 - The employee is using protective equipment rated for the voltage
 - The equipment is located so that no uninsulated part of its structure (that portion of the structure that provides a conductive path to employees on the ground) can come closer to the line than permitted below
- If any vehicle or mechanical equipment capable of having parts of its structure elevated near energized overhead lines is intentionally grounded, employees working on the ground near the point of grounding may not stand at the grounding location whenever there is a possibility of overhead line contact
- Additional precautions, such as the use of barricades or insulation, will be taken to protect employees from hazardous ground potentials, depending on earth resistivity and fault currents, which can develop within the first few feet or more outward from the grounding point

Illumination

- Employees may not enter spaces containing exposed energized parts, unless illumination is provided that enables the employees to perform the work safely
- Where lack of illumination or an obstruction precludes observation of the work to be performed, employees may not perform tasks near exposed energized parts
- Employees may not reach blindly into areas which may contain energized parts

Confined Spaces

- When an employee works in a confined or enclosed space (such as a manhole or vault) that contains exposed energized parts, ARM Environmental Services, Inc. will provide, and the employee will use, protective shields, protective barriers, or insulating materials as necessary to avoid inadvertent contact with these parts
- Doors, hinged panels, and the like will be secured to prevent their swinging into an employee and causing the employee to contact exposed energized parts

Conductive Materials and Equipment

Conductive materials and equipment that are in contact with any part of an employee's body will be handled in a manner that will prevent them from contacting exposed energized conductors or circuit parts.

- If an employee will handle long dimensional conductive objects (such as ducts and pipes) in areas with exposed live parts, Andy Wilson will institute work practices (such as the use of insulation, guarding, and material handling techniques) which will minimize the hazard

Portable Ladders

Portable ladders will have nonconductive siderails if they are used where the employee or the ladder could contact exposed energized parts.

Conductive Apparel

Conductive articles of jewelry and clothing (such as watch bands, bracelets, rings, key chains, necklaces, metalized aprons, cloth with conductive thread, or metal headgear) may not be worn if they might contact exposed energized parts. However, such articles may be worn if they are rendered nonconductive by covering, wrapping, or other insulating means.

Housekeeping

- Where live parts present an electrical contact hazard, employees may not perform housekeeping duties at such close distances to the parts that there is a possibility of contact, unless adequate safeguards (such as insulating equipment or barriers) are provided
- Electrically conductive cleaning materials (including conductive solids such as steel wool, metalized cloth, and silicon carbide, as well as conductive liquid solutions) may not be used in proximity to energized parts unless procedures are followed which will prevent electrical contact

Interlocks

Only a qualified person following the requirements of this section may defeat an electrical safety interlock, and then only temporarily while he or she is working on the equipment. The interlock system will be returned to its operable condition when this work is completed.

POLICY

ARM Environmental Services, Inc. has implemented this policy to ensure proper safe work practices and procedures are followed to protect employees from the fall hazards.

REFERENCES

- 1926 Subpart M, Fall protection
- § 1926.500, Scope, application, and definitions applicable to this subpart
- § 1926.501, Duty to have fall protection
- § 1926.502, Fall protection systems criteria and practices
- § 1926.503, Training requirements
- Appendix A, Determining roof widths - Non-mandatory guidelines for complying with 1926.501(b)(10)
- Appendix B, Guardrail systems - Non-mandatory guidelines for complying with 1926.502(b)
- Appendix C, Personal fall arrest systems - Non-mandatory guidelines for complying with 1926.502(d)
- Appendix D, Positioning device systems - Non-mandatory guidelines for complying with 1926.502(e)
- Appendix E, Sample fall protection plan - Non-mandatory guidelines for complying with 1926.502(k)

RESPONSIBILITIES

Employer Responsibilities

ARM Environmental Services, Inc. will provide at no cost to employees fall protection such as guard rails, safety nets, or personal fall arrest systems whenever employees are potentially exposed to falls to lower levels from heights of six feet or greater. This includes work near and around bins, tanks and excavations. Exception: When the standard methods of protection are not feasible or a greater hazard would be created. The exposure determination will be made without regards to the use of PPE.

ARM Environmental Services, Inc. is responsible for:

- Ensuring that safety inspections of the facility occur on regular basis
- Training personnel in fall protection equipment selection and use
- Responding quickly to eliminate workplace hazards
- Ensuring all equipment is kept in good repair
- Ensuring employees follow safe job procedures
- Reviewing job hazard analysis whenever there is a significant change to any element of the job or there has been an injury or illness

Andy Wilson Responsibilities

Andy Wilson is the Program Administrator – designated qualified person - responsible for managing the Fall Protection Program, the Andy Wilson will specify a fall protection system for each work-site, supervise its implementation, and inspect the system prior to use.

Safety Committee Responsibilities

- Assist in fall protection as necessary
- Assist in training employees to recognize and control workplace hazards
- Monitor the workplace for hazards
- Encourage employees to report hazards
- Implement appropriate controls
- Ensure corrective action is taken promptly

Employee Responsibilities

Employees will comply with the fall protection program at all times when working at heights of 6 feet or above will wear appropriate PPE (The fall protection system used will be appropriate for the specific work location or situation using best practices).

All employees are expected to: assist in job hazard analyses; follow safe job procedures; and report hazards to a supervisor immediately

TRAINING

Andy Wilson will ensure that all employees who participate in work where fall hazards are present are trained in recognition of fall hazards, fall protection procedures, equipment, and work practices. Written certification records will be maintained showing who was trained, types of training, dates of training, signature of person providing training, and the date training was determined to be adequate. Employees will be certified upon completion of training in the following areas:

- The nature of fall hazards in the work area
- The correct procedures for erecting, maintaining, disassembling, and inspecting the fall protection systems to be used
- The use and operation of guardrail systems, personal fall arrest systems, safety net systems, warning line systems, safety monitoring systems, personal fall restraint systems, slide guard systems, positioning devices, and other protection to be used
- The role of each employee in the safety monitoring system when this system is used
- The limitations on mechanical equipment use of during roofing
- The correct procedures for the handling and storage of equipment and materials and the erection of overhead protection
- The role of employees in the fall protection work plan

Employee re-training in fall protection will be provided when: previous training is deemed deficient; changes in work environment occur which would necessitate additional training; changes in fall protection equipment or systems occur; employee is observed applying unsafe work practices.

PROCEDURES

Prior to the start of work, Andy Wilson will make an initial survey of the types of fall hazards which are expected to be encountered and develop a plan relative to providing the kind and number of safeguards that will protect against these fall hazards. Each employee on a walking/working surface (horizontal and vertical surface) with an unprotected side or edge which is 6 feet or more above a lower level will be protected from falling by the use of guardrail systems, safety nets, or personal fall arrest systems.

- All accidents and serious incidents involving ARM Environmental Services, Inc. employees will be reported immediately to the supervisor for the work location. All accidents/incidents will be investigated under the guidelines of the company Accident Investigation Program. Changes will be implemented to the Fall Protection Plan as necessary
- ARM Environmental Services, Inc. will provide for prompt rescue of employees in the event of a fall or will assure the employees are able to rescue themselves
- All materials and equipment purchased and used at ARM Environmental Services, Inc. for fall protection will comply to ANSI and ASTM standards required for that material or equipment

Fall Protection Locations

Fall protection is required wherever the potential to fall 6 feet or more exists. Fall protection is not needed if an employee or employees are on a low sloped roof for inspection/observation, provided that they do not approach within 8 feet of the roof's edge.

Fall Protection Work Plans

Andy Wilson will develop and implement a written fall-protection work plan including each area of the work place where employees are assigned and where fall hazards of 6 feet or more exist. It is recommended that the written plan be upgraded as conditions change. The fall-protection work plan will:

- Identify all fall hazards in the work area as the project work progresses
- Describe the method of fall arrest or fall restraint to be provided
- Describe the procedures for assembly, maintenance, and disassembly of the fall-protection system
- Describe procedures for the handling, storage, and securing of tools and materials
- Describe the method of providing overhead protection for workers who may be in, or pass through, the area below the work site
- Be available on the job site for inspection
- Ensure that employees are trained and instructed
- Include inspection of fall-protection devices and systems to ensure compliance with applicable parts of this procedure

Fall Restraint and Fall Arrest Systems

Andy Wilson will ensure that fall-restraint or fall-arrest systems are provided, installed, and implemented according to the following requirements. Fall-restraint and arrest protection will consist of:

Standard Guardrails

- Top rail 39 to 45 inches above the working surface, and must be smooth and of a shape to permit grasping easily
- Midrail (center between riser and top rail), screen or mesh (continuous) or intermediate vertical members (not more than 19 inches apart) will be provided between the top rail and working surface
- Guardrail systems will be capable of supporting 250 pounds in the downward or outward direction at any point along the top edge
- Midrail will support a 150-pound load in the downward or outward direction
- Top rails and midrails will be at least 1/4-inch nominal thickness. Plastic or steel banding will not be used
- Chain gates will be used to cover hoisting areas, and the guardrails will extend 4 feet minimum on either side of the opening
- Rails will be so constructed so as not to deflect under test loads. If cable or rope is used it will have tension adjusting capability and remain taut at all times
- Wood Railings: Wood components will be minimum 1500 lb.-ft. / in.² fiber (stress grade) construction grade lumber. Posts will be at least 2-inch by 4-inch (5 cm x 10 cm) lumber spaced not more than 8 feet (2.4 m) apart on centers. The top rail will be at least 2-inch by 4-inch (5 cm x 10 cm) lumber; the intermediate rail will be at least 1-inch by 6-inch (2.5 cm x 15 cm) lumber
- Pipe Railings: Post, top rails, and intermediate railings will be at least one and one half inches nominal diameter (schedule 40 pipe) with posts spaced not more than 8 feet (2.4 m) apart on centers
- Structural Steel Railings: Posts, top rails, and intermediate rails will be at least 2 inch by 2-inch (5 cm x 10 cm) by 3/8-inch (1.1 cm) angles, with posts spaced not more than 8 feet (2.4 m) apart on centers

Portable Guardrails

- Portable guardrails may be used in locations where permanent guardrails are not feasible
- Top rail 39 to 45 inches above the working surface, and must be smooth and of a shape to permit grasping easily
- Midrail (center between riser and top rail), screen or mesh (continuous) or intermediate vertical members (not more than 19 inches apart) will be provided between the top rail and working surface
- Guardrail systems will be capable of supporting 250 pounds in the downward or outward direction at any point along the top edge
- Midrail will support a 150-pound load in the downward or outward direction

Harness, Lanyards, Lifelines and Anchor Points

- An approved Class III full body harness will be used
- All full body harness and lanyard hardware assemblies will be capable of withstanding a tensile loading of 4,000 pounds without cracking, breaking, or taking a permanent deformation
- Anchorage points used for fall restraint will supporting four times the intended load
- Restraint protection and positioning devices will be rigged to allow the movement of employees only as far as the sides and edges of the walking / working surface
- Full body harnesses will be attached to securely rigged restraint lines
- Rope-grab devices are prohibited for fall-restraint applications unless they are part of a fall-restraint system designed specifically for the purpose by the manufacturer and used in strict accordance with the manufacturer's recommendations and instructions
- Andy Wilson will ensure component compatibility
- Body harness systems or components subject to impact loading will be immediately removed from service and will not be used again for employee protection unless inspected and determined by a competent person to be undamaged and suitable for reuse
- All safety lines and lanyards will be protected against being cut or abraded
- Body harness systems will be rigged to minimize free-fall distance with a maximum free-fall distance allowed of 6 feet, and ensure that employees will not contact any lower level
- Hardware will have a corrosion-resistant finish and all surfaces and edges will be smooth to prevent damage to the attached body harness or lanyard
- When vertical lifelines (droplines) are used, not more than one employee will be attached to any one lifeline
- Full-body harness systems will be secured to anchorages capable of supporting 5,000 pounds per employee, except when self-retracting lifelines or other deceleration devices are used which limit free fall to two feet; in this case, anchorages will be capable of supporting 3,000 pounds
- Independent lifelines (droplines) will have a minimum tensile strength of 5,200 pounds, except that self-retracting lifelines and lanyards, which automatically limit free fall distance to two feet or less, will have a minimum tensile strength of 3,000 pounds
- Horizontal lifelines will have a tensile strength capable of supporting a fall impact load of at least 5,200 pounds per employee using the lifeline, applied anywhere along the lifeline
- Lanyards will have a minimum tensile strength of 5,200 pounds
- All components of body harness systems whose strength is not otherwise specified in this section will be capable of supporting a minimum fall impact load of 5,000 pounds applied at the lanyard point of connection
- Snap-hooks will not be connected to loops made in webbing-type lanyards
- Snap-hooks will not be connected to each other
- Not more than one snap-hook will be connected to any one D-ring
- Independent lifelines used on rock-scaling operations, or in areas where the lifeline may be subjected to cutting or abrasion, will be a minimum of 7/8-inch wire core manila rope. For all other lifeline applications, a minimum of 3/4-inch manila rope or its equivalent, with a minimum breaking strength of 5,000 pounds, will be used

- Safety harnesses, lanyards, and lifelines, independently attached or attended, will be used while performing the following types of work when other equivalent protection is not provided:
 - Work in hoppers, bins, silos, tanks, or other confined spaces
 - Work on hazardous slopes, or dismantling safety nets
 - Working on poles or from boatswains chairs at elevations
- Fall protection will be used when working at heights greater than six feet, on swinging scaffolds or other unguarded locations, and work on skips and platforms used in shafts by crews when the skip or cage does not include the opening to within one foot of the sides of the shaft, unless cages are provided
- Full-body harness systems will be inspected prior to each use for mildew, wear, damage, and other deterioration, and defective components will be removed from service if their function or strength has been adversely affected

Safety Nets

- Safety nets will be installed as close as practicable under the walking/working surface on which employees are working, but in no case more than 30 feet (9.1 m) below such level. When nets are used on bridges, the potential fall area from the walking/working surface to the net will be unobstructed
- Safety nets will extend outward from the outermost projection of the work surface as follows:

Vertical distance from working level to horizontal plane of net	Minimum required horizontal distance of outer edge of net from the edge of the working surface
Up to 5 feet	8 feet
More than 5 feet up to 10 feet	10 feet
More than 10 feet	13 feet

- Safety nets will be installed with sufficient clearance under them to prevent contact with the surface or structures below when subjected to an impact force equal to the drop test specified in the full-body harness section
- Safety nets and their installations will be capable of absorbing an impact force equal to that produced by the drop test specified in the full-body harness section
- Safety nets and safety net installations will be drop-tested at the job site before being used as a fall-protection system. The drop-test will consist of a 400-pound bag of sand 30+2 inches in diameter dropped into the net from the highest walking / working surface on which employees are to be protected. Exception: when the employer can demonstrate that a drop-test is not feasible or practicable, the net and net installation will be certified by a qualified person to be in compliance with the provisions of this section
- Safety nets will be inspected weekly for mildew, wear, damage, and other deterioration, and defective components will be removed from service
- Materials, scrap pieces, and tools which have fallen into the safety net will be removed as soon as possible from the net, and at least before the next work shift

- The maximum size of each safety net mesh opening will not exceed 36 square inches nor be longer than six inches on any side measured center-to-center of mesh ropes or webbing. All mesh crossings will be secured to prevent the enlargement of any mesh opening
- Each safety net (or section of it) will have a border rope for webbing with a minimum breaking strength of 5,000 pounds
- Connections between the safety net panels will be as strong as integral net components and will be spaced not more than six inches apart

Catch Platforms

A catch platform will be installed within ten vertical feet of the work area. The catch platform's width will equal the distance of the fall but will be a minimum of 45 inches wide and will be equipped with standard guardrails on all open sides

Guarding Of Low Pitched Roof Perimeters

During the performance of work on low pitched roofs with a ground to eaves height greater than 6 feet, Andy Wilson will ensure that employees engaged in such work be protected from falling from all unprotected sides and edges of the roof as follows:

- By the use of a fall-restraint or fall-arrest system, as defined in applicable OSHA or state regulations
- Mechanical equipment will be used or stored only in areas where employees are protected by a warning line system, or fall-restraint, or fall-arrest systems as described in applicable OSHA or state regulations. Mechanical equipment may not be used or stored where the only protection is provided by the use of a safety monitor
- The general provisions section of this section do not apply at points of access such as stairways, ladders and ramps, or when employees are on the roof only to inspect, investigate, or estimate roof level conditions. Roof edge materials handling areas and materials storage areas will be guarded as provided in the roof edge materials handling section of this section
- Workers engaged in built-up roofing on low-pitched roofs less than 50 feet wide may use a safety system without warning lines where the use of hot tar poses additional hazards

Warning Line Systems and Access Paths

- When mechanical equipment is not being used, the warning line will be erected not less than 6 feet (1.8 m) from the roof edge
- When mechanical equipment is being used, the warning line will be erected not less than 6 feet (1.8 m) from the roof edge which is parallel to the direction of mechanical equipment operation, and not less than 10 feet (3.1 m) from the roof edge which is perpendicular to the direction of mechanical equipment operation
- Points of access, materials handling areas, storage areas, and hoisting areas will be connected to the work area by an access path formed by two warning lines
- When the path to a point of access is not in use, a rope, wire, chain, or other barricade, equivalent in strength and height to the warning line, will be placed across the path at the point where the path intersects the warning line erected around the work area, or the path will be offset such that a person cannot walk directly into the work area
- Warning lines will be erected around all sides of the work area for work 6 to 10 feet from the roof edge.
- A warning line system as prescribed in 29 CFR 1926.500 and supplemented by the use of a safety monitor system as prescribed in 29 CFR 1926.500 to protect any employee engaged in

duties between the forward edge of the warning line and the unprotected sides and edges, including the leading edge, of a low pitched roof or walking/working surface

- Warning line and safety monitor systems as described in 29 CFR 1926.500 are prohibited on surfaces exceeding a 4/12 pitch, and on any surface whose dimensions are less than 45 inches in all directions
- The warning line will consist of a rope, wire, or chain and supporting stanchions
- The rope, wire, or chain will be flagged at not more than six feet intervals with high-visibility material
- The rope, wire, or chain will be rigged and supported in such a way that its lowest point (including sag) is no less than 39 inches from the roof surface and its highest point is no more than 45 inches from the roof surface
- After being erected, with the rope, wire or chain attached, stanchions will be capable of resisting, without tipping over, a force of at least 16 pounds applied horizontally against the stanchion, 30 inches above the roof surface, perpendicular to the warning line, and in the direction of the roof edge
- The rope, wire, or chain will have a minimum tensile strength of 500 pounds, and after being attached to the stanchions, will be capable of supporting, without breaking, the loads applied to the stanchions
- The line will be attached at each stanchion in such a way that pulling of one section of line between stanchions will not result in slack being taken up in adjacent sections before the stanchion tips over.
- Access paths: points of access, materials handling areas, and storage areas will be connected to the work area by a clear access path formed by two warning lines.
- When the path to a point of access is not in use, a rope, wire or chain, equal in strength and height to the warning line, will be placed at the point where the path intersects the warning line erected around the work area.

Roof edge Materials Handling Areas and Materials Storage

Employees working in a roof-edge materials-handling or materials storage area location on a low-pitched roof with a ground-to-work-area height greater than six feet will be protected from falling along all unprotected roof sides and edges of the area.

- When guardrails are used at hoisting areas, a minimum of four feet of guardrail will be erected on each side of the access point through which materials are hoisted
- A chain or gate will be placed across the opening between the guardrail sections when hoisting operations are not taking place
- When guardrails are used at bitumen pipe outlets, a minimum of four feet of guardrail will be erected on each side of the pipe
- When safety-harness systems are used, they will not be attached to the hoist
- When fall-restraint systems are used, they will be rigged to allow the movement of employees only as far as the roof edge
- Materials will not be stored within six feet of the roof edge unless guardrails are erected at the roof edge

Leading Edge Control Zone

When performing leading-edge work, Andy Wilson will ensure that a control zone is established according to the following requirements:

- The control zone will begin a minimum of six feet back from the leading edge to prevent exposure by employees who are not protected by fall-restraint or fall-arrest systems
- The control zone will be separated from other areas of the low-pitched roof or walking/working surface by the erection of a warning-line system
- The warning-line system will consist of wire, rope, or chain supported on stanchions, or a method which provides equivalent protection
- The spacing of the stanchions and support of the line will be such that the lowest point of the line (including sag) is not less than 39 inches from the walking / working surface, and its highest point is not more than 45 inches from the working / walking surface
- Each line will have a minimum tensile strength of 500 pounds
- Each line will be flagged or clearly marked with high-visibility materials at intervals not to exceed six feet

Safety-Monitor System

The employer will designate a competent person to monitor the safety of other employees and the employer will ensure that the safety monitor complies with the following requirements:

- The safety monitoring system will not be used as a fall protection system for any work other than roofing work on roof slopes of 2 in 12 (vertical to horizontal) or less
- Use of a safety monitoring system alone (i.e., without the warning line system) is not permitted on roofs more than 50 feet (15.25 m) in width
- When selected, the employer will ensure that the safety-monitor system will be addressed in the fall-protection work plan, include the name of the safety monitor(s) and the extent of their training in both the safety-monitor and warning-line systems, and will ensure that the following requirements are met:
 - The safety-monitor system will not be used when adverse weather conditions create additional hazards.
 - A person acting in the capacity of a safety monitor will be trained in the function of both the safety-monitor and warning-lines systems
 - The safety monitor will:
 - Be a competent person as defined in 29 CFR 1926.32(f)
 - Have control authority over the work as it relates to fall protection
 - Be instantly distinguishable from members of the work crew
 - Engage in no other duties while acting as safety monitor
 - Be positioned in relation to the workers under their protection, so as to have a clear, unobstructed view and be able to maintain normal voice communication
 - Not supervise more than eight exposed employees at one time
- Control zone workers will be distinguished from other members of the crew by wearing a high-visibility vest only while in the control zone

General Safety Considerations

The company will ensure prompt rescue of employees in the event of a fall or shall assure that employees are able to rescue themselves.

Fall arrest systems will be inspected prior to each use for wear, damage and other deterioration, and defective components shall be removed from service.

If Fall Protection Plans are utilized, site specific plans will be prepared, or modified by a Qualified Person, and maintained at the job site. The plan will be under the supervision of a Competent Person, and the plan will address why the use of conventional fall protection is infeasible, or why their use would cause a greater hazard.

If Fall Protection Plans are utilized, Andy Wilson will post a written notice of how is designated to work in controlled access zones. No other employees may enter controlled access zones.

If Fall Protection Plans are utilized, and in the event an employee falls, or some other related, serious incident occurs, (e.g., a near miss) the company will investigate the circumstances of the fall or other incident to determine if the fall protection plan needs to be changed (e.g. new practices, procedures, or training) and shall implement those changes to prevent similar types of falls or incidents.

