

# CAMERON GROUP LLC

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## **SAFETY PROGRAM**

REV. 06/23/2018

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# **I. Safety Commitment**

## **Introduction**

Cameron Group is dedicated to protecting its employees from being injured or becoming ill on the job. The purpose of this plan is to establish safety management procedures and policies which will ensure that every employee is aware of the hazards present and receives the training required to correctly identify those hazards. The ultimate goal is to prevent all work-related injuries and illnesses, providing a zero-injury, zero-incident workplace.

At Cameron Group, we believe that safety is everyone's responsibility. As such, all employees are expected to work and conduct themselves in a safe manner and to accept this responsibility as a condition of their employment.

We believe that injuries can be eliminated through sound and reasonable safety practices. We are committed to adhere to all applicable federal, state, and local safety and health laws and regulations, and all general contractor safety programs.

## **Employer Responsibilities Policy**

### **Overview**

At the Cameron Group, we ensure that we are in compliance with OSHA standards and the General Duty Clause of the OSH Act by:

1. Implementing an overall safety and health program that involves all departments/areas of our company.
2. Conducting hazard assessments to identify and control workplace hazards.
3. Monitoring OSHA regulatory activity and implementing compliance procedures, processes, and equipment when applicable.
4. Forming a safety committee to involve employees in workplace safety.

### **Safety and health program**

The Cameron Group safety and health program has the following core elements:

1. Management leadership
2. Employee involvement
3. Hazard identification and assessment procedures
4. Hazard prevention and controls
5. Employee education and training
6. Periodic review of all program elements to ensure effectiveness

We ensure that our safety and health program is appropriate to conditions in our workplace, such as the hazards to which employees are exposed by:

1. Analyzing the hazard assessment for problem areas/department
2. Performing job hazard analyses on jobs in problem areas

3. Developing and implementing engineering and administrative controls for hazards
4. Reviewing injury and illness records routinely to ensure that the controls are working

### **Management leadership**

We have established the following safety and health program responsibilities for managers, supervisors, and employees:

1. The Safety Director will involve managers, supervisors, and employees in developing and monitoring the safety and health program. Responsibilities are assigned and communicated so that managers, supervisors, and employees know and understand what is expected of them.
2. Managers and supervisors have the authority and designated funds for training and resources necessary to carry out their safety and health responsibilities.
3. Monthly safety meetings are conducted to ensure that employees receive safety and health information pertinent to their jobs.
4. At least one employee from each department/area will be a member of the safety committee for a one-year term.
5. The Safety Director is designated to receive and respond to reports about workplace safety and health conditions and when appropriate, to initiate corrective actions.

We actively involve our Safety Director and Safety Committee members in relevant safety aspects of our business. The committee recommends non-hazardous materials and processes whenever possible.

We have developed forms for employees and supervisors to use to report conditions that are dangerous and require remediation.

Following investigation of the hazard, the supervisor completes the form and forwards copies to the manager and Safety Director. The corrective action is made immediately whenever possible. A completed "actions taken" follow-up report is sent to all involved employees and a copy is kept permanently in the Safety Director's office.

We promote open communication between supervisors, managers, and employees for discussing workplace safety.

## **Employee Responsibilities Policy**

### **Overview**

At the Cameron Group, we understand that rules and regulations are necessary for the efficient operation of the company and to ensure a safe workplace for all employees.

We ensure that our employees receive initial and on-going safety training by requiring training upon hiring, at yearly updates, and whenever assignments and work processes change, with all applicable occupational safety and health standards and all rules, regulations, and orders issued pursuant to the OSH Act. Employees are expected to follow all occupational safety and health standards as described in their training, and as outlined in the policies and procedures found elsewhere in this manual.

During regular training, employees will be instructed in the hazards specific to their job or work area, and the

engineering and work practice controls designed to protect those employees. Recommended use of personal protective equipment (PPE), how to use and maintain PPE, and where to obtain the necessary PPE will be covered.

We ensure compliance with OSHA regulations by reviewing the location and contents of the OSHA poster at the yearly training sessions. Training will also cover employees' rights under the OSH Act. Employees will be trained how to report hazardous conditions to the appropriate supervisor. The supervisor will investigate the report, and within one working day provide the reporting employee with follow up information regarding the disposition of the report.

Employees are expected and encouraged to seek prompt medical attention and to report all accidents, illnesses, or symptoms that are related to the working environment. This company has provided the required medical surveillance programs, as directed by OSHA. Employees are expected to participate in the applicable medical surveillance programs.

We encourage participation by all employees on the Safety Committee by ensuring that the committee is composed of an employee from each department, area, or division within a facility. Membership on the Safety Committee is voluntary, and is open to all employees. The Safety Committee is responsible for establishing, implementing, and evaluating the company safety and health programs.

All employees are encouraged to communicate any safety and health concerns to their supervisor and the Safety Committee. The Safety Committee is responsible for investigating fatalities, injuries, illnesses, and incidents. Employees are free to communicate directly with the Safety Committee.

## **Safety Violations and Penalties**

Failure of a Cameron Group employee to follow any safety and health standard, any rule or regulation, or any of the safety policies and procedures outlined in this manual, or set forth in any other training received, will result in the following:

### **First Offense Violation:**

Employees who are found in violation of company safety policies, or have committed any unsafe act, may be cited with a written warning.

**Note: Depending on the severity of the safety violation, the offender may receive a stricter penalty.**

### **Second Offense Violation:**

Employees found to have committed a second offense for the same violation, or for any related violation, may be sent home for two days without pay.

**Note: Depending on the severity of the safety violation, the offender may receive a stricter penalty.**

### **Third Offense Violation:**

Employees found to have committed a third offense for the same violation, or for any related violation, may be terminated.

## **II. Safety Representatives**

Ed Cimino, Cameron Safety Director/Manager (240) 215-5592

Dave Ball, Operations Manager (240) 687-2521

Adam Collins, Production Superintendent (240) 687-5487

Eddy German, Superintendent (443) 852-6325

John Copenhaver, Superintendent (240) 687-5492

## **III. Safety Orientations**

### **Construction Safety Orientations**

All project employees shall attend any general contractor required safety orientations.

### **Cameron Safety Orientation**

All Cameron workers new to the project will attend a safety orientation prior to beginning work. This safety orientation is to be administered by the Cameron foreman or Production Superintendent, and is to include a review of the current AHA and a review of the proper use and care of required personal protective equipment.

## **IV. Personal Protective Equipment**

### **Introduction**

Making job tasks as safe as possible through engineering (environmental controls) is the preferred and most effective way to reduce the likelihood of injuries and health issues on the job.

Unfortunately, it is not always possible to make a job “perfectly safe.” This is where PPE comes in. It is the employer’s responsibility to determine the best PPE to protect you on your job, and to ensure that you are using it.

It is generally your employer's responsibility to provide you with the PPE required for your job. Some items which are not highly specialized, such as footwear and clothing, are generally the employee's responsibility.

## **Responsibilities**

The use of personal protective and safety equipment (PPE) is a control measure that is to be used only after a hazard evaluation identifies hazards associated with a particular job or activity, and it is determined that the hazards cannot be eliminated and/or controlled to an acceptable level through engineering design or administrative actions.

Based on hazard evaluations conducted by supervisors, employers shall identify and select, and each affected employee shall use PPE that will provide appropriate protection.

## **Use, care, and limitations of PPE**

Employees must be trained in and shall demonstrate an understanding of the following aspects of PPE prior to use: selection (for specific hazard); donning, doffing and adjusting; limitations and useful life; inspection and testing; and proper care including maintenance, storage and disposal. When the employer has reason to believe that any affected employee who has been trained does not have the understanding and skill required for the use of the PPE, the employer shall make certain that the employee receives the necessary re-training to acquire the appropriate skills. PPE shall be tested, inspected, and maintained in a serviceable and sanitary Condition as recommended by the manufacturer. Defective or damaged equipment, or equipment that has exceeded its useful life, shall not be used. It shall be tagged as out of service and/or immediately removed from the work site to prevent use.

## **Minimum requirements**

Employees shall wear clothing suitable for the weather and work conditions. For fieldwork, such as construction sites, at a minimum, this shall be: (1) Short sleeve shirt; (2) Long pants (excessively long or baggy pants are prohibited); and (3) Leather or other protective work shoes or boots. Open-toed shoes are prohibited.

Protective equipment shall be of heat, fire, chemical, and/or electrical-resistive material when conditions require protection against such hazards. Persons involved in activities that subject the hands to injury (for example, cuts, abrasions, punctures, burns, chemical irritants, toxins, vibration, and forces that can restrict blood flow) shall select and use hand protection appropriate for the hazard in accordance

## **Worker Responsibilities Summary:**

- Follow established procedures – use your PPE when required!
- Don't forget to review the job AHA/JSA, and read any applicable SDS
- Maintain and store your equipment properly
- Do not use defective equipment
- Inspect PPE before every use!

## **V. Substance Abuse Policy**

### **Active Employee Substance Abuse Testing Policy**

Employees may be required to submit to drug and/or alcohol testing at a laboratory chosen by the company if there is cause for reasonable suspicion of substance abuse. Circumstances that could be indicators of a substance abuse problem and considered reasonable suspicion are:

1. Observed alcohol or drug abuse during work hours on company premises (or at a job site)
2. Apparent physical state of impairment
3. Incoherent mental state
4. Marked changes in personal behavior that are otherwise unexplainable
5. Deteriorating work performance that is not attributable to other factors
6. Accident or other actions that provide reasonable cause to believe the employee may be under the influence

If the test results are positive the employee may be terminated or administratively referred to one of the providers in the Employee Assistance Resource File. The employee will be required to sign and follow the guidelines set forth in the Company's last chance agreement. This agreement will be made available to the employee should the company decide to refer the individual. If the employee refuses treatment or does not comply with the treatment recommended by the provider, termination will result.

