# ATLAS PAINTING AND SHEETING CORP. 465 Creekside Drive Amherst, NY 14228 (716) 564-0490

## CORPORATE HEALTH AND SAFETY PLAN

Revision 0
Prepared: January 6, 2025
by:
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By signing the Safety Commitment on page ii, and/ or by using this Plan for any means, Atlas Painting and Sheeting and its Owner's agree not to provide copies to other contractors for their use. Atlas Painting and Sheeting may utilize the Corporate Health and Safety Plan on their projects for a period of one year from the date the Plan was issued. It shall be Atlas Painting and Sheeting's responsibility to use the proper forms to make the Plan site specific, to enforce the provisions of this Plan and to allow all employees access to this Plan.

This Corporate Health and Safety Plan was prepared by Mr. Mitchell Blum CSP, CHMM, CHST of MB Safety Consulting, Inc., for Atlas Painting and Sheeting. This Plan is designed to be used by corporate management, the Safety Director, project supervisors and foreman in their efforts to provide an safe and healthy work environment for their employees, themselves and visitors. This Plan was written to comply with the current OSHA Construction Standards 29 CFR 1926 and OSHA General Industry Standards 29 CFR 1910. This Plan is intended to supplement OSHA standards and does not replace the OSHA standards. Where there are differences between this plan and other Federal, State or Local standards or manufacturer's safe operating procedures, the more stringent standard shall apply. Atlas Painting and Sheeting shall be responsible for ensuring that all projects, where this Plan is in use, comply with the Plan, Federal, State and Local regulations.

MB Safety Consulting does not exercise any oversight responsibilities and shall not be responsible or liable for the enforcement of this Plan. MB Safety Consulting shall not exercise direct or indirect control of Atlas Painting and Sheeting, nor have direct or indirect oversight of its employees.

Prior to starting any project, a pre-job hazard analysis must be performed. Then corporate management must complete the site specific safety plan documenting which sections of this plan will apply on the project and what training and personal protective equipment will be required.

### **SAFETY COMMITMENT**

Safe and healthy work environments are a priority for Atlas Painting and Sheeting for its employees and visitors. In order to accomplish a safe and healthy work environment, all Atlas Painting and Sheeting's employees will receive appropriate training and be provided the required safety equipment. Additionally, this Corporate Health and Safety Plan has been established and its implementation is mandatory.

Atlas Painting and Sheeting also recognizes the hazards imposed to both its employees and the environment by certain materials and processes during the course of its operations. Atlas Painting and Sheeting implements appropriate engineering controls and measures as required by its health and safety programs, OSHA regulations and project specifications to reduce and minimize the impact of these hazards. Atlas Painting and Sheeting follows all health and safety regulations established by OSHA, EPA and state and local government.

The management of Atlas Painting and Sheeting acknowledges its total support and the need to ensure the health and safety of its employees and other personnel involved at its job sites. Atlas Painting and Sheeting also authorizes its project competent person(s) to take prompt corrective measures to correct safety, health and environmental issues.

1/6/25

James Frangos Date

President

**Safety Director** 

 $\frac{1/6/25}{6}$ 

Robert Cohan Date

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### 1.0 INTRODUCTION

This Corporate Safety Plan is established to provide Atlas Painting and Sheeting management, supervisors and employees with guidelines and rules that will be established and followed at all project locations. At the time of the writing, the Plan is written based upon the latest Occupational Health and Safety (OSHA) regulations and is intended to supplement the OSHA regulations. Where there exists Federal, State or Local regulation that conflict with this Plan, the more stringent regulation will be followed. Atlas Painting and Sheeting shall be responsible for making this Plan site specific, enforcing the provisions of this Plan and allowing employees access to this Plan.

### 1.1 SITE SPECIFIC SAFETY PLAN

Prior to starting work at any Atlas Painting and Sheeting project location, a site specific safety plan is required. The plan will address state and local regulations in addition to OSHA and federal regulations. All personnel will be made aware of the site specific Health and Safety Plan and the requirements it contains. The Plan will be created by a Safety Consultant with knowledge of the industry or the Safety Director and submitted to management for review and approval. Prior to starting work on any project, employees will receive site specific training which will include the site specific safety plan and then sign an acknowledgment of the training. Employees will receive site specific training for each project they work.

### 1.2 HAZARD IDENTIFICATION AND RISK ASSESSMENT

Prior to starting any project, a pre-job hazard analysis (JHA) will be conducted by the Safety Consultant and/or Safety Director and may include the assistance of a Safety Professional and management. Employees and if sub-contractor are used, they are encouraged to participate in the pre-job hazard analysis. The analysis will include a review of the project specifications, project location(s), equipment to be used, methods to be used and personal to be assigned to the project. The pre-job hazard analysis will also include a review of routine and non-routine job tasks.

To conduct a pre-job hazard analysis, the following steps should be included:

- 1. Identify the job tasks or categories
- 2. Identify the hazards of each task or category
- 3. Identify the engineering and/ or administrative controls for each task or category
- 4. Identify the personal protective equipment required for each task or category
- 5. Identify the training required for each task or category
- 6. Review each of the above steps
- 7. All hazards identified will be classified as to its severity and probability.

During the project, the project competent person will re-assess the project to determine if new tasks, procedures or hazards will be encountered. If so, the competent person will complete an additional pre-job hazard analysis and the employees will be informed of any additional engineering, administrative, personal protective equipment or training required.

After corrective measures have been implemented, the project competent person will review the measures to ensure that no new hazards have been created, and if there are new hazards, the steps to mitigate the hazards.

Employees will be trained in the risk/ hazard identification process.

### 1.3 SAFETY PLAN REVIEW

The Corporate Safety Plan will be reviewed on an annual basis. The Plans may be reviewed and revised more frequently if new regulations affecting the company or its project are promulgated. Management, the Safety Professional and any interested employees will conduct the review. This review should take into account new projects, methods and regulations that may affect the company in the future. In addition, the review will consider new technology and/or enacting more stringent company regulations to protect the company and its employees.

### 1.4 OTHER CONTRACTORS HEALTH & SAFETY REQUIREMENTS

Subcontractors or other company's personnel on a Atlas Painting and Sheeting project will be required to comply with this Plan and the Site Specific Safety Plan, with the Atlas Painting and Sheeting, and all rules and regulations concerning health and safety of its workers.

### 1.4.1 GENERAL CONTRACTORS

On projects where Atlas Painting and Sheeting is the subcontractor, the General Contractor is ultimately responsible for its employees. Atlas Painting and Sheeting will provide the General Contractor with the Site Specific Safety Plan and a description of work area(s) that are to be avoided due to hazardous work such as lead abatement.

### 1.4.2 SUBCONTRACTORS

Any employee from a subcontractor found in violation of the Site Specific Safety Plan will be subject to Atlas Painting and Sheeting's Discipline Program. All subcontractor's employees working in or near a work site where potential exposures exist, must sign an acknowledgment that they have received and will comply with all instructions and directions given to them by Atlas Painting and Sheeting.

When Atlas Painting and Sheeting uses a sub-contractor, the sub-contractor will submit their Corporate Health and Safety Plan, current OSHA training relevant to the project, OSHA 300A for the previous three years and workers compensation experience modification rate (EMR) for the previous three years. Atlas Painting and Sheeting's Safety Director will review the above. The criteria for an acceptable sub-contractor is for the EMR to be 0.9 or less and the loss days with injury or illness to be 75% or lower than the industry standard for the sub-contractor's type of work.

Sub-contractors will be required to attend a pre-job safety meeting held by Atlas Painting and Sheeting. On a weekly basis, the sub-contractor employees will be required to attend a safety meeting held by Atlas Painting and Sheeting.

At the conclusion of each project, Atlas Painting and Sheeting's Safety Director will conduct a review of the sub-contractor's work and its performance.

### 1.4.3 OTHER SITE PERSONNEL

Atlas Painting and Sheeting does not exercise any control of Owner's representative such as Inspectors and does not have the authority to remove these people from Atlas Painting and Sheeting work areas. Most project specifications authorize the Owner's representative to enter hazardous work areas at any time.

### 1.5 REFERENCES

- a. 29 CFR 1926 OSHA Standards for the Construction Industry
- b. 29 CFR 1910 OSHA Standards for General Industry
- c. 29 CFR Part 1904
- d. Various OSHA Instructions such as CPL 2-2.58, CPL 2-1.23, CPL 2-0.12
- e. Various OSHA letters of interpretation
- f. 42 CFR part 84
- g. SSPC 93-02 Industrial Lead Paint Removal Handbook, 2<sup>nd</sup> Edition, Volume I
- h. SSPC 95-06 Project Design, Industrial Lead Paint Removal Handbook, Volume II
- i. 49 CFR 171-179
- j. Various ANSI standards
- k. Various manufacturer safe operating procedures

### 2.0 CORPORATE DISCIPLINE POLICY

Atlas Painting and Sheeting has established two levels of safety infractions, minor and major. A minor violation is a violation where the worker is not at immediate risk of serious injury. Minor violations may include failure to wear a hard hat or failure to wear a safety vest. A major violation is a violation where the worker is at risk of serious injury or death or places co-workers at risk of injury or death. Major violations include failure to tie-off at 6 feet for fall protection, failure to tie-off when using an aerial lift or failure to use a spotter when backing a vehicle in a work zone. The Safety Director, foreman and competent person will determine if a violation is major or minor.

### 2.1 MAJOR VIOLATION

Worker(s) committing a major violation of the safety rules as specified by the Corporate Health and Safety Plan and the Site Specific Safety Plan will be issued a written warning (Appendix 3). Examples of major violations include: not using fall protection, horse play, backing a vehicle without a spotter, and any other infraction which could cause bodily harm or death to a worker or co-worker. The second violation, the worker may be suspended for up to three days without pay and the third violation may be grounds for permanent termination from all Atlas Painting and Sheeting operations. Violations must occur within a six month period to determine if there are sufficient grounds for suspension or termination. The President, Safety Director, Foreman and Competent Person will make the determination if the violations is cause for suspension or termination. Likewise, if the Competent Person is at fault for not properly supervising the workers, the Competent Person will be subjected to the same disciplinary program. Any worker who puts himself or others in imminent danger will be terminated from the project immediately.

<u>Violation</u>	Disciplinary Action
1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup>	Written warning Written warning, up to 3 days off Written warning with possible termination of employment
Imminent danger	Immediate termination

### 2.2 MINOR VIOLATION

Worker(s) committing a minor violation of the safety rules as specified by the Corporate Health and Safety Plan and the Site Specific Safety Plan will be given a verbal warning the first time they are found breaking the rules. Examples of minor violations include: failure to wear a hard hat, failure to wear a respirator properly, failure to clean PPE as required and any other non-life threatening violation. If a verbal warning is given to a worker, the Competent Person will document the specific details of the warning in the job site Health and Safety log book. Written warning will be issue after the first violation (Appendix 3). The third violation, the worker may be suspended for up to three days without pay and the forth violation may be grounds for permanent termination from all Atlas Painting and Sheeting operations. Violations must occur within a three month period to determine if there are sufficient grounds for suspension or termination. The President, Safety Director, Foreman and Competent Person will make the determination if the violations is cause for suspension or termination.

<b>Violation</b>	<b>Disciplinary Action</b>
1 <sup>st</sup>	Verbal warning - documented in field log book
$2^{\text{nd}}$	Written warning
$3^{\rm rd}$	Written warning, up to 3 days off
4 <sup>th</sup>	Written warning with possible termination of employment

### 2.3 WORKPLACE INSPECTIONS

Workplaces will be inspected on a daily and weekly basis by the assigned competent person (Site Safety Officer). All inspections will be documented using forms from the Appendices within this Safety Plan. During the inspections, if an employee, or employees are observed not following the safety rules, the competent person will address the violation with the affected employee(s), and will document the infraction using the procedures in Section 2.1 or 2.2.

### 3.0 ORGANIZATION AND RESPONSIBILITIES

### 3.1 CORPORATE MANAGEMENT SAFETY RESPONSIBILITIES

- 1. Eliminate potential hazards by providing appropriate safeguards, removing or minimizing personal exposures to hazardous materials and providing personal protective equipment.
- 2. Assign and support a company Safety Director.
- 3. Provide training for all hazards encountered at the job sites.
- 4. Enforce Health and Safety regulations for all employees.
- 5. Make available to all employees copies of their medical records as well as health and safety plans.
- 6. Assign a competent person for each project who has the authority to implement the safety plan and take corrective actions as necessary.

### 3.2 SAFETY DIRECTOR RESPONSIBILITIES

- 1. Monitor project locations to ensure that the corporate safety programs are being carried out.
- 2. Ensure the most recent safety regulations are distributed to field personnel supervisors and competent persons.
- 3. Review all accident records, check OSHA logs for completeness, and review safety and loss programs
- 4. Confirm project locations are complying with federal, state and local regulations.
- 5. Implement and oversee the Respiratory Protection Program
- 6. Review project specifications for any new health, safety or environmental regulations that are required, and informing the President of the changes.
- 7. Ensure availability, distribution and maintenance of quality control inspection equipment, Personal Protective Equipment (PPE), and Protective Work Clothing (PWC) at all project sites.
- 8. Ensure field personnel working on hazardous paint removal projects participate in the appropriate medical surveillance programs.
- 9. Monitor the company Health and Safety Programs, assuring that the programs are up to date and site safety inspections are routinely conducted.
- 10. Review all accident reports and conducting follow-up interviews as necessary.
- 11. Ensure that the project's competent person is properly trained, is conducting the required inspections, and is filing the proper form through phone conversations and project reviews.
- 12. Stay abreast of health, safety and environmental regulations. If new regulations affect company business, discuss the changes with management and distribute the changes to supervisors and competent person.

### 3.3 SUPERINTENDENT/FOREMAN RESPONSIBILITIES

- 1. Know job safety rules and regulations and confirm employees in your charge understand the safety rules that apply to them. Immediately correct any unsafe act.
- 2. Act as the primary or secondary project competent person.
- 3. Eliminate unsafe working conditions and unsafe acts by employees as soon as possible, inform the Competent Person.
- 4. Set a good example for your employees.
- 5. Identify and evaluate job hazards and take the precautions necessary.
- 6. Instruct employees in the proper use and care of equipment.
- 7. Closely supervise employees and issue detailed instructions concerning work performance and personal conduct during the job.
- 8. Explain in detail the duties required of new employees. New employees will be carefully supervised to ensure qualification before the start of regularly assigned duties.

### 3.4 SAFETY CONSULTANT (INDUSTRIAL HYGIENIST)

- 1. Be available for consultation with management and the Safety Director on matters pertaining to health and safety.
- 2. Coordinate the development of the Corporate Health and Safety Plan.
- 3. At management's request, conduct job site audits and inspections.
- 4. The industrial hygienist will be a Certified Industrial Hygienist (CIH) and/ or Certified Safety Professional (CSP) with at least five years experience in the bridge painting industry.

### 3.5 OCCUPATIONAL PHYSICIAN

An Occupational Physician who is Board Certified, will be retained by Atlas Painting and Sheeting on projects which have specific OSHA health and safety standards. Criteria for this certification will be based on OSHA regulations and hazards encountered at each specific project location. The Physician will be available for consultation after acute exposure to toxic or hazardous substances or after an employee sustains exposure to an occupational injury or illness. The physician will administer pre-employment physicals as required to all site workers involved in hazardous operations, and certify that each worker is able to work in a hazardous environment, wear respiratory protection and other protective equipment specified for their jobs.

### 3.6 COMPETENT PERSON

The basic definition for a Competent Person is, one who is capable of identifying existing and predictable hazards which are unsanitary, hazardous or dangerous to employees and who have the authorization to take prompt corrective measures to eliminate them.