All affected employees will undergo training to recognize fall hazards and how to minimize these hazards. Retraining will occur when the following conditions occur: it is determined that employees already trained do not have the necessary understanding or skill, work place changes, and/or fall protection systems or equipment changes that render previous training obsolete. This training is documented, and the latest training certification is maintained.

POLICY

ARM Environmental Services, Inc. has implemented this policy to ensure proper safe work practices and procedures are followed for the protection of our employees against fire/explosion hazards. The following work practices, procedures, and engineering controls will be enforced as an integral part of our Company safety policy

RESPONSIBILITIES

Andy Wilson is designated as the supervisor to manage the Fire Prevention Program. ARM Environmental Services, Inc. will have and maintain an employee alarm system. The employee alarm system will use a distinctive signal for each purpose. Andy Wilson will ensure that all employees are informed and trained in the following minimum elements for Emergency Action Plans:

- Andy Wilson will ensure all employees are trained in the proper operation of all types of fire extinguishers provided by the company
- As warranted by the project, ARM Environmental Services, Inc. will provide a trained and equipped organization (Fire Brigade) to assure adequate protection to life
- Procedures for reporting a fire or other emergency
- Procedures for emergency evacuation for all areas of work, including type of evacuation and exit route assignments
- Safe assembly areas designated for all work areas in the event of evacuation
- Procedures to be followed by employees who remain to operate critical plant operations before they evacuate
- Procedures to account for all employees after evacuation
- Procedures to be followed by employees performing rescue or medical duties
- The members in the chain of command who may be contacted by employees who need more information about the Plan or for an explanation of their duties under the Plan
- All materials will be stored, handled, and piled with regard to their fire characteristics

TRAINING

ARM Environmental Services, Inc. will designate and train employees to assist in a safe and orderly evacuation of other employees.

Andy Wilson will review the Fire Prevention Plan with each employee covered by the plan: when each Plan is developed or an employee is initially assigned to a job; when the employee's responsibilities under the Plan change; when any element of the Plan is changed.

Fire Protection/Prevention training will be required on initial hiring and annually thereafter. Employees will be trained in fighting class A, B, C, D, and K fires using the PASS method.

All employees will be trained in the hazards involved in using fire extinguishers for incipient stage firefighting and escape purposes. Employees are instructed to ensure the local Emergency Medical Service EMS (Fire Department) is notified before attempting to extinguish any fire, and that if a fire is not immediately extinguished using one fire extinguisher, or the fire recurs to evacuate immediately.

SAFE PRACTICES

All fire extinguishers and firefighting equipment will be inspected by Andy Wilson on a monthly basis; this inspection will be recorded and documented with the required annual maintenance check. And defective equipment will be replaced immediately. Records of inspection will be kept on file in the office.

Procedures are instructions for accomplishing specific tasks. Emergency procedures are important because they tell employees exactly what to do to ensure their safety during an emergency to accomplish each of the following tasks:

- Report emergencies to local fire and police departments
- Inform the emergency chain of command of an emergency
- Warn employees about an emergency
- Conduct an orderly, efficient workplace evacuation
- Assist employees with disabilities or injuries during an evacuation
- Shut down critical equipment, operate fire extinguishers, and perform other essential services during an evacuation. Account for employees at a designated safe area after an evacuation
- Perform rescue and first aid that may be necessary during an emergency

FIRE CLASSES

Not all fires are the same. Different fuels create different fires and require different types of fire extinguishing agents. The fire types are listed below:

- Class A – Ordinary combustibles such as wood, paper, cloth, trash, and plastics
- Class B – Flammable liquids such as gasoline, petroleum oil, and paint. Also includes flammable gasses such as propane and butane
 - Class B does NOT include fires involving cooking oils and grease
- Class C – Energized Electrical Equipment such as motors, transformers, and appliances.
 - If the power is removed, Class C fires become one of the other classes of fire
- Class D – Combustible metals such as potassium, sodium, aluminum, and magnesium
- Class K – Cooking oils and grease such as animal fats and vegetable fats

POLICY

It is the policy of ARM Environmental Services, Inc. that training in first aid response is not a requirement for employment, but that local Emergency Medical Services are utilized for emergency medical care. Andy Wilson is designated as the administrator of the Medical Services Program.

- Medical services for employee evaluations, employment requirements, and special conditions of work are provided to employees at no cost as specified in OSHA requirements
- A person(s) who has a valid certificate in first aid training, the American Red Cross, or equivalent will be available at work sites to render emergency first aid
- Provisions will be made prior to commencement of a project for prompt medical attention in case of serious injury
- First aid supplies will be easily accessible when required
- Proper equipment for prompt transportation of the injured person to a physician or hospital or a communication system for contacting necessary ambulance service will be provided
- Andy Wilson is the designated first aid provider and certified in cardiopulmonary resuscitation CPR and is responsible for rendering first aid in the event of an injury requiring immediate response when emergency medical services are not available, and will also be responsible for first aid training of any employee required
- Injured employees are to be transported to medical facilities by emergency medical services. If emergency medical service is not available in a timely manner, the injured employee will be transported to the nearest medical service in a company vehicle by the job foreman
- In areas where 911 service is not available employees will be notified of phone numbers to contact local emergency response medical services. Andy Wilson will be responsible for posting of emergency phone numbers at all jobsites. The phone numbers will be conspicuously posted in all work locations
- Andy Wilson is responsible for the accessibility of First Aid Kits and for checking the contents of all First Aid Kits before being sent out to each job and at least weekly on each job to ensure that the expended items are replaced
- A valid certificate in first aid training must be obtained from the the American Red Cross or equivalent training that can be verified by documentary evidence
- First aid kits are readily available in all company vehicles and in the company office. First aid kits will consist of appropriate items and stored in a weather proof container with individual sealed packages of each type of item and will stock a minimum of the following items:

ARM ENVIRONMENTAL SERVICES, INC. HSE

<ul style="list-style-type: none"> • PPE for First Aid: • 3-Pair latex gloves • Surgical masks • Clear eye protection or Face Shield • Dust Masks or other needed Face Protection • Mouth-to-mouth barrier • Large, sterile gauze pads (6 each: 2X2's, 3X3's, and 4X4's) • Compress Dressings (4X8), 3 each • Rolled gauze bandages: 2" and 3" wide, 3 each • Large box assorted "Band-Aids" • Two elastic wrap bandages (ace) • Cotton balls and Q-tips • Surgical or athletic tape; 1" and 2" wide, 2 rolls each 	<ul style="list-style-type: none"> • Antiseptics and ointments: <ul style="list-style-type: none"> ○ Alcohol ○ Burn gel or cream ○ Alcohol swabs ○ Peroxide ○ Antiseptic spray and ointment • Pain relief tabs • 6 burn treatment single-use packages, 0.5 g. Application • Good quality eye-wash solution, with eye cup • 1 eye covering bandages (for two eyes) • Self-activating cold packs, 4x5 inches • Liquid antiseptic hand soap • Blunt-nose surgical scissors • Forceps, tweezers and safety pins • Snake-bite kit
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* General First-aid Guidebook, textbook, or manual will be readily available, but not necessarily inside of the first-aid kit.

- Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities will be provided within the work area for quick drenching or flushing of eyes or body
- Eye wash bottles are available wherever eye wash stations are not available, for any employee required to work in an environment where exposure to eye hazards may exist. Wash facilities or drench barrels are available at each jobsite for employees
- Procedure for flushing eyes — Eye membranes absorb chemicals quickly. This can lead to eye damage within minutes. Flood the eye with lukewarm (never hot) water poured from a large glass two to three inches from the eye. Continue for 15 minutes. Blink the eye as much as possible during the flooding. Do not force the eyelid open and do not allow the eyes to be rubbed. If lukewarm water is not available, rinse the eye quickly using a gentle stream from a hose for at least 15 minutes
- Procedure for drenching skin — If poisons come in contact with the skin, they must be removed as quickly as possible. Remove contaminated clothing and flood the skin area with water for 10 minutes. Then gently wash the skin area with soap and water and rinse. Later, destroy contaminated clothing. For a chemical skin burn, rinse the area with lots of water, remove the clothes and cover with a soft, clean cloth. Do not apply grease or ointments
- It is the policy of ARM Environmental Services, Inc. that all of the requirements of OSHA §1926.50 will be met

POLICY

ARM Environmental Services, Inc. has adopted this policy to inform employees of the General Waste Management Plan. This ensures the safety and health of the employees.

Andy Wilson is responsible for ensuring that the following policy is enforced.

WASTE TYPES

- **Listed Wastes:** Wastes that EPA has determined are hazardous. The lists include the F-list (wastes from common manufacturing and industrial processes), K-list (wastes from specific industries), and P- and U-lists (wastes from commercial chemical products)
- **Characteristic Wastes:** Wastes that do not meet any of the listings above but that exhibit ignitability, corrosivity, reactivity, or toxicity
- **Universal Wastes:** Batteries, pesticides, mercury-containing equipment (e.g., thermostats) and lamps (e.g., fluorescent bulbs)
- **Mixed Wastes:** Waste that contains both radioactive and hazardous waste components
- **Construction Wastes:** Building materials such as bricks, concrete, wood, insulation, nails, electrical wiring, and rebar, as well as waste originating from site preparation such as dredging materials, tree stumps, and rubble. Construction waste may contain lead, asbestos, or other hazardous substances
- **Medical and Infectious Wastes:** Waste generated by health care activities includes a broad range of materials, from used needles and syringes to soiled dressings, body parts, diagnostic samples, blood, chemicals, pharmaceuticals, medical devices and radioactive materials

PROCEDURES

Waste Estimation

Prior to the commencement of work, it is the policy of the company to ensure that an estimation of the wastes, trash and scrap materials that will be generated is conducted. This will be performed so the need for containers, and waste removal, if necessary, can be determined.

Waste Disposal

The company will coordinate with the project or site owner to ensure the proper disposal of wastes or scrap materials. The company will ensure that the owner is aware of whether wastes and scrap materials will be taken off site or will be disposed of on the owner's site.

Safety Hazards

The company will ensure safe practices related to the immediate storage and handling of waste, scrap, or left over materials are carried out. Always be aware of what you are handling. The proper Personal Protective Equipment (PPE) will be used before handling.

Handling, Organization, and Storage

ARM Environmental Services, Inc. will ensure that waste materials will be properly stored and handled to minimize the potential for a spill or impact to the environment. During outdoor activities, receptacles must be covered to prevent dispersion of waste materials and to control the potential for run-off.

It is the policy of ARM Environmental Services, Inc. that all types of waste or scrape materials generated will be stored properly and in an organized fashion.

ARM Environmental Services, Inc. ensures project-related wastes will be stored and maintained in an organized fashion to encourage proper disposal and minimize risks to employees. Proper waste receptacles will be provided for trash and materials that may be reused or recycled during a project.

Proper Methods of Disposal

It is the policy of ARM Environmental Services, Inc. to ensure all employees are instructed in the proper method to dispose of wastes.

Employees of ARM Environmental Services, Inc. will be instructed the general disposal of non-hazardous wastes, trash, or scrap materials. If wastes generated are classified as hazardous, employees will be trained to ensure proper disposal.

Waste Segregation

ARM Environmental Services, Inc. is committed to encouraging employees to properly segregate waste or scrap materials to ensure the opportunity for reuse or recycle.

ARM ENVIRONMENTAL SERVICES, INC. HSE

TRAINING RECORD

Trainer:	
Signature:	
Date:	
Content of Training:	
Attendees	
Print Name:	Signature:

POLICY

ARM Environmental Services, Inc. has implemented this policy to ensure no employee is exposed hazards caused by improper or unsafe use of hand and portable powered tools. ARM Environmental Services, Inc. will provide instruction and training by a Competent Person for each employee using any such tool. The program will enable each employee to recognize hazards related to hand and portable powered tool use and will train each employee in the procedures to be followed to minimize these hazards.

REFERENCES

- §1910.241 – Hand and Portable Powered Tools and Other Hand-Held Equipment
- §1926.300 – Tools - Hand and Power

RESPONSIBILITIES

Employer Responsibilities

ARM Environmental Services, Inc. is responsible for:

- Ensuring that hand tools and portable powered equipment outside of the facility are inspected on a regular basis
- Ensuring each employee has been trained or instructed by a competent person in the following areas, as applicable:
 - All hand and power tools and similar equipment, whether furnished by ARM Environmental Services, Inc. or the employee, will be maintained in a safe condition
 - Any tool not in compliance with any applicable OSHA requirements is prohibited. Such tools will either be identified as unsafe by tagging or locking the controls to render them inoperable, or the defective tool will be physically removed from its place of operation
 - When power operated tools are designed to accommodate guards, they will be equipped with such guards when in use
 - Guards shall be in place and operable at all times while the tool is in use. The guard may not be manipulated in such way that will compromise its integrity or compromise the protection in which intended. Guarding shall meet the requirements set forth in American National Standards Institute (ANSI) B15.1
 - Employees using hand and power tools and exposed to the hazard of falling, flying, abrasive, and splashing objects, or exposed to harmful dusts, fumes, mists, vapors, or gases will be provided with the appropriate Personal Protective Equipment (PPE) necessary to protect them from the hazard
 - Belts, gears, shafts, pulleys, sprockets, spindles, drums, fly wheels, chains, or other reciprocating, rotating, or moving parts of equipment will be guarded if such parts are exposed to contact by employees or otherwise create a hazard
 - One or more methods of machine guarding will be provided to protect the operator and other employees in the machine area from hazards such as those created by point of operation, ingoing nip points, rotating parts, flying chips, and sparks. The point of operation of machines whose operation exposes an employee to injury, will be guarded

- All fuel powered tools will be stopped while being refueled, serviced, or maintained. When fuel powered tools are used in enclosed spaces, the applicable PPE requirements for hazardous atmospheres will apply. Responding quickly to eliminate workplace hazards; ensuring all equipment is kept in good repair; ensuring employees follow safe job procedures; and reviewing job hazard analysis whenever there is a significant change to any element of the job or there has been an injury or illness

Safety Committee Responsibilities

It is the responsibility of the safety committee to:

- Assist in hand tool and portable powered equipment inspections
- Assist in training employees to recognize and control workplace hazards
- Monitor the workplace for hazards
- Encourage employees to report hazards
- Implement appropriate controls
- Ensure corrective action is taken promptly

Employee Responsibilities

All employees are expected to:

- Inspect hand tool and portable powered equipment before use
- Remove defective hand tool and portable powered equipment
- Follow safe job procedures
- Report hazards to a supervisor immediately

SAFE PRACTICES

General Power Tool Use

- Do not allow anyone to use power tools that has not been properly instructed and approved in the processes of safe operation
- Be familiar with your power tools. When using a new tool, or one that is foreign to you, take some time to “test-run” it and get a feel for its performance. Read and understand the operator’s manual and follow its instructions. Prior to its use, do a visual and operational inspection to ensure safe mechanical function
- Eye protection is extremely important and must always be worn when using power tools. When operations present potential eye injuries, adequate and appropriate protection must be selected. Use a face shield, protective goggles, or approved safety glasses depending on the job performed
- Hearing protection is required due to the extreme noise levels generated, especially during extended operating sessions
- Depending on the material being cut, gloves can be helpful and a respirator or dust mask may be required
- Wear clothing appropriate for power tools use; avoid long, loose shirtsleeves, neckwear, or untied long hair
- Check that the electrical circuit to be used is of the proper rating and that cords, plugs, and fittings are intact and secure. All power tools must be grounded unless they are double insulated
- Use only extension cords that are free of splices, taps, bare wires, or frayed and deteriorated insulation. Use 3-prong adapters

- Ensure all power tools are equipped with proper shields and guards, as recommended by the manufacturer. The guards are designed and engineered for the operator's safety
- Operate only properly maintained equipment. Check that spring-loaded on/off trigger switch functions properly
- If any operational problems are noted, remove the power tools from service and get it repaired immediately
- When repairing tools, changing blades, bits and/or cutters, disconnect the power source
- Remove chuck-keys or arbor wrenches before using the tool
- When possible, always secure your work on a stable platform using clamps or vices
- Unsafe practices and inadequate housekeeping create potentially dangerous work-zones; keep the work area free of trip hazards such as tangled power cords, cluttered material, scraps, bricks, or other obstacles and obstructions
- Be aware of your surroundings and always on the lookout for hazards. Avoid using power tools in a wet environment
- Always use the proper tool for the job. store tools in a dry, secure location

Powder-Actuated Tools

ARM Environmental Services, Inc. employees are required to follow these general requirements for safe powder-actuated tool use:

- Operators and assistants using tools must use eye, head, and face protection as required by working conditions
- Inspect the tool before use to ensure that it is clean, that all moving parts are free, and that the barrel is free of debris or obstructions
- The muzzle end of the tool must have a guard at least 3 ½" in diameter to confine any flying fragments that might create a hazard
- If a tool is defective, it must be taken out of use until it is properly repaired
- Tools are to remain unloaded until they are to be used
- Never point a tool, loaded or unloaded, at anyone
- In case of a misfire, the tool must be held in the operating position for at least 30 seconds, tried a second time, then wait another 30 seconds before unloading in strict accordance with manufacturer's instructions. Never leave a tool unattended where it would be available to unauthorized personnel
- Fasteners must not be driven into exceptionally hard materials such as cast iron, glazed tile, hardened steel, glass block, or rock
- A backing must be used on soft materials to prevent fastener from passing completely through and becoming a flying hazard
- Fasteners must not be driven through an existing hole unless means of positive alignment is available
- Fasteners may not be driven into a cracked or fractured area caused by a previous fastener
- Tools must not be used in an explosive or flammable atmosphere

Requirements for loads and fasteners:

- There must be a standard means of identifying the power level of loads being used in the powder actuated tools
- No load may be used in excess of design specifications for a low velocity tool
- Fasteners used in tools must be only those designed to be used in such tools

Circular Saws

ARM Environmental Services, Inc. employees are required to follow these safety guidelines when using a circular saw:

- Eye protection is extremely important and must always be worn when using circular protection must be selected. Use a face shield, protective goggles, or approved safety glasses depending on the job to be performed
- Hearing protection may be required due to the extreme noise levels generated, especially during extended use
- A respirator or dust mask may be required, depending on the material being cut
- Do not wear loose clothing, long-sleeves, or gloves while operating a circular saw
- Check that the electrical circuit to be used is of the proper rating and that cords, plugs, and fittings are intact and secure
- Circular saws must be grounded unless they are double insulated
- Use only extension cords that are free of splices, taps, bare wires, or frayed and deteriorated insulation. Do not use extensions over 100 ft. long due to the power drop. Operate only properly maintained equipment. Check that the spring-loaded on/off trigger switch functions properly. If any operational problems are noted, remove the circular saw from service and get it repaired immediately
- Be aware of your surroundings and always on the lookout for hazards. Avoid using circular saws in a wet environment
- Always cut material on an elevated work platform. Never attempt to cut any material lying on the ground or by simply holding the material in your opposite hand
- Be aware of the position of the cord. Always clear the cord before making the cut
- Inspect all material prior to cutting. Look for defects such as knots in the wood, nails and screws, or any obstruction that may impede the cut
- Always inspect the saw prior to operation, ensuring the blade is tight and guards are fully functional
- Never pin back or otherwise disable the retractable guard
- Unplug the saw when changing blades or making adjustments for depth or angle
- After tightening the blade or making other adjustments, be sure to remove wrench before operating the circular saw
- Maintain the saw and use only sharp blades or non-defective abrasive wheels free of distortion, cracks, or heat damage. A ring test will be performed on blades prior to installation to determine soundness
- Always store and discard saw blades in a safe responsible manner
- When the saw is not in use unplug the saw and place the saw out of the way with the blade facing down
- Always use the proper tool for the job. When not in use, store circular saws in a dry, secure location

Miter Saws

ARM Environmental Services, Inc. employees are required to follow these safety guidelines when using a miter cut-off (chop) saw:

- Do not ever, under any circumstances, allow anyone to use a chop saw that has not been properly instructed and approved in the processes of its safe operation

- Prior to its use, do a visual and operational inspection to ensure safe mechanical function of the saw:
 - Make certain all blade guards are in place and working smoothly. Removing or pinning back guards is not only extremely hazardous; it is considered a serious safety violation
 - Check the blade to be sure that it is straight and the arbor bolt is tight
 - Ensure the “constant-pressure” trigger switch operates properly
 - Check that the electrical cords, plugs, and fittings are intact and secure. Frayed cords are not permissible
 - Be sure that arbor wrenches or keys were not inadvertently left behind on the machine during a blade change
- When setting-up the cutting station, it is important that the saw is positioned in a manner that the work piece’s point of contact with the cutting edge can be easily viewed without straining or stooping
- Make sure the work-zone is level and free of trip hazards such as tangled power cords, cluttered material piles, scraps, stones, bricks, or other obstacles and obstructions. Avoid unsafe distractions by setting up away from high traffic areas
- Ensure the saw’s table or platform being used is stable and does not wobble. Be sure that accessory benches (for cutting long stock) are steady and sturdy; get assistance when needed
- During cuts, keep blade speeds at recommended levels; over-pressure on cuts will create hazardous situations
- Hearing protection is required due to the extreme sonic and acoustical levels generated, especially during extended cutting
- Eye protection must always be worn when using a chop saw
- Depending on the material being cut, a dust mask may be required
- Wear clothing appropriate with chop saw use; avoid long, loose shirtsleeves, neckwear, or untied long hair
- If any operational problems are noted, remove the saw from service and get it repaired immediately
- Proper care and maintenance should always be given the saw. Damage usually occurs during careless transport, handling, and storage of the tool
- Allow only qualified personnel to make repairs to the saw

Drills

- Do not allow anyone to use an electric drill that has not been properly trained in the processes of safe portable drilling operations
- Operate only properly maintained equipment. Before use, carefully inspect the machine for defects that could cause malfunctions. Ensure the power cord is secure and intact, trigger switch functions properly, and that fasteners and attachments are tight and fitted. Operate the tool using both hands and follow the manufacturer’s operating instructions
- Eye protection must always be worn when doing overhead operations. When operations present potential eye injuries, appropriate protection must be selected. Depending on the task, use a face shield, protective goggles, or approved safety glasses
- When using a new or unfamiliar tool, take time to “test-run” it
- Wear clothing appropriate for drilling or boring; avoid long, loose shirtsleeves, neckwear, or untied long hair
- The electrical circuit is properly rated and that cords, plugs, and fittings are intact and secure