If the test results are positive and if an employee is granted a leave of absence for substance abuse rehabilitation programs. During any leave of absence for the purpose of rehabilitation, he or she will be required to participate in all recommended after-care and work rehabilitation programs. During any leave of absence for the purpose of rehabilitation, whether voluntary or by referral, the employee's benefit accruals (for example vacation, PTO, etc.) will be suspended. Upon successful completion of all or part of these required programs; the employee may be released to resume work but must agree in writing to random substance abuse testing and close performance monitoring to insure that he or she remains drug free.

## **VI. Return to Work Program**

### **Overview**

The policies and procedures in this return-to-work program are not intended to be contractual commitments and they shall not be construed as such by our employees. This policy is not intended as a guarantee of continuity of benefits or rights. No permanent employment for any term is intended or can be implied by this

policy.

## **Objectives**

The Cameron Group has developed a return-to-work policy. Its purpose is to return workers to employment at the earliest date following any injury or illness. We desire to speed recovery from injury or illness and reduce insurance costs. This policy applies to all workers and will be followed whenever appropriate.

The Cameron Group defines “transitional” work as temporary modified work assignments within the worker’s physical abilities, knowledge, and skills. Where feasible, transitional positions will be made available to injured employees in order to minimize or eliminate time loss.

Transitional/temporary positions will be developed with consideration of the worker’s physical abilities, the business needs of Cameron Group, and the availability of transitional work. The Cameron Group reserves the right to determine the availability, appropriateness, and continuation of all transitional assignments and job offers.

## **Communication**

The Department Manager will decide upon the assignment of light duty/modified work. The worker must report for work at the designated time. The worker cannot return to work without a release from the attending physician. If the worker returns to a transitional/temporary job, the worker must make sure that he or she does not go beyond either the duties of the job or the physician’s restrictions. If the worker’s restrictions change at any time, it is the responsibility of the worker to notify his or her Department Manager at once and to give the Department Manager a copy of the new medical release.

If professional medical treatment is sought, the worker should inform the attending physician that Cameron Group has a return-to-work program with light duty/modified assignments available.

While off work, it is the responsibility of the worker to supply their Department Manager with a current telephone number (listed or unlisted) and an address where the worker can be reached. The worker will notify their Department Manager within 24 hours of all changes in medical condition.

## **Supervising Manager Responsibilities**

The worker’s supervising manager will monitor the worker’s performance to ensure the worker does not exceed the worker’s physician release. The supervising manager will monitor the worker’s recovery progress through regular contact to assess when and how often duties may be changed. The supervising manager will assess the company’s ability to adjust work assignments upon receipt of changes in physical capacities.

Note: This document is not designed as a substitute for reasonable accommodation under any applicable federal or state laws, such as Americans with Disabilities Act, The Rehabilitation Act of 1973, or other applicable laws. To preserve the ability to meet company needs under changing conditions, this company reserves the right to revoke, change, or supplement guidelines at any time with written notice.



## **VII. Safety Training**

### **Employee training**

Cameron Group employees receive safety and health training and information pertinent to their department/area and job-specific initially, prior to beginning their duties. Where there is demonstrated prior knowledge of a job duty, the supervisor or other designated person may conduct an evaluation of their performance.

Our employee training program includes:

- The hazards they may be exposed to and how to recognize them;
- What we are doing/have done to control the hazards;
- What protective equipment they must use; and
- What procedures they must take to maintain their safety and that of their coworkers.

Refresher safety training is given during the regularly scheduled monthly safety meeting, when new assignments are given, new equipment is installed, new processes are implemented or new chemicals or other hazardous substances are used.

Training is also provided for job-specific functions such as personal protective equipment, emergency procedures, machine guarding, and hazard communication. (See the attached training program material for applicable topics.)

Our company's Safety Director, has overall responsibility to ensure that each employee receives the training and information applicable to his or her job. Training records for each employee are kept in the Safety Office and a copy is also located in the office of the employee's department manager.

### **Program evaluation**

Specific elements of our safety and health program are evaluated on an on-going basis. We evaluate the overall program every two years to ensure that all elements are functioning together to maintain the integrity of our safety and health program. If deficiencies are identified through this evaluation, the Safety Director has the responsibility to implement procedures to correct the deficiencies.

## VIII. Material Handling

### Introduction

OSHA and EM 385 material handling and storage regulations require materials to be stored in a way which does not create a hazard. The material handling and storage regulations also regulate material handling equipment use. Material handling devices shall be available when material handling needs require it.

### Material Handling Hazards

It is important to be alert to hazards when you're involved with material handling. Whether you're using equipment or lifting and carrying yourself, here are some things to watch out for:

- Hand trucks, dollies, and other material handling equipment can also pose hazards to the untrained. Unbalanced loads—or loads you can't see over—can be dangerous to operators and others nearby.
- Manual lifting is a major potential source of back injuries. If you don't lift properly, you can hurt your back and struggle with a load that's too high or unbalanced to move easily. Then you're at risk not just of back injuries but of tripping or bumping into things.
- People who aren't wearing gloves can be hurt by splinters or loose nails on a skid or pallet.

### Practice Safe Lifting

Manual lifting is required to the stage materials and tools required to do your work. If an item weighs more than 50 pounds, do not lift it by yourself. Enlist the help of a coworker. When lifting an item by yourself, follow these instructions. (See NIOSH *Work Practices Guide for Manual Lifting* for more information.)

1. Stand close to the load with your feet spread shoulder width apart. One foot should be slightly in front of the other for balance.
2. Squat down bending at the knees (not your waist). Tuck your chin while keeping your back as vertical as possible.
3. Get a firm grasp of the object before beginning the lift.
4. Slowly begin straightening your legs, lifting slowly. Never twist your body during this step.
5. Once the lift is complete, keep the object as close to the body as possible. If the load's center of gravity moves away from your body, there is a dramatic increase in stress to the lumbar region of the back.

### Safe Storage Practices

Safe storage is more than keeping everything in its proper place. It includes checking what you're storing to determine if it must be stored under certain conditions—dry, dark, ventilated, etc. Consult section 7 of the Safety Data Sheet (SDS) for each product. Ask your supervisor if you have any questions.

Here are some general guidelines to keep in mind when you're placing any materials in storage.

- Check that shelves and racks are sturdy and in good condition.
- Stack all materials on a flat base.
- Place heavier objects close to the floor, lighter/smaller objects higher.
- Use material handling equipment for materials which cannot be reached while standing firmly on the floor.

## **IX. Hazard Communication**

### **General company policy**

The Cameron Group complies with the OSHA Hazard Communication Standard, Title 29 Code of Federal Regulations 1910.1200 by compiling a hazardous chemicals list by using Safety Data Sheets (SDS), by ensuring that containers are properly labeled, and by providing employee training.

This program applies to all work operations in our company where you may be exposed to hazardous substances under normal working conditions, or during an emergency situation.

Under this program, you will be informed of:

- The contents of the hazard communication standard;
- The hazardous properties of chemicals with which you work;
- Safe handling procedures; and
- Measures to take in order to protect you from these chemicals.

You will also be informed of the hazards associated with non-routine tasks, such as the hazards associated with chemicals in unlabeled pipes and hoses.

### **Administrative duties**

The Safety Director is responsible for developing a written plan for effectively managing hazard communication at our facility. This person is responsible for ensuring that the plan addresses all areas of our facility relating to hazard communication.

The written plan is kept at the following location: Safety Office, The Cameron Companies LLC, 7085 Dorsey Run Road, Elkridge, MD.

This plan shall be reviewed by a qualified person to determine if additional practices, procedures, or training needs to be implemented. Workers will be notified and trained, if necessary, in any new procedures.

## **List of hazardous chemicals**

The Safety Director has made and keeps a list of all hazardous chemicals and related work practices used in the facility, and will update the list as necessary. Our list of chemicals identifies all of the chemicals used in our work process areas. A separate list may be posted for each work area or site. Each list also identifies the corresponding SDS for each chemical. A master list of these chemicals will be maintained by, and is available from the Safety Director.

## **Safety Data Sheets (SDSs)**

SDSs provide you with specific information on the chemicals to which you may be exposed. The Safety Director will maintain a binder in his/her office with an SDS on every substance on the list of hazardous chemicals. Safety Director will also ensure that each work site maintains SDSs for hazardous materials.

The Safety Director is responsible for acquiring and updating SDSs. He/she will contact the chemical manufacturer or vendor if additional research is necessary, or if an SDS has not been supplied with an initial shipment. All new procurements for the company must be cleared by the safety and health manager. A master list of SDSs is available from the Safety Director.

## **Labels and other forms of warning**

The safety and health manager will ensure that all hazardous chemicals in the plant are properly labeled and updated, as necessary. Labels should list at least the chemical identity, the name and address of the manufacturer/importer or other responsible party, signal word, pictograms, and precautionary statements in compliance with the current Hazard Communication Standard.

## **Training**

Everyone who works with or is potentially exposed to hazardous chemicals will receive initial training on the hazard communication standard and the safe use of those hazardous chemicals by the safety and health manager. Whenever a new hazard is introduced, additional training will be provided.

The training plan will emphasize these items:

- Summary of the standard and this written program.
- Chemical and physical properties of hazardous materials (e.g., flash point, reactivity) and methods that can be used to detect the presence or release of chemicals (including chemicals in unlabeled pipes).
- Physical hazards of chemicals (e.g., potential for fire, explosion, etc.).
- Health hazards, including signs and symptoms of exposure, associated with exposure to chemicals and any medical condition known to be aggravated by exposure to the chemical.
- Procedures to protect against hazards (e.g., personal protective equipment required, proper use, and maintenance; work practices or methods to assure proper use and handling of chemicals; and procedures for emergency response).