### 3.7 TRAINING REQUIREMENTS FOR THE COMPETENT PERSON

- 1. Lead Competent Person will have completed the Society for Protective Coatings (SSPC) C-3 Supervisor/
  Competent Person for Deleading of Industrial Structures class and has current refresher training (SSPC
  C-5) within the previous year. Also will have two years of experience on industrial lead abatement projects.
- 2.Fall Protection Competent Person will have at least five years of fall protection experience. It is recommended that this person have completed a OSHA 10 hour in Construction class or a fall protection class.
- 3. Scaffold Competent Person will have at least five years of scaffold erection, modification and dismantling experience. It is recommended that this person have completed a OSHA 10 hour in Construction class or a scaffold training class.
- 4. Confined Space Supervisor will have training for confined space and rescue procedures.

### 3.8 COMPETENT PERSON FOR TOXIC METALS

The Competent Person reports directly to the President of Atlas Painting and Sheeting, has the ability to recognize hazards, and has the authority to take corrective actions. The Competent Person will:

- 1. Ensure the effectiveness and the continued integrity of environmental controls.
- 2. Monitor airborne and biological exposures and report results to employee.
- 3. Ensure implementation of the Hazard Communication program.
- 4. Implement applicable training for site personnel.
- 5. Ensure workers entering contaminated zones are properly protected and trained in the use of personal protective equipment (PPE), exposure control methods, personal hygiene facilities, and decontamination practices.
- 6. Verify the proper functioning and operation of the engineering controls.
- 7. Ensure emissions to air, water and soil and all waste streams are minimized and in compliance with applicable federal, state and local regulations.
- 8. Control access to the site and designate contaminated work zones.
- 9. Maintain project documentation as required by Atlas Painting and Sheeting.
- 10. Implement and oversee all site specific health and safety programs as directed by the Safety Director and Industrial Hygienist.
- 11. Conduct daily and weekly site inspections. Inspect job site conditions and workers personal protective equipment.
- 11. Oversee daily implementation and enforcement of the hazardous waste management procedures.
- 12. Set a good example for workers on the project.
- 13. If there are any safety, health or environmental problems, questions or concerns, contact the Safety Director.

If the Competent Person is unavailable during lead or other toxic metal exposure operations, either an alternate Competent Person will be onsite or other operations not involving lead exposure operations will be performed.

### 3.8.1 COMPETENT PERSON - OTHER THAN TOXIC METALS

Atlas Painting and Sheeting will have a competent person responsible during all other operations that require a competent person such as fall protection, scaffold erection, modification and dismantling and confined space operations. This person may be the same as the competent person for lead or other toxic metal operations. The competent person will have completed an OSHA 10 hour Construction Industry class and will have at least two years experience on similar types of projects. In addition, the competent person will:

- 1. Set a good example for workers on the project.
- 2. Ensure workers are trained for each hazard.
- 3. Ensure workers have the appropriate personal protective equipment.
- 4. Conduct daily and weekly inspections of personal protective equipment.
- 5. Conduct daily job site inspections.
- 6. If there are any safety problems, questions or concerns, contact the Safety Director.

### 3.9 WORKERS RESPONSIBILITIES

- 1. Report unsafe working conditions or unsafe acts to your foreman or Competent Person as soon as possible.
- 2. Report all accidents and near-misses to your foreman or Competent Person.
- 3. If injured, get first-aid promptly.
- 4. Use all prescribed safety equipment and personal protective equipment and maintain in good working condition. Any defective equipment will be taken out of service immediately. The use of safety equipment is mandatory and failure to use it will result in disciplinary actions.
- 5. Clean your equipment (i.e respirator, hard hat, safety vest) when required.
- 6. Always use the right tool for the job. Only use tools you are familiar with or get instruction and training from your foreman.
- 7. Always maintain good housekeeping practices.
- 8. Bringing or using drugs and alcohol are forbidden at the job site and is cause for immediate termination.
- 9. Arriving to a job site under the influence of drugs and/ or alcohol is prohibited and is cause for immediate termination.
- 10. The use of company vehicles is strictly for company business. Company vehicles shall not be used for personal business. If assigned a company vehicle, do not allow another employee to use the vehicle without management's authorization.
- 11. Compliance with the Corporate Health and Safety Plan and Site Specific safety Plans are a condition of employment. Violations of safety rules will be documented and may be cause for termination of employment.

### 4.0 SANITATION

In accordance with OSHA 29 CFR 1926.51 the following sanitation rules will apply for each project locations.

### **4.1 POTABLE WATER**

- 1. An adequate supply of potable water will be provided at each project location.
- 2. Potable containers for drinking water will be capable of being tightly sealed and have atap.
- 3. Each container will be clearly marked as drinking water.
- 4. Do not use a common drinking cup.
- 5. Trash receptacles for used drinking cups will be provided.
- 6. Potable water will meet the standards in 42 CFR part 72.

### 4.2 TOILETS

1. Toilets at construction sites will be provided as a minimum.

Number of Employees	Minimum Number of Facilities	
20 or less	1	
20 or more	1 toilet seat and 1 urinal per 40 workers	
200 or more	1 toilet seat and 1 urinal per 50 workers	

- 2. When working on a short duration project of less than two days, if a toilet facility is near-by (within ten minutes) of the work area, and no hazardous work is being performed (i.e. lead abatement operations), then an onsite portable toilet facility is not required.
- 3. When working a short duration project of less than two days, and hazardous work is being performed, toilet facilities will be required onsite.

### 4.3 HAND WASHING FACILITIES

- 1. Hand washing facilities are required during painting, coating and abatement of hazardous ortoxic
- 2. The hand wash facility will have the following:
  - a. Maintained in a sanitary condition.
  - b. Cold and hot or tepid running water.
  - c. Hand soap or a similar cleansing agent.
  - d. Individual hand towels (paper towels), air driers or clean individual sections of continuous cloth toweling.

### 4.4 SHOWERS

- 1. Where showers are required by an OSHA standard or project specifications the following will apply:
  - a. One shower will be provided for each 10 employees of each sex.
  - b. Soap will be provided in each shower.
  - c. Hot and cold running water will be provided.
  - d. Individual clean towels will be provided for each employee.
  - e. The shower facility will be cleaned either prior to or after each shift which requires a shower.
  - f. During cold weather, the shower facility will be heated.

### 5.0 ILLUMINATION

The primary requirements for industrial lighting are sufficient quantity and high quality of illumination on all work areas. All areas on the job site in which workers will be expected to work will be lighted in accordance with OSHA 29 CFR 1926.56, to not less than the OSHA minimum illumination intensities listed in the table below. Areas will be periodically measured by the Competent Person using a light meter to assure compliance with these requirements.

### MINIMUM ILLUMINATION INTENSITIES IN FOOT-CANDLES

Foot Candles	Area or Operation	
3	Waste areas, accessways, active storage areas,	
5	General site areas, indoors, corridors, hallways and	
10	Locker or dressing rooms, indoor toilets, dining	
30	First aid station and offices	

### 6.0 INSPECTIONS AND SAFETY MEETINGS

### 6.1 INSPECTIONS

Regular safety inspections will be conducted by the Competent Person, supervisor or foreman to check compliance with policy and standards; also to detect and correct violations of unsafe actions or conditions and ensure that sub-contractors are in compliance. In addition, outside agencies such as insurance carriers or safety consultants may be requested to conduct audits of Atlas Painting and Sheeting project safety.

### 6.1.1 DAILY SITE INSPECTIONS DURING ABRASIVE BLAST OPERATIONS

The Competent Person will conduct a site inspection during abrasive blast operations to verify compliance with health and safety regulations. During other operations, the competent person will maintain a log book and document information in the log book.

### 6.1.2 WEEKLY SITE INSPECTIONS

Weekly site inspections will be conducted and documented by the Competent Person using.

### **6.2 NEW HIRE ORIENTATION**

Upon hire, new employees will receive training on Atlas Painting and Sheeting's Corporate Health and Safety Plan, Safe Operating Procedures (SOP) of equipment that the employee may be required to use, medical requirements and any other information required for the individual to fulfill their duties. The new hire orientation will be conducted by the Safety Director or other designated person. This training will be repeated on an annual basis.

### 6.3 PRE-JOB SAFETY MEETING

Prior to starting work on any project, all employees must receive site specific safety training. The training will be based upon the hazards of the project, engineering controls, personal protective equipment that may be use, medical requirements and any other site specific information. The site specific training will be conducted by the project Competent Person, foreman or other designated person.

### **6.4 WEEKLY SAFETY MEETINGS**

Prior to staring any project, the Competent Person will conducted a pre-job safety meeting with all employees. The meeting will detail all recognized hazards such as toxic metal, location of emergency facilities, details of the site specific safety plan and any other information necessary for the project. Prior to any new employee starting the project, the new employee will receive the same pre-job safety meeting.

Safety meetings will be conducted weekly by the site Competent Person, foreman, technical service representative or other knowledgeable persons. Safety meetings may discuss sections of the Health and Safety Plan, discrepancies at the job site, accidents or other information that the crew may need to know in order to work safely. The meetings will be recorded and maintained in project records. The Safety Director will review these records quarterly to ensure that employees are receiving the appropriate safety meetings and will add new topics as necessary.

### Example of safety meeting topics are:

- 1. Hazard Communication- employees right to know, location of SDS, chemicals on the job
- 2. Lead- exposures, engineering controls, housekeeping
- 3. Respirators- how to clean, protection factors, change schedule of filters and cartridges
- 4. Fall Protection- harnesses and lanyards, safety cables, aerial lifts
- 5. Aerial Lifts- tie-off, how to use, Safe Operating Procedures
- 6. Safe Operating Procedures- blasting, painting, compressor, dust collector, etc.
- 7. Ladder- 3 foot over working surface, tie-off at the top, foot the ladder
- 8. Personal Protective Equipment
- 9. Overhead Utilities
- 10. Working over Water

A good practice would be to copy a section or sections of this Corporate Health and Safety Plan or the Site Specific Safety Plan to the back of the safety meeting or use pre-written safety meetings from trade organizations or prepare a detailed written safety meeting. By having a detailed safety meeting, outside auditors can be assured of what information was relayed to employees.

### 7.0 EMPLOYEE ACCESS TO MEDICAL RECORDS

In accordance with 29 CFR 1910.1020, employees have the right to access their medical and exposure records. Atlas Painting and Sheeting will provide access to employees records within 15 days of a written or verbal request.

### 7.1 EMPLOYEE RECORDS INCLUDE:

- 1. Monitoring results of workplace air or measurements of toxic substances or harmful physical agents in the workplace. The monitoring may have been on an employee performing the same job task.
- 2. Biological monitoring results.
- 3. Safety Data Sheets (SDS) containing information about a substance's hazards to human health.
- 4. Descriptions of treatments and prescriptions.
- 5. Employee medical complaints.
- 6. Medical and employment questionnaires or histories.

### 7.2 ACCESS CAN BE PROVIDED BY:

- 1. Employee's may be provided copies of their records.
- 2. Employee's may be provided facilities to copy their records.
- 3. Employee's may be loaned their records and would be required to return the original.

### 7.3 RECORDS WILL BE MAINTAINED FOR:

- 1. Employee medical records will be maintained for the duration of employment plus 30 years.
- 2. Employee exposure records will be maintained for the duration of employment plus 30 years.
- 3. Analysis using medical or exposure records for the duration of employment plus 30 years.

### 8.0 INCLEMENT WEATHER

The Foreman/ Competent Person will keep track of the weather conditions for outdoor projects by using radio, television, newspaper or other methods on a daily basis. Since weather conditions can and do change frequently during the day, the Foreman/ Competent Person will keep an eye on current weather conditions. If adverse conditions do occur, work will be stopped or curtailed as necessary.

### 8.1 ADVERSE CONDITIONS INCLUDE

- 1. Rain, snow, sleet or high winds.
- 2. Electrical storms.
- 3. When working from a platform, scaffold, aerial lift, platform truck, scissor lift or other scaffolds, work will be stopped when winds exceed 30 miles per hour (mph). The only exception, is when a scaffold or platform is specifically designed by an Engineer to withstand winds higher than 30 mph.
- 4. Tornado or hurricane.
- 5. Flooding.
- 6. Icing or slippery work surfaces.

### 9.0 PROTECTIVE WORK EQUIPMENT

Personal protective equipment (PPE) is to be provided by Atlas Painting and Sheeting, used in a manner as required by the manufacturer and maintained in a sanitary and reliable condition. If an employee uses his own personal equipment, the equipment will be inspected by the Competent Person and will be required to be maintained in a sanitary and reliable condition. Each type of PPE will be selected for each employee and will be fitted for the employee. If defective, damaged or unsanitary PPE is found either by an employee or the Competent Person, it will be removed from service.

### 9.1 PERSONAL PROTECTIVE EQUIPMENT ASSESSMENT

Prior to starting any project or new job task, a certified hazard assessment/ Personal Protective Equipment (PPE) assessment is to be conducted and documented. The assessment will be conducted by the Safety Director at the start of the project and the project competent person during the project when a new job task is being performed or if the PPE that has been assigned is deem inadequate. PPE is selected for each hazard and for each affected employee.

### 9.2 HARD HATS

Employees working in areas where there is the possibility of falling objects, head injury, impact or electrical shock or burns will be issued hard hats as required by OSHA standard 29 CFR 1926.100. The hard hat will meet ANSI Z89.1 for falling or flying objects or Z89.2 for high voltage electrical shock. The Project Supervisor/ Competent Person will establish areas where hard hats will be required and will ensure that all workers wear hard hats in the designated area.

### 9.3 EYE AND FACE PROTECTION

Atlas Painting and Sheeting requires eye protection to be worn at all times on its projects. Eye protection may include, but is not limited to: safety glasses, goggles, full-face respirator or blast helmet.

Eye and face protection will be used during cutting, painting, hammering, power tool operations as required by OSHA standard 29 CFR 1926.102 and as required by the Competent Person or Owner specifications and will meet ANSI Z87.1-1989. Specific protective equipment for each job task will be determined by the Competent Person at the start of the project.

The following table will be used as a guide in the selection of face and eye protection for the hazards and operations noted.

Operations	Hazards	Recommended Protectors	
Acetylene- burning Acetylene- cutting Acetylene- welding	sparks, harmful rays, molten metal, flying particles	7,8,9	
Chemical handling	splash, acid burns, fumes	2,10 (for severe exposure add 10 over 2)	
Chipping	flying particles	1,3,4,5,6,7A,8A	
Electric (arc) welding	sparks, intense rays, molten metal	7,8,9 (for severe exposure add 10)	
Grinding-light	flying particles	1,3,4,5,6,10	
Grinding- heavy	flying particles	1,3,7A,8A (for severe exposure add 10)	
Laboratory	chemical splash, glass breakage	2 (10 whin in combination with 4,5,6)	
Machining	flying particles	1,3,4,5,6,10	
Molten metals	heat, glare sparks splash	7,8 (10 in combination with 4,5,6 in tinted lenses)	
Spot welding	flying particles, sparks	1,3,4,5,6,10	

### Recommended Eye Protectors

- 1. Goggles, flexible fitting, regular ventilation
- 3. Goggles, cushioned fitting, rigid body
- 5. Safety glasses, plastic frame with side shields
- 7. Welding goggles, eyecup type, tinted lenses
- 8. Welding goggles, coverspec type, tinted lenses
- 9. Welding goggles, coverspec type, tinted plate lens
- 11. Welding helmet

- 2. Goggles, flexible fitting, hooded ventilation
- 4. Safety glasses, metal frame with side shields
- 6. Safety glasses, metal-plastic frame with side shields
- 7A. Chipping goggles, eyecup type, clear safety lenses
- 8A. Chipping goggles, coverspec type, clear safety lenses
- 10 Face shield

### 9.4 FOOT PROTECTION

Each affected employee will wear protective footwear when working in areas where there is a danger of foot injuries due to falling or rolling objects, or objects piercing the sole, and where employee's feet are exposed to electrical hazards.