- Use only extension cords that are free of splices, taps, bare wires, or frayed and deteriorated insulation. Use 3-prong adapters
- Select the correct drill and bit for the job and mount it securely in the chuck. Avoid using bits that are dull or bent
- When possible, always secure your work on a stable platform using clamps or vices. The work-piece must be secured so it does not move
- Prior to beginning drilling operations, inspect each work piece for nails, knots, or flaws that could cause the tool to buck or jump
- Turn on the switch for a moment to see if the bit is properly centered and running true
- With the switch off, place the point of the bit in the punched layout or pilot hole
- Hold the drill firmly in one or both hands and at the correct drilling angle
- Turn on the switch and feed the drill into the work-piece. The pressure required will vary with the size of the drill, the diameter of the drill bit, and the kind of material being drilled
- During operation, keep the drill aligned with the direction of the hole. Keep your free hand away from point of operation
- If any operational problems are noted, remove the drill from service and get it repaired immediately
- work-zones; keep the work area free of trip hazards such as tangled power cords, cluttered material, scraps, stones, bricks, or other obstacles When repairing tools or changing bits, always disconnect the power source
- Unsafe practices and inadequate housekeeping create potentially dangerous and obstructions.
- Be aware of your surroundings and always on the lookout for hazards. Avoid using electric drills in a wet environment

Portable Abrasive Wheels

ARM Environmental Services, Inc. employees are required to follow these safety guidelines when using handheld grinders or other portable abrasive wheels:

- Employees using grinding tools and/or are exposed to the hazards of falling, flying, abrasive, and splashing objects, or exposed to harmful dusts, fumes, or vapors will be provide with, and compelled to use, the particular personal protective equipment necessary to protect them from the hazard. This equipment includes eye and face, respiratory, hearing, and hand protection and will be properly maintained to meet all applicable standards
- All power grinding tools will be maintained in a safe condition. When these tools are designed to accommodate guards, they will be in place when the tool is in use. Safety guards will be strong enough to retain flying fragments and withstand the effects of a bursting wheel
- All grinding machines will be supplied with sufficient power to maintain safe spindle speeds under normal operating conditions
- All abrasive wheels will be carefully inspected and “ring-tested” before mounting to ensure that they are free from cracks or defects. To perform a sound or ring test, wheels should be tapped gently with a light, non-metallic instrument. If they sound cracked or dead, they could fly apart during operations and should be discarded. An intact, undamaged wheel will give a clear metallic tone or “ring”
- Only portable grinders with wheels 2 inches in diameter or less may be equipped with a positive on/off control switch. Grinders with wheels greater than 2 inches in diameter will be equipped with a momentary contact on/off switch and may have a lock-on control
- Grinders will be used on a 3-wire grounded circuit or be of the approved double insulated type. Using the tool’s power cord for hoisting or lowering will not be permitted

- All grinding/cutting wheels will fit freely on the spindle and must not be forced on. The spindle nut will be tightened only enough to hold the wheel in place
- When grinding metal, it is easy to leave razor-sharp edges; be sure you take them off before walking away from a work piece

Pneumatic Nailers and Staplers

- Never allow anyone to operate these tools without proper instruction in safe use
- Appropriate PPE must be worn when using compressed air tools and equipment
- Pneumatic powered tools must be secured to the hose by some positive means to prevent the tool from becoming accidentally disconnected
- All pneumatically powered nailers, staplers, or other similar equipment with automatic feed, that operate at over 100 psi at the tool, must have a safety device on the muzzle to prevent the tool from cycling and ejecting fasteners, unless the muzzle is in contact with the work surface
- Don't use compressed air to clean except where pressure is reduced to less than 30 psi
- The manufacturer's safe operating pressure for hoses, pipes, valves, filters, and other fittings must not be exceeded
- Avoid horseplay when using "air guns"
- Leave all safety features intact
- Always wear appropriate eye protection when using any air gun
- Hearing protection is often required depending on the noise level
- Read the owner's manual and operate the tool according to manufacturer's guidelines
- Ensure that tools are properly maintained and are in good working condition
- Never exceed manufacturer's recommended working pressures and never use more pressure than necessary (seldom more than 90 – 95 psi). Excessive pressure exerts more force, causing harder cycles. It is hard on tools and generates more flying debris
- Always keep the nose of the tool pointed toward the work-piece or downward when air charged. Never point the tool towards yourself or others
- During use, hold the nose of the gun firmly against the work-piece
- Ensure all safety features are intact and operational
- Always disconnect tool from air supply when clearing a jam or when not in use. Keep hoses and fittings in good condition
- Never carry an air-gun with your finger on the trigger. Accidental discharge and injury may result
- Tie-off and secure the air hose when working on a roof or scaffold to prevent the tool from falling on others
- Always move forward when working a nailer or stapler on a roof so you do not inadvertently trip or fall from the roof
- Never use volatile bottled gas to operate pneumatic fasteners or operate air guns around flammables; sparks may cause a fire
- Keep your free hand clear of air gun's nose during use
- Safety clips or retainers must be securely installed and maintained on pneumatic impact (percussion) tools to prevent attachments from being accidentally expelled

Air Compressors

ARM Environmental Services, Inc. employees are required to follow these safety guidelines while operating air compressors:

- Every air receiver must be equipped with a pressure indicator gauge with one or more spring loaded safety valves
- Pressure gauges must be located so as to be readily visible
- The pressure relief safety valves may not exceed the rated working pressure of the air receiving tank
- No valve of any type may be placed between the safety valve and the air receiver
- Safety valves, pressure gauges, regulators, and other controlling devices must be designed and installed so that they cannot be easily rendered inoperative by any means, including weather elements
- All safety valves must be tested at frequent intervals to determine proper operating condition
- A drainpipe and valve must be installed at the lowest point of any air receiver to provide for the frequent and complete removal of accumulated oil and water
- Never install compressors on an unrated air tank. The air receiver tank must be rated equal to or higher than original equipment
- If pressure gauges or pressure relief valves are damaged, replace them with compatible equipment before using the compressor
- If a compressed air storage tank is dented, deeply gouged, or badly rusted, compressor must be removed from service
- Do not use compressed air to pressurize barrels, pipes, or other containers not designed or intended as pressure vessels
- If an air receiver is equipped with a quick connect/release fitting, make sure the lock collar is fully engaged when hose is connected. When the hose is released from the fitting, firmly grasp the hose close to the fitting before releasing the lock collar
- Before servicing a compressor, disconnect it from the power source and bleed the pressure from the tank. Use appropriate Lockout Tagout (LOTO)
- Pulleys and belts on compressor motors and pumps must be properly guarded
- If using a gas powered compressor, engine must be shut off before refueling
- If an electric powered compressor, check power cord for cuts and abrasions, if the cord, plug, or any components are damaged, replace before use

Hand Tools

- Damaged, worn-out, or defective tools should be tagged and removed from service
- Do not perform "make-shift" repairs to tools
- Never use a tool if its handle has splinters, burrs, cracks, splits or if the head of the tool is loose
- Do not use impact tools such as hammers, chisels, punches or steel stakes that have mushroomed heads
- When handing a tool to another person, direct sharp points and cutting edges down and away from yourself and the other person
- Carry all sharp tools in a sheath or holster. Do not carry sharp or pointed hand tools such as screwdrivers, utility knives, scribes, snips, scrapers, chisels or files in your pocket unless the tool is sheathed. Transport hand tools only in toolboxes or tool belts
- Use tied off containers to keep tools from falling off scaffolds and other elevated work platforms

- Avoid carrying tools in your hand when you are climbing. Carry tools in tool belts or hoist the tools to the work area using a hand line
- Do not throw tools from one location to another or from one employee to another

Hammers: Do not use a hammer if your hands are oily, greasy or wet

- Never strike another hardened steel tool or surface, such as a cold chisel, with a claw hammer
- Avoid striking nails or other objects with the "cheek" of the hammer
- Do not strike one hammer against another hammer
- Never use a hammer as a wedge or a pry bar

Hand Saws: When using a handsaw, hold the work-piece firmly against the work table.

- Do not use an adjustable blade saw, such as a hacksaw or a coping saw, if the blade is not taut
- Avoid using any saw with a dull blade; always keep blades clean and sharp
- Keep hands and fingers away from the point of cut when using any saw
- Never carry a hand saw by the blade

Screwdrivers: Do not use a screwdriver if your hands are wet, oily or greasy.

- Always match the size and type of screwdriver blade to fit the head of the screw
- Never hold the work-piece against your body while using a screwdriver
- Avoid putting your fingers near the blade of the screwdriver when tightening a screw
- Use a drill, nail, or an awl to make a starting or pilot hole for screws
- Do not force a screwdriver by using a hammer or pliers on it
- Never use a screwdriver as a punch, chisel, pry bar, or nail puller
- When performing electrical work, ensure the screwdriver has a properly insulated handle

Pliers: Do not use pliers that are cracked, broken or sprung.

- Never use pliers as a wrench or a hammer
- Do not attempt to force pliers by using a hammer on them
- When you are performing electrical work, use pliers that have properly insulated handles
- When using diagonal cutting pliers, shield the loose pieces of cut material from flying into the air

Wrenches

ARM Environmental Services, Inc. employees are required to follow these safety guidelines when using wrenches:

- Inspect the wrench carefully before use and do not use if damaged
- Discard any wrench that has spread, nicked or battered jaws, or if the handle is loose, broken or bent
- Always use the proper size wrench for the job. A slipping wrench can damage bolt heads and nuts and cause personal injury. Do not use a shim to make a wrench fit the fastener
- Use a wrench that gives a straight, clean pull. If you must push the wrench, use the heel of your hand; do not wrap your fingers around the tool
- Do not cock the wrench in a manner that puts a strain on the points of contact; this can lead to tool failure. Keep the wrench flush with bolt head
- Avoid using a pipe or other "cheater bars" to extend the length of a wrench. Under excessive force, the wrench or bolt can slip or break

- Do not use a hammer with a wrench unless the wrench has been specifically designed for this purpose
- Replace cracked, worn, or “tweaked” wrenches
- Do not attempt to straighten a bent wrench. It will only weaken it further
- Do not substitute slip-joint pliers for a wrench; the pliers can slip and damage the bolt heads and nuts and cause hand injuries
- Sockets designed for use with hand wrenches should not be interchanged on air or impact wrenches; this can result in damage or injury
- When using air impact or other air wrenches, wear eye protection to safeguard against blowing debris. Use only heavy-duty hardened sockets
- Use a torque wrench for tightening only. Never use torque wrenches to break nuts or bolts loose; they are designed to measure tightness
- Be sure the jaws on you pipe wrenches are still sharp as unexpected slippage can cause injury

Jacks—lever and ratchet, screw, and hydraulic

ARM Environmental Services, Inc. employees are required to follow these safety guidelines when using jacks:

- The manufacturer's rated capacity will be legibly marked on all jacks and will not be exceeded
- All jacks will have a positive stop to prevent overtravel
- When it is necessary to provide a firm foundation, the base of the jack will be blocked or cribbed. Where there is a possibility of slippage of the metal cap of the jack, a wood block will be placed between the cap and the load
- After the load has been raised, it will be cribbed, blocked, or otherwise secured at once
- Hydraulic jacks exposed to freezing temperatures will be supplied with an adequate antifreeze liquid
- All jacks will be properly lubricated at regular intervals
- Each jack will be thoroughly inspected at times which depend upon the service conditions. Inspections will be not less frequent than the following:
 - For constant or intermittent use at one locality, once every 6 months
 - For jacks sent out of shop for special work, when sent out and when returned
 - For a jack subjected to abnormal load or shock, immediately before and immediately thereafter
 - Repair or replacement parts will be examined for possible defects
 - Jacks which are out of order will be tagged accordingly, and will not be used until repairs are made

ARM ENVIRONMENTAL SERVICES, INC. HSE

TRAINING RECORD

Trainer:	
Signature:	
Date:	
Content of Training:	
Attendees	
Print Name:	Signature:

POLICY

ARM Environmental Services, Inc. has implemented this program to ensure employees are informed of any chemical hazards and hazardous or toxic substances in their workplace:

ARM Environmental Services, Inc. will develop, implement, and maintain at each workplace a written hazard communication program that describes how labels and other forms of warning, safety data sheets, and employee information will be accomplished.

A copy of the Company's Hazard Communication Program is available to all employees, and will be kept at each jobsite by the foreman in charge, or in the office. Translations of the hazard communication program are available to non-English speaking employees upon request from Andy Wilson.

Employees will be notified of any hazardous substances used by any company other than ARM Environmental Services, Inc. in the workplace, and make safety data sheets available to employees.

A list of all chemicals known to be used at the workplace by company employees will be available for review at the jobsite and in the office. Safety Data Sheets (SDS) for all chemicals used in the workplace by ARM Environmental Services, Inc. are available to employees at the worksite from the job foreman or in the office.

Changes of job assignments, changes in materials used, or any non-routine tasks involving hazardous substances or conditions will require notification and/or retraining of effected employees. Andy Wilson will inform or retrain employees of any new or additional hazards, detail methods of hazard abatement or elimination, and provide proper personal protective equipment or engineering controls necessary for the job. Notifications and retraining will be documented as to name of employee, date, description of action taken, and verification by Andy Wilson.

CONTAINER LABELING

Andy Wilson will ensure that each container of hazardous chemicals in the workplace is labeled, tagged, or marked with the following information:

- Identity of the hazardous chemical(s)
- Pictograms
- A signal word
- Hazard and precautionary statements
- The product identifier
- Supplier identification

Andy Wilson will ensure labels or other, written warning forms, are legible and prominently displayed on the container, or readily available in the work area throughout each work shift. When ARM Environmental Services, Inc. has employees, whose primary language is not English, information shall be presented in their language as well.

No container will be released for use until this information is verified. Andy Wilson will ensure that all containers are labeled with a copy of the original manufacturer's label or a label that has the appropriate identification and hazard warning.

ARM Environmental Services, Inc. will have specific methods for providing other employer information concerning hazardous chemicals at job sites, methods for providing SDS, methods for precautionary measures to be taken, and methods for providing information on labeling systems. Where employees must travel between sites during a shift, the written program may be kept at a primary job site. If there is no primary site, the program will be sent with employees.

SAFETY DATA SHEETS

A SDS will be gathered and made available for every hazardous material at the worksite.

SDS are readily available for review to all ARM Environmental Services, Inc. employees, and cover all hazardous chemicals used in the workplace. SDS are kept with the hazard communication plan at the office location listed above. The safety data sheets are updated and managed by Andy Wilson. If a safety data sheet is not available for a hazardous chemical, before use, notify Andy Wilson, and a SDS will be obtained for the chemical to be used.

TRAINING

Required Hazard Communication Training

If you have employees who may be exposed to hazardous chemicals, you must inform them about the chemicals and train them when they are hired and whenever they are exposed to a new chemical hazard or a process change. Required employee training includes:

- An overview of the requirements in OSHA's CFR 29 1910.1200 hazard communication
- The written hazard-communication plan, and where it may be reviewed
- Hazardous chemicals present in their workplace
- The operations where hazardous chemicals are used
- Physical and health effects of the hazardous chemicals
- Methods used to determine the presence or release of hazardous chemicals in the work area
- How to reduce or prevent exposure to these hazardous chemicals through use of control/work practices and personal protective equipment
- Where to find and how to read the hazard-communication plan, the list of hazardous chemicals, and SDS
- The physical and health hazards of hazardous chemicals used by employees
- The meaning of warning labels on hazardous-chemical containers and on pipes that contain hazardous substances
- Emergency procedures to follow if an employee is exposed to these chemicals
- How to use personal protective equipment

Label Elements Training

ARM Environmental Services, Inc. will ensure all employees know the following elements of the labels: product identifier, signal word, pictogram, hazard statement, precautionary statement, and name address and phone number of chemical manufacturer, distributor, or importer.

Employees will also be trained on how to use the labels, to ensure proper storage and quickly locate first aid information.

They also need to know how the elements work together on a label.

- The different pictograms to indicate multiple hazards
- Where there are similar precautions, the one with most protective information will be on the label

SDS Training

Employees will be trained on the standardized 16-section format and the type of information found in each one.

Training will also explain how the SDS information is related to the label information.

After attending the training, each employee will sign a company training form verifying they understand the above topics and how the topics are related to our hazard communication plan.

General Safety Considerations

Employers who produce, use, or store hazardous chemicals at a workplace in such a way that the employees of other employer(s) may be exposed will additionally ensure that the hazard communication programs developed and implemented include the following: methods the employer will use to provide the other employer(s) on-site access to safety data sheets, precautionary measures that need to be taken to protect employees during the workplace's normal operating conditions and in foreseeable emergencies, the labeling system used in the workplace.

The company may not remove or deface existing labels on incoming containers of hazardous chemicals, unless the container is immediately marked with the required information.

Hazardous Non-Routine Tasks

Before employees perform non-routine tasks that may expose them to hazardous chemicals, they will be informed by their supervisors about the chemicals' hazards. Their supervisors also will inform them about the safe work practices necessary to control exposure and what to do in an emergency. Examples of non-routine tasks that may expose employees to hazardous chemicals include the following:

Task:	Hazard:

Hazardous Chemicals in Pipes, Closed, or Hidden Systems

Before working in areas where hazardous chemicals are transferred through pipes or where pipes are insulated with asbestos-containing material, employees will contact Andy Wilson for the following information: the chemicals in the pipes; the physical or health effects of the chemicals or the asbestos insulation; the safe work practices to prevent exposure.

Notification of Contractors

It is the responsibility of the assigned job foreman to provide any workplace-associated contractors and their employees with the following information, if they may be exposed to hazardous chemicals in our workplace:

- The identity of the chemicals, how to review safety data sheets, and an explanation of the container and pipe labeling system
- Safe work practices to prevent exposure

This person will also obtain a safety data sheet for any hazardous chemical a contractor brings into the workplace to which an employee of 2 may be exposed.

Hazard Communication in the Workplace

The essence of hazard communication is a warning. We use thousands of chemical products throughout our lives, at home and at work. However, most of us would be hard-pressed to distinguish safe products from hazardous ones without a warning (the familiar skull-and-crossbones, for example). The warning tells us the product is hazardous, that it can harm us if we use it improperly.

In the workplace, hazard communication ensures workers who may be exposed to hazardous chemicals know about the chemicals' hazards and understand how to protect themselves from exposure.

The Hazard Communication Process

Hazard communication begins when chemical manufacturers and importers evaluate their products to determine each product's chemical hazards. Next, they prepare a Safety Data Sheet (SDS) for each product. An SDS includes detailed information about the product's hazards. Manufacturers and importers must include an SDS and a warning label with each container of product they ship to a customer.

The part of the process that affects your workplace is the "Written Hazard Communication Plan." The plan identifies hazardous chemicals at your workplace and describes how you will use safety data sheets, warning labels, and training to protect employees and keep informed about the product's chemical hazards.

The labeling system, location of SDS, routine precautions and emergency procedures will be provided to other employers and employees who may be affected by hazardous chemicals produced, used, or stored at the worksite.

Definition of a Hazardous Chemical

OSHA's hazard-communication rule, 1910.1200, defines a hazardous chemical as "any element, chemical compound, or mixture that is a physical hazard or a health hazard".

Chemicals that are Physical Hazards

Chemicals that are physical hazards are unstable and, when handled improperly, can cause fires or explosions. A chemical that is a physical hazard has one of the following characteristics:

- Is a combustible liquid
- Is a compressed gas
- Is explosive
- Is flammable
- Is water-reactive
- Starts or promotes combustion in other materials
- Can ignite spontaneously in air

Chemicals that are Health Hazards

Chemicals that are health hazards can damage an exposed person's tissue, vital organs, or internal systems. Generally, the higher the chemical's toxicity, the lower the amount or dose necessary for it to have harmful effects. The effects vary from person to person, ranging from temporary discomfort to permanent damage, depending on the dose, the toxicity, and the duration of exposure to the chemical.

Health effects range from short-duration symptoms that often appear immediately (acute effects) to persistent symptoms that may appear after longer exposures (chronic effects). Health effects can be classified by how they affect tissue, vital organs, or internal systems:

- Agents that damage the lungs, skin, eyes, or mucous membranes
- Carcinogens cause cancer
- Corrosives damage living tissue
- Hematopoietic agents affect the blood system
- Hepatotoxins cause liver damage
- Sensitizers cause allergic reactions and Irritants cause inflammation of living tissue
- Nephrotoxins damage cells or tissues of the kidneys
- Neurotoxins damage tissues of the nervous system
- Reproductive toxins damage reproductive systems, endocrine systems, or a developing fetus

How to Determine Whether a Chemical is Hazardous

A chemical is hazardous if it is listed in any of the following documents:

- OSHA Division 2, Subdivision Z safety and health rules, Toxic and Hazardous Substances; Division 3, Subdivision Z, Toxic and Hazardous Substances (Construction); Division 4, Subdivision Z, Chemical/Toxins (Agriculture)
- Threshold Limit Values for Chemical Substances and Physical Agents in the Work Environment (latest edition). Published by the American Conference of Industrial Hygienists (ACGIH)
- The Registry of Toxic Effects of Chemical Substances, published by the National Institute for Occupational Safety and Health (NIOSH)
- The container label of the product will issue a warning of hazardous effects

Commonly-Used Hazardous Chemicals

Listed below are chemicals among those most commonly used in U.S. workplaces:

Hazardous Chemical	Harmful Effects
1,1,1-Trichloroethane	May cause mutations in cells; can irritate the skin and eyes and cause unconsciousness and death. High exposures may damage the liver and kidneys.
Acetone	Can irritate the skin, eyes, nose, and throat. High concentrations can cause dizziness and loss of consciousness.
Aluminum oxide	Can irritate the eyes, nose, and throat. Repeated high exposure can cause scarring of the lungs and shortness of breath.
Ammonia	Can irritate the lungs and burn the eyes and skin. Long-term exposure can cause irritation of the eyes, nose, mouth, and throat.
Benzene	A cancer-causing agent that has been shown to cause leukemia. May also cause headaches and irritation of the eyes, nose, and throat. High exposure can cause convulsions and death.
Ethylbenzene	Can irritate the eyes, nose, and throat. Repeated contact can cause drying and scaling of skin and may cause liver damage. High concentrations may cause dizziness and loss of consciousness.
Ethylene glycol	Can irritate the eyes, nose, or throat and cause nausea, vomiting, and headaches. Repeated or high exposure levels can cause kidney damage or stones and brain damage. May cause birth defects.
Freon 113	May cause skin irritation and rashes as well as drowsiness.
Glycol ethers	Can irritate the eyes, nose, and throat and may cause birth defects. Repeated or high exposure can cause kidney damage or stones. Brain damage also may occur.
Hydrochloric acid	Can irritate the lungs. High exposure can cause buildup of fluid in the lungs, which can cause death.
Lead	Can cause weakness and insomnia. Higher exposure can result in damage to the nervous and reproductive systems.
Methanol	Irritates the eyes, nose, mouth, and throat and can cause liver damage.
Methyl ethyl ketone	Can cause dizziness, headaches, blurred vision, and loss of consciousness. May cause birth defects.
Methyl isobutyl ketone	Irritates the skin, eyes, nose, and throat, and may cause dizziness, nausea, diarrhea, and loss of consciousness. Long-term exposure may damage the liver and kidneys.
Phenol	Can irritate the mouth, nose, throat, and eyes. Long-term exposure may damage the liver and kidneys and lead to genetic damage. May be a cancer risk. Major skin contact or inhaling it can cause death.
Sodium hydroxide	Breathing the dust or droplets can irritate and burn the lungs. Contact can cause severe skin burns.
Sulfuric acid	Can severely burn the skin and eyes. Repeated long-term exposure can cause bronchitis, shortness of breath, and emphysema.
Tetrachloroethylene	A suspected human carcinogen that has caused liver cancer in animals. It may damage the liver and kidneys after low but repeated exposure. It can cause dizziness and loss of consciousness.
Xylene	Can irritate the eyes, nose, and throat; high levels can cause loss of consciousness and death. It may damage fetuses. Repeated exposure may damage bone marrow and eyes and cause stomach problems.