- Work procedures to follow to assure protection when cleaning hazardous chemical spills and leaks.
- Where SDSs are located, how to read and interpret the information on both labels and SDSs, and how employees may obtain additional hazard information.

The safety and health manager or designee will review our employee training program and advise the plant manager on training or retraining needs. Retraining is required when the hazard changes, or when a new hazard is introduced into the workplace, but it will be company policy to provide training regularly in safety meetings to ensure the effectiveness of the program.

As part of the assessment of the training program, the safety and health manager will obtain input from employees regarding the training they have received, and their suggestions for improving it.

### **Non-routine tasks**

When our employees are required to perform hazardous non-routine tasks, such as entering confined spaces, a special training session will be conducted to inform you regarding the hazardous chemicals to which you might be exposed, and the proper precautions to take to reduce or avoid exposure.

### **Revised HCS / Globally Harmonized System (GHS)**

Employee training shall reflect the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). The GHS includes criteria for the classification of health, physical and environmental hazards, as well as specifying what information should be included on labels of hazardous chemicals as well as safety data sheets.

### **Further information**

All employees, or their designated representatives, can obtain further information on this written program, the hazard communication standard, applicable SDSs, and chemical information lists from the Cameron Safety Office.

## **X. Accident Reporting and Investigation**

### **Reporting Injuries**

It is the injured worker's responsibility to report work related injuries or illness to their supervisor. An Injury Report must be completed, including the names of any witnesses, and their contact information.

Injury Reports are available on the Safety Wall, outside of the dispatch office in the center of the Cameron warehouse.

Turning in a complete and accurate report is very important in getting you the medical treatment which you might require. Also, some injuries are also required to be reported by employers to governmental agencies.

Injuries may also need to be reported to the General Contractor's site Superintendent in some instances.

## **Getting Care**

You will also be faced with an even more pressing issue after experiencing an on the job injury or illness - determining what level of care you will need. You should call 911 or go to the nearest emergency room if you are experiencing any of the following:

- Chest pain
- Shortness of breath
- Severe abdominal pain following an injury
- Uncontrollable bleeding
- Confusion or loss of consciousness , especially after a head injury
- Poisoning or suspected poisoning
- Serious burns, cuts, or infections
- Inability to swallow
- Seizures
- Paralysis
- Broken bones

For non-life threatening conditions such as a sprain or pulled muscle for example, an urgent care center/ walk-in clinic may be a better choice. Generally, wait times are much shorter, and these centers can often provide follow-up rehabilitative therapies as well.

## **Near-Miss Reports**

Before most injuries happen, the circumstances surrounding them have occurred many times before. What if you could spot a problem with the way a particular job is approached, and change the way it's done before anybody actually gets hurt? You could alter the future!

That's what the Near-Miss Report is for. It is a way to alert management to potential job safety issues. They are located on the Safety Wall, outside of the dispatch office in the center of the warehouse.

## **Accident Investigation Policy**

At the Cameron Group, we strive to maintain a work environment free of work related injuries. Upon being notified of a workplace incident resulting in a worker injury, the company Safety Director shall form an Accident Investigation Team, and submit a resulting report for review and recommended actions by the Safety Committee. The Safety Committee shall be comprised of; the Cameron site foreman, the injured worker's direct supervisor and department manager, and at least one other coworker familiar with the work being performed at the site.

## **Responding to the accident**

In the event of an accident, emergency services are to be directly contacted as needed by calling "911," and providing details of the emergency situation and the nature of the desired response. After any needed emergency calls are made, immediately notify your direct supervisor. Then, either you or your supervisor must contact the Safety Director. Contact numbers are listed below:

- For Cameron BES: Dave Ball: (240) 687-2521 or Adam Collins: (240) 687-5487
- Safety Director: Ed Cimino: (240) 215-5592 (Call or text)

The Safety Director will form an Accident Investigation team, which is to be comprised of at least one coworker present at the time of the accident, preferably a direct witness to the incident, and/or worker's the immediate supervisor or manager. The Accident Investigation Team is responsible to:

1. Complete an "Accident Report Form," with the names of the injured employee(s) and witnesses.
2. Perform initial interviews with all eyewitnesses and any others present at the site.
3. Note the physical condition of tools, equipment, and machinery as it may relate to the accident.
4. Make photographs of the scene, as necessary.

## **Investigating accidents/incidents**

The Safety Director and the Safety Committee shall gather and review all relevant documents including training records, employee evaluations, photographs of the scene, statements of witnesses, and supervisory reports to produce "incident documentation." The documentation shall include:

1. A summation of the event, and its outcomes.
2. The suspected root cause or causes of the event.
3. A plan of action for correcting any deficiencies in operations, employee training, or work practices to prevent similar incidents.

The Safety Director and the Safety Committee will determine, to the best of their ability, the root cause or causes of the incident, and review current policy and procedures to determine if they require review or revision. They shall also review employee training and disciplinary records.

Once processes, work rules, training, and other potential causes of the incident have been reviewed, the Safety Committee will develop an abatement plan to reduce the likelihood of similar incidents occurring in the future. Affected employees will be trained on new policy and procedures.

Copies of the Accident Report, along with determination of the cause(s), will be distributed to:

1. Safety Director
2. Appropriate Supervisor
3. The files of the Safety Committee

The Safety Director is responsible for overseeing the work of the Safety Committee in regards to accident

investigation, and for ensuring that copies of the accident reports are forwarded to the appropriately.

## **XI. Emergency Procedures & Fire**

### **Make sure you know what to do in an emergency:**

1. The alarm or method used to alert workers
2. Where to meet if there is an order to evacuate
3. How to contact emergency services
4. Know your role in the case of an emergency
5. Review the AHA for your job task(s)

### **Medical Care**

If you are experiencing a **medical emergency, please call 911.**

#### **For the nearest Emergency Room, visit**

Adventist Healthcare Shady Grove Medical Center, 9901 Medical Center Dr, Rockville, MD 20850

#### **Urgent Care:**

Concentra Gaithersburg, 803 Russell Ave. Ste. 1A & 2B, Gaithersburg, MD 20879

**Note to Supervisors:** Injured workers must be accompanied to the healthcare provider.

**If Contractor Controlled Insurance Program, follow GC's procedures.**

### **First Aid Kits**

First-aid kits shall conform to ANSI Z308.1. First-aid kits shall be easily accessible to all workers and protected from the weather. The individual contents of the first-aid kits shall be kept sterile. First-aid kits shall be clearly marked. A first-aid kit shall be kept on each work truck, and in a conspicuous place in the work area. The crew foreman must be sure to notify all workers in the crew as to the precise location where it will be kept.

### **Fire Emergency**

In case of fire, call 911.

### **Fire Hazards**

There are many combustible materials used in your job, and found on construction sites in general.



- Wood/Sawdust
- Kraft Faced Paper
- Paints, Adhesives & Solvents
- Powered Equipment

## **Using a Fire Extinguisher**

Fire extinguishers are for controlling small fires before they have had a chance to spread. Don't try to fight a fire you can't put out.

### **Only use a fire extinguisher after:**

- The fire department has been notified
- Others have been alerted
- Evacuation has begun
- A clear escape route has been identified
- You are familiar with the operation of the fire extinguisher
- The correct extinguisher for the fire type is available

## **Use the P.A.S.S. method**

### **P – Pull the pin**

Hold the extinguisher upright, then pull the pin

### **A – Aim the nozzle**

Stand 8 – 10 feet from the fire

Aim the nozzle at the base of the fire

### **S – Squeeze the levers together**

### **S – Sweep**

Sweep from side to side, sweeping 3 – 6" beyond the left and right edges of the fire

Continue until contents is exhausted

Move around the fire to confirm it is completely extinguished

## **XII. Hand, Power Tool and Electrical Equipment Safety**

### **Use, inspection, and maintenance**

Hand and power tools shall be used, inspected, and maintained in accordance with the manufacturer's instructions and recommendations and shall be used only for the purpose for which designed. A copy of the manufacturer's instructions and recommendations shall be maintained with the tools.

Hand and power tools shall be inspected, tested, and determined to be in safe operating condition before use. Continued daily inspections shall be made to assure safe operating condition and proper maintenance. Inspect your tools for damage **prior to each use**.

### **Guarding**

Power tools designed to accommodate guards shall be equipped with such guards. All guards must be functional. Reciprocating, rotating, and moving parts of equipment shall be guarded if exposed to contact by employees or otherwise create a hazard.

### **Clothing**

Loose and frayed clothing, loose long hair, dangling jewelry (including dangling earrings, chains, and wrist watches) shall not be worn while working with any power tool.

### **Grounding**

Electric tools and other electrically powered equipment must be properly grounded. GFCI protected outlets must be verified. If GFCI is not available at the outlet, use a commercially available GFCI plug-in pigtail, or line cord. Extension cords must be checked for damage or fraying. Damage cords must be removed from the job site. An electrical power control shall be provided on each machine/power tool to make it possible for the operator to cut off the power for the machine/power tool without leaving the point of operation.

### **Shortcuts & Abuse**

Taking shortcuts or using the wrong tool for the job will often cause an accident.

One of the most frequent abuses of a hand tool is the misuse of the screw driver. This hand tool is often used as a mini pry bar, a wood chisel, etc. - any number of small tasks for which it simply was not designed to be used. A puncture wound can easily occur when misusing any pointed hand tool. Always use the right tool for the job at hand.

## **Maintaining Tools**

Hand and power tools shall be in good repair and with all required safety devices installed and properly adjusted. Tools having defects that will impair their strength or render them unsafe shall be removed from service. Replace broken tools and broken or cracked handles immediately. If you have any question about the condition of the tool, or how to use it properly, check with your supervisor.

## **XIII. Fall Protection Policy**

### **Purpose**

These written procedures establish uniform requirements for fall protection training, operation, and practices. This plan is intended to document procedures that ensure all work requiring fall protection is carried out safely. All employees of the Cameron Group have the responsibility to work safely on the job.