Safety shoes and boots provide both impact and compression protection. Where necessary, safety shoes can be obtained which provide puncture protection. In some work situations, metatarsal protection should be provided, and in other special situations electrical conductive or insulating safety shoes would be appropriate.

Safety shoes or boots with impact protection will be required for carrying or handling materials such as packages, objects, parts or heavy tools, which could be dropped; and, for other activities where objects might fall onto the feet. Safety shoes or boots with compression protection will be required for work activities involving skid trucks (manual material handling carts) around bulk rolls (such as paper rolls) and around heavy pipes, all of which could potentially roll over an employee's feet. Safety shoes or boots with puncture protection would be required where sharp objects such as nails, wire, tacks, screws, large staples, scrap metal etc., could be stepped on by employees causing a foot injury.

### 9.5 HAND PROTECTION

Hand protection is required when employees' hands are exposed to hazards such as those from skin absorption of harmful substances; severe cuts or lacerations; severe abrasions; punctures; chemical burns; thermal burns; and harmful temperature extremes.

Skin contact is a potential source of exposure to toxic materials; it is important that the proper steps be taken to prevent such contact. Gloves should be selected on the basis of the material being handled, the particular hazard involved, and their suitability for the operation being conducted. One type of glove will not work in all situations.

Most accidents involving hands and arms can be classified under four main hazard categories: chemicals, abrasions, cutting, and heat. There are gloves available that can protect workers from any of these individual hazards or combination of hazards.

Gloves should also be worn whenever it is necessary to handle rough or sharp-edged objects, and very hot or very cold materials. The type of glove materials to be used in these situations include leather, welder's gloves, aluminum-backed gloves, and other types of insulated glove materials.

Selection of hand PPE will be based on an evaluation of the performance characteristics of the hand protection relative to the task(s) to be performed, conditions present, duration of use, and the hazards and potential hazards identified. Gloves are often relied upon to prevent cuts, abrasions, burns, and skin contact with chemicals that are capable of causing local or systemic effects following dermal exposure. There is no glove that provides protection against all potential hand hazards, and commonly available glove materials provide only limited protection against many chemicals.

### 9.6 PPE TRAINING

Employees will be trained on the use of personal protective clothing. the training will include:

- 1. Why is PPE necessary.
- 2. When and what is PPE necessary.
- 3. How to don and doff the PPE.
- 4. Limitations of PPE.
- 5. Care and maintenance of PPE.
- 6. Useful life and disposal of PPE.

Retraining will be required when there is a change in the work environment, the type of PPE required changes or if an employee is demonstrates improper or lack of use.

The training will be documented and records maintained by Atlas Painting and Sheeting.

### 9.7 SELECTION OF PERSONAL PROTECTIVE EQUIPMENT BY TYPICAL PAINT REMOVAL JOB TASKS

The following table is designed at allow Management, the Safety Director and site personnel to select protective equipment based upon the job task. This table represents the minimum requirements and should not be construed to reflect every job and job task. Prior to starting any project, a hazard assessment will be performed to verify what types of personal protective equipment is required for each job task.

Job Task	Head Protection <sup>1</sup>	Eye Protection <sup>2</sup>	Hearing Protection <sup>3</sup>	Foot Protection	Work Clothing <sup>4</sup>
Abrasive blaster	blast helmet	blast helmet	ear plugs or canal caps	leather shoes with steel toes	two layers of protective clothing
Vacuum during abrasive blasting	blast helmet	blast helmet	ear plugs or canal caps	leather shoes with steel toes	two layers of protective clothing
Vacuum after abrasive blasting	hard hat	full face respirator or safety glasses	ear plugs, canal caps or ear muffs	leather shoes with steel toes	one layer of protective clothing
Spray Painting	hard hat	full face respirator or goggles	may not be required	appropriate foot wear	one layer of protective clothing
Brush and roll painting	hard hat	full face respirator or goggles	may not be required	appropriate foot wear	one layer of protective clothing
Equipment operator during abrasive blasting	hard hat	safety glasses	ear plugs, canal caps or ear muffs	leather shoes with steel toes	one layer of protective clothing
Power tool cleaning worker	hard hat	full face respirator, safety glasses or face shield	ear plugs, canal caps or ear muffs	appropriate foot wear	one layer of protective clothing
Hand tool worker	hard hat	safety glasses	may not be required	appropriate foot wear	one layer of protective clothing

<sup>1 -</sup> verify the blast helmet meets ANSI standards

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<sup>2 -</sup> most full-face respirators do not meet ANSI standards for eye protection

<sup>3 -</sup> conduct a sound level survey to verify the proper level of hearing protection

<sup>4 -</sup> during abrasive blast operations, all personnel inside the blast area must wear cloth coverall or similar heavy duty clothing that does not rip easily

### 10.0 RESPIRATORY PROTECTION

### 10.1 INTRODUCTION

The Atlas Painting and Sheeting Respiratory Protection Program is written to comply with the OSHA Standard 29 CFR 1910.134 Respiratory Protection.

Occupational injuries and diseases caused by contaminated breathing air will be controlled whenever possible through the use of engineering control measures. If engineering controls are not feasible, then respiratory protection will be selected and used pursuant to the guidelines in this section.

Respirators, training and medical evaluations are to be provided to the employee at no cost to the employee.

#### 10.2 DEFINITIONS

This is only a partial list of the definitions included in 29 CFR 1910.134, for additional definitions reference the standard.

Air Purifying Respirator: A respirator with an air-purifying filter, cartridge, or canister that removes specific air contaminants by passing ambient air through the air-purifying element.

Atmospheric Supplying Respirator: A respirator that supplies the user with breathing air from a source independent of the ambient atmosphere.

**Fit Test**: The use of a protocol to qualitatively or quantitatively evaluate the fit of a respirator on an individual.

High Efficiency Particulate Air Filter (HEPA): A filter that is at least 99.97% efficient in removing particles of 0.3 micrometers in diameter, The equivalent NIOSH 42 CFR 84 particulate filters are the N100, R100 and P100.

Immediately Dangerous to Life and Health (IDLH): An atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individuals ability to escape from a dangerous atmosphere.

NIOSH: National Institute for Occupational Safety and Health

Negative Pressure Respirator: A respirator in which the pressure inside the face piece is negative during inhalation with respect to the ambient air pressure outside the respirator.

**Oxygen Deficient Atmosphere**: An atmosphere with an oxygen content below 19.5% by volume.

Physician or other Licensed Health Care Professional (PLHCP): An individual whose legally permitted scope of practice allows him or her to independently provide health care services as required by 29 CFR 1910.134.

Qualitative Fit Test (QLFT): A Pass/Fail test to assess the adequacy of respirator fit that relies on the individual's response to the test agent.

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**Quantitative fit test** (QNFT): an assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.

User Seal Check: an action conducted by the respirator user to determine if the respirator is properly sealed to the face.

### 10.3 SAFE WORK CONDITIONS

Safe work operations during respirator use include the following guidelines. Use these guidelines to assist you in maintaining a safe working environment, and to protect your health and safety.

- 1. Use your respirator whenever you are directed to do so.
- 2. Clean and store your respirator to ensure that it remains sanitary.
- 3. Never alter your respirator in any way.
- 4. Inspect your respirator whenever you put it on and take it off.
- 5. Do not remove your respirator while you are in a respirator required work area.
- 6. Do not enter a work area that could contain a hazardous atmosphere, unless it has been cleared by the Respirator Administrator or his designee.
- 7. Never assume that a work location is safe, even if it has been before. Always check the work area for potential hazards before the start and prior to resuming work.
- 8. Understand what the potential hazard(s) is, and use the appropriate equipment. If you are unsure, contact the Respirator Administrator or his designee.

### **10.4 RESPONSIBILITIES**

#### 10.4.1 EMPLOYEES

- 1. Use respirators as trained.
- 2. Do not modify respiratory protection equipment.
- 3. Do not enter into respiratory protection areas without proper protection.
- 4. Consult with the Respirator Administrator or his designee for any concerns about safe working conditions.
- 5. Perform User Seal Checks whenever donning respirators.
- 6. Clean and maintain your respirator after each work shift, when the respirator is used.
- 7. Store your respirator in its original bag, a sealable baggie or a sealable container.

#### 10.4.2 COMPETENT PERSON

- 1. Act as the site Respirator Administrator under the Company Respirator Administrator.
- 2. Ensure that employees use respirators as required.
- 3. Ensure that all employees required to work in respiratory protection areas have the appropriate training and have been supplied with the appropriate equipment.
- 4. Evaluate the hazard at the project location and have the Respirator Administrator or his designee select the appropriate respirator for use.
- 5. Do not allow anyone into the work area if they have not received training and equipment as necessary.
- 6. Verify that all workers perform User Seal Checks.

- 7. Conduct weekly random respirator inspections and record results on the weekly site inspection form.
- 8. Test the compressed air quality for supplied air respirators.

### 10.4.3 RESPIRATOR ADMINISTRATOR - SAFETY DIRECTOR

- 1. Evaluate job hazards and select the appropriate equipment. This includes the determination of the specific hazards as well as engineering controls to be implemented.
- 2. Approve fit test procedures for employees.
- 3. Maintain fit test and respirator clearance records.
- 4. Update records at least annually.
- 5. Periodically inspect job sites to ensure that employees are using respiratory protection equipment.
- 6. Provide training to employees annually.
- 7. Supervision of the Project Respirator Administrator.

# 10.4.4 MANAGEMENT

- 1. Provide necessary equipment.
- 2. Provide support for safe work operations.
- 3. Allow employees time for proper respiratory protection training

### 10.5 RESPIRATORY PROTECTION PROGRAM

The Respirator Administrator will assess the adequacy of the program annually, or as necessary. This program is written to mirror the Respirator Protection Standard, however additional requirements may be put in place as necessary by Atlas Painting and Sheeting to protect its employees. This program will guide you on the following issues: selecting a respirator, medical evaluations, fit testing, use of respirators, maintenance and care of respirators, breathing air quality, filter and cartridges, training, program evaluation, record keeping and emergency procedures.

#### 10.6 MEDICAL EVALUATIONS

A medical evaluation is required for all employees who are required to wear a respirator. This evaluation will include at a minimum an evaluation of the employee's ability to wear the respirator. All medical evaluations will be confidential, conducted during normal working hours, convenient and understandable to the employee and the employee will be given the opportunity to discuss the results with the PLHCP. The medical evaluation will be performed by a PLHCP using a medical questionnaire and a medical examination, an example of the questionnaire can be found in 29 CFR 1910.134 Appendix C..

Atlas Painting and Sheeting prefers to use an Occupational Physician to conduct the respiratory clearance testing including pulmonary function testing.

Atlas Painting and Sheeting will provide to the PLHCP the following information as requested:

- 1. Type and weight of respirator to be used.
- 2. Duration and frequency of use.
- 3. Temperature and humidity extremes that may be encountered.
- 4. Estimated physical exertion of employee during work shift.

5. Additional Personal Protective Equipment (PPE) which may be worn.

The Respirator Administrator will also provide the PLHCP with copies of this Respiratory Protection Program and the OSHA Respiratory Protection Standard 29 CFR 1910.134.

In order for the employee to be fit tested for a respirator, the PHLCP must provide the Respirator Administrator with the following:

- 1. A written recommendation on the employee's ability to use a respirator. This information will be kept on record at the main office.
- 2. If an employee is found to be unfit to use a negative pressure respirator, then the PHLCP will indicate whether or not the employee is medically able to wear a Powered Air Purifying Respirator (PAPR).

Additional medical evaluations will be made of the employee in the following cases:

- 1. An employee displays or reports medical signs and/or symptoms which may affect the ability to wear a respirator.
- 2. The PHLCP, Respirator Administrator or supervisor indicates that the employee needs medical reevaluation.
- 3. A change in workplace conditions occurs which may increase the physiological burden place on an employee.
- 4. Information acquired through administration and implementation of this program indicates the need for medical reevaluation.

### 10.7 PROCEDURES FOR SELECTING RESPIRATORS

Selection of a respirator will depend on the Respirator Administrator's evaluation of the workplace hazard, and identification of relevant workplace and user factors. If hazards cannot adequately be assessed, the atmosphere will be considered as IDLH. Atlas Painting and Sheeting will select and provide a respirator that is appropriate to the hazards to which the worker is exposed. All respirators will be NIOSH certified and used in compliance with the conditions of their certification.

When working in an IDLH environment, outside standby personnel will be required to assist in the event of a rescue, communication will be required between the worker and outside personnel, workers will be trained for the actual work space. In addition, back-up SCBA or SAR will be required.

Atlas Painting and Sheeting uses 3M 6100, 6200, 6300, 7501, 7502, 7503 and North 7700 half-face air purifying respirators, 3M 6700, 6800, 6900 and North 54001 full-face air purifying respirators and NOVA 2000, NOVA 3 blast or Bullard CE 88 blast helmets for its respiratory protection. Other respirators may be used by employees based upon comfort by the wearer and location of use.

Respirators will be selected using the following guidelines:

- 1. For protection against gases and vapors, Atlas Painting and Sheeting will provide either an atmospheresupplying respirator or an air-purifying respirator provided that:
  - a. An end-of-service-life indicator is provided to alert the user that the canister or cartridge needs to be changed.

- b. The company will implement a change schedule based on the hazard present. A schedule for the vapors present on each project site may change, so a site specific plan will be created. If no schedule is available, then employees must change cartridges, canisters or filter after one work shift when working around gases or vapors.
- 2. For protection against particulate, Atlas Painting and Sheeting will provide either an atmosphere supplying respirator or an air-purifying respirator equipped with a filter certified for particulate by NIOSH under 42 CFR part 84. Filters to be used will be either N100, R100 or P100 filters.
- 3. Respirators will initially be selected in accordance with the table below. If exposure monitoring indicates that additional protection is required, then Engineering controls will be investigated and the proper level of respiratory protection will be provided.

Job Task	Toxic Metal	PEL (ug/m³)	Respirator	APF	MUC (ug/m³)
Abrasive Blast	Lead (Pb) Cadmium (Cd) Chromium (Cr) Arsenic (Ar) Heaxavalent Chromium	50 5 1000 10 5	Bullard CE 88 blast helmet, NOVA 2000 blast helmet or other approved blast helmet	1,000 1,000 1,000 1,000 1,000	50,000 5,000 1,000,000 10,000 5,000
Power Tool Cleaning without HEPA Vacuum	Lead (Pb) Cadmium (Cd) Chromium (Cr) Arsenic (Ar)	50 5 1000 10	Full-Face air purifying respirator with P100 HEPA filters	50	2,500 250 50,000 500
Power Tool Cleaning with HEPA Vacuum	Lead (Pb) Cadmium (Cd) Chromium (Cr) Arsenic (Ar)	50 5 1000 10	half-face air purifying respirator with P100 HEPA filters	10	500 50 10,000 100
Manual Scraping	Lead	50	half-face air purifying respirator with P100 HEPA filters	10	500
Prime Coat Painting	Lead VOCs	50	To be determined	10	500 To be determined
Mid, Top and Other Coats of Paint	VOCs	Refer to Paint Manufacturer's SDS	To be determined	to be determined	To be determined

10.7.1 IDENTIFICATION OF FILTERS

All filters, cartridges and canisters to be used must be labeled and color-coded with NIOSH approved labels. These labels are not to be tampered with by anyone.