Using Safety Data Sheets

An SDS contains detailed information about a hazardous chemical product's health effects, physical and chemical characteristics, and safe practices for using it.

Responsibilities of Chemical Manufacturers, Importers, and Distributors

Chemical manufacturers and importers must prepare an SDS for each hazardous chemical product they produce. Distributors are responsible for ensuring that you have an SDS for each hazardous chemical product they sell to you.

What to do if You Use Hazardous Chemical Products at your Workplace

You must have a current SDS for each product. Employees must be able to review the SDS in their work area at any time. You can keep SDS in a notebook or on a computer, though employees must be able to obtain the information immediately in an emergency. One person should be responsible for managing all the SDS at your workplace. The person should ensure the list of hazardous chemicals is current, that the identity of each chemical on the list matches its identity on its SDS, and that incoming hazardous chemical containers have an SDS.

What to do When You No Longer Use a Hazardous Chemical at Your Workplace

When you no longer use a hazardous chemical, you do not need to keep its SDS. However, you do need to keep a record of the chemical's identity, the locations, and the calendar years it was used in your workplace, for at least 30 years. For more information about record-keeping requirements, see the "Access to employee exposure and medical records" section of 1910.1020.

Information required on Safety Data Sheets

Chemical manufacturers and importers must prepare an SDS for each hazardous chemical product they ship to you. The following information must appear on each sheet.

Section 1, Identification includes product identifier; manufacturer or distributor name, address, phone number; emergency phone number; recommended use; restrictions on use.

Section 2, Hazard(s) identification includes all hazards regarding the chemical; required label elements.

Section 3, Composition/information on ingredients includes information on chemical ingredients; trade secret claims.

Section 4, First-aid measures includes important symptoms/effects, acute, delayed; required treatment

Section 5, Fire-fighting measures lists suitable extinguishing techniques, equipment; chemical hazards from fire.

Section 6, Accidental release measures lists emergency procedures; protective equipment; proper methods of containment and cleanup.

Section 7, Handling and storage lists precautions for safe handling and storage, including incompatibilities.

Section 8, Exposure controls/personal protection lists OSHA's Permissible Exposure Limits (PELs); Threshold Limit Values (TLVs); appropriate engineering controls; personal protective equipment (PPE)

Section 9, Physical and chemical properties lists the chemical's characteristics.

Section 10, Stability and reactivity lists chemical stability and possibility of hazardous reactions.

Section 11, Toxicological information includes routes of exposure; related symptoms, acute and chronic effects; numerical measures of toxicity.

Section 12, Ecological information*

Section 13, Disposal considerations*

Section 14, Transport information*

Section 15, Regulatory information*

*OSHA does not require these sections.

Section 16, Other information, includes the date of preparation or last revision.

Using Container Warning Labels

The purpose of a container warning label is to warn employees about the container's contents and to refer employees to an appropriate SDS for more information about the chemical's physical and health hazards. Manufacturers, importers, and distributors must ensure that each hazardous chemical product sold to you has a label that includes the chemical's identity, a hazard warning, and a name and address for additional information about the product. If you use hazardous chemicals at your workplace, you must ensure that each hazardous chemical container has a legible label, in English, that identifies the chemical and warns of its hazards.

Containers that must be Labeled

Original containers of hazardous chemicals from a manufacturer, importer, or distributor must have warning labels. Do not remove or deface them. If you transfer a hazardous chemical from a labeled container to an unlabeled container, label the container.

Contents of a Warning Label

A warning label must identify the chemical – a common chemical name or a code name is acceptable – and display a hazard warning such as DANGER or the familiar skull and crossbones.


- The identity of the chemical on the label, on its SDS, and on your hazardous chemical sheet must match
- If you are not sure a hazardous chemical container is properly labeled, contact the manufacturer or supplier
- Make someone at your workplace responsible for ensuring all hazardous-chemical containers are properly labeled

ARM ENVIRONMENTAL SERVICES, INC. HSE

ARM Environmental Services, Inc. will ensure that workplace labels or other forms of warning are legible, in English, and prominently displayed on the container, or readily available in the work area throughout each work shift. If ARM Environmental Services, Inc. has employees who speak other languages, the company may add the information in their language to the material presented, as long as the information is presented in English as well

EXAMPLE OF ORIGINAL CONTAINER GHS LABEL

SAMPLE LABEL

<p>CODE _____ Product Name _____</p> <p>Company Name _____ Street Address _____ City _____ State _____ Postal Code _____ Country _____ Emergency Phone Number _____</p> <p>Keep container tightly closed. Store in a cool, well-ventilated place that is locked. Keep away from heat/sparks/open flame. No smoking. Only use non-sparking tools. Use explosion-proof electrical equipment. Take precautionary measures against static discharge. Ground and bond container and receiving equipment. Do not breathe vapors. Wear protective gloves. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Dispose of in accordance with local, regional, national, international regulations as specified.</p> <p>In Case of Fire: use dry chemical (BC) or Carbon Dioxide (CO₂) fire extinguisher to extinguish.</p> <p>First Aid If exposed call Poison Center. If on skin (or hair): Take off immediately any contaminated clothing. Rinse skin with water.</p>	<p>Product Identifier</p> <p>Supplier Identification</p> <p>Precautionary Statements</p>	<p>Hazard Pictograms</p>  <p>Signal Word Danger</p> <p>Hazard Statements</p> <p>Supplemental Information</p> <p>Directions for Use</p> <p>_____ _____ _____</p> <p>Fill weight: _____ Lot Number: _____ Gross weight: _____ Fill Date: _____ Expiration Date: _____</p>	
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OSHA 3492-02 2012

Secondary/Portable Containers

Secondary containers are used to hold material transferred from the manufacturers' original container. These are required to be labelled if:

- Is not used within the work shift by the individual who makes the transfer
- The worker who made the transfer leaves the work area
- The container is moved to another work area and is no longer in the possession of the person who filled the container

Labels for secondary containers must include:

- The identity of the chemical and appropriate hazard warnings must be shown on the label.
- The hazard warning that provides users with an immediate understanding of the primary health and/or physical hazard(s) of the chemical through the use of words, pictures, symbols, or any combination of these elements
- The name and address of the manufacturer, importer or other responsible party

The hazard label message must be legible, permanently displayed and written in English

Portable containers are intended for immediate use of a chemical by the person who makes the transfer. Labels on portable containers are not required if the worker who made the transfer uses all of the contents during the work shift, or the chemical is return to a labelled primary or secondary container at the end of the shift, or when work is completed.

Confirmation of Employee's Hazard Communication Training

I, _____, have been informed about the hazardous chemicals that I may be exposed to during my work and I have received training on the following topics:

- An overview of the requirements in OSHA's hazard communication rules.
- Hazardous chemicals present in the workplace.
- The written hazard-communication plan.
- Physical and health effects of the hazardous chemicals.
- Methods to determine the presence or release of hazardous chemicals in the work area.
- How to reduce or prevent exposure to these hazardous chemicals through use of exposure controls/work practices and personal protective equipment.
- Steps we have taken to reduce or prevent exposure to these chemicals.
- Emergency procedures to follow if exposed to these chemicals.
- How to read labels and review Safety Data Sheets.

Note to employee:

This form becomes part of your personnel file; read and understand it before signing.

By signing below I attest and verify that I have received training in the above areas of hazard communication, and that I understand the content of that training.

Employee: _____ Date: _____

Trainer: _____ Date: _____

POLICY

ARM Environmental Services, Inc. has implemented this policy to ensure no employee is exposed to Hazardous Waste material at levels in excess of Permissible Exposure Limits (PEL). Andy Wilson 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. Andy Wilson 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 personnel 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

ARM Environmental Services, Inc. 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 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 person 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, 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 – will be received by employees who are trained in accordance with this plan. A record of methods used will be kept

Initial Training

- ARM Environmental Services, Inc. employees engaged in hazardous substance removal or other activities that expose, or potentially expose, workers to hazardous substances and health hazards will receive a minimum of 40 hours of instruction off the site, and a minimum of three 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 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 day actual field experience under the direct supervision of a trained, experienced supervisor
- Workers with 24 hours of training who become general site workers or who are required to wear respirators, will have the additional 16 hours and two days of training necessary to total the required training

Supervisor Training

On-site supervisors directly responsible for, or who supervise employees engaged in, hazardous waste operations will receive 40 hours initial training and three days of supervised field experience. Supervisors will receive at least eight additional hours of specialized training at the time of job assignment on such topics as the company safety and health program, PPE program, spill containment program, health hazard monitoring procedure 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 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 show by documentation or certification that an employee's work experience and/or training has resulted in equivalent required training will not be required to provide the initial training requirements. Equivalent training includes any academic training or the training that existing employees might have already received from actual hazardous waste site experience. ARM Environmental Services, Inc. will provide a copy of the certification or documentation to our employees upon request.

All employees new to a 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 prior to beginning emergency response operations. The plan is in writing and available for inspection by employees, their representatives, and OSHA.

Elements of the ARM Environmental Services, Inc. Emergency Response Plan include:

- Pre-emergency planning and coordination with outside parties
- Personnel 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 personnel 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, ARM Environmental Services, Inc., 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 ARM Environmental Services, Inc. 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 be covered by the Medical Surveillance Program
- Engineering controls, safe practices, and PPE will be used to reduce and maintain exposure limits. 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

ARM Environmental Services, Inc. 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 hazards and provides for emergency response for hazardous waste operations.

The program includes the following:

- An organizational structure
- A comprehensive work-plan
- A site-specific safety and health plan which does not repeat standard operating procedures
- The safety and health training program
- The medical surveillance program
- 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, ARM Environmental Services, Inc. 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 personnel, and to personnel of other Federal, state, or local agencies with regulatory authority over the site.

ORGANIZATIONAL STRUCTURE OF THE SITE-SPECIFIC PROGRAM

The organizational structure establishes the 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 personnel 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 personnel 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 and include 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
- Personal protective equipment 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, personnel 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 requirements

The Site-specific Safety and Health Plan provides for pre-entry briefings to be held prior to 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

Workers 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 workers' 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.

ARM Environmental Services, Inc. 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

ARM Environmental Services, Inc. has made medical examinations and consultations available to the above-named employee categories on the following schedules:

- Prior to 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 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 the employee has 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 should 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.

ARM Environmental Services, Inc. will provide one 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 personal protective equipment 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

ARM Environmental Services, Inc. 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 the employee's health from work in hazardous waste operations or emergency response, or from respirator use
- The physician's recommended limitations upon the employees assigned work
- The results of the medical examination and tests if requested by the employee
- 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 ARM Environmental Services, Inc., 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 opening of drums, wetting down dusty operations, and locating 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
- ARM Environmental Services, Inc. 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
- ARM Environmental Services, Inc. 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.

PERSONAL PROTECTIVE EQUIPMENT PROGRAM

ARM Environmental Services, Inc.'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 prior to, 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 Personal Protective Equipment

- PPE is selected and used that will protect employees from the hazards and potential hazards they will encounter as identified during the site evaluations
- PPE selection is based on assessments of the performance characteristics of the PPE relative to the requirements and limitations of the site, the task-specific conditions and duration, and the hazards and potential hazards identified on site
- 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 may 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 0.5 percent

MONITORING

Monitoring is performed where there may be a question of employee exposure to hazardous concentrations of hazardous substances in order to assure 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 used to identify and quantify airborne levels of hazardous substances and safety and health hazards in order to determine the appropriate level of employee protection needed on site.

Upon initial entry, air monitoring will be conducted to identify any IDLH condition, exposure over permissible exposure limits, exposure over a radioactive material's dose limits, or other dangerous condition 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 has developed or when there is indication that exposures may have risen over permissible exposure limits since prior 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, ARM Environmental Services, Inc. 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 contacted hazardous substances
- All 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 minimize the exposure of uncontaminated employees or equipment to contaminated employees or equipment. All equipment and solvents used for decontamination will be decontaminated or properly disposed of.

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.

ARM ENVIRONMENTAL SERVICES, INC. HSE

TRAINING RECORD

Trainer:	
Signature:	
Date:	
Content of Training:	
Attendees	
Print Name:	Signature:

POLICY

ARM Environmental Services, Inc. has implemented this policy to ensure no employee is exposed to Hydrogen Sulfide (H₂S) at levels in excess of the Permissible Exposure Limit (PEL). This policy is available to all employees request. Andy Wilson is the assigned supervisor responsible for ensuring the following engineering controls and work practices are enforced:

Andy Wilson will provide employees with information and training at the time of their initial assignment to a work area where H₂S is present. Training will address characteristics and health effects of H₂S. If exposures are above the action level, employees will be provided with information and training at least annually thereafter. Necessary employee training will be documented to include: identify of the employee trained; the signature and title of the employee trainer; the date of the training.

Employees will be informed of all regulated areas and will be properly trained in entrance procedures, safety requirements, and practices while in regulated areas.

CHARACTERISTICS OF HYDROGEN SULFIDE

H₂S is a colorless, extremely poisonous gas that has the characteristic odor of rotten eggs. The sense of smell becomes rapidly fatigued and cannot be relied upon to warn of the continuous presence of H₂S. Large amounts of H₂S are obtained in the removal of sulfur from petroleum.

Hydrogen Sulfide is:

- Extremely toxic. 100 ppm is the Immediately Dangerous to Life and Health (IDLH) concentration
- Colorless
- Solubility in water at 68 °F is 0.4% by weight
- Flammable Gas
- Incompatible and reacts with strong oxidizers, strong nitric acid, and metals
- UEL (upper explosive [flammable] limit in air) is 44.0% by volume (at room temperature)
- LEL (lower explosive [flammable] limit in air) is 4.0% by volume (at room temperature)

Additional considerations:

- Contact and exposure occurs through inhalation, skin and/or eye contact
- Target organs are the eyes, respiratory system, and central nervous system
- Health effects and symptoms include irritation of the eyes and respiratory system; apnea, coma, convulsions; conjunctivitis, eye pain, lacrimation (discharge of tears), photophobia (abnormal visual intolerance to light), corneal vesiculation (blisters); dizziness, headache, lassitude (weakness, exhaustion), irritability, insomnia; gastrointestinal disturbance
- Affects the nerve centers of the brain which control breathing

Potential employee exposure to Hydrogen Sulfide includes:

- Drilling Operations
- Recycled Drilling Mud
- Water from sour crude wells
- Blowouts
- Tank Gauging (tanks at producing, pipeline, and refining operations)
- Field Maintenance
- Tank batteries and wells, etc

RESPIRATORY PROTECTION REQUIREMENTS

The Respiratory Protection Program, in compliance with OSHA §1910.134, and respiratory protective equipment is provided at no cost for all employees with potential for exposure to H₂S.

The following National Institute of Occupational Safety and Health (NIOSH) respirator recommendations with their Assigned Protection Factor (APF) will be used under these hazardous conditions:

- H₂S Concentrations up to 100 ppm:
 - Any powered, air-purifying respirator with cartridge(s) providing protection against the compound of concern/(APF = 50)
 - Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted canister providing protection against the compound of concern/(APF = 10)
 - Any supplied-air respirator/(APF = 50)
 - Any self-contained breathing apparatus with a full facepiece
- Emergency or planned entry into unknown H₂S concentrations or IDLH conditions:
 - Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode/(APF = 10,000)
 - Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus
 - Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted canister providing protection against the compound of concern/Any appropriate escape-type, self-contained breathing apparatus/(APF = 50)

SPECIFIC REQUIREMENTS

- In the event of an emergency where H₂S is released at hazardous levels, employees not wearing sufficient Personal Protective Equipment (PPE) for the situation will be immediately evacuated to a safe area until the hazard is contained.
- Adequate ventilation will be ensured in all enclosed work areas. Employees engaged in maintenance of ventilation systems, including filter changes, are required to use proper PPE for the task.
- Regular monitoring of air quality in work areas will be provided to ensure that PEL of H₂S are not being exceeded. Records of all monitoring tests will be kept available at the Company office.
- Employees working at job-sites where there is a potential for exposure to an H₂S hazardous atmospheres will be supplied with personal monitoring equipment which must be carried outside of clothing on the worker at all times when in the work area.

- The supplied monitors will be capable of sensing a minimum of 10 ppm of H₂S in the atmosphere; and will activate audible and visual alarms when the concentration of H₂S in the atmosphere reaches 10 ppm. When monitor alarms sound, employees will vacate the area and will not re-enter without proper respiratory protection.
- In the event that PEL of H₂S are exceeded within any facility where employees are contracted to work, all work will be stopped and employees evacuated until the facility's management can ensure that H₂S levels are brought down to an acceptable level for safe work.
- The management of any facility where ARM Environmental Services, Inc. contracts to work must provide a list of all operations in the facility where H₂S is emitted. Facility management will provide a copy of the facility's contingency plan provisions.
- Special precautions will be taken when employees are working inside tanks or vessels. Employees will adhere to the ARM Environmental Services, Inc. written Confined Space Program per §1910.146 and employees will be trained under §1910.146(g).
- The medical surveillance program for employees who potentially may be exposed to H₂S at or above the action level or PEL will be provided under the supervision of a licensed physician at no cost to the employee.
- Employees must wear proper Personal Protective Equipment (PPE) at all times while in work areas where H₂S is present. This PPE will include proper eye/face protection in accordance with §1910.133 where appropriate.
- All required signs and labels will be posted in areas of potential exposure to H₂S.
- All containers or materials containing H₂S will be appropriately labeled to indicate the contents and the hazards of the contents.
- SDS for H₂S and all hazardous materials at ARM Environmental Services, Inc. are available to employees at the Company office upon request.

HAZARDS OF HYDROGEN SULFIDE

Hazards of Hydrogen Sulfide (H₂S)

Hydrogen Sulfide (H₂S) presents a potential hazard to workers at the work site. It usually occurs as an unwanted by-product and can result in worker exposure in many different industries or occupations. To ensure protection against exposure to H₂S, both workers and employers must be aware of its properties, how it affects the body, and what to do in emergency situations. ARM Environmental Services, Inc. shall ensure that all personnel who will be working at the job site will be properly trained in H₂S awareness and contingency procedures.

H₂S Characteristics

Hydrogen sulfide is a powerful and deadly gas which is colorless and smells like rotten eggs at low concentrations and has a sweet smell at high concentrations. But workers should not rely on the smell as a warning as the gas quickly paralyzes the olfactory nerves which allow you to smell. The result could be instant death. Long exposure to low concentrations will also deaden the sense of smell.

H₂S is explosive - it will ignite and explode when subjected to a spark or ordinary flame - in any concentration from 4% to 44% of the air. It is also soluble in water and oil, so it may flow for a considerable distance from its origin before escaping above ground or in an entirely unexpected place. Because the vapor (gas) is heavier than air, it may travel for a long way until ignited and then flash back towards the source. One of the products of burning H₂S is Sulfur Dioxide, also a toxic gas.

If the gas is burned, toxic products such as sulfur dioxide will be formed. Hydrogen sulfide is incompatible with oxidizing agents, such as nitric acid and chlorine trifluoride, and may react violently or ignite spontaneously.

Sources of H₂S

H₂S is found widely in industry and few workers are warned of its dangers, or their exposure. It is formed by the decomposition of organic materials, so it is found in natural gas and oil, recycled drilling mud, water from sour crude wells, in mines, wells, fertilizers, sewers, and cesspools. It is given off as a by-product in the manufacture of rayon, synthetic rubber, dyes, and the tanning of leather.

Hydrogen sulfide is found in large amounts in natural gas and petroleum. Any worker involved in extracting gas and petroleum from the ground, or in storing, transporting, or processing gas is at risk from exposure to H₂S. Hydrogen sulfide exists in solution in crude oil, and workers are exposed when the gas begins to "pass off" as it reaches the surface or comes into contact with air. This can occur at any point, including all stages of the refining operation, and it is accelerated by heat or hot weather.

Fundamentally, employers and employees must be alert to the fact that working with a "closed system" does not always ensure safety. Operations involving the opening of valves or pumps on otherwise closed systems or working on such equipment that is not isolated or locked out are particular sources of danger. When a normally closed system is opened, the potential exists for releasing hazardous chemicals into the workers' breathing zones in unknown concentrations.

Health Effects on the Body

Hydrogen Sulfide is extremely toxic. When you breathe in H₂S, it goes directly through your lungs and into your bloodstream. To protect itself, your body "oxidizes" (breaks down) the H₂S as rapidly as possible into a harmless compound.

If you breathe in so much H₂S that your body cannot oxidize all of it, the H₂S builds up in the blood and you become poisoned. It may cause death instantaneously in high airborne concentrations. The nervous centers in your brain that control breathing are paralyzed. Your lungs stop working and you are asphyxiated - just as though someone had come up and put their hands around your neck and strangled you.

A single breath of hydrogen sulfide at about 1000 ppm may paralyze the respiratory system and result in coma and death. A worker can be overcome by H₂S and lose consciousness in a few seconds; luckily if he is rescued in time and is given artificial respiration within a few minutes, the worker may recover. Either artificial mouth-to-mouth or an oxygen supply system of resuscitation will work if it is done in time, because, with an adequate source of oxygen and no further H₂S intake, the body will quickly break down the H₂S still in the blood.