This program informs interested persons, including employees, how the Cameron Group complies with OSHA Fall Protection requirements (29 CFR 1926.500 to .503).

This program applies to all employees who might be exposed to fall hazards, except when designated employees are inspecting, investigating, or assessing workplace conditions before the actual start of construction work or after all construction work has been completed.

The Safety Director is the program coordinator/manager of this program and is responsible for its implementation. Copies of the written program may be obtained from the Safety Director.

Certain employees may be authorized to inspect, investigate, or assess workplace conditions before construction work begins or after all construction work has been completed, who are exempt from the fall protection rule during the performance of these duties.

These authorized employees determine if all walking/working surfaces on which our employees work have the strength and structural integrity to support the employees. Our employees will not be allowed to work on these surfaces until they have the requisite strength and structural integrity.

### **Work Site Assessment and Fall Protection System Selection**

Our criteria for selecting a given fall protection system follow those established at 29 CFR 1926.502.

## **Protection from Falling Objects**

When employees are exposed to falling objects, we ensure they wear hard hats and also implement one of the measures listed in 29 CFR 1926.501(c).

## **General Worksite Policy**

1. If any one of the conditions described in the Workplace Assessment is not met for the area or piece of equipment posing a potential fall hazard, then do not perform that work until the condition is met. If you cannot remedy the condition immediately, notify a supervisor of the problem and utilize a different piece of equipment or work in a different area, according to the situation.
2. If the situation calls for use of fall protection devices such as harnesses or lanyards and belts because the fall hazard cannot be reduced to a safe level, then the employee must don such protective equipment before beginning the work and use it as intended throughout the duration of the work.
3. Only employees trained in such work are expected to perform it.
4. All places of employment, job sites, shall be kept clean and orderly and in a sanitary condition.
5. All walking/working surfaces must be kept in a clean and, so far as possible, dry condition. Where wet processes are used, drainage shall be maintained and false floors, platforms, mats, or other dry standing places should be provided where practicable.

## **Training Program**

Under no circumstances will employees work in areas where they might be exposed to fall hazards, do work requiring fall protection devices, or use fall protection devices until they have successfully completed this company's fall protection training program. The training program will cover the areas required by 29 CFR 1926.503(a).

The Safety Office, along with the hiring manager, will identify all current and new employees who require training and schedule the classroom instruction for those employees. Training will occur both in the classroom and on the job site, as appropriate. Classroom training will cover written policy/procedures on fall protection and include a training video on the subject. Instruction will include demonstration of and practice in wearing fall protection equipment and any instruction necessary for a specific job.

The Safety Office has overall responsibility for the safety of employees and will verify compliance with 1926.503(a), training program, for each employee required to be trained.

The Safety Office, with input from field management and supervision, has the responsibility of determining when an employee who has already been trained, does not have the understanding and skill required by the training program (1926.503(a)).

A written certificate of training will be maintained according to 29 CFR 1926.503(b).

Retraining is required when an employee cannot demonstrate the ability to recognize the hazards of falling and the procedures to be followed to minimize fall hazards.

## **Enforcement**

Constant awareness of and respect for fall hazards, and compliance with all safety rules are considered conditions of employment. The company field superintendent, and other managers, including from the safety office, reserve the right to issue disciplinary warnings to employees, up to and including termination, for failure to follow the guidelines of this program. (See Employee Responsibilities Policy.)

## **Incident Investigation**

All accidents that result in injury to workers, regardless of their nature, are investigated and reported. It is an integral part of any safety program that documentation takes place as soon as possible, so that the cause and means of prevention can be identified to prevent a re-occurrence.

In the event that an employee falls or there is some other related, serious incident (e.g., a near miss) occurs, this plan will be reviewed to determine if additional practices, procedures, or training need to be implemented to prevent similar types of falls or incidents from occurring.

## **Changes to Plan**

Any changes to the plan will be approved by the Safety Director. This plan is reviewed by qualified persons to determine if additional practices, procedures or training needs to be implemented by the competent person to improve or provide additional fall protection. Workers are notified and trained, if necessary, in the new procedures. A copy of this plan and all approved changes is maintained by the Safety Office.

# **XIV. Ladder Safety**

## **Introduction**

Ladders are one of the most frequently used pieces of equipment on the job. They are also a tool, that when used improperly, leads to many severe injuries – Some of which are fatal. Your life literally can depend on knowing how to inspect, use, and care for this tool.

## **Inspecting Ladders**

Ladders shall be inspected for visible defects on a daily basis. Broken or damaged ladders shall be immediately tagged "DO NOT USE," and withdrawn from service -- i.e., removed from the work area.

***Before using any ladder, inspect it. Look for the following faults:***

- ✓ Loose or missing rungs or cleats
- ✓ Loose nails, bolts, or screws
- ✓ Cracked, broken, split, dented, or badly worn rungs, cleats, or side rails
- ✓ Fiberglass splinters
- ✓ Corrosion of metal ladders or metal parts
- ✓ If you find a ladder in poor condition, don't use it

## Choosing and Using Ladders

Choose the **correct type and size (length) ladder**. Only use a ladder for its intended use.

### Keep these rules in mind:

- Be sure straight ladders are long enough so that the side rails extend above the top support point by at least 3 feet.
- Don't set up ladders in areas such as doorways or walkways where they may be run into by others, unless they are protected by barriers. Keep the area around the top and base of the ladder clear. Don't run hoses, extension cords, or ropes on a ladder and create an obstruction.
- Don't try to increase the height of a ladder by standing it on boxes, barrels, or other materials. Don't try to splice two ladders together either!
- Set the ladder on solid footing against a solid support. Don't try to use a step ladder as a straight ladder.
- Observe 75° rule when setting up ladder. Place the base of straight ladders out away from the wall or edge of the upper level about one foot for every four feet of vertical height. Don't use ladders horizontally as a platform, runway, or scaffold.
- Tie in, block, or otherwise secure the top of straight ladders to prevent them from being displaced.
- When climbing extension ladders, double-check that fly section is locked in securely
- To avoid slipping on a ladder, check the ladder rungs and your shoes for oil, grease, mud, ice, or snow, and wipe it off before climbing.
- Always face the ladder and hold on with both hands when climbing up or down. Don't try to carry tools or materials with you. Always maintain at least three (3) points of contact while ascending and descending the ladder!
- Don't lean out to the side when you're on a ladder. If something is out of reach, get down and move the ladder over.
- Most ladders are designed to hold **ONLY ONE PERSON AT A TIME**. Two may cause the ladder to fail or throw it off balance.
- Keep in mind that **STEP LADDERS** are made for performing work that would otherwise be out of reach, **NOT** for getting to and from other floors, or accessing work platforms on a different level.

## Ladder Care

Take good care of ladders and they'll take care of you!

### **How do you take proper care of a ladder?**

- ✓ Inspect before using.
- ✓ Do not "walk" the ladder.

- ✓ Do not throw the ladder/handle improperly.
- ✓ Keep clean
- ✓ Lubricate moving parts

## XV. Scaffolding Safety

### Overview

This job will require the use of mobile (rolling) supported frame scaffolds.

### Competent Persons

The employer must designate a competent person, who would be responsible for determining the feasibility and safety of providing fall protection for employees erecting or dismantling scaffolds. Scaffolds are to be erected, moved, dismantled, or altered only by **experienced and trained employees** who have been selected for that work by the competent person. If you do not have the required training and experience, do not attempt to erect, dismantle or modify scaffolds.

- Only erect or dismantle scaffolding under the direction of the competent person.

<p><b>From OSHA:</b> The term "Competent Person" is used in many OSHA standards and documents. An OSHA "competent person" is defined as "<b>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 authorization to take prompt corrective measures to eliminate them</b>" [29 CFR 1926.32(f)]. By way of training and/or experience, a competent person is knowledgeable of applicable standards, is capable of identifying workplace hazards relating to the specific operation, and has the authority to correct them. Some standards add additional specific requirements which must be met by the competent person.</p>
--

### General Guidelines

- Follow all OSHA, MOSH and any other local codes, ordinances and regulations pertaining to scaffolding.
- Never ride a rolling scaffold.
- Be sure to lock the wheels before accessing a mobile scaffold.
- Mobile scaffold maximum platform height may not exceed 4 times the minimum base dimension. (3x Under EM385-1-1 rules!)
- Keep platforms and the area around the scaffold free of debris and unnecessary material or other hazards that could cause you to trip or fall.
- Be sure to plank all work areas and only use lumber that is graded as scaffold plank.

- Never allow unsupported ends of planks to extend an unsafe distance beyond supports, and be sure all planks are secured so they cannot be dislodged.
- Fasten all braces securely and do not mismatch side braces.
- Provide overhead protection if there is a hazard above the work area.
- Don't use scaffolds within 10 feet of power lines.

## **Inspections**

- The designated competent person must inspect all equipment daily.
- Check for cracked or bent end frames, connectors, bracing, guard rails, access ladders. NEVER use any equipment that has been damaged.
- Check operation of casters and locking mechanisms
- Check for fully planked work surface.
- Be sure the scaffold is not overloaded.
- Scaffolds must be tagged for safe operation and tags signed daily.

## **Access and Fall Protection:**

- Mobile scaffolds used at this site can generally be accessed by climbing the end frames, which have been designed to accommodate this.
- OSHA standards specifically forbid climbing cross-braces as a means of access.
- Direct access to or from another surface is permitted only when the scaffold is not more than 14 inches horizontally and not more than 24 inches vertically from the other surface.
- The competent person is responsible for determining the safety and feasibility of installing and using safe means of access, based on site conditions and the type of scaffold involved.
- Each employee on a scaffold more than 10 feet above a lower level must be protected from falling to that lower level. Always follow the general contractor's fall protection height thresholds if more stringent.