- 1. HEPA filters
  - a. N100- not resistant to oil
  - b. R100- oil resistant
  - c. P100- oil proof
- \* Atlas Painting and Sheeting will only used P, N or R100 filters as these are HEPA filters. If other filters such as P95 or N95 are found on the job site, they will be promptly removed.
- 2. Color code for cartridges and gas mask canisters
  - a. Black- organic vapor

- 3. End of service life indicator (ESLI)
  - a. 3M P100 filters will be changed when the employee notices an increased resistance to breathing, if the filter is ripped or torn, or if the filter is covered with paint, or 40 hours when in an atmosphere that contains oils. Other respirator manufacturer's may have different change schedules that will be verified if other respirators are in use.
  - b. N100 and R100 filters will be changed every 8 hours.
  - c. Atlas Painting and Sheeting will make a change schedule based upon the chemicals present, manufacturer recommendations and a safety factor. All workers will be informed of the change schedule prior to using organic vapor cartridges. If a worker detects an odor while wearing an organic vapor cartridge, the worker should immediately change cartridges and inform the competent person. The change schedule should then be reviewed and changed if necessary.
  - d. If an employee notices a break-through or resistance while wearing a respirator, the employee is to immediately leave the work area to wash and change cartridges.

### 10.7.2 TRAINING AND INFORMATION

Atlas Painting and Sheeting is required to provide effective training to its employees prior to issuing respirators. All training must be performed at least annually, or as conditions dictate. Training will consist of:

- 1. Why the respirator is necessary and how improper fit, usage or maintenance can affect the performance.
- 2. What limitations the respirator has, including cannot provide oxygen, filters are made for a specific use, etc.
- 3. What to do in emergencies.
- 4. How to inspect, put on and remove the respirator.
- 5. Storage and maintenance procedures.
- 6. How to recognize medical signs and symptoms that may limit or prevent respirator effectiveness.
- 7. General requirements of 29 CFR 1910.134.
- 8. Job tasks and work areas at project sites which will require the use of respiratory protection.
- 9. Fit testing.
- 10. Medical signs and symptoms that may interfere with the effective use of respirators.

#### 10.7.3 FIT TESTING

All employees that are required to use a respirator must be fit tested prior to being issued arespirator. Atlas Painting and Sheeting will provide a selection of sizes and models of respirators to its employees so that it is acceptable to and fits the user. The selection of the respirators types will be determined by a pre-job hazard analysis that will determine the hazards that are expected on the job site. If one of the provided respirators does not provide an adequate fit, an alternate model will be selected and offered. The employee will be fit tested with the type and size respirator that will be used by the employee. The fit test will either be Qualitative or Quantitative. Atlas Painting and Sheeting currently uses the qualitative fit testing procedures as provided in 29 CFR 1910.134 Appendix A. This procedure may be used for all respirators that must achieve a fit factor of 100 or less (an Assigned Protection Factor (APF) of 10 or less). If the required fit factor is greater than 100, then the quantitative fit test procedures must be used.

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All tight fitting powered-air and atmosphere-supplying respirators must be tested while in the negative pressure mode, regardless of operational mode. This includes PAPRs and full-face tight fitting supplied-air respirator.

Fit testing for employees will be conducted:

- 1. When an employee is initially issued a respirator.
- 2. When an employee changes the make, model, size or style of respirator face piece worn.
- 3. When there is a visible change in the employee's physical condition that could affect the fit of a respirator.
- 4. When an employee indicates they would like to use a different respirator.
- 5. Annually after initial fit testing.

The Assigned Protection factor (APF) of the respirator that Atlas Painting and Sheeting typically uses is listed in the following table.

Respirator Selection	Qualitative Fit Test (APF)	Quantitative Fit Test (APF)	
Half-face Air purifying Respirator	10	10	
Full-Face Air Purifying Respirator	10	50	
Full-Face Powered Air Purifying Respirator (PAPR)	10	1000	
Supplied Air Respirator - Continuous Flow Helmet/ Hood	25	25/1000*	
Supplied Air Respirator (SAR) - Pressure Demand	10	1000	

<sup>\*</sup> APF is 1000 if the manufacturer has completed a Workplace Protection factor (WPF) or Simulated Workplace Protection factor (SWPF) test.

### 10.8 USE OF RESPIRATORS

It is the responsibility of Atlas Painting and Sheeting to ensure that all employees using respirators use them properly. This includes prohibiting conditions that may result in face piece seal leakage, preventing employees from removing respirators while in the work area, ensuring employees perform User Seal Checks each time the respirator is donned and ensuring effective respirator operation throughout the entire shift. Face piece seal protection will be ensured by not permitting respirators to be worn by employees who have:

- 1. Facial hair growth of more than 24 hours that comes between the sealing surface of the face piece.
- 2. Any condition that interferes with the face-to-face piece seal or valve function.
- 3. Goggles or glasses will be worn in such a manner so that they do not interfere with the respirator seal.

# 10.8.1 USER SEAL CHECK

A user seal check is the method used in the field to ensure that an adequate seal is achieved each time the respirator is put on. All employees using respirators are required by this program to perform a user seal check consisting of a positive and negative pressure fit check each time they put on a respirator. Employees are trained to perform these checks during the respirator training.

#### 10.8.2 POSITIVE PRESSURE FIT CHECK

To perform a positive pressure fit check, the employee must first put on and adjust the respirator. The employee then covers the exhalation valve (usually located at the bottom center of the respirator), and gently exhales. The positive pressure fit check is passed if the employee is able to create a slight pressure inside the face piece without breaking the seal of the respirator.

#### 10.8.3 NEGATIVE PRESSURE FIT CHECK

To perform a negative pressure fit check, the employee must first put on and adjust the respirator. The employee then covers the inhalation valves (identified by where the filters connect to the respirator) and gently inhales so that the face piece collapses slightly, and hold for a period of ten seconds. If no leaks are detected in the face piece, the negative pressure fit check is passed.

If the employee satisfactorily passes each fit check, then the seal is effective. If a leak is detected, the employee should leave the work site and readjust the respirator as necessary to correct the seal.

Alternate fit check methods may be used if they are recommended by the manufacturer, and if they can be demonstrated to be as effective as the procedures listed above.

#### 10.9 MAINTENANCE AND CARE OF RESPIRATORS

- 1. Cleaning and disinfecting: all respirators provided to employees are to be cleaned and sanitized prior to issue. Employees are instructed on cleaning and sanitation procedures to be used and are to clean the respirator at the end of each shift. Periodic field surveillance by the competent person will be made to ensure that compliance is maintained.
- Storage: employees are expected to store their respirator in the original bag or a replacement zipper type bag.
  These bags will be kept clean and closed to prevent contamination.
  - 3.Inspection: all respirators are inspected prior to issue to employees by the competent person. Employees are instructed on inspection procedures for their personnel respirator. Emergency respirators must be inspected prior to being taken to the job site. Inspections will include:
  - a. A check of the respirator function.
    - b. Tightness of connections.
    - c. Condition of parts.
  - d. Straps, snaps and other connectors in good working conditions.
  - 4. Repairs: respirators that fail inspection are either repaired immediately, placed out of service until repairs can be made or discarded.

# 10.9.1 CLEANING PROCEDURES

At the end of each work shift, where the respirator is worn, employees will clean own respirators at the handwash station or other approved location as determined by the competent person. Cleaning will be in accordance with the manufacturer's recommendations which may allow respirator wipes or if the manufacturer has no recommendations follow the procedures as set forth in 29 CFR 1910.134 Appendix B-2.

- 1. Remove filters, cartridges or canisters. Disassemble face pieces by removing speaking diaphragms, demand and pressure demand valve assemblies, hoses, or any other components recommended by the manufacturer. Discard or repair any defective parts.
- 2. Wash components in warm water with a mild detergent.
- 3. Rinse components under warm running water.
- 4. If the detergent does not contain a disinfecting agent, the respirator and its components will be immersed in a hypochlorite solution made up of ½ cap full of bleach in one gallon of water for two minutes.
- 5. Rinse all components under warm running water.
- 6. Either air dry, or hand dry with a clean lint free cloth.
- 7. Reassemble all parts.
- 8. When dry, store in clean bag in a clean area.
- 9. Prior to using, conduct a user seal check.

Employees may clean their respirators more frequently during a work shift if the respirator has excess moisture or if the employees believes it to be necessary.

### 10.10 BREATHING AIR QUALITY AND USE

All atmosphere-supplying respirators, whether supplied-air or SCBA, must provide quality breathing air to the user. Compressed breathing air will meet the requirements for Type I, Grade D breathing air. Compressed air tanks for SCBA/escape bottles will be filled by a vendor qualified to deliver this type of air. Specifications for this type of air are:

- 1. Oxygen content of 19.5 to 23.5%.
- 2. No more than 5 milligrams per cubic meter of air of hydrocarbons.
- 3. CO content less than 10 ppm.
- 4. CO2 content of 1000 ppm or less.
- 5. Lack of noticeable odor.

Air supplied by compressors will be monitored periodically to ensure that quality meets these requirements. Compressors used to supply air must be constructed and situated to:

- 1. Prevent entry of contaminated air into the system.
- 2. Minimize moisture content.
- 3. Have suitable in-line filters and sorbent beds to purify the air.
- 4. Filter changes must be documented through the use of a tag on the compressor.
- 5. A carbon monoxide alarm or high-temperature alarm will be used to monitor CO levels as required.
- 6. If a high-temperature alarm is used, the air will be checked periodically for CO level.

### 10.10.1 CARBON MONOXIDE ALARM

- 1. For compressors that are not oil lubricated, a carbon monoxide alarm is required when supplied air is in use.
- 2. For compressors that are oil lubricated, a carbon monoxide alarm is required at intervals sufficient to prevent carbon monoxide in the breathing air.
- 3. The carbon monoxide alarm will sound at 10 ppm. If the alarm sounds, all employees using supplied air will be removed from the work area until it is safe to return.

4. The carbon monoxide alarm will be calibrated in accordance with manufacturer's recommendations and tested weekly if it has a test switch.

### 10.11 CORRECTIVE LENSES

If corrective lenses are required, they must not interfere with the seal of the respirator. As a temporary measure, short temple-armed glasses may be used, or glasses without arms may be taped to the wearer's head. If corrective lenses are needed on a long term or normal use situation, special considerations will be given to obtaining special face pieces for the respirator so that the corrective lenses may be mounted inside the face piece.

# 10.12 USE OF RESPIRATORS WHEN NOT REQUIRED

The information contained here must be provided by the employer to all employees who chose to wear a respirator even when it is not required and the exposure is below the exposure Permissible Exposure Limit. The employer will provide the employee a copy of 29 CFR 1910.134 Appendix D. Whenever an employee chooses to use his/her own respirator, or respirators are provided by the employer for voluntary use, the employee should follow these precautions.

- 1. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care of the respirator.
- 2. Read all warnings regarding respirator limitations.
- 3. Choose respirators certified for use to protect against the contaminant of concern. NIOSH certifies respirators. A label or statement of certification must appear on the respirator or respirator packaging. It will tell you what the respirator is designed for, and how much it will protect you.
- 4. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed. For example, a respirator designed to filter dust particles will not protect you against gases or vapors.
- 5. Keep track of your respirator so that you do not mistakenly use someone else's respirator.

# 10.13 EMERGENCY PROCEDURES

The supervisor/ competent person will determine the proper respiratory protection based upon the situation, such as fire or spill. Then the supervisor and/or competent person will select and direct employees only those employees who have the proper training to assist in emergency actions. When a hazard arises that is beyond the scope and training of the employees or their respiratory protection, emergency personnel will be called.

#### 10.14 PROGRAM REVIEW AND EVALUATION

The site supervisor and/or competent person will be responsible for conducting weekly random inspections of employees respirators. The Respiratory Administrator will use the results of these weekly inspections to verify that the respiratory protection program as it is written remains effective or if changes are required. During the inspection, random employees will be asked about fit, selection, use and maintenance of respirators to determine they understand their respirator and the need for respiratory protection.

This program will be reviewed and updated whenever it is determined that it may have become ineffective, or if new rules and regulations are in effect. At a minimum, the program will be reviewed annually.

### 10.15 RECORD KEEPING

Atlas Painting and Sheeting will maintain the following records:

- 1. Medical Evaluations in accordance with 29 CFR 1910.1020.
- 2. Fit test records to include employee identification, type of test performed, make, model, style and size or respirator tested, date of test and the results of the test.
- 3. A written copy of the current program.

# 11.0 HEARING CONSERVATION PROGRAM

Paint removal operations, clean-up operations and other activities found at construction sites can produce noise above the OSHA standard 29 CFR 1926.52 noise limit. The purpose of this program is to identify and control the noise and its potential effects on hearing. Each work environment will be evaluated to determine the level of hearing protection required.

# 11.1 OSHA NOISE LIMITS

The OSHA Permissible Exposure Limit (PEL) for noise is a Time-Weighted-Average (TWA) of 90 dBA averaged over eight working hours. The OSHA Action Level (AL) for noise is a TWA of 85 dBA averaged over eight working hours, or half the PEL. A 5 dBA doubling rule applies where the allowable exposure time is cut in half, as follows:

Time Limit
8-hours
4-hours
2-hours
1- hour
½-hour
½-hour

Atlas Painting and Sheeting will use 85 dBA as its in-house PEL and will have all employees exposed to noise above 85 dBA wear hearing protection.

Typical noise exposures during paint removal operations

Job Task	Noise Level
Abrasive Blaster	115-125 dBA
Equipment Operator	75-105 dBA
Power Tool Cleaning - needle gun and rotopeen	110-115 dBA
Power Tool Cleaning - grinder	90-100 dBA

### 11.2 ENGINEERING AND ADMINISTRATIVE CONTROLS

During abrasive blast operations, there are no engineering controls for the abrasive blaster. Instead, the employee will rely on hearing protection. The equipment operator will stand away from the noise producing areas of the equipment such as the muffler and engine when possible.

#### 11.2.1 ENGINEERING CONTROLS

After it is determined that noise exposure above 85 dB(A) are present, engineering controls should be evaluated and implemented to reduce the noise exposure before administrative controls are initiated. Some examples of engineering controls include:

- 1. Noise reducing baffles
- 2. Compartmentalization
- 3. Installing noise reducing gears
- 4. Installing rubber pads under machinery

### 11.2.2 ADMINISTRATIVE CONTROLS

After engineering controls are evaluated for effectiveness or feasibility, administrative controls should be considered to reduce noise exposure. Administrative controls include restricting exposure time, wearing hearing protection properly and training on hazardous noise levels and proper use of hearing protection.

### 11.3 USE OF HEARING PROTECTORS

Management, supervisors and employees will properly wear the prescribed hearing protectors while working in or traveling through any section of a location that is designated a High Noise Area. Hearing protection is provided to all employees at no cost to the employee. The following rules will be enforced:

- 1. Personal stereos, such as MP3 players, IPods, etc., will not be permitted as a substitute to hearing protection.
- 2. Hearing protectors, at least two types of plugs and one type of muffs, will be provided.
- 3. Hearing protectors and replacements will be provided free of charge
- 4. Hearing protectors will be properly worn at all times when the noise level is above the PEL.

Preformed earplugs and earmuffs should be washed periodically and stored in a clean area, and foam inserts should be discarded after each use. It is important to wash hands before handling pre-formed earplugs and foam inserts to prevent contaminants from being placed in the ear which may increase your risk of developing infections.

### 11.3.1 DONNING HEARING PROTECTION

Employees will be trained on the proper method of donning hearing protection. Ear plug manufacturer's often have testing holes on the sides of their boxes for employee to practice rolling the insert to the proper size prior to inserting into the ear.