Low levels may be extremely irritating to the lungs, nose, throat, and eyes. Hydrogen Sulfide can be detected by smell at levels as low as 0.13 parts H₂S per million parts air (ppm). Odor cannot be used as a warning because the gas can deaden the sense of smell within 2 to 15 minutes in exposures of approximately 100 ppm. Convulsions may also occur. Prolonged exposure at about 250 ppm H₂S may cause the lung tissue to swell and fill up with water (pulmonary edema). This effect may occur after the exposed worker recovers from the irritant effects of the gas. Exposures of 20 to 50 ppm hydrogen sulfide for one hour may cause inflammation of the cornea and the delicate lining of the eye and eyelid (a condition called keratoconjunctivitis). Exposures for long periods at 50 ppm may cause severe irritation of the nose, throat and lungs. Workers exposed to lower concentrations of H₂S may develop headaches, eye disorders, and chronic bronchitis.

Chronic effects

Hydrogen Sulfide can also cause a wide range of sub-acute and chronic effects. At very low concentrations of 10-100 ppm.) headache, dizziness, nausea, and vomiting may develop, together with irritation of the eyes and respiratory tract (the lungs and trachea and bronchi, or air pipes from the nose and mouth to the lungs). The eyes become red, sore, inflamed, and sensitive to light. Respiratory system effects include cough, pain in the nose and throat, and pain on breathing.

If exposure at low levels continues, the worker may develop a state of chronic poisoning. In addition to eye and respiratory tract irritation, there will be a slowed pulse rate, fatigue, insomnia, digestive disturbances, and cold sweats. More dangerous, if exposure at the level of 100 ppm (which results in eye and respiratory tract irritation and drowsiness after 15 minutes) lasts for several hours, it may result in death within the next 48 hours. Symptoms of chronic exposures at low levels are conjunctivitis (eye infections), headache, attacks of dizziness, diarrhea, and loss of weight.

Chronic H₂S intoxication is marked by headaches, eye disorders, chronic bronchitis, and a grey-green line on the gums. Reports of nervous system disorders including paralysis, meningitis, and neurological problems have been reported, but not confirmed.

A study of workers and community residents of a California refinery engaged in extracting sulfur from crude oil, which is rich in H₂S, complained of headaches, nausea, vomiting, depression, personality changes, nosebleeds, and breathing difficulties. When compared to a non-exposed group of people, the exposed people showed abnormalities of color discrimination, eye-hand coordination, balance, and mood disturbances.

Hydrogen Sulfide can penetrate the skin and cause toxicosis in people exposed to large concentrations over long periods. The speed of onset of acute H₂S poisoning and the potency of H₂S are almost the same as for cyanide gas. In rats, exposure to H₂S has caused teratogenic (biological monstrosities and malformations) effects.

Symptoms of H₂S exposure

H₂S is classified as a chemical asphyxiant, similar to carbon monoxide and cyanide gases. It inhibits cellular respiration and uptake of oxygen, causing biochemical suffocation. Exposure levels to H₂S and symptoms of that exposure are divided into different toxicity levels, shown in the chart below.

10 ppm	Beginning eye irritation
50-100 ppm	Slight conjunctivitis and respiratory tract irritation after 1 hour exposure
100 ppm	Coughing, eye irritation, loss of sense of smell after 2-15 minutes. Altered respiration, pain in the eyes and drowsiness after 15-30 minutes followed by throat irritation after 1 hour. Several hours' exposure results in gradual increase in severity of these symptoms and death may occur within the next 48 hours.
200-300 ppm	Marked conjunctivitis and respiratory tract irritation after 1 hour of exposure
500-700 ppm	Loss of consciousness and possibly death in 30 minutes to 1 hour.
700-1000 ppm	Rapid unconsciousness, cessation of respiration, and death.
1000-2000 ppm	Unconsciousness at once, with early cessation of respiration and death in a few minutes. Death may occur even if individual is removed to fresh air at once.

Use and operation of H₂S monitoring systems and detection methods used on site

Employees working at jobsites where there is a potential for exposure to hazardous atmospheres, will be supplied with personal monitoring equipment that must be carried outside of clothing on the worker at all times when in the work area. The monitors supplied will be capable of sensing a minimum of 10 ppm of H₂S in the atmosphere; and will activate audible and visual alarms when the concentration of H₂S in the atmosphere reaches 20 ppm. 20 ppm is the acceptable ceiling concentration for H₂S exposure, and 50 ppm is the acceptable maximum peak above the acceptable ceiling concentration for an 8-hour shift with a one-time 10-minute exposure only if no other measured exposure exists.

Alternatively, stationary monitors may be installed. Personal or stationary monitors must be capable of sounding an audible alarm or warning. Andy Wilson will administer the monitor maintenance program for ARM Environmental Services, Inc.. Monitors will be calibrated and maintained per manufacturer's instructions.

Proper use and maintenance of PPE

See ARM Environmental Services, Inc. Policy on respiratory protection. Employees working in areas where the possibility of exposure to toxic gases exists will be provided NIOSH approved full face SCBA respiratory equipment, and trained in their use and maintenance according to the company Respiratory Protection Program which is administered by Andy Wilson. Demonstrated proficiency in using PPE is required by the program.

Locations and use of safety equipment

Personal hazardous atmosphere detection monitors and respiratory protective equipment will be immediately available to each employee at all times in the work area. Safety equipment will be kept immediately available to all employees on the job-site.

All employees of ARM Environmental Services, Inc. must be notified of the location of safety equipment on each jobsite prior to commencement of work. Only personnel trained in the proper use of any required safety equipment will be allowed on the job-site.

Recognition and response to H₂S warnings at the workplace

ARM Environmental Services, Inc. employees at will be required to respond immediately to audio or visual warnings issued either by personal monitoring equipment or established workplace general warning signals. Workplace site-specific contingency plans of the plant owner will be reviewed with personnel and provisions of the plan followed. When a warning signal is sounded, employees must immediately put on SCBA respiratory protection and initiate evacuation procedures. Evacuation plans must be established for each work-site prior to commencement of work. Andy Wilson, or the foreman in charge of the job-site, will be responsible for supervision of evacuation procedures, checking for proper use of respiratory protection, ensuring all employees are cleared of the hazard area, notification of the facility management, and assembly and head-count of evacuated personnel at designated safe areas.

Proper rescue and first aid to be used in a H₂S exposure

First aid kit and oxygen will be kept in the supervisor's work vehicle and available to all employees. A litter for transport of incapacitated workers will be provided by ARM Environmental Services, Inc., and kept on-site, if one is not available from the facility.

In the event an employee is exposed to H₂S, the employee will immediately be evacuated to a safe briefing area, emergency medical services will be notified, and oxygen will be administered, along with cardiopulmonary resuscitation (CPR) if required. Oxygen will be administered regardless of the condition of the victim to ensure a reduction of the absorption concentration of H₂S. If an employee is rendered unconscious due to H₂S exposure, assigned personnel wearing proper SCBA must respond to perform rescue operations of the victim.

Locations of safe briefing areas

Safe briefing areas will be designated outside the work zone for each work location where the possibility of hazardous atmospheres exist. At least two briefing areas will be designated for each work-site. Workers will be notified of these areas prior to the commencement of work. Andy Wilson will be responsible for evaluation and designation of safe briefing areas for ARM Environmental Services, Inc..

Wind direction awareness and routes of egress

Wind direction will be monitored by Andy Wilson at the beginning of each shift to determine safe egress routes for employees in the event of an evacuation. Wind direction will be regularly checked and noted throughout the work shift for wind shift which will necessarily facilitate a change of egress routes for evacuation. Evacuation routes will be determined for each work area before commencement of work, and routes will be clearly marked and posted in conspicuous areas in the workplace. In the event of an emergency evacuation, Andy Wilson will be responsible for determination and notification of the proper egress route to be used for employee safety.

Confined space and enclosed facility entry procedures

Whenever employees enter a confined space, such as a tank, strict work practices will be followed, including the company permit entry system.

Andy Wilson will ensure that the ARM Environmental Services, Inc. Confined Space Entry program is adhered to, that the air is continually monitored for the presence of H₂S, and that a worker be stationed as a monitor outside of a confined space. Supplied-air respirators, lifelines, and rescue equipment must be immediately available.

See ARM Environmental Services, Inc. Policy on Permit Required Confined Spaces. These procedures will be enforced in all confined work situations.

CHEMICALS WITH POTENTIAL SPILL OR RELEASE LIST

Product or Brand Name	Manufacturer	Hazardous Ingredient

ARM ENVIRONMENTAL SERVICES, INC. HSE

TRAINING RECORD

Trainer:	
Signature:	
Date:	
Content of Training:	
Attendees	
Print Name:	Signature:

POLICY

ARM Environmental Services, Inc. has implemented this policy to ensure no employee is exposed to hazards caused by improper or unsafe use of ladders and/or stairways. ARM Environmental Services, Inc. will provide a training program for each employee using ladders and stairways. The program will enable each employee to recognize hazards related to ladders and stairways and will train each employee in the procedures to be followed to minimize these hazards.

REFERENCES

- §1926.1050 – Ladders and Stairways

RESPONSIBILITIES

Ladder and stairway safety is a responsibility shared between the Company and its employees.

Employer Responsibilities

- Providing and installing all stairway and ladder fall protection systems required by this subpart and will comply with all other pertinent requirements of this subpart before employees begin the work that necessitates the installation and use of stairways, ladders, and their respective fall protection systems
- Ensuring that visual safety inspections of ladders and stairways occur on regular basis
- Training personnel
- Responding quickly to eliminate workplace hazards
- Ensuring all equipment is kept in good repair
- Ensuring employees follow safe job procedures
- Reviewing job hazard analysis whenever there is a significant change to any element of the job or there has been an injury or illness

Safety Committee Responsibilities

- Assist in jobsite ladders and stairways as necessary
- Assist in training employees to recognize and control workplace hazards
- Monitor the workplace for hazards
- Encourage employees to report hazards
- Implement appropriate controls
- Ensure corrective action is taken promptly

Employee Responsibilities

- Assist in jobsite ladder and stairway inspections
- Follow safe job procedures
- Report hazards to a supervisor immediately

TRAINING

Andy Wilson will ensure each employee has been trained by a competent person in the following areas, as applicable: The nature of fall hazards in the work area; The correct procedures for erecting, maintaining, and disassembling the fall protection systems to be used; the proper construction, use, placement, and care in handling of all stairways and ladders; the maximum intended load-carrying capacities of ladder; the standards contained in §1926.1050 – Ladders and Stairways. Retraining will be provided for each employee as necessary so that the employee maintains the understanding and knowledge acquired through previous training required for OSHA compliance.

SAFE PRACTICES

A stairway or ladder will be at all access points with a break in elevation of 19 inches or more without a ramp, runway, sloped embankment, or personnel hoist.

- Employees will not use any spiral stairways that will not be a permanent part of the structure on which construction work is being performed
- A double-cleated ladder or two or more separate ladders will be provided when ladders are the only mean of access or exit from a working area for 25 or more employees, or when a ladder is to serve simultaneous two-way traffic
- When a building or structure has only one point of access between levels, that point of access will be kept clear to permit free passage of employees. When work must be performed or equipment must be used such that free passage at that point of access is restricted, a second point of access will be provided and used
- When a building or structure has two or more points of access between levels, at least one point of access will be kept clear to permit free passage of employees

Ladders

Andy Wilson will ensure the following requirements are adhered to concerning the use of all ladders:

- When portable ladders are used for access to an upper landing surface, the ladder side will extend at least 3 feet above the upper landing surface to which the ladder is used to gain access; or, when such an extension is not possible because of the ladder's length, then the ladder will be secured at its top to a rigid support that will not deflect, and a grasping device, such as a grabrail, will be provided to assist employees in mounting and dismounting the ladder. In no case will the extension be such that ladder deflection under a load would, by itself, cause the ladder to slip off its support
- Ladders will be maintained free of oil, grease, and other slipping hazards
- Ladders used by employees must meet OSHA/ANSI specifications
- Ladder rungs, cleats, and steps will be parallel, level, and uniformly spaced when the ladder is in position for use
- Ladders will not be loaded beyond the maximum intended load for which they were built or beyond their manufacturer's rated capacity. Ladders need to have the load capacity needed for the task
- Ladders will be used only for the purpose for which they were designed
- Non-self-supporting ladders will be used at a 75 degree angle
- Wood job-made ladders with spliced side rails will be used at an angle such that the horizontal distance is one-eighth the working length of the ladder
- Fixed ladders will be used at a pitch no greater than 90 degrees from the horizontal

- Ladders will be used only on stable and level surfaces unless secured
- Ladders will not be used on slippery surfaces without slip-resistant feet unless secured. Slip-resistant feet will not be used as a substitute for care in placing, lashing, or holding a ladder that is used upon slippery surfaces, including flat metal or concrete surfaces that are constructed so they cannot be prevented from becoming slippery
- Ladders placed where they can be displaced by workplace activities or traffic, such as in passageways, doorways, or driveways, will be secured to prevent accidental displacement, or a barricade will be used to keep the activities or traffic away from the ladder
- The area around the top and bottom of ladders will be kept clear
- The top of a non-self-supporting ladder will be placed with the two rails supported equally unless it is equipped with a single support attachment
- Ladders will not be moved, shifted, or extended while occupied
- Ladders will have nonconductive side-rails if they are used where the employee or the ladder could contact exposed energized electrical equipment
- The top or top step of a stepladder will not be used as a step
- Cross-bracing on the rear section of stepladders will not be used for climbing unless the ladders are designed and provided with steps for climbing on both front and rear sections
- Ladders will be inspected by a competent person for visible defects on a periodic basis and after any occurrence that could affect their safe use
- Portable ladders with structural defects will either be immediately marked in a manner that readily identifies them as defective, or be tagged with "DO NOT USE" or similar language, and will be withdrawn from service until repaired
- Fixed ladders with structural defects, such as broken or missing rungs, cleats, or steps, broken or split rails, or corroded components, will be withdrawn from service until repaired. The defective ladder will be withdrawn from service in the following manner: immediately tagged with "Do Not Use" or similar language; marked in a method that readily identifies it as defective; blocked from further use, such as with a plywood attachment that spans several rungs
- Before damaged or defective ladder may be returned to service, repairs will be made that restore the ladder to its original design specifications
- Single-rail ladders will not be used
- When ascending or descending a ladder, the user will face the ladder
- Each employee will use at least one hand to grasp the ladder when progressing up and/or down the ladder
- An employee will not carry any object or load that could cause the employee to lose balance and fall
- Extension ladders will be placed one unit away from the vertical surface for every four units high

Stairways

Andy Wilson will ensure the following requirements are applied to all stairways:

- Stairways that will not be a permanent part of the structure on which construction work is being performed will have landings of not less than 30 inches in the direction of travel and extend at least 22 inches in width at every 12 feet or less of vertical rise
- Stairs will be installed between 30 deg. and 50 deg. from horizontal
- Riser height and tread depth will be uniform within each flight of stairs, including any foundation structure used as one or more treads of the stairs. Variations in riser height or tread depth will not be over ¼-inch in any stairway system
- Where doors or gates open directly on a stairway, a platform will be provided, and the swing of the door will not reduce the effective width of the platform to less than 20 inches
- Metal pan landings and metal pan treads, when used, will be secured in place before filling with concrete or other material
- All parts of stairways will be free of hazardous projections, such as protruding nails
- Slippery conditions on stairways will be eliminated before the stairways are used to reach other levels
- Except during stairway construction, foot traffic is prohibited on stairways with pan stairs where the treads and/or landings are to be filled in with concrete or other material at a later date, unless the stairs are temporarily fitted with wood or other solid material at least to the top edge of each pan. Such temporary treads and landings will be replaced when worn below the level of the top edge of the pan
- Except during stairway construction, foot traffic is prohibited on skeleton metal stairs where permanent treads and/or landings are to be installed at a later date, unless the stairs are fitted with secured temporary treads and landings long enough to cover the entire tread and/or landing area
- Treads for temporary service will be made of wood or other solid material, and will be installed the full width and depth of the stair
- Stairways having four or more risers or rising more than 30 inches, will be equipped with: at least one handrail; one stairrail system along each unprotected side or edge
- Winding and spiral stairways will be equipped with a handrail offset sufficiently to prevent walking on those portions of the stairways where the tread width is less than 6 inches
- The height of stairrails will be as follows will be not less than 36 inches from the upper surface of the stairrail system to the surface of the tread, in line with the face of the riser at the forward edge of the tread
- Midrails, screens, mesh, intermediate vertical members, or equivalent intermediate structural members, will be provided between the top rail of the stairrail system and the stairway steps
 - Midrails will be located at a height midway between the top edge of the stairrail system and the stairway steps
 - Screens or mesh will extend from the top rail to the stairway step, and along the entire opening between top rail supports
 - When intermediate vertical members, such as balusters, are used between posts, they will be not more than 19 inches apart
 - Other structural members will be installed such that there are no openings in the stairrail system that are more than 19 inches wide

- Handrails and the top rails of stairrail systems will be capable of withstanding, without failure, a force of at least 200 pounds applied within 2 inches of the top edge, in any downward or outward direction, at any point along the top edge
- The height of handrails will be not more than 37 inches or less than 30 inches from the upper surface of the handrail to the surface of the tread
- When the top edge of a stairrail system also serves as a handrail, the height of the top edge will be not more than 37 inches or less than 36 inches
- Stairrail systems and handrails will be so surfaced as to prevent injury to employees from punctures or lacerations, and to prevent snagging of clothing
- Handrails will provide an adequate handhold for employees grasping them to avoid falling
- The ends of stairrail systems and handrails will be constructed so as not to constitute a projection hazard
- Handrails that will not be a permanent part of the structure being built will have a minimum clearance of 3 inches between the handrail and walls, stairrail systems, and other objects
- Unprotected sides and edges of stairway landings will be provided with guardrail systems

ARM ENVIRONMENTAL SERVICES, INC. HSE

TRAINING RECORD

Trainer:	
Signature:	
Date:	
Content of Training:	
Attendees	
Print Name:	Signature:

POLICY

ARM Environmental Services, Inc. has implemented this Control of Hazardous Energy (COHE) Program and Lockout/Tagout (LOTO) procedures to ensure that employees are properly trained, aware of hazards associated with Lockout/Tagout, and correctly informed of procedures, policies, and practices to prevent or, if possible, eliminate these hazards. This program covers the servicing and maintenance of machines and equipment in which the unexpected energizing or starting of the machines or equipment, or the release of stored energy, could cause injury to employees.

REFERENCES

- § 1910.147 – The control of hazardous energy (lockout/tagout)

ROLES AND RESPONSIBILITIES

Andy Wilson is the supervisor responsible for ensuring the following training, engineering controls, work practices, and safety procedures are enforced. Andy Wilson must ensure that employees, sub-contractors comply with the LOTO program and all client requirements. The performance of lockout/tagout procedures at ARM Environmental Services, Inc. will be inspected/evaluated at least annually by Andy Wilson for compliance with company policy. Inspections will be documented and date, equipment, and employee(s) reviewed will be recorded.

All Employees

Failure to comply with proper lockout/tagout procedures is grounds for disciplinary action. Any unauthorized removal of warning tags or lockout devices will be grounds for immediate termination of employment.

OSHA has defined three different categories of employees, depending upon their exposure to hazardous energy

- Authorized Employees
- Affected Employees
- Other Employees

Authorized Employees

An authorized employee is a person who locks out or tags out machines or equipment in order to perform servicing or maintenance on those machines or equipment. An affected employee becomes an authorized employee when that employee's duties include performing servicing or maintenance covered under this section.

- Affected employees will be notified by Andy Wilson or the authorized employee of the application and removal of lockout devices or tagout devices. Notification will be given before the controls are applied, and after they are removed from the machine or equipment
- Locking out the appropriate equipment
- Identifying the lockout
- Verifying the lockout
- Maintaining the key to their lock in their possession
- Checking the work area and replacing guards or reactivating safety devices as appropriate, before removing the lockout
- Removing their lock when the job is complete
- Following the requirements of this standard when either preparing equipment for maintenance or actually performing maintenance activities
- Signing and dating tags

Affected Employees

Affected employees are those who operate or use a machine or equipment on which servicing or maintenance is being performed under lockout or tagout, or whose job requires them to work in an area in which such servicing or maintenance is being performed. Affected employees may assist when testing the equipment de-energized.

Other Employees

Other employees (those whose work activities are or may be in an area where energy control procedures may be utilized) may not attempt to restart or reenergize machines or equipment that are locked out or tagged

TRAINING

Andy Wilson will provide training to ensure the purpose and function of the Lockout / Tagout Program are understood by employees. The training program will ensure that employees acquire the knowledge and skills needed to safely apply, use, and remove energy controls. Each authorized employee will receive training in how to recognize applicable hazardous energy sources, the type and magnitude of the energy available in the workplace, and the methods and means necessary for energy isolation and control. Affected and other employees will be trained on these topics:

- An overview of the applicable LOTO regulations
- Hazards associated with stored energy
- Recognition of lockout devices
- Purpose of the energy control program
- LOTO procedures

Training will be documented using sign-in sheets that include the topics covered, and the dates and times of training sessions.

All affected / authorized employees will retrain in, and review, lockout-tagout procedures whenever there is a change in machines, assignments, equipment, or processes that presents a new hazard, or when there is a change in the energy control procedures. This retraining will be completed and documented on an ongoing basis by employees' area supervisor.

Employees must also receive additional training and demonstrate understanding if inspection or conditions show that the employees are not following established procedures or that safety has been compromised.

When tagout systems are used, employees will also be trained in the following limitations of tags.

- Tags are essentially warning devices affixed to energy isolating devices, and do not provide the physical restraint on those devices that is provided by a lock
- When a tag is attached to an energy isolating means, it is not to be removed without permission of the authorized person responsible for it, and it is never to be bypassed, ignored, or otherwise defeated
- Tags must be legible and understandable by all authorized employees, affected employees, and all other employees whose work operations are or may be in the area, in order to be effective
- Tags and their means of attachment must be made of materials that will withstand the environmental conditions encountered in the workplace
- Tags may evoke a false sense of security, and their meaning needs to be understood as part of the overall energy control program
- Tags must be securely attached to energy isolating devices so that they cannot be inadvertently or accidentally detached during use

Retraining

Changes of job assignments, changes in materials used, or any non-routine tasks involving energy control procedures will require notification and/or retraining of effected employees. Andy Wilson will inform or retrain employees of any new or additional hazards, detail methods of energy control necessary for the job. Notifications and retraining will be documented with the name of employee, date, description of action taken, and verification by Andy Wilson.