## XVI. Heat Illness Prevention Program

A. PURPOSE: The purpose of this Program is to establish the guidelines and requirements for evaluating and controlling employee exposure to heat stress, or heat-related illnesses, during work, so as to prevent heat related-illness. All employees will be trained in this Program.

B. IMPLEMENTATION:

The site supervisor shall be responsible for determining whether any of the following conditions exist. If any of the following conditions are found to exist on a jobsite, the Heat Illness Prevention Program shall be implemented and enforced by the site supervisor. Questions by the site supervisor shall be addressed to company management before proceeding with work in a high heat index environment.

1. The ambient (dry bulb) temperature of the work environment is forecasted to be 80°F or above.
2. The ambient (dry bulb) temperature is forecasted to be 77°F or above, and one or more of the following conditions exist:
  - Humidity sources exist in the work area;
  - Work is conducted near sources of radiant heat (asphalt, roof tops, steam pipes, boilers or heating vessels);
  - PPE such as Tyvek coveralls, respiratory protection (such as an N-95, half face respirator, full face respirator or supplied air respirator), or semi-permeable chemical suits are utilized;
  - Moderate to heavy physical labor is required;
  - Work requires direct physical contact with a hot object;
  - Work requires use of powered tools or equipment which generate heat;
  - Work is to be performed in enclosures or other environments with minimal air movement (such as attics), where heat can build up; and/or
  - The work is being performed in direct sunlight.

**The site supervisor shall determine whether any of the above conditions exist or will exist during the work day prior to the start of work each day, and again as needed throughout the work day due to changing conditions.**

C. POLICY: The procedures below shall be implemented when any of the conditions described in (B) is found to exist on a jobsite.

1. Work-Rest Schedules. Site supervisors shall implement the appropriate work-rest schedule based upon the site conditions, or utilize the [OSHA Heat App](#).
2. Hydration. The frequent consumption of small quantities of water is important to preventing heat illness. Up to one quart of water per hour (one 8oz cup of water every 15 min.) is recommended by NIOSH under high heat index conditions. Access to suitably cool drinking water shall be provided as close as practicable to where employees are working. Water will be provided either as a continuous source or as a portable supply in the amount of one quart per employee per hour for the entire shift. Water shall be provided to employees free of charge.

3. Cooling-off area. A shaded, well-ventilated area will be provided for rest breaks. The shade shall be at least enough to accommodate the number of employees on recovery or rest periods. The shaded area will be located as close as practicable to the areas where employees are working.
4. Additional rest and recovery periods. If an employee complains of heat-related symptoms (see #10) or if an employee believes that a rest break is needed to prevent a heat stress condition, access to a shaded area will be provided for no less than five minutes. Access to shade will be permitted at all times. Any employee who requests an additional rest break, or an employee who shows signs of heat illness, shall be monitored and asked if he or she is experiencing symptoms of heat illness. The employee shall be encouraged to remain in the shade and shall not be returned back to work until signs or symptoms of heat illness have subsided.
5. Clothing. Employees shall wear breathable, loose-fitting, lightly colored clothing and shall avoid wearing clothing that is dark colored, heavy or tight-fitting. The site supervisor will observe employees' clothing and any employee found to be wearing clothing that does not meet these criteria, will be asked to change or will be reassigned.
6. Physical work factors. Site supervisors will instruct employees of the physical work factors that can contribute to heat related illnesses and what action they should take before performing their task(s). These factors will include, at a minimum, the following:
  - a. Type of work they will be performing;
  - b. Duration of work activity;
  - c. Level of physical activity;
  - d. Location of work activity; and
  - e. Use of clothing color and clothing weight to control body temperature.
7. Environmental Controls. Site supervisors will evaluate and implement the environmental controls needed to reduce the risk of heat-related illness. These measures include, but are not limited to:
  - a. Evaluate air temperature;
  - b. Evaluate humidity;
  - c. Control sources of radiant heat; and
  - d. Provide adequate air circulation in work area.
8. Communication and Emergency Response. The site supervisor will maintain frequent communication with employees working by themselves or in small groups to observe for possible signs of heat illness. All symptoms or signs of heat stress shall be immediately reported to the site supervisor. An employee showing signs or symptoms of heat illness shall be monitored and shall not be left alone or sent home without being offered onsite first aid and/or being provided with emergency medical services. If any employee demonstrates signs or symptoms that indicate a *severe* heat illness, the company's emergency response procedures must be implemented.
9. Signs of heat illness. Signs of heat illness include, but are not limited to:
  - Muscle cramps, pain or spasms in the abdomen, arms and/or legs
  - Headaches
  - Rapid heart beat

- Heavy sweating
- Extreme weakness or fatigue
- Dizziness
- Nausea/vomiting
- Irritability
- Fast, shallow breathing
- Slightly elevated body temperature
- High body temperature
- Confusion
- Loss of coordination
- Hot/dry skin or profuse sweating
- Seizures
- Loss of consciousness or unresponsiveness

10. Acclimatization program. New employees, and employees who are not accustomed to working in the heat shall be acclimatized to working in the heat. An employee who has not worked in the heat for more than two weeks is not accustomed to working in the heat, and will need to be reacclimatized before being permitted to work full time in the heat. NIOSH recommends that employees who are not accustomed to working in the heat, gradually increase their workload over a period of 7-14 days when working in hot conditions. New employees will be closely supervised and/or assigned a “buddy” for the first 14 days of employment, who will monitor the employee for signs of heat illness.

D. HIGH HEAT PROCEDURES. High heat procedures are additional preventative measures that will be used when the heat index equals or exceeds 95°F (see Appendix B).

- a. Employees will be regularly observed for alertness and signs of heat illness.
- b. Employees will be reminded throughout the work day to drink plenty of water and take rest breaks.
- c. Pre-Task plans will include a discussion of high heat procedures.

E. TRAINING. Training should be a part of your heat illness prevention program. Employees will be trained in the following areas:

- a. The environmental and personal risk factors for heat stress.
- b. Measures to control heat related illnesses, including knowing the air temperature, humidity, radiant heat sources, and air circulation.
- c. Work factors that can contribute to heat related illnesses and what action should be taken into consideration before performing their task.
- d. The importance of frequent consumption of small quantities of water, up to one quart per hour under extreme conditions of work and heat.
- e. The importance of acclimatization. Newly hired employees and employees who have been off of work two weeks or longer should not work extended time in the heat until they have become accustomed to the heat.

- f. The different types of heat related illnesses, common signs and symptoms, and how to identify these symptoms in themselves and others.
- g. The steps to be taken when the signs or symptoms of heat stress are observed.
- h. The importance of immediately reporting to one's supervisor symptoms or signs of heat stress in themselves or in a co-worker.
- i. The site procedures for providing first-aid to respond to heat stress, and the emergency procedures in place for contacting medical service providers.
- j. Procedures for complying with the requirements of the Heat Stress Prevention program.
- k. Employees have the exclusive right to determine when a rest or recovery period is needed.

When training employees, supervisors will utilize the *Heat Illness Prevention Training Guide* developed by Cal/OSHA, which is available for download at

[https://www.osha.gov/SLTC/heatillness/osha\\_heattraining\\_guide\\_0411.pdf](https://www.osha.gov/SLTC/heatillness/osha_heattraining_guide_0411.pdf)

## XVII. Silica Exposure Control

### Written Exposure Control Plan for Respirable Crystalline Silica (RCS)

#### I. Tasks

**Task Description:** Performing tasks on a worksite which do not themselves generate RCS. (When an exposure is, or may potentially be generated by others.)

**Engineering and Work Practice Control Methods:**

Be alert to potential RCS hazards. The following is a list of common activities which have the potential to create an RCS exposure:

- Sawing, hammering, cutting, drilling, grinding, and chipping of concrete or masonry
- Chipping, hammering, and drilling rock
- Dry sweeping or pressurized air blowing of dust, concrete, rock, or sand
- Excavating, grading, loading, hauling, and dumping of dirt or rock
- Sandblasting
- Demolition of concrete or masonry
- Mixing of concrete, mortar or grout
- Tuck-pointing and mortar removal

- Jackhammers (Concrete or other masonry breaking)
- Vehicle-mounted rock drilling rigs

□ **Housekeeping Measures**

- Use wet sweeping, HEPA-filtered vacuuming or other methods that minimize the likelihood of exposure. Dry sweeping or dry brushing is not allowed.
- Compressed air shall not be used to clean clothing or surfaces where RCS could be present, unless the compressed air is used in conjunction with a ventilation system that effectively captures the dust cloud created by the compressed air. Assume all dust and debris on the job site to potentially contain RCS.

□ **Procedures to restrict access**

From time to time, areas may be marked with signage stating “Restricted Access” due to RCS. Do not enter any such area. Talk to the Cameron designated competent person onsite if you have any questions.

## **II. Designation of Competent Persons**

A competent person shall be designated to make frequent and regular inspections of job sites, materials, and equipment to implement this plan. A competent person must be capable of identifying existing and foreseeable RCS hazards, and also have the authorization to take prompt corrective measures to eliminate or minimize them. Only persons having the knowledge and ability necessary to fulfill the responsibilities set forth in this plan may be designated as a competent person.

## **III. Review and Evaluation of the Plan**

This plan shall be reviewed by the safety manager at least annually, in order to evaluate its effectiveness, and be updated as necessary.

## **IV. Plan Availability**

This plan shall be readily available for examination and copying, upon request, to each employee covered by CFR 1926.1153, their designated representative, the Assistant Secretary and the Director.

## **XVIII. Site Safety Committee Participation**

The site Cameron site foreman/crew leader (to be determined) is the assigned crew member to participate in any Site Safety Committee/Safety Stand-downs.

## **XIX. Housekeeping**

The practice of good housekeeping is required in both the OSHA and EM 385 standards. The focus is on the importance of keeping the work area clean and neat and walkways & passageways clear.