#### 11.4 AUDIOMETRIC TESTING

Audiometric testing may be made available to all workers exposed to noise levels at or above the AL. Testing will include baseline audiograms within six months of a worker's first exposure at or above the AL. Baseline audiograms must be preceeded by fourteen hours without exposure to workplace noise. Annual audiograms may be provided to all workers potentially exposed to noise, within one year of the baseline audiogram, and each subsequent year. Hearing loss will be evaluated based on standardized threshold shifts (STS) of 10 dB or more at 2,000, 3,000 and 4,000 hertz. Workers will be informed within twenty-one days from the time the determination is made that their audiometric test results showed a standard threshold shift.

If a worker experiences a STS, then Atlas Painting and Sheeting will re-evaluate the worker's hearing protection to determine if it is adequate or additional hearing protection is required. Also, the worker may be required to have an additional medical evaluation.

Workers will be notified in writing of a standard threshold shift within 21 days of the determination.

#### 11.5 NOISE REDUCTION RATING

Ear plugs and/or muffs used will have Noise Reduction Rating (NRR) sufficient to reduce the noise below the PEL. With certain job tasks this may not be possible so administrative controls will be implemented. Ear plugs and muff may be used together where necessary. Industry practice of reducing the NRR by seven decibels is commonly recommended and currently recognized by OSHA

Actual Noise Level - (NRR-7) = worker exposure

### 11.6 TRAINING

All workers potentially exposed to noise at or above the AL for noise must receive initial and annual training in hearing conservation. This training will include:

- Potential health effects of exposure to excessive levels of noise, including impact and long term
- Sources of excessive noise exposure. b.
- Monitoring strategies for noise, including sound level meter surveys and noise dosimetry, and c. how to interpret this information.
- d. The purpose of medical surveillance for noise, including baseline and annual audiograms, standard threshold shifts, and permanent hearing loss.
- Personal protective equipment available for protection against excessive noise, and the proper e. selection, fit and care of such equipment.

# 11.7 SOUND LEVEL MEASUREMENTS

Sound level measurements can be performed using sound level meters or noise dosimeters. The preferred method is the use of noise dosimeters on workers and sound level meters around the work area and equipment.

Sound level measurements will be conducted at least every two years on each job category and equipment.

# 11.8 RECORD KEEPING

Noise exposure measurements must be retained for two years. Audiometric test results will be included in an individual's medical records and retained for the duration of the affected employee's employment.

Atlas Painting and Sheeting

### 12.0 HAZARD COMMUNICATION PROGRAM

In accordance with the Hazard Communication Rule, 29 CFR 1926.59, and to ensure the information necessary for the safe use, handling and storage of hazardous chemicals is provided and made available to employees the following is Atlas Painting and Sheeting's Hazard Communication (HazCom) program. This program will be maintained at each work site and a separate chemical inventory will be maintained at each work site.

### 12.1 RESPONSIBILITIES

### 12.1.1 SAFETY DIRECTOR

- 1. Maintain a list of hazardous chemicals in use at all projects and at company facilities.
- 2. Monitor the effectiveness of the program.
- 3. Conduct an annual audit of the program.
- 4. Conduct project audits for the effectiveness of the program.
- 5. Ensure all workers receive annual hazard communication training.
- 6. Ensure Safety Data Sheets (SDS) are available. If SDS are not available, obtain the SDS either through the manufacturer's website, contacting the sales representative or by obtaining it from the store.
- 7. Ensure SDS are the most recent published by the manufacturer.
- 8. Conduct weekly chemical inventory at each location where chemicals are stored.

### 12.1.2 FOREMAN/ COMPETENT PERSON

- 1. Conduct site specific hazard communication training. If new chemicals are brought to a project, conduct training for the new chemical at the next safety meeting or prior to its use.
- 2. Ensure chemicals are properly labeled and stored.
- 3. Ensure that all SDS are onsite and readily available and all workers know where they are located.
- 4. Create a chemical inventory for each project. Post the chemical inventory in the decontamination trailer, project postings board or other appropriate location.
- 5. Conduct weekly chemical inventory at project locations.
- 6. Ensure that the SDS are readily available for each work shift.

### 12.1.3 EMPLOYEES

- 1. Comply with the requirements of the hazard communication program.
- 2. Report any chemicals not properly labeled or stored.
- 3. Immediately report any spills.
- 4. Use chemicals only for specific assigned tasks.

### 12.2 CHEMICAL HAZARDS

- 1. Physical hazards can produce a dangerous situation outside the body.
- 2. Health hazards can damage one's health by acute and chronic exposures.

#### 12.3 CHEMICAL INVENTORY

- 1. The Competent Person will maintain an inventory of all known chemicals in use at the work-site. A chemical inventory list and Safety Data Sheets (SDS) will be available from the Competent Person.
- 2. Hazardous chemicals brought onto the work site by Atlas Painting and Sheeting will be included on the hazardous chemical inventory list.
- 3. Employees who work with hazardous chemicals may request a copy of the Safety Data Sheets (SDS). Requests for SDS should be made to the site Competent Person.

### 12.4 CONTAINER LABELING

- 1. All chemicals on-site will be stored in their original or approved containers with a proper label attached; except small quantities intended for immediate use. Any container not properly labeled should be given to the foreman or competent person for proper labeling or disposal.
- 2. Workers may dispense chemicals from original containers only in small quantities intended for immediate use. Any chemicals left after work is completed must be returned to the original container or to the foreman or competent person for proper handling and labeling.
- 3. Unmarked containers of any size are not to be left unattended in the work area at any time.
- 4. Atlas Painting and Sheeting will rely on manufacturer applied labels whenever possible and will ensure the labels are maintained. Containers that are not labeled or on which the manufacturers label has been removed or destroyed will be re-labeled.
- 5. Container labels will not be defaced or removed. If a container is not properly labeled it will be brought to the foreman who will label the container.
- Labels are to be legible. 6.
- 7. The foreman or competent person will ensure that each container is labeled with the identity of the hazardous chemical contained, name and address of the chemical manufacturer and any appropriate hazard warning.
- 8. Labeling will include:
  - a. Product identifier
  - b. Signal word
  - c. Hazard statement
  - d. Pictogram
  - e. Precautionary statement
  - f. Name, address and telephone number of chemical manufacturer, importer or other responsible party.

#### 12.5 SAFETY DATA SHEET

SDS contain the following information

- 1. Section 1- identification
- 2. Section 2 hazard identification
- 3. Section 3- composition/information on ingredients
- 4. Section 4 first aid measures
- 5. Section 5- fire-fighting measures
- 6. Section 6 accidental release measures
- 7. Section 7- handling and storage
- 8. Section 8 exposure control/personal protection
- 9. Section 9 physical and chemical properties
- 10. Section 10 stability and reactivity
- 11. Section 11- toxicological information
- 12. Section 12 ecological information
- 13. Section 13 disposal considerations
- 14. Section 14 transport information
- 15. Section 15 Regulatory information
- 16. Other information, including date of preparation or last revision

#### 12.6 EMPLOYEE TRAINING

Employees will be trained to work safely with hazardous chemicals. Employee training will include:

- 1. Methods that may be used to detect a release of a hazardous chemical(s) in the work place.
- 2. Physical properties and health hazards associated with each chemical.
- 3. Protective measures to be taken in order to reduce the risk of chemical exposure including safe work practices, emergency responses and the proper use of Personal Protective Equipment (PPE).
- 4. The details of the Hazardous Communication Program developed by Atlas Painting and Sheeting.
- 5. How to read and interpret information on labels and the SDS.
- 6. Location of the SDS and hazard communication program.
- 7. Explanation of the chemical labeling system.
- 8. If a non-routine task is required, the employee will be provided training on the chemical(s) that will be used and the hazards of the chemical(s) and the personal protective equipment that will be required.

Site specific training will be conducted at a pre-job safety meeting. If new chemical(s) are brought to a project, all workers will receive training for the new chemical(s) at the next safety meeting or prior to its use.

Training on the Safety Data Sheets, the hazards of the chemicals and any other pertinent information will be provided in the language of the employee. Atlas Painting and Sheeting typically has bi-lingual employees and will use a person who can speak the language of other employees to assist in the training.

#### 12.7 NON-ROUTINE JOB TASKS

Based upon the nature of the work performed by Atlas Painting and Sheeting, it is not anticipated that non-routine job tasks such as entry into reactor vessels or unlabeled pipes in the work area will be encountered. However, if a situation is found, the following steps will be required.

- 1. Stop work in the affected location.
- 2. Request from the Facility Owner what is in the pipes, reactor or other area identified.
- 3. Based upon the nature, the competent person will conduct a safety training as identified in Section 12.7 (8).
- 4. Prior to resuming work in the affected area, the competent person will verify the proper PPE is being worn, the area is demarcated if necessary and any other safety precautions are implemented prior to work in the affected area.

### 12.8 EMERGENCY RESPONSE

- 1. Any incident, over-exposure or spill of a hazardous chemical(s) must be reported to the site Competent Person immediately.
- 2. The site Competent Person or foreman will be responsible for insuring that proper emergency response actions are taken in the event of a leak or spill.

# 12.9 INFORMING OTHER CONTRACTORS, SUBCONTRACTORS AND VISITORS

- 1. Other on-site employers and/or visitors are required to adhere to the provisions of the Hazard Communication Program.
- 2. Information on hazardous chemicals known to be present will be exchanged with other employers or subcontractors. Each employer will be responsible for providing the necessary information to their employees.
- 3. Other on-site employers and/or visitors will be provided with a copy of the Hazard Communication Program.

# **OSHA PICTOGRAMS**

### 13.0 LEAD EXPOSURE CONTROL PLAN

Unless specified in contract specifications as part of Atlas Painting and Sheeting's work, Atlas Painting and Sheeting's employees will not disturb lead containing material. However, if the contract requires the removal of paint that may have lead based paint from a structure, this Section will apply.

If Atlas Painting and Sheeting is working on a multi-contractor work site, and its work does not involve lead exposures, Atlas Painting and Sheeting will keep its workers out of all posted lead regulated work areas.

### 13.1 POTENTIAL LEAD SOURCES AND TASK EVALUATION

#### 13.1.1 POTENTIAL LEAD SOURCES

During the cleaning and painting of lead-based paint projects, several job categories may have potential exposure to lead dust. Each job category having potential exposure to lead will be subjected to initial exposure monitoring to determine if exposures are within acceptable limits, and what additional requirements, corrective measures or actions must be taken. The following is a list of typical job tasks and those which may have an exposure to lead above the Action Level.

### a. ABRASIVE BLASTING OPERATIONS

- 1. Abrasive blaster the person at the end of the blast nozzle that conducts the actual removal of paint from a substrate. This worker has the potential for the highest exposure to lead.
- 2. Vaccoumer during abrasive blast operations works inside the blast area to remove spent abrasive and paint chips. Exposures are similar to an abrasive blaster.
- 3. Vacuumer after abrasive blast operations works inside and outside the blast area to remove all remaining abrasive and paint chips. This worker can minimize exposure by waiting till the dust settles after the blast to start operations.
- 4. Equipment operator runs the abrasive blast equipment which includes recyclers, blast pots, compressors, air dryers. Also oversees the loading of new abrasive. Exposures vary depending upon method and type of abrasive used.
- 5. Support workers assist the equipment operator, blasters or foreman during abrasive blasting operations. Their exposures vary depending upon the type of job they are conducting.
- 6. Riggers set-up and tear-down containment systems. The exposures vary depending upon the cleanliness and types of the materials used to build the containment.
- 7. Foreman remains outside the blast area and oversees the entire project. The foreman should not have an exposure to lead above the OSHA Action level.
- 8. Competent person remains outside the blast area and oversees site safety. The competent person should not have an exposure to lead above the OSHA Action level.
- 9 Quality control inspector may be required to enter the work area during abrasive blast operations. Inspects the substrate to verify compliance with project specifications.

# **b. POWER TOOL CLEANING OPERATIONS**

- 1. Power tool operator uses the power tool to clean a substrate. Highest level of exposure for this type of work.
- 2. Equipment operator runs the compressor and any other equipment. Should not have an exposure.
- 3. Vacuumer after power tool cleaning operations cleans the inside and outside of the work area of any paint chips. Exposure should be minimal when using a HEPA vacuum.

- 4. Foreman remains outside the work area and oversees the entire project. The foreman should not have an exposure to lead above the OSHA Action level.
- 5. Competent person remains outside the work area and oversees site safety. The competent person should not have an exposure to lead above the OSHA Action level.
- 6 Quality control inspector may be required to enter the work area during power tool cleaning operations. Inspects the substrate to verify compliance with project specifications.

# c. HAND TOOL CLEANING OPERATIONS

- 1. Workers conduct hand tool cleaning operations.
- 2. Foreman remains outside the designated work area and oversees the entire project. The foreman should not have an exposure to lead above the OSHA Action level.
- 3. Competent person remains outside the designated work area and oversees site safety. The competent person should not have an exposure to lead above the OSHA Action level.
- 4 Quality control inspector may be required to enter the designated work area during abrasive hand tool operations. Inspects the substrate to verify compliance with project specifications.

### 13.1.2 TASK EVALUATION

Until laboratory results of personnel samples are available, respiratory protection, personal protective equipment (PPE), change areas, hand wash facilities, biological monitoring and lead training must be provided based upon the exposure hazard of the job category as established in OSHA's 29 CFR 1926.62 Lead Standard. All PPE will be provided to the employee at no cost to the employee.

The level of respiratory protection, the need for personal protective equipment (PPE), changes areas, hand wash facilities, biological monitoring, showers and lunchrooms will be modified based upon the results of the initial exposure assessment, The following table outlines the minimum requirements.

Exposure Level	Respiratory Protection	PWC <sup>1</sup>	Change Areas <sup>2</sup>	Hand Wash facilities <sup>3</sup>	Showers <sup>4</sup>	Lunchrooms <sup>5</sup>	Biological Monitoring <sup>6</sup>
<30 ug/m <sup>3</sup>	not required	not required	not required	Yes	Not required	Not required	Not required
>30 but <50 ug/m <sup>3</sup>	not required	not required	not required	Yes	not required	not required	Yes
>50 but <500 ug/m <sup>3</sup>	½ face air purifying respirator with P100 filters	Yes	Yes	Yes	Yes	Yes	Yes
>500 but < 2500 ug/m <sup>3</sup>	Full face air purifying respirator with P100 filters	Yes	Yes	Yes	Yes	Yes	Yes
>2500 ug/m <sup>3</sup>	Bullard CE 88/ Nova 2000	Yes	Yes	Yes	Yes	Yes	Yes

- 1. Coverall or similar full body work clothing, gloves, hats and shoes or disposable shoe coverlets
- 2. Change areas equipped with separate storage facilities for PWC and equipment and for street clothes
- 3. Hand wash facilities must be located near the work area
- 4. Must be used at the end of the shift by workers exposure above the OSHA permissible exposure limit
- 5. Area as free as practicable from lead contamination
- 6. Blood lead and zinc protoporphyrin levels

### 13.1.3 SELECTION OF RESPIRATORY PROTECTION

Job Category	Assumed Exposure Level	Respirator
Abrasive Blast Vacuum during Abrasive Blast Operation Cleaning the dust collector or recycler filters, where entry is necessary	>2,500 ug/m <sup>3</sup>	Approved blast helmet or full face piece supplied air respirator
Power Tool Operations without HEPA Vacuum Vacuuming after Abrasive Blast Operations Clean-up Operations Set-up and Tear down Operations	>500 but < 2500 ug/m <sup>3</sup>	Full face air purifying respirator with P100 filters or powered air purifying respirator with P100 filters
Water-jetting Operations Power Tool Cleaning with HEPA Vacuum Painting during Prime Coat Operations Equipment Operator of a steel grit recycler Water Jetting Operator	>50 and <500 ug/m <sup>3</sup>	half-face air purifying respirator with P100 filters
Hand Tool Operations Support Workers outside of regulated areas Equipment Operator for black beauty operations	<50 ug/m <sup>3</sup>	Respiratory protection is not required

# 13.2 SIGNS OF LEAD POISONING

Signs and symptoms that lead poisoning may have occurred include:

Sleep Problems	Clumsiness	Dizziness	
Depression	Nervousness	Headaches	Memory
Difficulty Concentration	g Hyperactivity (in	kids) Numbness	
Weakness	Wrist or Foot Drop	Loss of Appetite	
Constipation	Metal Taste in Mouth		
Problems having Healthy Children			
	Depression Difficulty Concentration Weakness Constipation	Depression Nervousness Difficulty Concentrating Hyperactivity (in Weakness Wrist or Foot Drop Constipation Metal Taste in Mouth	Depression Nervousness Headaches Difficulty Concentrating Hyperactivity (in kids) Numbness Weakness Wrist or Foot Drop Loss of Appetite Constipation Metal Taste in Mouth

Through the implementation of engineering controls and respiratory protection, and personal protective equipment Atlas Painting and Sheeting makes every effort to keep its workers healthy.