THE SOURCES OF STORED ENERGY THAT REQUIRE LOCKOUT ARE:

- Electrical: service panels, outlets, transformers, motors, capacitors
- Mechanical: spring-loaded equipment, tensioning devices
- Hydraulic: rams, oil-powered equipment
- Pneumatic: compressed-air equipment
- Kinetic / Gravity: counterweights, flywheels
- Fluids / Steam: heating pipes, steam lines

PROTECTIVE MATERIALS AND HARDWARE

Locks, tags, chains, wedges, key blocks, adapter pins, self-locking fasteners, or other hardware will be provided by the employer for isolating, securing or blocking of machines or equipment from energy sources.

Lockout devices and tagout devices will be singularly identified; will be the only devices(s) used for controlling energy; will not be used for other purposes; and will meet the following requirements:

Durable

- Lockout and tagout devices will be capable of withstanding the environment to which they are exposed for the maximum period of time that exposure is expected
- Tagout devices will be constructed and printed so that exposure to weather conditions or wet and damp locations will not cause the tag to deteriorate or the message on the tag to become illegible
- Tags will not deteriorate when used in corrosive environments such as areas where acid and alkali chemicals are handled and stored

Standardized

Lockout and tagout devices will be standardized within the facility in at least one of the following criteria: color; shape; or size, and additionally, in the case of tagout devices, print and format will be standardized.

Substantial

- Lockout devices. Lockout devices will be substantial enough to prevent removal without the use of excessive force or unusual techniques, such as with the use of bolt cutters or other metal cutting tools
- Tagout devices. Tagout devices, including and their means of attachment, will be substantial enough to prevent inadvertent or accidental removal. Tagout device attachment means will be of a non-reusable type, attachable by hand, self-locking, and non-releasable with a minimum unlocking strength of no less than 50 pounds and having the general design and basic characteristics of being at least equivalent to a one-piece, all-environment-tolerant nylon cable tie

Identifiable

Lockout devices and tagout devices will indicate the identity of the employee applying the device(s).

Tagout devices will warn against hazardous conditions if the machine or equipment is energized and will include a legend such as the following: Do Not Start, Do Not Open, Do Not Close, Do Not Energize, Do Not Operate.

SAFE PRACTICES

This policy applies to the control of hazardous energy during servicing and / or normal maintenance of machines and equipment if:

- An employee is required to remove or bypass a guard or other safety device
- An employee is required to place any part of his or her body into an area on a machine or piece of equipment where work is being performed at or upon the point of operation, or when an associated danger zone exists during a machine's operating cycle

EXCEPTION: Minor tool changes and adjustments that take place during normal production operations are not covered by the OSHA Standard if they are routine, repetitive, and integral to the use of the equipment for production, provided that the work is performed using alternative measures which provide effective protection.

The policy does not apply to:

- Work on cord-and-plug-connected electrical equipment when the employee performing the service or maintenance controls energizing by unplugging the equipment from the energy source
- Hot tap operations involving transmission systems for substances such as gas, steam, water, or petroleum, when they are performed on pressurized pipelines. However, it must be demonstrated that the continuity of service is essential, shut off of the system is impractical, and special equipment is used which provides effective protection

When a machine can be unplugged and there is no residual stored energy, a LOTO procedure need not be used. In that case, use a DO NOT OPERATE tag to warn employees that the equipment is out of order.

- If an energy source can be locked out, this method will be utilized. A “Lockout Device” utilizes a lock, either key or combination, to hold an energy isolating device in a safe position
- If an energy source cannot be locked out, a tagout system will be utilized. A “Tagout Device” is a warning tag (weather and chemical resistant) standardized in size, color, with wording warning of hazardous energy such as: (Do Not Start) (Do Not Open) (Do Not Close) (Do Not Energize) (Do Not Operate)
- Whenever equipment is replaced or undergoes major repair, renovation, or modification, and whenever new machines or equipment are installed, energy isolating devices for such machine or equipment will be designed to accept a lockout device.
- Lockout/Tagout devices will be clearly marked to indicate the identity of the employee applying the device
- Lockout or tagout will be performed only by the authorized employees who are performing the servicing or maintenance
- Affected employees will be notified by Andy Wilson or authorized employee of the application and removal of lockout devices or tagout devices. Notification will be given before the controls are applied, and after they are removed from the machine or equipment

Established ARM Environmental Services, Inc. procedures for energy control and the application of lockout or tagout devices covers the following elements and actions and will be done in the following sequence:

Sequence of Lockout

1. The authorized employee will notify all affected employees that servicing or maintenance is required on a machine or equipment, and that the machine or equipment must be shut down and locked out to perform the servicing or maintenance.
2. The authorized employee will identify the type and magnitude of the energy that the machine or equipment uses, will understand the hazards of each energy source and will know the methods to control the energy.
3. When the electrical disconnect is attached (or adjacent) to the equipment, the motor stop button will be depressed and the disconnect handle placed in the “Off” position. The disconnect handle should be operated while standing to one side of the disconnect, rather than in front of the switch. This is a safety precaution in case the parts in the switch explode. The authorized employee should attach his / her lock to the handle of the disconnect and remove the key.
4. If a switch or disconnect cannot be locked out for any reason, an electrician must remove the fuses before any work is started.
5. Stored or residual energy such as that in capacitors, springs, rotating flywheels and hydraulic systems, and in air / gas, steam or water pressure lines must be dissipated or restrained by methods such as grounding, repositioning, blocking or venting. If the accumulation of stored energy is possible, isolation must be verified continuously until servicing or maintenance is completed.

6. Equipment using hydraulic pressure will be locked out by placing the hydraulic pump motor electrical disconnect switch in the "Off" position, applying a lock to the disconnect and bleeding off residual pressure in the piping system if the energy could potentially endanger personnel.
7. The authorized employee will ensure that the equipment is completely disconnected from all energy source(s) by operating the push button or other normal operating controls or by otherwise testing to make certain the machine / equipment will not operate.
8. Return operating control(s) to neutral or "Off" position after verifying the isolation of the equipment.
9. The machine is now locked out and service or repairs can safely begin.
10. If there are any doubts about the above procedure, the authorized employee will contact his / her supervisor before proceeding.

Procedures Involving More than One Person (Group Lockout)

In the preceding steps, if more than one individual is required to lock the energy-isolating device(s), they will utilize a procedure which affords the employees a level of protection equivalent to that provided by implementing a personal lockout or tagout device. When an energy-isolating device cannot accept multiple locks, a multiple lockout or tagout device (hasp) may be used.

There will be authorized employees responsible for a set number of employees protected by a single lock under the authorized employee's responsibility.

Restoring Equipment to Service

When servicing or maintenance is completed and the machine or equipment is ready to return to normal operating condition, the authorized person will take the following steps:

1. Visually inspect the machine or equipment and the immediate area around the machine or equipment to ensure that nonessential items have been removed and that the machine or equipment components are operationally intact.
2. Visually inspect the work area to ensure that all employees have been safety positioned or removed from the area.
3. Verify that the controls are in neutral.
4. Remove the lockout device(s) and re-energize the machine or equipment.

Note: Some forms of blocking may require the machine to be re-energized before they can be safely removed.

5. Notify affected employees that the servicing or maintenance is completed and the machine or equipment is ready to use.

Procedures for Removing Abandoned Locks

If a safety lock has been left in place by an employee who has left the building, it will be removed only by according to the following procedures.

Before the lock is removed:

- A thorough inspection of the equipment will be made by the supervisor responsible for the area
- Andy Wilson will confirm that the authorized employee who applied the lockout device is not at the facility
- Andy Wilson will remove the lock, once he / she has determined that starting up the equipment will not endanger other personnel
- Andy Wilson will make all reasonable efforts to contact the authorized employee to inform him / her that his / her lockout or tagout device has been removed
- Andy Wilson will ensure that the authorized employee has knowledge of this release before he / she resumes work at the facility
- Each time it is necessary to remove / cut a safety lock, a written report will be prepared by the person authorized to remove the lock and a copy will be sent to the ARM Environmental Services, Inc. and contractor (if applicable) leadership
- In situations where lockout or tagout devices must be temporarily removed and the machine or equipment energized to test or position, the following procedures will be followed:
 1. Clear the machine or equipment of tools and materials.
 2. Remove employees from the machine or equipment area.
 3. Remove the lockout or tagout devices as specified.
 4. Energize and proceed with testing or positioning.
 5. De-energize all systems and reapply energy control measures to continue the servicing and/or maintenance.

This procedure will be verified and documented by personnel performing it.

- Whenever outside servicing personnel are to be engaged in operations requiring lockout or tagout procedures, Andy Wilson and the outside employer will inform each other of their respective lockout or tagout procedures
- Andy Wilson will ensure that employees understand and comply with the restrictions and prohibitions of the outside employer's energy control program
- When servicing and/or maintenance is performed by a crew, craft, department, or other group, they will utilize a procedure which affords the employees a level of protection equivalent to that provided by the implementation of a personal lockout or tagout device. Group lockout or tagout devices will be used with the following specific requirements:
 - Primary responsibility is vested in Andy Wilson for a set number of employees working under the protection of a group lockout or tagout device (such as an operations lock)
 - Provision for Andy Wilson to ascertain the exposure status of individual group members with regard to the lockout or tagout of the machine or equipment
 - When more than one crew, craft, department, etc. is involved, assignment of overall job-associated lockout or tagout control responsibility to Andy Wilson to coordinate affected work forces and ensure continuity of protection
 - Each authorized employee will affix a personal lockout or tagout device to the group lockout device, group lockbox, or comparable mechanism when he or she begins work, and will remove those devices when he or she stops working on the machine or equipment being serviced or maintained
- During shift or personnel changes, procedures will be utilized to ensure the continuity of lockout or tagout protection, including provision for the orderly transfer of lockout or tagout device protection between off-going and oncoming employees, to minimize exposure to hazards from the unexpected energization or start-up of the machine or equipment, or the release of stored energy. Documentation will be maintained as to personnel, equipment, and particular Lockout/Tagout procedures involved in a specific ongoing operation.
- Lockout procedures are to be utilized over tagout procedures, where possible.
- Locks and tags used for lockout or tagout procedures will be clearly marked with identification of the employee applying the device.

General Safety Considerations

Full employee protection must be used when a tagout device is used on an energy isolating device which is capable of being locked out. The tagout device will be attached at the same location that the lockout device would have been attached, and the employer will demonstrate that the tagout program will provide a level of safety equivalent to that obtained by using a lockout program.

When testing or positioning machines, equipment or components in situations in which lockout or tagout devices must be temporarily removed, the following sequence of actions will be followed: clear the machine or equipment of tools and materials, remove employees from the machine or equipment area, remove the lockout or tagout devices, energize and proceed with testing or positioning, de-energize all systems and reapply energy control measures.

Whenever outside servicing personnel are to be engaged in activities requiring LOTO, the on-site company and the outside employer will inform each other of their respective lockout or tagout procedures. The on-site employer will ensure that his/her employees understand and comply with the restrictions and prohibitions of the outside employer's energy control program.

The Lockout /Tagout procedures for ARM Environmental Services, Inc. are administered by Andy Wilson, and will be those described in the following sections.

ADDITIONAL SAFETY CONSIDERATIONS

The company will conduct a periodic inspection of the energy control procedure, at least annually, to ensure that the procedure and the requirements are being followed.

The company will conduct testing or positioning of machines, equipment or components in situations in which lockout or tagout devices must be temporarily removed. The following sequence of actions will be followed:

- Clear the machine or equipment of tools and materials
- Remove employees from the machine or equipment area
- Remove the lockout or tagout devices
- Energize and proceed with testing or positioning
- Deenergize all systems and reapply energy control measures

SPECIFIC ENERGY CONTROL PROCEDURE (PAGE 1 OF 2)

Procedure Number		Date			
Completed By					
Machine(s) or equipment utilizing this procedure					
Number of locks required					
Other lockout devices required					
PROCEDURES FOR CONTROLLING HAZARDOUS ENERGY					
1. Sources of Hazardous Energy					
<input type="checkbox"/>	Electrical	<input type="checkbox"/>	Natural Gas	<input type="checkbox"/>	Springs
<input type="checkbox"/>	Hydraulic	<input type="checkbox"/>	Gravity	<input type="checkbox"/>	Steam
<input type="checkbox"/>	Chemical	<input type="checkbox"/>	Pneumatic	<input type="checkbox"/>	Thermal
<input type="checkbox"/>	Other				
2. Notify affected employees that the machine is about to be shut down and locked out.					
<input type="checkbox"/>	Special Instructions				
3. Shut down the machine using normal stopping procedures.					
<input type="checkbox"/>	Special Instructions				
4. Isolate all energy sources listed above.					
<input type="checkbox"/>	Special Instructions				

SPECIFIC ENERGY CONTROL PROCEDURE (PAGE 2 OF 2)

5. a. Apply locks to all isolating devices installed in Step Four.					
<input type="checkbox"/>	Special Instructions				
5. b. If a tag is used in lieu of a lock when an energy-isolating device is incapable of locking out a piece of equipment, the following additional safety precaution will be taken:					
<input type="checkbox"/>	Special Instructions				
6. Block or dissipate all stored energy in rams, flywheels, springs, pneumatic or hydraulic systems, etc.					
<input type="checkbox"/>	Special Instructions				
7. Verify that the machine is locked out by testing the machine operating controls. RETURN ALL CONTROLS TO THE "NEUTRAL" OR "OFF" POSITION AFTER TESTING.					
<input type="checkbox"/>	Special Instructions				

ARM ENVIRONMENTAL SERVICES, INC. HSE

LOCKOUT PROCEDURE AUDIT/INSPECTION

Employee Auditing/Inspecting		Date	
Task/Equipment Description			
		YES	NO
1. Is there a written lockout procedure for this machine or piece of equipment?		<input type="checkbox"/>	<input type="checkbox"/>
2. Is individual familiar with lockout procedures for specific piece of equipment?		<input type="checkbox"/>	<input type="checkbox"/>
3. Has individual performing lockout been trained?		<input type="checkbox"/>	<input type="checkbox"/>
4. Has machine or equipment been shut down?		<input type="checkbox"/>	<input type="checkbox"/>
5. Has machine or equipment been isolated?		<input type="checkbox"/>	<input type="checkbox"/>
6. Has individual placed lockout devices? (lockout and tag)		<input type="checkbox"/>	<input type="checkbox"/>
7. Has individual released all stored energy or placed a positive mechanical device in place to prevent accidental release?		<input type="checkbox"/>	<input type="checkbox"/>
8. Has individual tested the machine or equipment to verify effectiveness of the lockout device?		<input type="checkbox"/>	<input type="checkbox"/>
9. Upon removal of lockout device, has individual communicated to appropriate personnel that machine/equipment is back in service?		<input type="checkbox"/>	<input type="checkbox"/>
10. Procedure followed?		<input type="checkbox"/>	<input type="checkbox"/>
Recommendations/Corrective Action			
Audited/Inspected By			
Employee Signature			

PURPOSE

This procedure establishes the minimum requirements for the lockout of energy isolating devices whenever maintenance or servicing is done on machines or equipment. It will be used to ensure that the machine or equipment is stopped, isolated from all potentially hazardous energy sources and locked out before employees perform any servicing or maintenance where the unexpected energization or start-up of the machine or equipment or release of stored energy could cause injury.

COMPLIANCE WITH THIS PROGRAM

All employees are required to comply with the restrictions and limitations imposed upon them during the use of lockout. The authorized employees are required to perform the lockout in accordance with this procedure. All employees, upon observing a machine or piece of equipment which is locked out to perform servicing or maintenance will not attempt to start, energize, or use that machine or equipment. Type of compliance enforcement to be taken for violation of the above:

SEQUENCE OF LOCKOUT

1. Notify all affected employees that servicing or maintenance is required on a machine or equipment and that the machine or equipment must be shut down and locked out to perform the servicing or maintenance.

Affected employees and how to notify:

Name(s)	
Job Title(s)	

2. The authorized employee will refer to the company procedure to identify the type and magnitude of the energy that the machine or equipment utilizes, will understand the hazards of the energy, and will know the methods to control the energy.

Type(s) and magnitude(s) of energy, its hazards and the methods to control the energy.

3. If the machine or equipment is operating, shut it down by the normal stopping procedure (depress stop button, open switch, close valve, etc.).

Machine(s) or Equipment operating controls:

Type(s)	Location(s)

4. Deactivate the energy isolating device(s) so that the machine or equipment is isolated from the energy source(s).

Type(s) and location(s) of energy isolating devices.

LOCKOUT PROCEDURE FOR ARM ENVIRONMENTAL SERVICES, INC. (PAGE 2 OF 2)

5. Lock out the energy isolating device(s) with assigned individual lock
(Locks will be labeled with individuals name and number).

Lock #		Assigned To	
Lock #		Assigned To	
Lock #		Assigned To	
Lock #		Assigned To	

6. Stored or residual energy (such as that in capacitors, springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure, etc.) must be dissipated or restrained by methods such as grounding, repositioning, blocking, bleeding down, etc.

Type(s) of stored energy - methods to dissipate or restrain.

7. Ensure that the equipment is disconnected from the energy source(s) by first checking that no personnel are exposed, then verify the isolation of the equipment by operating the push button or other normal operating control(s) or by testing to make certain the equipment will not operate.

Caution: Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment.

Method of verifying the isolation of the equipment.

8. The machine or equipment is now locked out.

RESTORING EQUIPMENT TO SERVICE

When the servicing or maintenance is completed and the machine or equipment is ready to return to normal operating condition, the following steps will be taken:

1. Check the machine or equipment and the immediate area around the machine or equipment to ensure that non-essential items have been removed and that the machine or equipment components are operationally intact.
2. Check the work area to ensure that all employees have been safely positioned or removed from the area.
3. Verify that the controls are in neutral.
4. Remove the lockout devices and reenergize the machine or equipment.
5. Note: The removal of some forms of blocking may require re-energization of the machine before safe removal.
6. Notify affected employees that the servicing or maintenance is completed and the machine or equipment is ready for use.

POLICY

ARM Environmental Services, Inc. has implemented this policy to ensure no employee is exposed to noise that exceeds the action levels. Andy Wilson is the designated supervisor for ensuring the following engineering controls and work practices will be enforced:

Hearing protectors are available upon request from Andy Wilson at no cost to all employees exposed to an 8-hr. time-weighted average of 85 decibels. Hearing protection will be replaced as necessary. Each employee will be properly trained in the use, care, and fitting of hearing protectors. Andy Wilson will ensure that hearing protectors are worn. Employees will be given the opportunity to select their hearing protectors from a variety of suitable hearing protectors.

ARM Environmental Services, Inc. will provide a continuing effective hearing conservation program when employees are exposed to sound levels greater than 85 dBs on an 8 hour time-weighted average basis.

When information indicates that employee exposure may equal/exceed the 8 hr time-weighted avg. of 85 decibels, Andy Wilson will implement a monitoring program to identify employees to be tested.

TRAINING

Upon initial hiring, all employees who are exposed to action level noise will be trained in the hazards presented by excessive noise levels in the workplace, and the use and care of hearing protection devices. Training will be repeated annually for each employee and updated to reflect changes in personal protective equipment (PPE) and work processes or requirements. Andy Wilson will make copies of the noise exposure procedures available to affected employees and will also post a copy in the workplace and allow OSHA access to records.

HEARING PROTECTION

Hearing protectors are available upon request from Andy Wilson at no cost to all employees exposed to an 8-hr. time-weighted average of 85 decibels. Hearing protection will be replaced as necessary. Each employee will be properly trained in the use, care, and fitting of hearing protectors. Andy Wilson will ensure that hearing protectors are worn. Employees will be given the opportunity to select their hearing protectors from a variety of suitable hearing protectors.

Andy Wilson will ensure that hearing protectors are worn:

- By an employee who is required by paragraph (b)(1) of this section to wear personal protective equipment; and
- By any employee who is exposed to an 8-hour time-weighted average of 85 decibels or greater, and who:
 - Has not yet had a baseline audiogram established pursuant to paragraph (g)(5)(ii); or
 - Has experienced a standard threshold shift

AUDIO MONITORING

Audio monitoring will be implemented if it is believed noise levels in work areas are approaching or exceed action level limits. If monitoring results indicate exposures equaling or exceeding safe limits, an employee will be included in a hearing conservation program.

All continuous, intermittent, and impulsive sound levels from 80 decibels to 130 decibels shall be integrated into the noise measurements. Instruments used to measure employee noise exposure shall be calibrated to ensure measurement accuracy.

Monitoring shall be repeated whenever a change in production, process, equipment or controls increases noise exposures to the extent that:

- Additional employees may be exposed at or above the action level; or
- The attenuation provided by hearing protectors being used by employees may be rendered inadequate to meet the requirements

Employee notification. The employer shall notify each employee exposed at or above an 8-hour time-weighted average of 85 decibels of the results of the monitoring.

Observation of monitoring. The employer shall provide affected employees or their representatives with an opportunity to observe any noise measurements conducted pursuant to this section.

When employees are subjected to sound exceeding those listed in the below table, feasible administrative or engineering controls shall be utilized. If such controls fail to reduce sound levels within the levels of table, personal protective equipment shall be provided and used to reduce sound levels within the levels of the table overleaf.

ARM ENVIRONMENTAL SERVICES, INC. HSE

DURATION OF EXPOSURE	SOUND LEVEL
8 hours	90 decibels
6 hours	92 decibels
4 hours	95 decibels
3 hours	97 decibels
2 hours	100 decibels
1.5 hours	102 decibels
1 hour	105 decibels
30 minutes	110 decibels
15 minutes	115 decibels

Methods of Control

All monitoring results shall be reviewed by the site safety representative. Upon receiving results that indicate noise levels to be above the action level, the site safety representative shall determine which of the following control methods shall be utilized to reduce or eliminate the hazard:

- Andy Wilson shall first determine if any means of engineering the problem out are possible. Some of these means may include such things as eliminating the job all together, shortening the length of the job, or installing barriers to reduce noise levels
- If engineering controls are not feasible, then administrative controls shall be taken into consideration. This type of control would include such activity as using job rotation
- Only when it is not feasible for management to implement a type of engineering or administrative control will PPE be used as the primary control method

AUDIOMETRIC TESTING

Andy Wilson will maintain an audiometric testing program by making audiometric testing available to all employees whose exposures equal or exceed an 8-hr. time-weighted avg. 85 decibels. The program is provided at no cost to employees.

Within 6 months of an employee's first exposure at or above the action level, ARM Environmental Services, Inc. shall establish a valid baseline audiogram against which future audiograms can be compared. When a mobile van is used, the baseline shall be established within 1 year.

Testing to establish a baseline audiogram will be preceded by at least 14 hours without exposure to workplace noise. Hearing protection may be used to meet the requirement. Employees will also be notified to avoid high levels of noise.