Common hazards caused by poor housekeeping:

- Objects or materials in aisles or on the floor, which become tripping hazards
- Materials stacked or stored loosely or insecurely that might fall on someone
- Protruding nails, fasteners, and other sharp objects that can puncture or cut
- Large items left where people can bump against them
- Trash strewn about that can cause someone to trip or slip
- Water, oil, or other liquid spills on the floor that can cause slips and falls

At a minimum, daily cleanup of the work area is required, and more often if needed to provide a safe work environment. Work areas and means of access shall be maintained safe and orderly at all times.

The foreman must inspect all work areas prior releasing the area to a work crew. Inspections should be repeated periodically throughout the day.

## **XX. Safety Meetings**

Toolbox talk safety meetings are to be held weekly. Employee attendance is mandatory.

Employees may attend the weekly safety meeting held on Tuesdays at 6:00 AM, at the Cameron Group premises, or may alternatively attend an on-site toolbox talk given by a Cameron Foreman, or Field Production Superintendent. Foremen are also responsible for developing a daily Safe Plan of Action each day at the site, and reviewing it with the crew before work begins.

## **XXI. Respiratory Protection Program**

# **CAMERON GROUP LLC**

## **Respiratory Protection Program for Spray Foam**

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## I. Purpose and Scope

The purpose of this program is to protect all employees of the Cameron Group companies from respiratory hazards and to ensure that the company is in compliance with OSHA’s Respiratory Protection Program Standard 29 CFR 71910.134 which applies to all respiratory use in general industry and construction workplaces. The standard applies when (1) employees are required to wear respirators to protect themselves from exposure to air contaminants above a specific exposure limit, or (2) if the employer requires respirators to be worn, or (3) if respirators are otherwise necessary to protect employee health.

Engineering controls, such as ventilation, may not be completely effective in controlling airborne hazards. In these situations, respirators and other types of personal protective equipment (PPE) must be used to safeguard employees’ health. If the company has determined that some employees in certain work tasks are exposed to respiratory hazards, then all employees performing these tasks must wear the designated equipment. The company requires these employees to participate in the company’s respiratory protection program as a condition of continued employment.

### A. Required Use of Respirators

Pursuant to OSHA’s Respiratory Protection Standard, “in any workplace where respirators are necessary to protect the health of the employee or whenever respirators are required by the employer, the employer shall establish and implement a written respiratory protection program with worksite-specific procedures. The program shall be updated as necessary to reflect those changes in workplace conditions that affect respirator use.”

Employees are required to wear respirators when the following situations exist:

- There is exposure to air contaminants above a specific exposure limit
- If respirators are necessary to protect employee health
- During specific routine work practices, processes, or tasks identified by the company as requiring use of a respirator (See Table 1)

In all cases, the company pays for the cost of respirators when their use is required. The expenses associated with training, medical evaluations, and equipment shall be borne by the company.

<b>TABLE 1 - Required Respirator Use</b>		
<b>Respirator Type</b>	<b>Task</b>	<b>Respiratory Hazard</b>
Supplied Air Respirator (SAR)	Spraying SPF insulation indoors, high pressure application	MDI, Chlorinated Phosphate Ester,



Supplied Air Respirator (SAR) <i>or</i> Air Purifying Respirator (APR)	Spraying SPF insulation outdoors, high pressure application	Tertiary Amine, Hydrofluorocarbon, Ethylene Glycol, Brominated Flame Retardant
Supplied Air Respirator (SAR) <i>or</i> Air Purifying Respirator (APR)	Spraying SPF insulation indoors, low pressure application	
Supplied Air Respirator (SAR) <i>or</i> Air Purifying Respirator (APR)	Spraying SPF insulation outdoors, low pressure application	

**B. Recommended Use of Respirators**

Pursuant to OSHA’s Respiratory Protection Standard, Table 2 displays an overview of recommended respirator use. Employees voluntarily wearing dust masks (filtering face-piece) are not subject to the program’s medical evaluation; however, per OSHA requirements, their equipment must be clean and free of contamination, and not interfere with the employee’s ability to work safely. Cameron Group has adopted a voluntary respiratory protection program for installers of fiberglass. As a member of the ICAA Group Health & Safety Program, we employ Best Practices When Working with Fiberglass Insulation.

**TABLE 2 - Recommended Respirator Use**

<b>Respirator Type</b>	<b>Task</b>	<b>Respiratory Hazard</b>
Filtering Face-piece (Dust Mask)	Installation of mineral fiber insulation products.	Nuisance dust

## **II. Program Administration**

**A. Program Administrator’s Responsibilities**

Pursuant to OSHA’s Respiratory Protection Standard, “the employer shall designate a Program Administrator who is qualified by appropriate training or experience that is commensurate with the complexity of the program to administer or oversee the respiratory protection program and conduct the required evaluations of program effectiveness.”

The company’s respirator Program Administrator is the Safety Director. The administrator’s duties are to oversee the development of the respiratory program and make sure it is carried out in the workplace. The administrator will also evaluate the program regularly to make sure procedures are followed, respirator use is monitored, and respirators continue to provide adequate protection when job conditions change.

The Program Administrator’s duties include the following:

- Identifying work areas, processes, or tasks that require workers to wear respirators, and evaluating the associated hazard
- Selecting appropriate and approved respiratory protection
- Monitoring respirator use to ensure that respirators are used in accordance with their certifications
- Arranging for and/or conducting training
- Ensuring proper storage and maintenance of respiratory protection equipment

- Ensuring that fit-testing is conducted

Additionally, the Program Administrator may work with other company personnel:

- Administering medical evaluations
- Maintaining required program records
- Evaluating the respiratory protection program
- Updating the written program as necessary

#### B. Employee Responsibilities

Each employee must wear a respirator when and where required under the conditions specified by this program. Each employee is also obligated to use the equipment according to the training procedures for each model.

Employees are also responsible for the following:

- Being familiar with the program
- Caring for and maintaining respirators as instructed and storing them in a clean sanitary location
- Informing supervisor if a respirator no longer fits well so a new one that fits properly can be assigned
- Informing supervisor or Program Administrator of any potential respiratory hazards or other concerns regarding the program

### **III. Program Elements**

#### A. Medical Evaluations

Pursuant to the OSHA Respiratory Protection Standard, “using a respirator may place a physiological burden on employees that varies with the type of respirator worn, the job and workplace conditions in which the respirator is used, and the medical status of the employee.” Accordingly, OSHA specifies the minimum requirements for medical evaluation that employers must implement to determine the employee’s ability to use a respirator.

Every employee who is required to wear a respirator (and every employee who chooses to wear an air-purifying respirator voluntarily) must pass a medical evaluation and have medical approval before they are allowed to use the respirator. Employees who are not required to wear a respirator for their tasks are excluded from this requirement. Employees refusing the medical evaluation cannot work in areas requiring respirator use. Employees are not permitted to wear respirators until a physician or licensed health care professional (PLHCP) has determined that they are medically able to do so.

The evaluation is conducted using the questionnaire provided in the OSHA Respiratory Protection Program Standard 29 CFR 71910.134 Appendix C. The questionnaire and its results remain confidential

between the employee and the PLHCP. The PLHCP will disclose its written recommendations about the employee's ability to wear a respirator to the employer. Pursuant to the OSHA standard, the PLHCP will provide a copy of its recommendations to the employee. The company may utilize a third-party vendor to administer the questionnaire.

#### 1. Evaluation Procedures

Each employee requiring a medical evaluation is given a medical questionnaire, and the questionnaire is reviewed by a physician or other licensed health care professional (PLHCP). The employee is to complete the confidential questionnaire during his/her work shift and submit it to the PLHCP. The employer must not see the completed questionnaire; only the written recommendations of the PLHCP shall remain in the confidence of the employer.

To the extent feasible, the company accommodates employees unable to read the questionnaire. At an employee's request, someone other than the Program Administrator may be asked to assist in reading the document.

Follow-up medical exams are given to employees as required by the OSHA standard or as deemed necessary by the PLHCP.

After an employee has received approval and started using a respirator, an additional medical evaluation will be conducted for any of the following reasons:

- The employee reports signs and/or symptoms related to his/her ability to use a respirator, such as shortness of breath, dizziness, chest pains, or wheezing
- The PLHCP or supervisor informs the Program Administrator of a re-evaluation need
- Information from this program, including observations made during fit-testing and program evaluation, indicates a need for re-evaluation
- A change occurs in the workplace conditions that may result in an increased physiological burden on the employee

#### 2. Determination of Fitness

A physician or other licensed health care professional (PLHCP) evaluates the completed medical questionnaire. Prior to making a formal determination, the employer must provide the PLHCP with the following information on respirator usage:

- The equipment's type and weight as well as use, frequency, and duration
- Expected work effort
- Additional personal protective clothing/equipment to be used
- Estimated temperature and humidity extremes expected in the work area where the respirator is to be used

The PLHCP provides an assessment of each employee's physical ability to wear a respirator and perform the assigned work. Such evaluations will be provided in writing according to one of the following three formats:

- The employee is qualified to perform assigned work and wear the assigned respirator
- The employee is not qualified to perform assigned work and wear the assigned respirator

- The employee is qualified to perform assigned work and wear the assigned respirator with the following limitations (listed).

### 3. Follow-Up Medical Examination

A follow-up exam is provided if an employee responds positively to any of questions #1 through #8 in Section 2 of the questionnaire, or any of questions #10 through #15 if the employee has been selected to use a full-face-piece respirator or a self-contained breathing apparatus, or if the PLHCP deems it necessary. This exam includes any medical tests, consultations, or diagnostic procedures that the PLHCP needs to make a final determination for safe respirator usage.