#### 13.3 ACTION LEVEL

An Action Level (AL) of 30 ug/m<sup>3</sup> is the exposure to lead without regard to respirators, when the following requirements of the OSHA Lead in Construction Standard must first be implemented.

- a. Written Worker Protection Plan
- b. Exposure Monitoring
- c. Housekeeping
- d. Employee Medical Surveillance and Medical Removal Protection
- e. Employee Information and Training
- f. Signs and Regulated Areas
- g. Record keeping

# 13.4 PERMISSIBLE EXPOSURE LIMIT

The Permissible Exposure Limit (PEL) is 50 ug/m<sup>3</sup> averaged over 8-hours without regard to respiratory protection. When in addition to complying with the requirements identified when exceeding the Action Level, the following protective measures are required:

- a. Engineering and Work Practice Controls
- b. Respiratory Protection
- c. Protective Clothing and Equipment
- d. Hygiene Facilities and Practices

The PEL will be reduced for extended work shifts as follows:

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Adjusted PEL = (400/hours worked in a day)
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Lead for an 8 hr shift:  $PEL = 50 \text{ ug/m}^3$ e.g. Lead for a 10 hr shift:  $PEL = 40 \text{ ug/m}^3$ 

> It is Atlas Painting and Sheeting's intent to keep all workers exposure levels below the OSHA PEL for lead.

#### 13.5 REGULATED AREAS

Regulated areas are the areas where the exposure to lead dust is at or above the PEL and support areas are the areas not inside the regulated area. The regulated area(s) will be delineated using signs and/ or tape to prevent inadvertent contamination from leaving the work site and to minimize contamination to the workers during the work shift. Work areas include containment enclosures and all work areas involved in lead paint removal, clean-up and set-up or tear down of containment systems. The area(s) around equipment will initially not be a regulated area, unless area monitoring around the equipment indicates otherwise.

The regulated area will have access limited to workers who have received the required training, medical surveillance and are wearing the personal protective equipment required for the job they are performing, and supervisors and/or authorized visitors wearing appropriate clothing and/or protective equipment. No food, beverages or tobacco products are to be present or consumed in the work area.

Initially the support area will be a minimum of five feet from the work area. This is based upon several years of area monitoring around containment. The regulated area may be moved closer or further from the work area if initial or periodic monitoring indicates the need for a change.

### **13.6 SIGNS**

Signs will be used to identify the areas where exposures could exceed the Action Level (the OSHA Lead Standard states the signs are above the PEL, use of the Action Level will minimize exposures to outside personnel). Signs when used at night will be illuminated. Signs will be cleaned as necessary so the wording is visible. Signs will read as follows:

DANGER
LEAD WORK AREA
MAY DAMAGE FERTILITY
OR THE UNBORN CHILD
CAUSES DAMAGE TO THE
CENTRAL NERVOUS SYSTEM
DO NOT EAT, DRINK OR
SMOKE IN THIS AREA

#### 13.7 DECONTAMINATION FACILITIES

### **13.7.1 SHOWERS**

The Support Area will consist of a decontamination trailer equipped with a shower separating clean and contaminated sides of the trailer. All street clothing worn to the job will be removed and stored in lockers on the clean side of the trailer. Work clothing, once used and contaminated will remain on the contaminated side of the trailer. At the end of each shift, workers wearing contaminated work clothing must pass through the decontamination trailer after leaving the regulated area and remove their contaminated work clothing in the dirty side of the trailer. At the end of each work day workers exposed to toxic metals above the PEL must shower completely with soap, including hair washing. If initial exposure monitoring is below the PEL then workers are only required to use a handwash station to clean up at the end of the day.

The decontamination trailer will be located away from the regulated area. Workers will leave their own vehicles at the decontamination trailer. If workers are required to travel by work vehicle to and from the decontamination, the work vehicle will be cleaned daily using a HEPA vacuum and/or wet wiping. Once workers have changed into their protective work clothing and that clothing has become contaminated with toxic metal dust, they will not be permitted to enter or use their vehicles again until they have removed the PWC and/or have decontaminated and are once again wearing their clean street clothing. All wash water will be filtered and tested to remove toxic metals to below the local sewer authority's limits.

### 13.7.2 HANDWASH FACILITIES

Handwash stations will be located between the regulated and break area located in the Support Area. Hands and face must be washed before eating, drinking or smoking.

#### 13.8 LUNCH FACILITY

Lunch facilities will be set up in a clean area near the work area, away from all sources of contamination. The lunch area will be at least 50 feet upwind from the work area. All work clothing must be cleared of loose dust by vacuuming with a HEPA vacuum prior to exiting the work area and the outer layer of the abrasive blasters work clothing will be removed just outside the work area to minimize transporting any hazardous waste around the support and clean areas. The lunch facility will be cleaned using a HEPA vacuum on a daily basis.

# 13.9 PROTECTIVE WORK CLOTHING (PWC)

Workers entering lead work areas where exposure to lead dust may exceed the PEL will change their clothing before entering the work areas for work, and again at the end of the day before leaving the Decontamination Area. Street clothing may not be worn during work on this project, unless fully covered by PWC. Contaminated work clothing should be vacuumed of loose dust using a HEPA vacuum, but may not be taken away from the job site after work. Work clothing consisting of cloth shirts and trousers, disposable or cloth coveralls, and gloves will be provided and maintained by Atlas Painting and Sheeting for workers involved in these designated job functions.

Disposable coveralls will not be used as the sole means of PWC if such garments are likely to become torn or fall apart under normal use. In these cases cloth coveralls, or similar PWC will be used.

### 13.10 LAUNDERING OF WORK CLOTHING

Do not remove or clean the clothing by any means which reintroduces the toxic metals into the ambient air such as brushing, shaking or blowing. Use vacuums equipped with HEPA filters for cleaning. Work clothing will be laundered and/or replaced on a weekly basis if the Time Weighted Average (TWA) exposure to lead is less than 200 ug/m<sup>3</sup>. Work clothing will be provided daily if the TWA exposure to lead is greater than 200 ug/m<sup>3</sup>.

Work boots must remain at the job site or decontamination trailer for the duration of the job. Contaminated work clothing will be placed in plastic bags and either given to a laundry service, or disposed of as hazardous waste by Atlas Painting and Sheeting. If a laundry service is used, Atlas Painting and Sheeting will advise them in writing that the clothing may be contaminated with lead or other hazard-bearing dust and must be handled in such a fashion as to minimize the generation of air-borne dust, and/or contamination of skin or surfaces that may come into contact with the clothing. Plastic bags containing contaminated clothing to be laundered will be labeled with the following warning:

Danger: clothing and equipment contaminated with lead. May damage fertility or the unborn child. Causes damage to the central nervous system. Do not eat, drink or smoke when handling. Do not remove dust by blowing or shaking. Dispose of lead contaminated wash water in accordance with applicable local, state or federal regulations.

#### 13.11 HOUSEKEEPING

All work areas will be maintained as free as practical of accumulation of lead dust. In order to minimize the likelihood of dust becoming airborne, cleaning will be conducted daily in all work areas using a vacuum equipped with a HEPA filter or by wet cleaning.

#### 13.12 EXPOSURE MONITORING

Exposure monitoring is essential to identifying the need for proper industrial hygiene controls at the job site. Air sampling will be conducted in the worker's breathing zone (six to nine inches from the nose and mouth) to determine actual worker exposures and recommend respiratory protection that is adequate for those levels.

#### 13.12.1 PERSONNEL AIR SAMPLING

Initial air sampling will be conducted to represent actual worker exposures to lead in each job category. Sampling will be conducted on multiple individuals performing the same job category. Sampling will be conducted for a full work shift, minimally 7 hours. If initial exposure monitoring results are above the PEL, then every three months additional air samples will be taken to verify worker exposure levels, the adequacy of engineering controls, and determine if personal protective equipment is adequate.

If the initial results are above the Action Level (AL), then additional sampling will be conducted every six months. If the initial results are below the Action Level then additional exposure monitoring is not required. Additional air samples will be taken whenever site conditions change from those observed during the initial exposure monitoring, equipment or process changes, a significant change in the workforce, or at different structures.

Air samples will be collected and analyzed in accordance with appropriate NIOSH Methods. The laboratory used to analyze the samples will have current accreditation by the American Industrial Hygiene Association (AIHA). In addition, some states require additional accreditations such as by the state department of health.

Employees and other workers in the same job category will be notified in writing of the monitoring results within five (5) days after receiving results.

### 13.12.2 AREA MONITORING

- 1. The purpose of the regulated (the area where a worker may be exposed to lead above the OSHA PEL) area is to ensure that unprotected personnel are not permitted access to areas where the airborne exposures are above the designated Action Level (30 ug/m³ for lead).
- 2. Job categories and/or areas that may generate airborne hazardous material emissions include paint removal activities, dust collection systems, abrasive vacuum systems and waste storage areas.

#### 13.12.3 OBSERVATION OF MONITORING

All workers or their designated representatives will be given the opportunity to observe the personal exposure monitoring procedures in accordance with 29 CFR 1926.62 (o). The observer will be allowed to receive an explanation of the monitoring procedures, observe all steps related to the monitoring of lead and receive copies of the results when returned from the laboratory.

### 13.12.4 RECORD KEEPING

Detailed records of the exposure will be in compliance with 29 CFR 1926.62, as given below. All personal air sampling results will be maintained by Atlas Painting and Sheeting or its subcontractors for at least 30 years.

- 1. The date(s), number, duration, location and results of each sample taken, including a description of the sampling procedure used to determine representative employee exposure where applicable.
- 2. A description of the sampling and analytical methods used and evidence of their accuracy.
- 3. The type of respiratory protective devices worn.
- 4. Name, social security number, and job category of the employee monitored and all other employees whose exposure the measurement is intended to represent.
- 5. The environmental variables that could affect the measurement of employee exposure.

### 13.13 ENGINEERING CONTROLS

All feasible engineering controls will be used to minimize lead dust exposure. Additional control measures may be implemented based on the results of air monitoring once the project begins. The following engineering controls will be used.

Job Task	Control Methods	
Abrasive Blast Operation Vacuuming during Abrasive Blast Operations	Dust collector with natural or forced ventilation 100 fpm horizontal air flow or 60 fpm vertical air flow minimum	
Water Jetting Operations	Water Dust collector may be required based upon containment type	
Power tool cleaning	HEPA vacuums	
Hand tool cleaning	Wet misting	
Clean up after paint removal	HEPA vacuums	
Spray painting	adequate ventilation using windows and/ or a dust collector	

Engineering controls selected above are the industry standards, when new technology is produced that would reduce worker exposures and costs, Atlas Painting and Sheeting will evaluate that method or will seek others in the industry for their evaluation. In addition, this specification requires the use of abrasive material for cleaning the structures. Additional control measures will be re-evaluated if exposures are found to exceed the protection factor of respiratory protection normally used for this type of work.

### 13.14 ADMINISTRATIVE CONTROLS

Job rotation on a lead abatement project typically is not feasible due to the limited amount of qualified personnel. However, Atlas Painting and Sheeting will implement work practice controls including but not limited to: hygiene facilities, personal protective clothing and respiratory protection.

### 13.15 RESPIRATORY PROTECTION

Prior to wearing a respirator, employees must comply with Section 10.0 of this Health and safety Plan and the OSHA Respirator Standard 29 CFR 1910.134. Respirators will be selected in accordance with the following table.

Airborne concentration of lead	Required respirator	
500 ug/m <sup>3</sup> or less	Half-face air purifying respirator with P100 HEPA filters	
1,250 ug/m <sup>3</sup> or less	Hood or helmet supplied air respirator operating in the continuous flow mode	
2,500 ug/m <sup>3</sup> or less	Full face piece air purifying respirator with P100 HEPA filters	
50,000 ug/m³ or less	Approved Type CE abrasive blasting helmet such as Bullard CE 88/Nova 2000	
100,000 ug/m <sup>3</sup> or less	<ol> <li>Full face piece supplied air respirator operated in pressure demand or other positive pressure mode</li> <li>Type CE abrasive blasting helmet operated in a positive pressure mode</li> </ol>	
100,000 ug/m <sup>3</sup> or more or unknown concentration	Full face piece SCBA operated in the pressure demand or other positive pressure mode	

Where a worker is required to enter into the dust collector, recycler or roll-off to either move dust and debris around or to remove the dust and debris, the competent person will ensure the worker is wearing the proper personal protective clothing including respiratory protection and where applicable follows confined space procedures.

- 1. Entering the dust collector to remove or clean out debris, workers will wear a supplied airrespirator that provides protection up to 50,000 ug/m<sup>3</sup>.
- 2. Entering the dust collector section of a recycler unit to remove or clean out debris, workers will wear a supplied air respirator that provides protection up to 50,000 ug/m³.
- 3. Entering a roll-off to move used black beauty from one side to the other, workers will wear a respirator that provides protection up to 2,500 ug/m³.

#### 13.16 MEDICAL SURVEILLANCE PROGRAM

As a condition of employment with Atlas Painting and Sheeting, all workers exposed to lead at or above the OSHA Action Level are required to enter the medical surveillance program to reveal medical conditions which could predispose an individual to excessive risk from working on this job and provide clearance to wear a negative-pressure respirator.

### 13.16.1 PROGRAM ELEMENTS

The program elements listed below are for exposures above the Action Level to lead, additional testing may be required if exposed to other toxic metals.

- 1. Each worker must have a baseline examination within one year prior to commencing work.
- 2. Each worker will have an entry blood lead and zinc protoporphyrin test in accordance with OSHA regulations.
  - a. After initial testing, bi-monthly testing will be conducted for the first six months.
  - b.Semi-annual testing may be performed for workers with blood lead levels below 40 ug/dl. If a worker has a blood lead level between 40 and 50 ug/dl, then bi-monthly testing will continue, until two consecutive tests come back below 40 ug/dl, then the worker may be placed on a semi-annual testing schedule.
- 3. Blood lead testing will be performed by an OSHA approved laboratory.
- 4. When blood testing reveals 50 micrograms of lead per deciliter of whole blood or more, and that level does not decrease upon subsequent testing within two weeks, that worker will be removed from Atlas Painting and Sheeting projects until two consecutive blood tests result in levels below 40 ug/dl.
- 5. Whenever blood testing reveals 40 ug/dl or greater of lead in whole blood, workers will be offered a medical evaluation, be retrained, and reminded about medical removal protection. PPE will be upgraded if necessary to provide a higher level of protection.
- 6. Each worker must receive authorization from a physician or other licensed health care professional (PLHCP) for wearing respiratory protection. The authorization will be maintained by Seawy Painting in the employee's file.
- 7. The OSHA Medical Removal Program (MRP) is for workers who have a blood lead level of 50 ug/ dl after two tests within two weeks.
- 8. Post employment or yearly physical examinations, as outlined for baseline exams, will be provided for all workers whose blood levels at any time during the duration of the job reaches or exceeds 40 ug/dl whole blood.
- 9. Workers are allowed to request another physician to review the findings (multiple physician review) or to have another physician conduct examinations. The physician must have knowledge about lead exposures.