ARM ENVIRONMENTAL SERVICES, INC. HSE

At least annually after obtaining the baseline audiogram, Andy Wilson will obtain a new audiogram for each employee exposed at or above an 8-hour time-weighted average of 85 decibels. Each employee's annual audiogram shall be compared to that employee's baseline audiogram to determine if the audiogram is valid and if a standard threshold shift has occurred. If a comparison of the annual audiogram to the baseline audiogram indicates a standard threshold shift, the employee shall be informed of this fact in writing, within 21 days of the determination.

If a standard threshold shift occurs, use of hearing protection shall be re-evaluated and/or refitted and if necessary a medical evaluation may be required. The following procedures will be implemented:

- Employees not using hearing protectors will be fitted with hearing protectors, trained in their use and care, and required to use them
- Employees already using hearing protectors will be refitted and retrained in the use of hearing protectors and provided with hearing protectors offering greater attenuation if necessary
- Employees will be referred for a clinical audiological evaluation or an otological examination, as appropriate, if additional testing is necessary or if it is suspected that a medical pathology of the ear is caused or aggravated by the wearing of hearing protectors
- Employees will be informed of the need for an otological examination if a medical pathology of the ear that is unrelated to the use of hearing protectors is suspected
- Audiometric evaluation and testing conducted by a licensed physician using the guidelines contained in §1910.95 (g), and is available to all employees whose work requirements equals or exceeds an 8 hr. time-weighted average 85 decibels on a regular basis at no cost to the employee.
- Proctored hearing protector attenuation will be evaluated for the specific noise environments in which the protector will be used. The methods used for measuring attenuation will be one of the four methods described in CCR Title 8, Section 5098, Appendix E
- Hearing protectors must attenuate the noise level to an 8-hour TWA of 90 dBA or less
- For employees who have experienced a standard threshold shift, the attenuation must reduce the sound level to an 8-hour TWA of 85 dBA or less
- Re-evaluation of hearing protectors will be done whenever a workplace noise level increase renders the hearing protector's attenuation inadequate
- Workplaces in which the noise level exceeds 85 dBA will have signs posted. Signs will read "Hearing Protectors Required"

Hearing protection is available at no cost to all employees upon request from the jobsite foreman or company office.

RECORDKEEPING

ARM Environmental Services, Inc. will keep all records collected by this policy, and specifically maintain noise exposure measurement records for at least two years and audiometric test records for the entire length of each employee's employment.

These records will also be transferred to any successor employer if ARM Environmental Services, Inc. ceases to do business.

POLICY

ARM Environmental Services, Inc. has implemented this safety program to ensure the protection of personnel from hazards on the job which may be safeguarded against by the proper use of Personal Protective Equipment (PPE).

Andy Wilson is the supervisor responsible for ensuring the following work practices are enforced.

PPE will be provided at no cost for all work required by ARM Environmental Services, Inc. and employees are required by company policy to use only proper company PPE at all times when required on the job or on company property. Failure to use PPE will result in disciplinary action against the violating employee.

- Andy Wilson will ensure that if employee-owned PPE is used, ARM Environmental Services, Inc. is responsible that it will be adequate for the application, properly maintained, and kept in sanitary condition
- PPE will be issued and fitted to each affected employee individually. Employees must demonstrate proficiency in donning and doffing equipment, and proper techniques of cleaning and maintaining their respective equipment
- Defective or damaged PPE will NOT be used. Defective or damaged PPE will be immediately tagged "OUT OF SERVICE", removed from service, and replaced with serviceable equipment. PPE will be inspected by the individual employee at the beginning of each work shift
- PPE must be used, stored, and maintained in a sanitary condition. All PPE must be cleaned and/or disinfected and stored according to manufacturer's recommendations

TRAINING

Andy Wilson will ensure all employees are properly trained in the recognition and assessment of hazards, the proper selection and use of PPE required for the hazard and how to control the hazards.

PPE training will include when it is necessary; what is necessary; how to don, doff, adjust, and wear PPE; the limitations, proper care, maintenance, useful life and disposal of PPE.

Retraining of employees is required when the workplace changes, making the earlier training obsolete; the type PPE changes; or when the employee demonstrates lack of use, improper use, or insufficient skill or understanding.

Employees will be trained on initial hiring to use, maintain, clean and disinfect, store, and service PPE properly. Employees will receive refresher training on PPE at least annually, or as work requirements, changing job assignments, changing equipment, or environment warrants it. Any employee who demonstrates a lack of knowledge or understanding of any aspect of PPE use or maintenance will be re-trained. An employee must verify his/her understanding of training content as a condition of employment.

All training will be documented and will include the employee name, the dates of training, and the certification subject.

HAZARD ASSESSMENT

Andy Wilson will perform a hazard assessment of each jobsite prior to commencement of work to ascertain if hazards are present or likely to be encountered, what engineering controls may be implemented to minimize hazards, and what PPE is necessary for the performance of the job. The hazard assessment will include the certifier's name, signature, date(s), and identification of assessment documents. Affected employees will be notified of hazards, engineering controls needed, and PPE required.

GENERAL REQUIREMENTS

PPE devices should be relied on as the final protection against hazards, used in conjunction with guards, engineering controls, and sound manufacturing practices. It is necessary to consider certain general guidelines for assessing the foot, head, eye and face, and hand hazard situations that exist in an occupational operation or process, and to match the protective devices to the particular hazard. It is the responsibility of Andy Wilson to exercise common sense and appropriate expertise to accomplish these tasks.

After completion of a Hazard Identification and Risk Assessment, the general procedure for selection of protective equipment is to:

- Become familiar with the potential hazards and the type of protective equipment that is available, and what it can do; i.e., splash protection, impact protection, etc
- compare the hazards associated with the environment; i.e., impact velocities, masses, projectile shape, radiation intensities, with the capabilities of the available protective equipment
- select the protective equipment which ensures a level of protection greater than the minimum required to protect employees from the hazards
- fit the user with the protective device and give instructions on care and use of the PPE. It is very important that end users be made aware of all warning labels for and limitations of their PPE

PERSONAL WORK CLOTHING

The minimum work clothing acceptable is long pants, good work shoes or boots, and a shirt that completely covers the worker's shoulders (minimum 4-inch sleeves) and provides adequate protection against such hazards as concrete splash, abrasions to the skin, oil or grease spills, and slag from welding or cutting.

Welders should be cautioned against wearing any type of highly flammable clothing, such as polyesters, double-knits, etc. Wool and specially treated cotton are two natural fibers that are fire-resistant and comfortable. Heat-resistant material, such as leather, is used to protect against dry heat, flames, and molten material. Fire-resistant clothing also protects from high workplace temperature and electrical operations.

For the most part, construction workers should wear clothing that is reasonably snug, particularly about the neck, wrists, and ankles. Employees shall not wear loose clothing, rings, watches, necklaces or long hair, all of which may catch in power driven equipment.

Rubber and rubberized fabrics, neoprene, and plastics protect against some acids and chemicals. Disposable chemical suits are used to protect against dusty materials and materials that splash. For materials that have are extremely toxic, a fully encapsulated suit may be necessary.

Arc rated clothing shall be worn during work activities that have been identified to present an arc flash potential. The clothing will be rated for the arc flash potential of the task. Such clothing may include long sleeved FR shirts, FR pants, face shield, and appropriate class rubber gloves. The employee shall not wear synthetic fiber clothing under Fire Resistant clothing. Refer to the Electrical Safety and Arc Flash policy for clothing required for arc flash potential posed by the task and equipment.

EYE AND FACE PROTECTION

To prevent possible eye and face injuries suitable eye protection shall be worn. Potential eye and face injuries occur from flying objects, liquid chemicals, acids or caustic liquids, molten metal, chemical gases or vapors, and light radiation. Eye protection shall provide adequate protection, be reasonably comfortable, fit snugly, be durable, capable of being disinfected and cleaned, kept sanitary and in good repair. When selecting eye and face protection consider what kind and degree of hazard is present.

Eye or face protection shall comply with American National Standards Institute (ANSI) Z87.1. If you have questions about eye or face protection ask your supervisor or refer to the manufacture instructions.

FOOT AND LEG PROTECTION

Most foot injuries occur from employees not wearing protective footwear. The typical foot injury is caused from objects falling fewer than 4 feet. For protection from falling or rolling objects, sharp objects, molten metal, hot surfaces, and slippery surfaces, employees shall use appropriate foot guards, steel toe safety shoes, steel toe safety boots, metatarsal guards and leggings. Leggings protect the lower leg and feet from molten metal and welding sparks.

Leather work shoes/boots are required and safety shoes are recommended for use by all employees. Safety shoes should be sturdy, have an impact resistant toe, and have puncture resistant soles. Protective footwear shall comply with ANSI Z41-1991.

When working with wet concrete, workers shall wear rubber boots.

Shoes and boots shall be kept in good repair, and those with worn heels of thin or worn soles should not be permitted. In addition, the wearing of sneakers, sandals, or shoes that have been slit or have holes cut in them, shall not be permitted.

HAND AND ARM PROTECTION

Arm and hand protection is used to prevent skin contact and absorption with potentially harmful materials, to prevent burns, and electrical shock. Where needed, workers should wear work gloves in good condition, which are suited to the type of work involved. Some of the factors taken into account when gloves were selected are the toxic properties of chemicals handled by employees, the degree of dexterity required, duration, frequency, degree of exposure to the hazards, and physical stress that will be applied. The company relies on the manufacturers' standard test procedures for hand and arm protection performance characteristics. Refer to Attachment C for guidelines for glove selection.

Employees who are required to operate or work around drill presses, power saws, and similar rotating machinery shall not wear gloves.

Special type gloves such as neoprene or rubber to handle chemicals shall be issued to those employees who have a need for them. Welders shall wear gloves during settling operations.

HEAD PROTECTION (HARD HATS)

Employees shall wear protective helmets when working in areas where there is a potential for injury to the head from falling objects. Protective helmets designed to reduce electrical shock hazard shall be worn by each such affected employee when near exposed electrical conductors which could contact the head.

All employees that wear company issued hard hats shall wear them at all times when working on construction projects or areas of an existing facility, which has been designated as a "Hard Hat Area." This includes visitors, subcontractors, engineers, inspectors, and anyone else who has authorization to be on the project site.

Head protection shall be worn properly with the brim in front. Hard hats which have been altered by drilling or cutting will not be permitted, nor will those hats which have been altered by the addition of any items on the outside of the hat other than safety, or site stickers. When it is necessary to use additional personal protective equipment, which shall be attached to the hard hat, only those hard hats designed for this purpose may be used.

Protective hard hats shall meet ANSI requirements Personal Protection-Protective Headgear for Industrial Workers Z89.1-1986. Electrical workers shall wear hard hats that are rated for the voltage of the equipment where work is being performed.

RESPIRATORY PROTECTION

Company issued respiratory protective devices, appropriate for the hazard, shall be used where airborne contaminants, such as fibers, dust, smoke, vapors, and mists exist and may exceed acceptable levels. Respiratory protective devices will be used in accordance with NIOSH requirements.

HEARING PROTECTION

Hearing protection shall be worn in areas that exceed 85 dBA. Refer to 28, Occupational Noise Exposure Program.

FULL BODY HARNESS AND LANYARDS

Harnesses with lanyards in use, shall be worn by all employees who are working at elevated levels which are not protected by standard handrails, or when working from suspended scaffolds. Employees are required to wear and use full body harnesses to protect them from falling when they are exposed to falls from heights of six feet or more. If they are working on powered platforms or over machinery, moving equipment or objects posing an impalement hazard, or in the case of entering a confined space, with an attended lifeline, 100% full protection is required. This might include the need for two lanyards per belt. All harnesses and lanyards shall be inspected and each inspection documented with the harness serial number. Inspections shall be performed by supervision. Quick release belts shall only be used when working over bodies of water. Lanyards shall have locking snaps that require two actions to open. Refer to the Fall Protection Program for complete requirements.

FLOTATION VESTS

US Coast Guard approved flotation vests shall be worn by all employees when working on barges, floating pipelines or plants, or on structures extending over water, that are not protected by adequate standard handrails. In addition, any employee who is working over the side of a vessel or structure, which is extended over water, or, in any area where a drowning hazard exists, shall wear an approved flotation vest.

TRAFFIC VESTS

Employees shall wear, as a minimum, an ANSI Class II fluorescent orange or lime traffic safety vest when working within 15 feet of a roadway or in a parking lot. Vests shall also be used when directing traffic on a construction site.

ARM ENVIRONMENTAL SERVICES, INC. HSE

TRAINING RECORD

Trainer:	
Signature:	
Date:	
Content of Training:	
Attendees	
Print Name:	Signature:

POLICY

ARM Environmental Services, Inc. has implemented this policy to prevent or minimize the consequences of catastrophic releases of toxic, reactive, flammable, or explosive chemicals, and to ensure no employee is exposed to toxic or hazardous material at levels above the permissible exposure limits.

REFERENCES

- §1910.119 – Process Safety Management of Highly Hazardous Chemicals
- §1910.1200 – Hazard Communication Standard

RESPONSIBILITIES

Employer Responsibilities

- Developing a written plan of action to implement employee participation required by PSM
- Consulting with employees and their representatives on the conduct and development of the process hazard analysis (PHA) and on the development of the other elements of process management
- Training each employee presently involved in operating a process or a newly assigned process in an overview of the process and in its operating procedures
- Responding quickly to eliminate workplace hazards
- Ensuring all equipment is kept in good repair
- Ensuring employees follow safe job procedures
- Reviewing process hazard analysis whenever there is a significant change to any element of the job or there has been an injury or illness
- Teach employees about the hazards of their jobs, specifically any: potential fire, explosions, or toxic release

Safety Committee Responsibilities

- Assist in process hazard analyses as necessary
- Assist in training employees to recognize and control workplace hazards
- Monitor the workplace for hazards
- Encourage employees to report hazards
- Implement appropriate controls
- Ensure corrective action is taken promptly

Employee Responsibilities

- Assist in process hazard analyses
- Follow safe job procedures
- Report hazards to a supervisor immediately

TRAINING

Employees will be told that the purpose of PSM is to prevent or minimize consequences of catastrophic releases of toxic, reactive, flammable, or explosive chemicals in various industries such as refineries, etc. Each employee will be trained in the overview of the process and its operating procedures for every process they are involved in or newly assigned to. The training will emphasize the process's specific safety and health hazards, emergency operations, shutdown, and other applicable safe work practices.

ARM Environmental Services, Inc. will document the identity of the employee (permanent or contract), the date of training, and the means used to verify that the employee understood the training.

Hazard communication will cover known workplace hazards, including how to avoid and abate them. ARM Environmental Services, Inc. employees are required to abide by all company safety policies, procedures, and their supervisor's instruction. Contract employees must be advised of all hazards to which they may be exposed in the workplace.

PROCEDURES

Process safety information

Andy Wilson will compile all written process safety information before conducting any PHA. The compilation should be completed under the same schedule required for the PHA. The PHA will include information on: the hazards of the chemicals used or produced by the process; the technology of the process; the equipment in the process.

Safety Data Sheets (SDS) meeting the Hazard Communication Standard requirements may be used to comply with information on the hazards requirement to the extent they contain the required information.

Process hazard analysis

Prior to starting work, Andy Wilson, or a designated alternative/team, will perform a job hazard assessment (PHA) of the worksite. Immediately upon completion of the hazard assessment, Andy Wilson will make their customer, employer, or owner of the host facility / jobsite aware of any hazards identified and unique hazards presented by work being performed by Andy Wilson.

The PHA will focus on equipment, instrumentation, utilities, human actions (routine and non-routine), and external factors that might impact the process. The PHA team will determine and document the priority order for conducting PHAs that includes such considerations as the extent of the process hazards, the number of potentially affected employees, the age of the process, and the operating history of the process.

Standard operating practices (SOPs)

Operating procedures describe tasks to be performed, data to be recorded, operating conditions to be maintained, samples to be collected, and safety and health precautions to be taken. The procedures will be accurate, understandable to employees, and revised periodically to ensure that they reflect current operations. Andy Wilson will use the process safety information package as a resource to better ensure that the operating procedures and practices are consistent with the known hazards of the chemicals in the process and that the operating parameters are accurate.

SOPs will be written so that an experienced operator not familiar with a particular process unit could run the unit with minimal supervision or help from other operators, or the least experienced operator released for unsupervised work could run the unit.

ARM Environmental Services, Inc. employees will abide by employers safety work practices during operations such as lockout/tagout, confined space entry, opening process equipment or piping and controls over entrance to facility.

Pre-start-up safety review

The initial start-up procedures and normal operating procedures need to be fully evaluated by Andy Wilson and the work team as part of the pre-start-up review to ensure a safe transfer into the normal operating mode for meeting the process parameters. Piping and instrument diagrams (P&IDs) are to be completed along with having the operating procedures in place and the operating staff trained to run the process before start-up. Any incident investigation recommendations, compliance audits, or PHA recommendations need to be reviewed as well to see what impacts they may have on the process before beginning the start-up.

Mechanical integrity program

Andy Wilson will establish and implement written procedures to maintain the ongoing integrity of process equipment. Elements of a mechanical integrity program include the identification and categorization of equipment and instrumentation, inspections and tests, testing and inspection frequencies, development of maintenance procedures, training of maintenance personnel, the establishment of criteria for acceptable test results, documentation of test and inspection results, and documentation of manufacturer recommendations as to meantime to failure for equipment and instrumentation.

Hot work permit

A permit must be issued by Andy Wilson for hot work operations conducted on or near a covered process. The permit must document that the fire prevention and protection rules for welding, cutting, and brazing have been implemented before beginning. It must also indicate the authorized dates and identify the object to be worked on.

Management of change

Andy Wilson will prepare written procedures to manage changes (except for “replacements in kind”) to process chemicals, technology, equipment, operating procedures, and facilities that affect a covered process. Changes in documents, such as PandIDs, raw materials, operating procedures, mechanical integrity programs, electrical classifications, etc., need to be noted so that these revisions can be changes need to be kept in an accessible location to ensure that design changes are available to operating made permanent when the drawings and procedure manuals are updated. Copies of process personnel as well as to PHA team members when a PHA is being done or one is being updated.

Incident investigation

Incident investigation is the process of identifying the underlying causes of incidents and implementing steps to prevent similar events from occurring. The intent of an incident investigation is for employers to learn from past experiences and thus avoid repeating past mistakes. The incidents for which OSHA expects employers to become aware and to investigate are the types of that result in or could reasonably have resulted in a catastrophic release. Some of the events are sometimes referred to as “near misses,” meaning that a §1910.119 – consequence did not occur but could have.

All workers are required to report incidents and near misses to their supervisors. All incidents and near misses will also be immediately reported to the host employer.

Emergency planning and response

Address what actions employees are to take when there is an unwanted release of highly hazardous chemicals. Andy Wilson will select how many different emergency preparedness procedures or lines of defense are needed and then develop the necessary plans and procedures, appropriately train employees in their emergency duties and responsibilities, and then implement these lines of defense.

COMPLIANCE AUDIT

Andy Wilson or an assembled trained team of people will audit the PSM system and program. A small process or plant may need only one knowledgeable person to conduct an audit. The audit is to include an evaluation of the design and effectiveness of the PSM system and a field inspection of the safety and health conditions and practices to verify that the employer's systems are effectively implemented. The audit should be conducted or lead by a person knowledgeable in audit techniques and impartial toward the facility or area being audited. The essential elements of an audit program include planning, staffing, conducting the audit, evaluation and corrective action, follow-up, and documentation.

TRADE SECRETS

ARM Environmental Services, Inc. employees are instructed in the confidentiality of trade secret information, and the disciplinary action which will be a consequence of violation of confidentiality.

CONTRACTORS

When ARM Environmental Services, Inc. is the contractor:

- ARM Environmental Services, Inc. employees will abide by employers safety work practices during operations such as lockout/tagout, confined space entry, opening process equipment or piping and controls over entrance to facility.
- ARM Environmental Services, Inc. employees will not perform hot work until a hot work permit is obtained from ARM Environmental Services, Inc.'s employer and/or the owner of the host facility / jobsite. The permit will document that provisions of §1910.252(a) have been met.
- ARM Environmental Services, Inc. will respect the confidentiality of trade secret information when the process safety information is released to them.
- ARM Environmental Services, Inc. will tell the employer of any hazards it found or created in the course of the work.

ARM Environmental Services, Inc. will develop a written procedure for managing contractors that perform maintenance or repair, turnaround, major renovation, or specialty work on or adjacent to a covered process. Such procedures will not apply to contractors providing incidental services that do not influence process safety, such as janitorial, food and drink, laundry, delivery, or other supply services. Ensure that each contract employee is trained in the work practices necessary to safely perform his or her job

Andy Wilson will ensure each contract employee is instructed in the known potential fire, explosion, or toxic release hazards related to his/her job and the process and the applicable provisions of the Emergency Action Plan.

POLICY

ARM Environmental Services, Inc. has implemented this policy to ensure that no employee is exposed to airborne hazards in the workplace exceeding Permissible Exposure Limits (PEL), or oxygen deficient atmospheres. ARM Environmental Services, Inc. will provide respirators which are applicable and suitable for the purpose intended when such equipment is necessary to protect the health of our employees. Specifically when workers may be exposed to harmful vapors and oxygen deficient atmospheres. This Respiratory Protection Program provides training, medical evaluations, and respirators at no cost to our employees.

Andy Wilson is the supervisor responsible for ensuring the following training, administrative controls, engineering controls, and safe work practices are enforced:

Andy Wilson is responsible for administrating the Respiratory Protection Program its recordkeeping and periodic evaluation. The evaluation will be based on results of the air quality monitoring program, medical evaluations, changing work environment, equipment changes, work requirements, and employee responses. Respiratory equipment will be National Institute of Occupational Safety and Health (NIOSH) certified only, and selection will be made by Andy Wilson, based on identified and potential hazards, estimated exposures, and contamination information.

In any workplace where respirators are necessary to protect the health of our employees, ARM Environmental Services, Inc. has established and implemented this written Respiratory Protection Program with worksite-specific procedures. This program will be updated as necessary to reflect any changes in workplace conditions that affect respirator use.