### B. Respirator Selection

Pursuant to OSHA's Respiratory Protection Standard, only appropriate NIOSH-certified respirators shall be selected and provided by the employer when such equipment is necessary to protect the health of the employee. The selection of a respirator is based on the respiratory hazard(s) to which the worker is exposed and the workplace and user factors that affect respiratory performance and reliability. The company performs an exposure assessment identifying the respiratory hazards found in its workplace. Information on chemical components of the materials used in the workplace can be found within the Safety Data Sheets (SDS). The company is hereby utilizing the *\*workplace exposure estimates* from the following chemical manufacturers:

**Chemical Manufacturer:** Icynene Insulation System **Reference:** SDS A-004

**Methylene bisphenyl isocyanate (MDI):**

0.005 ppm TWA (ACGIH TLV (8-hr. TWA) ppm) / 0.02 ppm Ceiling (U.S. OSHA PEL 8 hr. TWA mg/m<sup>3</sup>)

When the product is sprayed or heated without adequate ventilation, an approved MSHA/NIOSH positive-pressure, supplied air respirator may be required. Air purifying respirators equipped with organic vapor cartridges and a HEPA (P100) particulate filter may be used under certain conditions when a cartridge change-out schedule has been developed in accordance with the OSHA respiratory protection standard (29 C.F.R. 1910.134).

**Chemical Manufacturer:** Baysystems North America

**References:** BAYSEAL C C Article Number 81208019, BAYSEAL 2.0 Article Number 6725023, BAYSEAL C C Article Number 81205087

**Aliphatic Ether (CAS# is a trade secret)** US. ACGIH Threshold Limit Values TWA: 20 ppm

US.OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) PEL: 50 ppm, 240 mg/m<sup>3</sup>

**Glycerin (56-81-5)** US. ACGIH Threshold Limit Values TWA: 10mg/m<sup>3</sup> (Mist.)

**Ethylene Glycol (107-21-1)** US. ACGIH Threshold Limit Values Ceiling Limit Value: 100mg/m<sup>3</sup> (Aerosol.)

US.OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) PEL: 5mg/m<sup>3</sup> (Respirable fraction.) PEL: 15mg/m<sup>3</sup> (Total dust.)

**4,4'-Diphenylmethane Diisocyanate (MDI) (101-68-8)** US. ACGIH Threshold Limit Values TWA: 0.005 ppm

US.OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) Ceiling Limit Value: 0.02 ppm, 0.2mg/m<sup>3</sup>

When this product is sprayed in combination with polymeric MDI ("A" side), a full-face or hood-type supplied air respirator operated in the positive pressure or continuous flow mode is required. For exterior spray applications where the use of supplied air respiratory protection may create a safety hazard (e.g., roof applications), and air purifying respirator with combination organic vapor/particulate (P100) cartridges may be substituted for a supplied air respirator.

\*Conditions exceeding OSHA and ACGIH prescribed Workplace Exposure Limits may be present during typical field installation of these products, requiring respiratory protections as described here, and elsewhere in this document. Based on this information and the assistance of respirator manufacturer selection tools, and in accordance with all OSHA standards, the Program Administrator has selected the appropriate respirators to be used.

There are four main types of respirators that employees will use during certain tasks. The type and brands of respirators vary widely ranging from dust masks to Supplied-Air Respirators (SARs) Following is description of the four main types of respirators used. **Air-purifying respirators or APRs are generally appropriate for exterior applications, while Supplied-Air Respirators (SARs) are recommended for interior applications.**

1. Dust Masks (Filtering Facepieces)

These simple, two-strap disposable dust masks are designed only for dust. They are not as protective as other respirators, but do an adequate job in many cases, unless the dust is toxic or copious. Don't confuse these two-strap masks with the less protective one-strap dust mask designed only for pollen or non-toxic dust.

2. Air-Purifying Respirators (APRs)

These respirators come in "half-face" or "full-face" varieties. They have removable cartridges that filter out dust, chemicals, or both. Selecting the correct cartridges is essential since they are designed for particular types of chemicals or dust. These cartridges are typically removable and sometimes interchangeable. Cartridges are available for solvents, ammonia, chlorine, acids, and other chemicals. Full-face respirators offer much more protection of the face than half-face respirators and are a better selection for the employee if irritating chemicals or skin-absorbed chemicals are expected.

Change-out Schedule.

The company has selected a cartridge/canister recommended for that chemical by the manufacturer. (Canisters are filters inside a metal shell.) The company has implemented a change-out schedule for the cartridge/canister. The cartridges must be changed out or replaced according to the change-out schedule, especially for chemicals, since they can absorb only so much contaminant before breakthrough occurs. Currently, there are few cartridges available on the market equipped with end-of-service-life indicators that show when a cartridge should be replaced. Most cartridges don't have this indicator so the company, if it utilizes APRs, has established and implemented change-out schedules to prevent breakthrough. For some gases and vapors, OSHA has published change-out schedules, as have many cartridge manufacturers.

**To establish change-out schedules to prevent cartridges/canisters from being used past their service life, the company relies on information from sources who have expertise and knowledge such as OSHA, respirator cartridge manufacturers, and chemical manufacturers (SDSs).**

The change-out schedule is based on the chemical concentration, physical work effort, temperature, and humidity. Respirator users should be trained to understand that abnormal odor or irritation is evidence that respirator cartridges need to be replaced. The OSHA standard prohibits the use of warning properties as the sole basis for determining change schedules.

3. Powered Air-Purifying Respirators (PAPRs)

These respirators use an A/C unit to draw ambient air through a sealed, variable-length hose and blow into a fully sealed hood. The result is a constant flow of clean, fresh and cool air. This reduces sweating and discomfort.

#### 4. Supplied-Air Respirators (SARs)

Supplied-air respirators are recommended for interior applications where exposures to MDI or the “B” side (resin) components may be high or unknown. SARs can provide breathing air from 1) a compressor, bottled (compressed) air, or a low pressure pump attached to an air-line hose, or from 2) a self-contained breathing apparatus (SCBA), in which you carry the bottled air with you. SARs are also called “Type C” systems or “air-line” respirators. Supplied-air systems provide the greatest protection for the wearer.

SARs consist of a full-face piece, hood or helmet to which air is supplied through a small-diameter hose connected to an air source. There are three types of air supply:

1. Continuous flow, which supplies a constant airflow to the facepiece or hood/helmet no matter what the worker’s breathing rate.
2. Pressure-demand, which supplies a constant flow of air to create a slight positive pressure in the facemask and also responds to the worker’s breathing rate.
3. Demand airflow, which provides breathing air to the facemask at a rate that depends on the worker’s breathing rate.

**Note: Demand airflow is less protective than continuous and pressure-demand.**

The air supplied to the facepiece, hood, or helmet must meet the requirements described in ANSI/ Compressed Gas Association Specification G7.1.1989 for Type 1, Grade D gaseous air. This standard requires:

- Air to have the same oxygen content as normally present in the atmosphere (19.5% to 23.5%);
- No more than 5 milligrams per cubic meter of condensed hydrocarbon contamination;
- No more than 10 parts per million of carbon monoxide;
- Lack of noticeable odor;
- A maximum of 1000 ppm of carbon dioxide.

**WARNING: Never use pure oxygen in supplied-air systems because it is a severe fire hazard and can also be toxic to the user.**

Overheating internally lubricated, piston-type compressors may produce carbon monoxide. Therefore, OSHA requires the use of:

1. A high temperature alarm;
2. A carbon monoxide alarm, OR

3. Use of both to monitor carbon monoxide levels.

If only the high-temperature alarm is used, the air supply must be monitored at intervals sufficient to prevent carbon monoxide in the breathing air from exceeding 10 ppm.

Plant compressed air is NOT recommended for use as breathing air.

### C. Respirator Fit-Testing

Pursuant to OSHA's Respiratory Protection Standard, "before an employee may be required to use any respirator with a negative or positive pressure tight-fitting face-piece, the employee must be fit-tested with the same make, model, style, and size of respirator which will be used."

The company uses a qualitative fit-test (QLFT) or a quantitative fit-test (QNFT) method to determine proper respirator fit. If an employee passes either test but notifies the employer that the fit is unacceptable, the employee is allowed to select a different respirator and is retested.

#### 1. Qualitative Fit-Testing (QLFT)

The qualitative fit-test procedures rely on a subjective sensation (taste, irritation, smell) of the respirator wearer to a particular test agent. QLFT will only be used in atmospheres less than ten times the Permissible Exposure Limit (PEL) since existing evidence only validates the QLFT protocols listed in Appendix A of OSHA's Respiratory Protection Standard to identify respirators that achieve a fit factor of 100.

#### 2. Quantitative Fit-Testing (QNFT)

The quantitative test procedures use measuring instruments to measure face-seal leakage.

The fit-test is conducted:

- Prior to initial use of the respirator
- If a different respirator face-piece (size, style, model or make) is used
- On an annual basis
- If the employee, the employer, PLHCP, supervisor, or Program Administrator makes a visual observation of changes in the employee's physical condition that could affect respirator fit. This might include dental changes, cosmetic surgery or a drastic change in weight.

#### 3. Fit-Test Exercises

The following test exercises must be performed for all fit-testing methods:

1. Normal breathing in a normal standing position, without talking;
2. Deep breathing in a normal standing position, breathing slowly and deeply, taking precaution not to hyperventilate
3. Turning the head slowly from side to side, while standing in place, with the employee holding his/her head momentarily at each extreme so that the employee can inhale at each side

4. Moving the head up and down slowly, while standing in place, inhaling in the up position when looking toward the ceiling
5. Talking out loud slowly, reading from a prepared text such as the Rainbow Passage noted by OSHA in Appendix A of the standard, counting backward from 100, or reciting a memorized poem or song

The following is one of several choices for the respirator user for the verbal component of the fit test

***Rainbow Passage***

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

6. Grimacing by smiling or frowning (only for QNFT testing)
7. Bending at the waist as if to touch toes (jogging in place can be done when the fit-test enclosure doesn't permit bending at the waist)
8. Normal breathing (as described above)

Each test exercise must be performed for one minute, except for the grimace exercise which must be performed for 15 seconds. The respirator must not be adjusted once the fit-test exercises begin. If the employee exhibits breathing difficulty during the fit-test, the employee must be referred to a PLHCP to determine whether the employee can wear a respirator while performing his duties.