# 13.16.2 EXIT MEDICAL EXAMINATION

If required by specifications, workers will be offered an exit medical examination consisting of a blood lead level and zinc protoporphyrin and a physical within five days of exiting a project or during extended project shut downs. All offers will be made either at the job site, mailed via certified mail with return receipt or sent with employee paychecks.

#### 13.16.3 NOTIFICATION OF WORKERS

All workers tested and/or examined under this medical surveillance program will be notified in writing of the results of testing within five working days after Atlas Painting and Sheeting has received the results.

Notification will be completed by the worker signing the original medical result form or the employee notification of biological monitoring results form. The signed form will be maintained in the workers records.

#### 13.16.4 RECORD KEEPING

Medical records will be maintained for the duration of employment plus 30 years, or a total of 30 years, whichever is longer. Workers or their appointed representatives will be able to access those records upon written request to Atlas Painting and Sheeting. Access will be provided within 15 days after the employee's request, unless Atlas Painting and Sheeting states the reason for the delay and the earliest date when the records will be made available. Those records will include but not be limited to the following items:

- 1. Name, social security number and job description.
- 2. Copy of physician's written opinion, including clearance to wear a respirator.
- 3. Results of exposure monitoring and medical testing and examinations.
- 4. Records of medical complaints related to lead exposure.

If an individual worker is removed from exposure to lead, the following records will be kept as well:

- 5. Date of each occasion that the individual was removed from exposure, and returned to work.
- 6. A brief explanation of how each removal was or is being accomplished.
- 7. A statement indicating the reason for removal and blood level results.

### 13.17 TRAINING FOR LEAD

All workers must be trained prior to starting any project where the exposures will be above the OSHA Action Level for lead in the hazards of lead and on an annual basis thereafter. Signed and dated training records will be required stating that each worker has received the training. Copies of the OSHA Lead Standard, and the site specific Health and Safety Plan will be made available to all workers. Training will include:

### a. THE OSHA LEAD STANDARD 29 CFR 1926.62

- 1. HEALTH EFFECTS OF EXPOSURE TO LEAD
- 2. ROUTES OF EXPOSURE
- 3. PERSONAL PROTECTIVE EQUIPMENT
- 4. PERSONAL HYGIENE & DECONTAMINATION
- 5. MEDICAL SURVEILLANCE AND REMOVAL PROGRAMS
- 6. EXPOSURE MONITORING
- 7. ENGINEERING CONTROLS AND WORK PRACTICE
- 8. INFORMATION REGARDING CHELATING AGENTS
- 9. EMPLOYEE RIGHTS TO INFORMATION
- 10. APPENDICES A AND B
- b. THE HEALTH AND SAFETY PLAN
- c. HAZARDOUS WASTE PROCEDURES (40 CFR 265.16)
- d. EMERGENCY RESPONSE
- e. THE OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1926.59 INCLUDING THE SPECIFIC HAZARDS OF LEAD:
  - 1. Reproductive/ developmental toxicity
  - 2. Central nervous system effect
  - 3. Kidney effects
  - 4. Blood effects
  - 5. Acute toxicity effects
- f. RESPIRATORY PROTECTION PROGRAM 29 CFR 1910.134
- g. BASIC SAFETY AND HEALTH TRAINING 29 CFR 1926.21

# 14.0 CADMIUM EXPOSURE CONTROL PLAN

### 14.1 POTENTIAL CADMIUM SOURCES AND TASK EVALUATION

During the cleaning and painting of cadmium-based paint projects, several job categories may have potential exposure to cadmium dust. Each job category having potential exposure to cadmium will be subjected to initial exposure monitoring to determine if exposures are within acceptable limits, and what additional requirements, corrective measures or actions must be taken. Workers will be informed of the monitoring results within five days of Atlas Painting and Sheeting receiving the results.

Until laboratory results of personnel samples are available, respiratory protection, personal protective equipment (PPE), change areas, hand wash facilities, biological monitoring and cadmium training must be provided based upon the exposure hazard of the job category as established in OSHA's 29 CFR 1926.1127 Cadmium Standard. The following table will be used to ensure adequate respiratory protection during the initial exposure assessment.

Job Category	Assumed Exposure Level	Respirator
Abrasive Blast Vacuum during Abrasive Blast Operation	>5.0 ug/m <sup>3</sup>	Bullard CE 88 blast helmet or Nova 2000
Power Tool Operations without HEPA Vacuum Vacuuming after Abrasive Blast Operations Clean-up Operations Set-up and Tear down Operations	>5.0 but < 2.5 ug/m <sup>3</sup>	half- face air purifying respirator with HEPA filters
Water-jetting Operations Power Tool Cleaning with HEPA Vacuum Hand Tool Operations Support Workers working in or near paint removal operations Painting during Prime Coat Operations	<2.5 ug/m <sup>3</sup>	Respiratory protection may not be required

Change areas, PPE, handwash facilities, biological monitoring and cadmium training are required as part of worker safety during the initial exposure assessment.

The level of respiratory protection, the need for personal protective equipment, changes areas, hand wash facilities, biological monitoring, showers and lunchrooms will be modified based upon the results of the initial exposure assessment.

#### 14.2 ACTION LEVEL

The Action Level (AL) of 2.5 ug/m<sup>3</sup> is the exposure to cadmium, at which the following requirements of the OSHA Cadmium in Construction Standard must first be implemented.

- a. Written Worker Protection Plan
- b. Exposure Monitoring
- c. Housekeeping
- d. Employee Medical Surveillance and Medical Removal Protection
- e. Employee Information and Training
- f. Signs and Regulated Areas
- g. Record keeping

Results of additional sampling for heavy metals during paint removal and cleaning operations or organic vapors during painting will be compared with the established Permissible Exposure Limits (PEL) in 29 CFR 1910.1000 Table Z.

#### 14.3 PERMISSIBLE EXPOSURE LIMIT

The Permissible Exposure Limit (PEL) of 5.0 ug/m<sup>3</sup> is the 8-hour Time-Weighted-Average.

In addition to complying with the requirements identified when exceeding the Action Level, the following protective measures will be incorporated when exposure exceed the PEL.

- a. Engineering and Work Practice Controls
- b. Respiratory Protection
- c. Protective Clothing and Equipment
- d. Hygiene Facilities and Practices

# 14.4 DELINEATED AREAS

Work areas and support areas will be delineated using signs and tape to prevent inadvertent contamination from leaving the work site and to minimize contamination to the workers during the work shift. Work areas include containment enclosures and all work areas involved in cadmium paint removal, clean-up, set-up or equipment involved in these operations.

The work area will have access limited to workers who have received the required training, medical surveillance and are wearing the personal protective equipment required for the job they are performing, and supervisors and/or authorized visitors wearing appropriate clothing and/or protective equipment. No food, beverages or tobacco products are to be present or consumed in the work area.

#### **14.5 SIGNS**

Signs will be used to identify work areas where exposures could exceed the Action Level. Signs will read as follows:

> **DANGER CADMIUM** MAY CAUSE CANCER CAUSES DAMAGE TO **LUNGS AND KIDNEYS** WEAR RESPIRATORY PROTECTION IN THIS AREA AUTHORIZED PERSONNEL ONLY

### 14.6 DECONTAMINATION FACILITIES

### **14.6.1 SHOWERS**

The Support Area will consist of a decontamination trailer equipped with a shower separating clean and contaminated sides of the trailer. All street clothing worn to the job will be removed and stored in lockers on the clean side of the trailer. Work clothing, once used and contaminated will remain on the contaminated side of the trailer. Workers wearing contaminated work clothing must pass through the trailer after leaving the Work Area and remove their contaminated work clothing. At the end of each work day workers exposed to cadmium above the PEL must shower completely with soap, including hair washing.

The decontamination trailer will be located in a centralized location. Workers will leave their own vehicles at the decontamination trailer. If workers are required to travel by work vehicle to and from the decontamination, the work vehicle will be cleaned daily using a HEPA vacuum and/or wet wiping. Once workers have changed into their protective work clothing and that clothing has become contaminated with toxic metal dust, they will not be permitted to enter or use their vehicles again until they have removed the PWC and/or have decontaminated and are once again wearing their clean street clothing. All wash water will be filtered and tested to remove cadmium to below the local sewer authority's limits.

#### 14.6.2 HANDWASH FACILITIES

Handwash stations will be located between the Work and break area located in the Support Area. Hands and face must be washed before eating, drinking or smoking.

### 14.7 LUNCH FACILITY

Lunch facilities will be set up in a clean area near the work area, away from all sources of contamination. The lunch area will be at least 50 feet upwind from the work area. All work clothing must be cleared of loose dust by vacuuming with a HEPA vacuum prior to exiting the work area and the outer layer of the abrasive blasters work clothing will be removed just outside the work area to minimize transporting any hazardous waste around the support and clean areas. The lunch facility will be cleaned using a HEPA vacuum on a daily basis.

# 14.8 PROTECTIVE WORK CLOTHING (PWC)

Workers entering cadmium work areas where exposures to cadmium dust may exceed the PEL will change their clothing before entering the work areas for work, and again at the end of the day before leaving the Decontamination Area. Street clothing may not be worn during work on this project, unless fully covered by PWC. Contaminated work clothing should be vacuumed of loose dust using a HEPA vacuum, but may not be taken away from the job site after work. Work clothing consisting of cloth shirts and trousers, disposable or cloth coveralls, and gloves will be provided and maintained by Atlas Painting and Sheeting for workers involved in these designated job functions.

Disposable coveralls will not be used as the sole means of PWC if such garments are likely to become torn or fall apart under normal use. In these cases cloth coveralls, or similar PWC will be used.

### 14.9 LAUNDERING OF WORK CLOTHING

Do not remove or clean the clothing by any means which reintroduces cadmium into the ambient air such as brushing, shaking or blowing. Use vacuums equipped with HEPA filters for cleaning. Work clothing will be laundered and/or replaced on a weekly basis or more often if the clothing becomes dirty and/or wet.

Work boots must remain at the job site or decontamination trailer for the duration of the job. Contaminated work clothing will be placed in plastic bags and either given to a laundry service, or disposed of as hazardous waste by Atlas Painting and Sheeting. If a laundry service is used, Atlas Painting and Sheeting will advise them in writing that the clothing may be contaminated with cadmium or other hazard-bearing dust and must be handled in such a fashion as to minimize the generation of airborne dust, and/or contamination of skin or surfaces that may come into contact with the clothing.

Warning labels for containers of cadmium protective clothing, equipment, waste and scrap or debris will include a minimum of the following: *Danger, Contains cadmium, may cause cancer, causes damage to lungs and kidneys, avoid creating dust.* 

### 14.10 HOUSEKEEPING

All work areas will be maintained as free as practical of accumulation of cadmium dust. In order to minimize the likelihood of dust becoming airborne again, cleaning will be conducted daily in all work areas using a vacuum equipped with a HEPA filter or by wet cleaning.

## 14.11 EXPOSURE MONITORING

Exposure monitoring is essential to identifying the need for proper industrial hygiene controls at the job site. Air sampling will be conducted in the worker's breathing zone (six to nine inches from the nose and mouth) to determine actual worker exposures and recommend respiratory protection that is adequate for those levels.

### 14.11.1 PERSONNEL AIR SAMPLING

Initial air sampling will be conducted to represent actual worker exposures to cadmium in each job category and each such job category several times and on multiple individuals doing the same job. Additionally, sampling will be conducted for a full work shift, minimally 7 hours.

If the initial results are at or above the Action Level (AL), then additional sampling will be conducted at a frequency and pattern as determined by Atlas Painting and Sheeting. If the initial results are below the Action Level then additional exposure monitoring is not required. Additional air samples will be taken whenever site conditions change from those observed during the initial determination exposure monitoring.

Air samples will be collected and analyzed in accordance with NIOSH Methods. The laboratory used to analyze the samples will have current accreditation by the American Industrial Hygiene Association (AIHA). In addition, some states require additional accreditations such as by the state department of health.

Employees and other workers in the same job category will be notified in writing of the monitoring results within five (5) days after receiving the results.

### 14.11.2 OBSERVATION OF MONITORING

All workers or their designated representatives will be given the opportunity to observe the personal exposure monitoring procedures in accordance with 29 CFR 1926.1127 (o). The observer will be allowed to receive an explanation of the monitoring procedures, observe all steps related to the monitoring of cadmium and receive copies of the results when returned from the laboratory.

### 14.11.3 RECORD KEEPING

Detailed records of the exposure will be in compliance with 29 CFR 1926.1127, as given below. All personal air sampling results will be maintained by Atlas Painting and Sheeting or its subcontractors for at least 30 years.

- 1. The date(s), number, duration, location and results of each sample taken, including a description of the sampling procedure used to determine representative employee exposure where applicable.
- 2. A description of the sampling and analytical methods used and evidence of their accuracy.
- 3. The type of respiratory protective devices worn.
- 4. Name, social security number, and job category of the employee monitored and all other employees whose exposure the measurement is intended to represent.
- 5. The environmental variables that could affect the measurement of employee exposure.

### 14.12 ENGINEERING CONTROLS

All feasible engineering controls will be used to minimize cadmium dust exposure. Additional control measures may be implemented based on the results of air monitoring once the project begins. The following engineering controls will be used.

Job Task	Control Methods
Abrasive Blast Operation Vacuuming during Abrasive Blast Operations	Dust collector with natural or forced ventilation
Power tool cleaning	HEPA vacuums
Hand tool cleaning	Wet misting
Clean up after paint removal	HEPA vacuums

Engineering controls selected above are the industry standards, when new technology is produced that would reduce worker exposures and costs, Atlas Painting and Sheeting will evaluate that method or will seek others in the industry for their evaluation. In addition, this specification requires the use of abrasive material for cleaning the structures. Additional control measures will be re-evaluated if exposures are found to exceed the protection factor of respiratory protection normally used for this type of work.

## 14.13 RESPIRATORY PROTECTION

Prior to wearing a respirator, employees must comply with Section 10.0 of this Health and safety Plan and the OSHA Respirator Standard 29 CFR 1910.134. Respirators will be selected in accordance with the following table.

Airborne Concentration	Required Respirator Type	
10 x or less	A half-face air-purifying respirator with HEPA filters	
25 x or less	A powered air-purifying respirator (PAPR) with a loose-fitting helmet or hood equipped with HEPA filters or supplied-air respirator with a loose-fitting hood or helmet in the continuous flow mode	
50 x or less	A full-face air-purifying respirator with HEPA filters, or a PAPR with a tight fitting half-mask equipped with HEPA filters, or a supplied-air respirator with a tight-fitting half mask operated in the continuous flow mode	
250 x or less	a PAPR with a tight-fitting full face piece equipped with a HEPA filter or a supplied-air respirator with a tight-fitting full face piece operated in the continuous flow mode.	
1000 x or less	A supplied-air respirator with half-mask or full face piece operated in the pressure demand or positive pressure mode	

## 14.14 MEDICAL SURVEILLANCE PROGRAM

All workers potentially exposed to cadmium at or above the OSHA Action Level for 30 or more days per year are required to enter the medical surveillance program to reveal medical conditions which could predispose an individual to excess risk from working on this job, and clearance to wear a negative-pressure respirator.