The Respiratory Protection Program includes the following elements:

- Procedures for selecting respirators for use in the workplace
- Medical evaluations of employees required to use respirators
- Fit testing procedures for tight-fitting respirators
- Procedures for proper use of respirators in routine and reasonably foreseeable emergency situations
- Procedures and schedules for cleaning, disinfecting, storing, inspecting, repairing, discarding, and otherwise maintaining respirators
- Procedures to ensure adequate air quality, quantity, and flow of breathing air for atmosphere-supplying respirators
- Training of employees in the respiratory hazards to which they are potentially exposed during routine and emergency situations
- Training of employees in the proper use of respirators, including putting on and removing them, any limitations on their use, and their maintenance
- Procedures for regularly evaluating the effectiveness of the program

TRAINING

Andy Wilson will ensure that effective training is initially provided to all employees who are required to use respirators. The training will be comprehensive, conducted in a manner that is understandable to our employees, and recur annually or more often if necessary. Before being allowed or required to wear breathing protection, each of our employees will be able to demonstrate knowledge of at least the following:

- Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator
- What the limitations and capabilities of the respirator are
- How to use the respirator effectively in emergency situations, including situations in which the respirator malfunctions
- How to inspect, put on and remove, use, and check the seals of the respirator
- Procedures for cleaning, maintenance, and storage of respirators
- How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators
- The general requirements of §1910.134 – Respiratory Protection

Retraining will be administered annually or when the following situations occur:

- Changes in the workplace or the type of respirator render previous training obsolete
- Inadequacies in the employee's knowledge or use of the respirator indicate that the employee has not retained the requisite understanding or skill
- Any other situation arises in which retraining appears necessary to ensure safe respirator use

ARM Environmental Services, Inc. allows employees to wear respirators on a voluntary basis when not required by OSHA. When a filtering face piece respirator is all that is used, the employee must be provided a copy of Appendix D. A filtering facepiece respirator is defined in 29 CFR 1910.134(b) as “a negative pressure particulate respirator with a filter as an integral part of the facepiece or with the entire facepiece composed of the filtering medium. For all other voluntary users, the respiratory protection program that covers medical fitness and proper maintenance procedures will be implemented.

EVALUATION AND MONITORING

Workplace evaluations will be conducted as necessary to ensure that the provisions of the current Respiratory Protection Program are being effectively carried out and that it continues to be effective.

Employees required to use respirators will be regularly consulted to assess their views on program effectiveness and to identify any problems. Any problems that are identified during this assessment will be corrected. Factors to be assessed include, but are not limited to:

- Respirator fit, including the ability to use the respirator without interfering with effective workplace performance
- Appropriate respirator selection for the hazards to which the employee is exposed
- Proper respirator use under the workplace conditions the employee encounters
- Proper respirator maintenance

Andy Wilson will ensure that all filters, cartridges and canisters used in the workplace are labeled and color coded with the NIOSH approval label and that the label remains legible and is not removed.

Proper respiratory equipment, replacement elements, and any parts or equipment necessary for the proper functioning of the respiratory equipment will be available to employees at no cost.

RESPIRATOR SELECTION, CARE AND MAINTENANCE

All respiratory protection equipment will be maintained, cleaned, stored, and serviced per manufacturer’s recommendations. Job foremen will supervise and ensure proper methods are used.

Respirator selection will be based on the hazards that the worker is exposed. Only NIOSH-certified respirators will be provided. Hazard evaluation is based on the estimate of exposures, type of contaminant, physical form, and chemical state. For no exposure estimate or data, the exposures will be addressed as immediately Dangerous to Life and Health (IDLH) and NIOSH-approved respirators for full-faced, pressure demand 30 minute SCBA, or SAR with auxiliary air supply will be provided. Respirator brands and models will be listed below.

Respirator Models and Brand used by this Company		
Brand	Model	I.D. Number

ARM Environmental Services, Inc. will provide each respirator user with a respirator that is clean, sanitary, and in good working order. Andy Wilson will ensure that respirators are cleaned and disinfected using the procedures in Appendix B-2 of §1910.134, or procedures recommended by the respirator manufacturer, provided that such procedures are of equivalent effectiveness. The respirators will be cleaned and disinfected at the following intervals:

- Respirators issued for the exclusive use of an employee will be cleaned and disinfected as often as necessary to be maintained in a sanitary condition
- Respirators issued to more than one employee will be cleaned and disinfected before being worn by different individuals
- Respirators maintained for emergency use will be cleaned and disinfected after each use
- Respirators used in fit testing and training will be cleaned and disinfected after each use

Andy Wilson will ensure that respirators are stored as follows:

- All respirators will be stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals, and they will be packed or stored to prevent deformation of the facepiece and exhalation valve
- In addition to the above requirements, emergency respirators will be: kept accessible to the work area and stored in compartments or covers that are clearly marked as emergency respirators

Stored in accordance with any applicable manufacturer instructions.

Andy Wilson will ensure respirators are inspected as follows:

- All respirators used in routine situations will be inspected before each use and during cleaning
- All respirators maintained for use in emergency situations will be inspected at least monthly and in accordance with the manufacturer's recommendations, and will be checked for proper function before and after each use
- Emergency escape-only respirators will be inspected before being carried into the workplace for use

Andy Wilson will ensure respirator inspections include the following:

- A check of respirator function, tightness of connections, and the condition of the various parts including, but not limited to, the facepiece, head straps, valves, connecting tube, and cartridges, canisters or filters
- A check of elastomeric parts for pliability and signs of deterioration

In addition to the requirements above, self-contained breathing apparatus will be inspected monthly. Air and oxygen cylinders will be maintained in a fully charged state and will be recharged when the pressure falls to 90% of the manufacturer's recommended pressure level. Andy Wilson will determine that the regulator and warning devices function properly.

For respirators maintained for emergency use, Andy Wilson will:

- Certify the respirator by documenting the date the inspection was performed, the name (or signature) of the person who made the inspection, the findings, required remedial action, and a serial number or other means of identifying the inspected respirator
- Provide this information on a tag or label that is attached to the storage compartment for the respirator, is kept with the respirator, or is included in inspection reports stored as paper or electronic files. This information will be maintained until replaced following a subsequent certification

Andy Wilson will ensure that respirators that fail an inspection, or are otherwise found to be defective, are removed from service and are discarded, repaired, or adjusted in accordance with the following procedures:

- Repairs or adjustments to respirators will be made only by persons appropriately trained to perform such operations and will use only the respirator manufacturer's NIOSH-approved parts designed for the respirator
- Repairs will be made according to the manufacturer's recommendations and specifications for the type and extent of repairs to be performed
- Reducing and admission valves, regulators, and alarms will be adjusted or repaired only by the manufacturer or a technician trained by the manufacturer

MEDICAL EVALUATION AND FIT TESTING

A medical examination for employees required to use respiratory equipment is required before use of the equipment, and will be provided at no cost to the employee. The medical questionnaire provided in Appendix C is mandatory for employees required to use respiratory protection.

ARM Environmental Services, Inc. will provide a medical evaluation to determine the employee's ability to use a respirator, before the employee is fit tested or required to use the respirator in the workplace. ARM Environmental Services, Inc. may discontinue an employee's medical evaluations when the employee is no longer required to use a respirator.

Periodic monitoring of the air quality in work areas will be performed to determine if, or where respiratory equipment will be required.

Andy Wilson will maintain appropriate surveillance, and ensure employees leave the area to wash, change cartridges, or if they detect break-through or resistance.

Medical evaluation procedures will include:

ARM Environmental Services, Inc. will identify a physician or other licensed health care professional (PLHCP) to perform medical evaluations using a medical questionnaire or an initial medical examination that obtains the same information as the medical questionnaire.

The medical evaluation will obtain the information requested by the questionnaire in Sections 1 and 2, Part A of Appendix C of §1910.134.

Follow-up medical examination

ARM Environmental Services, Inc. will ensure that a follow-up medical examination is provided for an employee who gives a positive response to any question among questions 1 through 8 in Section 2, Part A of Appendix C or whose initial medical examination demonstrates the need for a follow-up medical examination

The follow-up medical examination will include any medical tests, consultations, or diagnostic procedures that the PLHCP deems necessary to make a final determination.

Administration of the medical questionnaire and examinations will include:

- The medical questionnaire and examinations will be administered confidentially during the employee's normal working hours or at a time and place convenient to the employee. The medical questionnaire will be administered in a manner that ensures that the employee understands its content
- ARM Environmental Services, Inc. will provide the employee with an opportunity to discuss the questionnaire and examination results with the PLHCP

The following supplemental information will be provided to the PLHCP before the PLHCP makes a recommendation concerning an employee's ability to use a respirator:

- The type and weight of the respirator to be used by the employee
- The duration and frequency of respirator use (including use for rescue and escape)
- The expected physical work effort
- Additional protective clothing and equipment to be worn
- Temperature and humidity extremes that may be encountered

ARM Environmental Services, Inc. will provide the PLHCP with a copy of the written respiratory protection program and a copy of §1910.134.

Fit Testing

Fit testing of the equipment to individual employees will follow OSHA guidelines listed in §1910.134 (f)(1-8) and is required before use of the equipment.

ARM Environmental Services, Inc. will ensure employees pass OSHA-accepted qualitative fit test (QLFT) or quantitative fit test (QNFT) of tight-fitting facepieces before initial use, if a different respirator is used, and annually. SARs are required to be fit tested as well. (Refer to the Appendices).

Facial hair, glasses, etc. which might affect the seal of the respirator facepiece are prohibited, and seal will be checked each time equipment is donned.

If employees are required to work in Immediately Dangerous to Life or Health (IDLH) atmospheres, the following procedures and controls will be in place:

- At least one employee is located outside the IDLH atmosphere
- Visual, voice, or signal line communication is maintained between the employee(s) in the IDLH atmosphere and the employee(s) located outside the IDLH atmosphere
- The employee(s) located outside the IDLH atmosphere are trained and equipped to provide effective emergency rescue
- Andy Wilson is notified before personnel enter the IDLH atmosphere, or before employee(s) located outside the IDLH atmosphere enter the IDLH atmosphere to provide emergency rescue
- Employee(s) located outside the IDLH atmospheres will be equipped with:
 - Pressure demand or other positive pressure SCBA
 - Appropriate retrieval equipment for removing the employee(s) who enter(s) these hazardous atmospheres

SAR and SCBA equipment will only be filled by certified refilling facilities using grade D or better air. Oxygen will not be used in compressed air units and all cylinders will meet DOT requirements. Compressor will be located in a "clean" atmosphere, with in-line purification, and tagged to indicate date of change-out. A carbon monoxide monitor will be in place and set to alarm at 10 PPM or monitored frequently. All line fittings will be incompatible for non-respirable gases and containers.

Where possible, ventilation will be required for all enclosed work areas to ensure that airborne hazards do not exceed permissible limits. The least hazardous or toxic materials which will allow the job required to be accomplished will be used in the performance of work.

ARM Environmental Services, Inc. will maintain written records and information regarding medical evaluations, fit testing, and the Respiratory Protection Program. These records will promote employee involvement in the respirator program, assist in auditing the adequacy of the program, and provide a record for OSHA compliance. Records will be retained at the main office and be made available upon request to affected employees and to OSHA. Written records include the following:

- Required medical evaluations will be retained and made available in accordance with §1910.1020
- Qualitative and quantitative fit tests administered to an employee including: the name or identification of the employee tested; type of fit test performed; specific make, model, style, and size of respirator tested; date of test.
- The pass/fail results for qualitative fit tests or the fit factor and strip chart recording or other recording of the test results for quantitative fit tests
- Fit test records will be retained for respirator users until the next fit test is administered

RESPIRATORY PROTECTION PROGRAM

EMPLOYEE ACKNOWLEDGMENT

By my signature below, I acknowledge that I have received instruction and have read the ARM Environmental Services, Inc. Respiratory Protection Program. I have been given the opportunity to ask questions and have received answers, instruction, and clarification to my questions. I understand the contents of and agree to follow ARM Environmental Services, Inc. company policy regarding this Respiratory Protection Program.

Respiratory Protection Program received on (Date)			
Employee Name (Print)			
Employee Signature		Date	
Employee Social Security Number (Print)			
Trainer Name (Print)			
Trainer Signature		Date	

cc: Employee file

INFORMATION FOR EMPLOYEES USING RESPIRATORS

When Not Required Under 29 CFR 1910.134		
<p>To the employer: The statement below must be read by all employees using respirators not required under the Respiratory Protection Standard</p>		
<p>To the employee: Can you read? Yes <input type="checkbox"/> No <input type="checkbox"/></p>		
<p>Your employer is required to have you read the statement below if you are using respirators not required under the Respiratory Protection Regulation. Ensure you keep a copy of this form for your personal records.</p>		
EMPLOYEE INFORMATION		
Employee Name:	Work Location:	
Facility:	ID/Clock Number:	
Job Title:	Dept./Phone:	
<p>CERTIFICATION: I certify that I have read and understand the below Respiratory Protection Statement as required by the Occupational Safety and Health Administration (OSHA).</p>		
Employee Signature:		Date:
OSHA RESPIRATORY PROTECTION STATEMENT		
<p>To The Respirator User:</p> <p>Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If your employer provides respirators for your voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.</p> <p>You Should Do The Following:</p> <ol style="list-style-type: none"> 1. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations. 2. Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you. 3. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke. <p>Keep track of your respirator so that you do not mistakenly use someone else's respirator.</p>		
FORM RETENTION INFORMATION		ATTACHMENTS
Retention File:	Location:	*Yes <input type="checkbox"/> No <input type="checkbox"/>
Date Filed:	Filed By:	*See Following Pages <input type="checkbox"/>

Respirator Cleaning Record

OWNER INFORMATION	
Owner's Name (if individually issued):	
Company Name:	Department:
Employee ID # (if applicable):	Work Phone:
RESPIRATOR INFORMATION	
Type of Respirator:	
Manufacturer:	Model #:
Size #:	Respirator ID #:
Date of Inspection:	Time:
CLEANING REQUIREMENTS FOR TIGHT FITTING RESPIRATORS	
Estimated Frequency (Check all that apply): <input type="checkbox"/> Hourly <input type="checkbox"/> Twice each Shift <input type="checkbox"/> Daily <input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Before Use <input type="checkbox"/> After Use	
COMPONENT	CLEANING REQUIREMENTS
Cartridge Holder:	
Cartridge Threads/Fittings:	
Cartridge/Canister:	
Cartridge Filter:	
Connections:	
Elastomeric Parts Deteriorating?:	
Elastomeric Parts Pliable?:	
Exhalation Valve Assembly:	
Facepiece:	
Gaskets:	
Harness Assembly:	
Headbands:	
Hose Assembly:	
Inhalation Valve:	
Nose Cup Valves:	
Speaking Diaphragm:	
Respirator Cleaning Procedures (Mandatory) These procedures are provided for employee use when cleaning respirators. They are general in nature, and the employee as an alternative may use the cleaning recommendations provided by the manufacturer of the respirators, provided such procedures are as effective as those listed in 29 CFR 1910.134 Appendix B-2. Equivalent effectiveness simply means that the procedures used must accomplish the objectives set forth below. Procedures for Cleaning Respirators: A. Remove filters, cartridges, or canisters. Disassemble facepieces by removing speaking diaphragms, demand and pressure - demand valve assemblies, hoses, or any components recommended by the manufacturer. Discard or repair any defective parts. B. Wash components in warm (110 deg. F maximum) water with a mild detergent or with a cleaner recommended by the manufacturer. A stiff bristle (not wire) brush may be used to facilitate the removal of dirt. C. Rinse components thoroughly in clean, warm (110 deg. F maximum), preferably running water. Drain. D. When the cleaner used does not contain a disinfecting agent, respirator components should be immersed for two minutes in one of the following: 1. Hypochlorite solution (50 ppm of chlorine) made by adding approximately one milliliter of laundry bleach to one liter of water at 110 deg. F. 2. Aqueous solution of iodine (50 ppm iodine) made by adding approximately 0.8 milliliters of tincture of iodine (6-8 grams ammonium and/or potassium iodide/100 cc of 45% alcohol) to one liter of water at 110 deg. F. 3. Other commercially available cleansers of equivalent disinfectant quality when used as directed, if their use is recommended or approved by the respirator manufacturer. E. Rinse components thoroughly in clean, warm (110 deg. F maximum), preferably running water. Drain. The importance of thorough rinsing cannot be overemphasized. Detergents or disinfectants that dry on facepieces may result in dermatitis. In addition, some disinfectants may cause deterioration of rubber or corrosion of metal parts if not completely removed. F. Components should be hand-dried with a clean lint-free cloth or air-dried. G. Reassemble facepiece, replacing filters, cartridges, and canisters where necessary. H. Test the respirator to ensure that all components work properly.	
Inspector's Name:	Title:
Signature:	Date:
FORM RETENTION INFORMATION	ATTACHMENTS
Retention File: Location:	*Yes <input type="checkbox"/> No <input type="checkbox"/>
Date Filed: Filed By:	*See Following Pages <input type="checkbox"/>

POLICY

ARM Environmental Services, Inc. has adopted this policy to inform employees of the Spill Prevention and Response Policy. This ensures the safety and health of the employees.

Andy Wilson is responsible for ensuring that the following policy is enforced.

STORAGE

It is the policy of ARM Environmental Services, Inc. that all chemical substances must be stored in the proper containers to minimize the potential for a spill. Whenever possible, chemicals will be kept in closed containers and stored so they are not exposed to stormwater.

SUBSTANCE IDENTIFICATION

ARM Environmental Services, Inc. will ensure all chemicals used that may be potentially spilled or released are kept on the chemicals with potential spill or release list provided on page 4 of this policy. The chemicals list will consist of both liquid chemicals used at the facilities of ARM Environmental Services, Inc. or brought on to the sites of the owner client.

SPILL KITS

It is the policy of ARM Environmental Services, Inc. that spill kits must contain the appropriate supplies for the materials that that may be spilled. The supplies will be easily accessible when required and considerations will be made for both the type and quantity of materials.

Spill kits will include, but are not limited to, at least the following:

10 white absorbents for oil	Vermiculite or other absorbent
10 gray absorbents for all chemical spills	Broom and pan
Plastic bags with waste labels	Personnel protective equipment (gloves, goggles, dust/mist mask)
6 gallon empty recovery drum	

ARM Environmental Services, Inc. will ensure the availability of adequate spill response supplies by periodic inspection to assess their availability and adjust inventory as necessary.

TRAINING

It is the policy of ARM Environmental Services, Inc. that all employees will be instructed on the proper response procedures for spilled materials.

SAFE PRACTICES

At all times, there will be one person on call (and available to respond to an emergency, who will be responsible for coordinating all hazardous waste emergency response measures.

This individual will be designated the On-Scene Coordinator, and will have the authority to mobilize all resources necessary to carry out procedures outlined in the plan. He or she will have knowledge of all hazardous waste generating operations and activities at the location and characteristics of hazardous waste, the location of records, and location of all emergency response and spill cleanup and control equipment.

In the event of a hazardous waste release the On-Scene Coordinator, or alternate, must be contacted immediately. A mobile communication system (i.e., telephone, radio, walkie-talkie, or cellular phone) will be available near the storage locations during transfer operations.

The On-Scene Coordinator must be informed of the nature and location of the spill and will direct the resources of manpower and equipment for the spill response action. The On-Scene Coordinator will remain in control for the duration of the response.

The Need of Outside Support (Larger Spills): The On-Scene Coordinator, or individual directed by the On-Scene Coordinator, will make the necessary contact with outside support and regulatory agencies.

Spill Events: In the event of an incident involving a large spill (greater than 1 gallon of hazardous material or 1 pint of acutely hazardous)

Alert the On-Scene Coordinator

The On-Scene Coordinator will immediately notify the Environmental Health and Safety Department. The On-Scene Coordinator will summon additional assistance, if necessary (local or state emergency response teams, Fire Depts. etc.). The On-scene coordinator will obtain the Material's Safety Data Sheet (SDS) to determine the hazards and appropriate response activities. The SDS will be provided to emergency responders.

APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (PPE)

Determine exact source of leak or spill, amount, and area affected by the release. After putting on personal protective equipment and after assessing the nature of the hazards and hazardous chemicals, remedy and stop the point source spill, if safe to do so. Stop spill material with standard industrial absorbent. Take the necessary action to keep the spill from spreading. Spread absorbent to surround and absorb the spilled material. Collect contaminated material (absorbent, rags, disposal suits, etc.) into a recovery drum and label for proper disposal.

DISPOSAL OF SPILL MATERIALS

Oil Spill Waste

Oil Spill Waste will be cleaned up using spill absorbent material, and drummed for off-site disposal. Free liquid is pumped into UN approved 30 or 55-gallon drums. The UTPA Environmental Protection Division, using an approved UT System Vendor, disposes of generated waste.

Hazardous Waste Releases

The On-Scene Coordinator must, immediately after an emergency, provide for the treatment, storage, or disposal of recovered waste, contaminated soil or surface water, or any other material that results from a fire, explosion, or other release at the facility.

HOUSEKEEPING

It is the policy of ARM Environmental Services, Inc. that areas where chemicals may be used or stored must be maintained using good housekeeping best management practices. This includes, but is not limited to clean and organized storage, labelling, and secondary containment where necessary.

COMMUNICATION MEASURES

The emergency contacts will be summoned by telephone or directly in the event of a spill of any quantity that is either indoors or outdoors.

Emergency Contact Numbers will be posted at telephones located throughout the facility.

The following information should be provided when reporting a spill:

- Identity of the caller
- Contact phone number
- Location of spill
- Type of product spilled
- Quantity spilled
- Extent of actual and/or potential water pollution
- Date and time of spill
- Cause of spill

DISCLAIMER

OSHA's "Safety and Health Regulations" are continuously being reinterpreted. Therefore, Safety Services Company is unable to completely guarantee the exactness of the information conveyed in this publication. Safety Services Company assumes no responsibility and shall be held harmless for any inaccuracies or omissions contained within this manual and shall not be held liable to any extent or form for any injury or loss resulting from the manner in which this information is interpreted and/or applied.

Careful effort has been dedicated in order to provide a simplified, understandable explanation of OSHA regulations based on currently available information. This "Safety and Health Manual" is distributed with the agreement that Safety Services Company is not employed in providing legal or other specialized business services. Should expert assistance be required, retain the services of a competent professional.

Safety Services Company

P.O. Box 27148 Tempe, Arizona 85285-7148

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Toll Free FAX (866) 556-0004

Toll Free Customer Service (866) 644-9630

e-mail ssc@safetyservicescompany.com

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EMPLOYEE SIGNOFF

This is to certify that I have received a copy of the Company Health, Safety and Environment Manual.

I have read these instructions, understand them, and will comply with them while working for the Company.

I understand that failure to abide by these rules may result in disciplinary action and possible termination of my employment with ARM Environmental Services, Inc.

I also understand that I am to report any injury to my foreman or superintendent immediately and report all safety hazards.

I further understand that I have the following "Safety Rights":

- I am not required to work in any area I feel is not safe.
- I am entitled to information on any hazardous material or chemical I am exposed to while working.
- I will not be discriminated against for reporting safety concerns.

Employee Name	Signature	Date
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Supervisor Name	Signature	Date
-----------------	-----------	------

cc: Employee File