D. Respirator Use

1. General Use Instructions

The respirator must be used under the conditions of NIOSH certification. Each time a respirator is worn, the wearer must conduct a "user seal check" to ensure that an adequate seal is achieved each time the respirator is put on. Employees may select either the positive or negative pressure check per OSHA guidelines in 1910.134 Appendix B-1. User seal checks are not substitutes for qualitative or quantitative fit-tests. The respirator must not be removed in hazardous environments.

Positive pressure check

Close off the exhalation valve and exhale gently into the face-piece. The face fit is considered satisfactory if a slight positive pressure can be built up inside the face-piece without any evidence of outward leakage of air at the seal. For most respirators, this method of leak testing requires the wearer to first remove the exhalation valve cover before closing off the exhalation valve and then carefully replacing it after the test.



### Negative pressure check

Close off the inlet opening of the canister or cartridge(s) by covering with the palm of the hand(s) or by replacing the filter seal(s), inhale gently so that the face-piece collapses slightly, and hold the breath for ten seconds. The design of the inlet opening of some cartridges cannot be effectively covered with the palm of the hand. The test can be performed by covering the inlet opening of the cartridge with a thin latex or nitrile glove. If the face-piece remains in its slightly collapsed condition and no inward leakage of air is detected, the tightness of the respirator is considered satisfactory.

The respirator manufacturer's recommended procedures for performing a user seal check may be used instead of the positive and/or negative pressure check procedures provided that the employer demonstrates that the manufacturer's procedures are equally effective.

Tight fitting face-piece respirators are not permitted for use if an employee:

- Has facial hair that interferes with either the sealing surface of the respirator and the face, or interferes with the valve function
- Wears corrective glasses/goggles or other personal protective equipment that interferes with the seal of the face-piece
- Wears any type of object (e.g., jewelry) that interferes with the seal of the face-piece

The employee must vacate the respirator-use area for any of the following reasons:

- To wash his/her face and respirator face-piece as necessary to prevent respirator-induced eye irritation
- If vapor or gas breakthrough is detected
- If there is a change in breathing resistance
- If there is face-piece leakage
- To replace the respirator/filter or change the cartridge/canister
- If he or she becomes ill

## 2. Cleaning, Maintenance, and Storage

### a. Cleaning

Respirators are to be regularly cleaned and disinfected as necessary and according to the manufacturer's instructions. Employees inspect and clean their own respirators according to the provisions of this program. The following steps are to be followed for cleaning and disinfecting respirators, unless the manufacturer directs otherwise:

- Disassemble respirator, removing all filters, canisters, or cartridges
- Wash the face-piece and associated parts in a mild detergent with warm water. Do not use organic solvents or bleach

- Rinse thoroughly in clean, warm water
- Wipe the respirator with disinfectant wipes (70% isopropyl alcohol)
- Air-dry in a clean area. If a clean area is not available, use clean disposable paper towels to blot excess moisture
- Reassemble the respirator and replace any defective parts (noting the condition of the head straps and valve flaps)
- Place in a clean, dry plastic bag or other air-tight container

The Program Administrator is responsible for ensuring there is an adequate supply of cleaning and disinfecting supplies. If supplies are low, employees must notify their supervisor or the Program Administrator.

b. Maintenance

After leaving the respirator-use area, employees can do limited maintenance on their equipment only in an area that is free from respiratory hazards. Maintenance involves a thorough visual inspection for cleanliness and/or defects. Worn or deteriorated parts must be replaced prior to equipment use. No components are replaced or repairs made beyond those recommended by the manufacturer. The company uses only replacement parts that are authorized by the respirator manufacturer.

The OSHA standard requires that all respirators be inspected before each use and during cleaning. Respirator Inspection Checklist:

- Face-piece: cracks, tears, holes, facemask distortion, cracked, or loose lenses/face shield
- Head straps: breaks, tears, broken buckles/clasps, overstretched elastic bands
- Valves: residue/dirt, cracks or tears in valve material, absence of valve flap
- Filters/Cartridges/Canisters: proper cartridge for hazard, approval designation, intact body and gaskets, cracks or dents in housing
- Air Supply Systems: breathing air quality/Grade D and Certificate of Analysis from supplier, condition of supply hoses, hose connections, settings on regulators and valves, fully charged battery, moisture content, NIOSH markings on breathing gas containers

Defective respirators or those with defective parts should be taken out of service immediately. Employees should notify their supervisor about all respirator defects. It is the supervisor's responsibility to give the defective equipment to the Program Administrator who will then decide whether to:

- Temporarily take the respirator out of service until it can be repaired
- Have it repaired
- Dispose of it if the problem cannot be repaired

When a respirator is taken out of service, it is tagged as such to prevent accidental use of a malfunctioning device. All defective respirators are stored separately from functional respirators.

### c. Storage

Respirators are stored in a clean, dry area. The company follows the manufacturer's storage recommendations. The equipment is stored in plastic bags or airtight containers. Each bag/container is marked with an employee name, and only that particular employee can use it for his/her equipment storage. Typically, the equipment will be stored in the employee's assigned vehicle. A supply of respirators and replacement components are stored in the Program Administrator's supply room.

The employer must ensure that all canisters and filters are properly labeled and color coded with the NIOSH approval label and that the label is not removed, obscured, or defaced while in service. This requirement enables the respirator user to confirm that the appropriate filters have been selected before the respirator is used.

### 3. Cartridge and Canister Change-Out Schedules

Using 3M's Service Life Software, the #60921 organic vapor/P100 cartridge is calculated to have a service life of 46,727 hours until breakthrough to 10% of the exposure concentration. (Service life calculation based on 4,4-Diphenylmethane diisocyanate at an Exposure=0.051mg/m3.) Since mechanical restriction may occur over time due to the work environment, a monthly change-out schedule has been established.

### 4. Equipment Malfunction

If a respirator or any of its components malfunctions (breakthrough, face-piece leakage, or faulty valve) the wearer must leave the respirator-use area immediately and notify the supervisor about the malfunction. The supervisor will ensure that the employee receives the necessary repair parts or a new functional respirator.

## E. Respirator Training

Pursuant to OSHA's Respiratory Protection Standard, employees must be trained in the proper use of respirators including transporting them, putting on and removing them, any limitations on their use, and their maintenance. The Program Administrator provides training to respirator users and their supervisors on:

- Contents of the company's Respiratory Protection Program
- Responsibilities of employees and supervisors
- Requirements of OSHA's Respiratory Protection Standard

All training will occur prior to any respirator use in the workplace. Training recurs annually and more often if retraining appears necessary to ensure safe use. The training program covers the following topics:

- All elements of the company's Respiratory Protection Program
- The information covered under OSHA Standard 29 CFR 71910.134 as well as the company's obligations under the standard

- Respiratory hazards encountered at the workplace
- Proper selection and use of respirators and other applicable PPE
- Why the respirator is necessary
- The respirator's capabilities and limitations
- Fit-testing
- How improper fit, use, or maintenance can make the respirator ineffective
- How to properly inspect, put on, seal check, use, and remove the respirator
- How to clean, repair, and store the respirator
- Medical symptoms that may limit or prevent respirator use

Employees are required to demonstrate their understanding of the topics covered in the training through hands-on exercises. The Program Administrator documents the training including type, model, and size of respirator on which each employee has been trained and fit-tested.

## **IV. Program Evaluation**

Pursuant to OSHA's Respiratory Protection Standard, the employer must conduct evaluations of the workplace to ensure that the written respiratory protection program is properly implemented and to consult employees to ensure that they are using the respirators properly. The Program Administrator conducts periodic evaluations of the workplace to ensure that the provisions of this program are being implemented. These evaluations include regular consultations with both the employees using respirators and their supervisors. This is done to identify areas for improvement. A review of records, site inspections, and periodic air monitoring also assist in program review.

We evaluate our respiratory program for effectiveness by doing the following steps:

- Checking results of fit-test and health provider evaluations
- Talking with employees who wear respirators about their respirators: how they fit; do they feel the respirators are adequately protecting them; do they notice any difficulties in breathing while wearing them; do they notice any odors while wearing them; etc.
- Routine surveillance of work conditions
- Periodically checking employee job duties for changes in chemical exposure
- Periodically checking maintenance and storage of respirators
- Periodically checking how employees use their respirator

## V. Documentation and Recordkeeping

The following records will be kept on file at the company:

- A copy of this written respiratory program and the OSHA standard
- Medical evaluation records and fit-testing records (available only to the employee and to OSHA)
- Respiratory training records
- Written recommendations from the PLHCP on the employee's ability to use respirators (maintained in accordance with the OSHA Medical Records Standard 29 71910.1020)
- Safety Data Sheets (SDSs) of the relevant materials used in the workplace

Fit-test records must be kept until the next fit-test is administered. Although medical records are confidential to the employee, the employer must retain a record of the medical evaluation which includes the PLHCP's written recommendation.

## VI. Resources

1. Respiratory Protection Program Standard 29 C.F.R. 71910.134.
2. Fit-Testing Procedures. Appendix A-1 to 71910.134.
3. User Seal Check Procedures. Appendix B-1 to 71910.134.
4. Respiratory Cleaning Procedures. Appendix B-2 to 7 1910.134.
5. OSHA Respirator Medical Evaluation. Appendix C to 7 1910.134.
6. OSHA Respirator Medical Evaluation. Appendix C to 7 1910.134. (Spanish translation).
7. National Institute for Occupational Safety And Health (NIOSH) - Respiratory Protection.