### 14.14.1 PROGRAM ELEMENTS

The program elements listed below are for exposures at or above the Action Level to cadmium, additional testing may be required if exposed to other toxic metals.

## 14.14.1.1 INITIAL MEDICAL EXAMINATION

- 1. A detailed medical and work history with an emphasis on past, present and anticipated future exposures to cadmium.
- 2. Biological monitoring that includes:
  - A. Cadmium in urine (CdU), standardized to grams of creatinine (g/Cr).
  - B. Beta-2 microglobulin in urine (â2-M), standardized to grams in creatinine (g/Cr).
  - C. Cadmium in blood (CdB), standardized to liters of whole blood (lwb).
- 3. A 14 inch by 17 inch posterior-anterior chest x-ray.
- 4. Other criteria as specified in 29 CFR 1926.1127 or by the examining physician.

### 14.14.1.2 PERIODIC MEDICAL EXAMINATIONS

- 1. A detailed medical and work history with an emphasis on past, present and anticipated future exposures to cadmium.
- 2. A complete physical examination with an emphasis on: blood pressure, the respiratory system and urinary system.
- 3. A 14 inch by 17 inch posterior anterior chest x-ray, if required by the physician.
- 4. Biological monitoring every 12 months, or as specified in 29 FR 1926.1127.

### 14.14.1.3 BIOLOGICAL MONITORING

- 1. If initial or periodic biological monitoring test results are above 3 ug/g Cr for CdU, 300 ug/Cr for â2-M, or above 5 ug/lwb for CdB, the worker shall be medically removed from areas where the airborne cadmium exposures may exceed the Action Level.
  - A. In addition to the medical removal, Atlas Painting and Sheeting will:
    - 1. Reassess the employee's work and hygiene practices.
    - 2. Reevaluate the employee's use of respirators and the company respiratory protection program.
    - 3. Review hygiene facilities.
    - 4. Reevaluate engineering controls.
    - 5. Assess the employee's smoking history and status.
    - 6. Within 90 days after the receipt of the biological monitoring results, a full medical examination will be provided to the employee.
  - B. After the full medical examination, the examining physician determines in a written medical opinion whether to medically remove the employee from work or that medical removal is not necessary.

Until the employees biological monitoring results are below 3 ug/g Cr for CdU, 300 ug/Cr for â2-M, or above 5 ug/lwb for CdB, Atlas Painting and Sheeting will provide:

- 1. Biological monitoring every six months.
- 2. Annual medical examinations.
- C. See 29 CFR 1926.1127(1) Medical Surveillance for further guidance.
- D. Blood cadmium analysis is to be performed by a laboratory approved by OSHA or licensed by the U.S.Center for Disease Control

### 14.14.2 NOTIFICATION OF WORKERS

All workers tested and/or examined under this medical surveillance program will be notified in writing of the results of testing within five working days after Atlas Painting and Sheeting has received the results. A good practice is to have employees sign the original copy of the results and maintain this copy with the employee's records.

### 14.14.3 RECORD KEEPING

Medical records will be maintained for the duration of employment plus 30 years, or a total of 30 years, whichever is longer. Workers or their appointed representatives will be able to access those records upon written request to Atlas Painting and Sheeting. Access will be provided within 15 days after the employee's request, unless Atlas Painting and Sheeting states the reason for the delay and the earliest date when the records will be made available. Those records will include but not be limited to the following items:

- 1. Name, social security number and job description.
- 2. Copy of physician's written opinion, including clearance to wear a respirator.
- 3. Results of exposure monitoring and medical testing and examinations.
- 4. Records of medical complaints related to cadmium exposure.

If an individual worker is removed from exposure to cadmium, the following records will be kept as well:

- 5. Date of each occasion that the individual was removed from exposure, and returned to work.
- 6. A brief explanation of how each removal was or is being accomplished.
- A statement indicating the reason for removal and blood level results. 7.

### 14.15 TRAINING FOR CADMIUM

All workers must be trained prior to starting any project where the exposures will be above the OSHA Action Level for cadmium in the hazards of cadmium. Signed and dated training records will be required stating that each worker has received the training. Copies of the OSHA Cadmium Standard, and the site specific Health and Safety Plan will be made available to all workers. Training will include:

- **a.** The osha cadmium standard 29 CFR 1926.1127
  - 1. Health hazards associated with cadmium exposure
  - 2. The osha cadmium standard 29 CFR 1926.1127
  - 3. Personal protective equipment
  - 4. Personal hygiene & decontamination
  - 5. Medical surveillance program
  - 6. Exposure monitoring
  - 7. Engineering controls and work practice
  - 8. Employee rights to information under 29 CFR 1926.33(g)(1) and (2)
- **b.** The health and safety plan
- c. Hazardous waste procedures (40 CFR 265.16)
- **d.** Emergency response
- e. The osha hazard communication standard 29 cfr 1926.59
- **f.** Respiratory protection program 29 CFR 1910.134
- g. Basic safety and health training 29 CFR 1926.21

Atlas Painting and Sheeting

## 15.0 ARSENIC EXPOSURE CONTROL PLAN

### 15.1 POTENTIAL ARSENIC SOURCES AND TASK EVALUATION

During the cleaning and painting of arsenic-based paint projects, several job categories may have potential exposure to arsenic dust. Each job category having potential exposure to arsenic will be subjected to initial exposure monitoring to determine if exposures are within acceptable limits, and what additional requirements, corrective measures or actions must be taken. Workers will be informed of the monitoring results within five days of Atlas Painting and Sheeting receiving the results.

Until laboratory results of personnel samples are available, respiratory protection, personal protective equipment (PPE), change areas, hand wash facilities, biological monitoring and arsenic training must be provided based upon the exposure hazard of the job category as established in OSHA's 29 CFR 1926.1118 Arsenic Standard. The following table will be used to ensure adequate respiratory protection during the initial exposure assessment.

Job Category	Assumed Exposure Level	Respirator
Abrasive Blast Vacuum during Abrasive Blast Operation	>10.0 ug/m <sup>3</sup>	Bullard CE 88 blast helmet/ Nova 2000
Power Tool Operations without HEPA Vacuum Vacuuming after Abrasive Blast Operations Clean-up Operations Set-up and Tear down Operations	>10.0 but < 5.0 ug/m <sup>3</sup>	half- face air purifying respirator with HEPA filters
Water-jetting Operations Power Tool Cleaning with HEPA Vacuum Hand Tool Operations Support Workers working in or near paint removal operations Painting during Prime Coat Operations	<5.0 ug/m <sup>3</sup>	Respiratory protection may not be required

Change areas, PPE, handwash facilities, biological monitoring and arsenic training are required as part of worker safety during the initial exposure assessment.

The level of respiratory protection, the need for personal protective equipment, changes areas, hand wash facilities, showers, biological monitoring and lunchrooms will be modified based upon the results of the initial exposure assessment.

### 15.2 ACTION LEVEL

An Action Level (AL) of 5.0 ug/m<sup>3</sup> is the exposure to arsenic without regard to respirators, at which the following requirements of the OSHA Arsenic in Construction Standard must first be implemented.

- a. Written Worker Protection Plan
- b. Exposure Monitoring
- c. Housekeeping
- d. Employee Medical Surveillance and Medical Removal Protection
- e. Employee Information and Training
- f. Signs and Regulated Areas
- g. Record keeping

#### 15.3 PERMISSIBLE EXPOSURE LIMIT

The Permissible Exposure Limit (PEL) of 10.0 ug/m<sup>3</sup> is the 8-hour Time-Weighted-Average.

In addition to complying with the requirements identified when exceeding the Action Level, the following protective measures will be incorporated when exposure exceed the PEL.

- a. Engineering and Work Practice Controls
- b. Respiratory Protection
- c. Protective Clothing and Equipment
- d. Hygiene Facilities and Practices

## 15.4 DELINEATED AREAS

Work areas and support areas will be delineated using signs and tape to prevent inadvertent contamination from leaving the work site and to minimize contamination to the workers during the work shift. Work areas include containment enclosures and all work areas involved in arsenic paint removal, clean-up, set-up or equipment involved in these operations.

The work area will have access limited to workers who have received the required training, medical surveillance and are wearing the personal protective equipment for the job they are performing, and supervisors and/or authorized visitors wearing appropriate clothing and/or protective equipment. No food, beverages or tobacco products are to be present or consumed in the work area.

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### **15.5 SIGNS**

Signs will be used to identify work areas where exposures could exceed the Action Level. Signs will read as follows:

DANGER
INORGANIC ARSENIC CANCER HAZARD
AUTHORIZED PERSONNEL ONLY
NO SMOKING OR EATING
RESPIRATORS REQUIRED

## 15.6 DECONTAMINATION FACILITIES

### **15.6.1 SHOWERS**

The Support Area will consist of a decontamination trailer equipped with a shower separating clean and contaminated sides of the trailer. All street clothing worn to the job will be removed and stored in lockers on the clean side of the trailer. Work clothing, once used and contaminated will remain on the contaminated side of the trailer. Workers wearing contaminated work clothing must pass through the trailer after leaving the Work Area and remove their contaminated work clothing. At the end of each work day workers exposed to arsenic above the PEL must shower completely with soap, including hair washing.

The decontamination trailer will be located in a centralized location. Workers will leave their own vehicles at the decontamination trailer. If workers are required to travel by work vehicle to and from the decontamination, the work vehicle will be cleaned daily using a HEPA vacuum and/or wet wiping. Once workers have changed into their protective work clothing and that clothing has become contaminated with toxic metal dust, they will not be permitted to enter or use their vehicles again until they have removed the PWC and/or have decontaminated and are once again wearing their clean street clothing. All wash water will be filtered and tested to remove arsenic to below the local sewer authority's limits.

### 15.6.2 HANDWASH FACILITIES

Handwash stations will be located between the Work and break area located in the Support Area. Hands and face must be washed before eating, drinking or smoking.

## 15.7 LUNCH FACILITY

Lunch facilities will be set up in a clean area near the work area, away from all sources of contamination. The lunch area will be at least 50 feet upwind from the work area. All work clothing must be cleared of loose dust by vacuuming with a HEPA vacuum prior to exiting the work area and the outer layer of the abrasive blasters work clothing will be removed just outside the work area to minimize transporting any hazardous waste around the support and clean areas. The lunch facility will be cleaned using a HEPA vacuum on a daily basis.

## 15.8 PROTECTIVE WORK CLOTHING (PWC)

Workers entering arsenic work area and other job categories in which exposure to arsenic dust may exceed the PEL will change their clothing before entering the work areas for work, and again at the end of the day before leaving the Decontamination Area. Street clothing may not be worn during work on this project, unless fully covered by PWC. Contaminated work clothing should be vacuumed of loose dust using a HEPA vacuum, but may not be taken away from the job site after work. Work clothing consisting of cloth shirts and trousers, disposable or cloth coveralls, and gloves will be provided and maintained by Atlas Painting and Sheeting for workers involved in these designated job functions.

Disposable coveralls will not be used as the sole means of PWC if such garments are likely to become torn or fall apart under normal use. In these cases cloth coveralls, or similar PWC will be used.

## 15.9 LAUNDERING OF WORK CLOTHING

Do not remove or clean the clothing by any means which reintroduces arsenic into the ambient air such as brushing, shaking or blowing. Use vacuums equipped with HEPA filters for cleaning. Work clothing will be laundered and/or replaced on a weekly basis or more often if the clothing becomes dirty and/or wet.

Work boots must remain at the job site or decontamination trailer for the duration of the job. Contaminated work clothing will be placed in plastic bags and either given to a laundry service, or disposed of as hazardous waste by Atlas Painting and Sheeting. If a laundry service is used, Atlas Painting and Sheeting will advise them in writing that the clothing may be contaminated with arsenic or other hazard-bearing dust and must be handled in such a fashion as to minimize the generation of air-borne dust, and/or contamination of skin or surfaces that may come into contact with the clothing.

## 15.10 HOUSEKEEPING

All work areas will be maintained as free as practical of accumulation of arsenic dust. In order to minimize the likelihood of dust becoming airborne again, cleaning will be conducted daily in all work areas using a vacuum equipped with a HEPA filter or by wet cleaning.

## 15.11 EXPOSURE MONITORING

Exposure monitoring is essential to identifying the need for proper industrial hygiene controls at the job site. Air sampling will be conducted in the worker's breathing zone (six to nine inches from the nose and mouth) to determine actual worker exposures and recommend respiratory protection that is adequate for those levels.

## 15.11.1 PERSONNEL AIR SAMPLING

Initial air sampling will be conducted to represent actual worker exposures to cadmium in each job category and each such job category several times and on multiple individuals doing the same job. Additionally, sampling will be conducted for a full work shift, minimally 7 hours.

If the initial results are at or above the Action Level (AL), then additional sampling will be conducted at a frequency and pattern as determined by Atlas Painting and Sheeting. If the initial results are below the Action Level then additional exposure monitoring is not required. Additional air samples will be taken whenever site conditions change from those observed during the initial determination exposure monitoring.

Air samples will be collected and analyzed in accordance with NIOSH Methods. The laboratory used to analyze the samples will have current accreditation by the American Industrial Hygiene Association (AIHA). In addition, some states require additional accreditations such as by the state department of health.

Employees and other workers in the same job category will be notified in writing of the monitoring results within five (5) days after receiving the results.

### 15.11.2 OBSERVATION OF MONITORING

All workers or their designated representatives will be given the opportunity to observe the personal exposure monitoring procedures in accordance with 29 CFR 1926.1118 (r). The observer will be allowed to receive an explanation of the monitoring procedures, observe all steps related to the monitoring of arsenic and receive copies of the results when returned from the laboratory.

### 15.11.3 RECORD KEEPING

Detailed records of the exposure will be in compliance with 29 CFR 1926.1118, as given below. All personal air sampling results will be maintained by Atlas Painting and Sheeting or its subcontractors for at least 30 years.

- 1. The date(s), number, duration, location and results of each sample taken, including a description of the sampling procedure used to determine representative employee exposure where applicable.
- A description of the sampling and analytical methods used and evidence of their 2. accuracy.
- 3. The type of respiratory protective devices worn.
- Name, social security number, and job category of the employee monitored 4. and all other employees whose exposure the measurement is intended to represent.
- 5. The environmental variables that could affect the measurement of employee exposure.

## 15.12 ENGINEERING CONTROLS

All feasible engineering controls will be used to minimize arsenic dust exposure. Additional control measures may be implemented based on the results of air monitoring once the project begins. The following engineering controls will be used.

Job Task	Control Methods
Abrasive Blast Operation Vacuuming during Abrasive Blast Operations	Dust collector with natural or forced ventilation
Power tool cleaning	HEPA vacuums
Hand tool cleaning	Wet misting
Clean up after paint removal	HEPA vacuums

Engineering controls selected above are the industry standards, when new technology is produced that would reduce worker exposures and costs, Atlas Painting and Sheeting will evaluate that method or will seek others in the industry for their evaluation. In addition, this specification requires the use of abrasive material for cleaning the structures. Additional control measures will be re-evaluated if exposures are found to exceed the protection factor of respiratory protection normally used for this type of work.

### 15.13 RESPIRATORY PROTECTION

Prior to wearing a respirator, employees must comply with Section 10.0 of this Health and safety Plan and the OSHA Respirator Standard 29 CFR 1910.134. Respiratory protection for inorganic arsenic particulate except for those with significant vapor pressure will be selected in accordance with the following table.

Airborne Concentration	Required Respirator Type	
100 ug/m <sup>3</sup> or less	<ol> <li>Half-face air purifying respirator with HEPA filters</li> <li>Any half-face supplied air respirator</li> </ol>	
500 ug/m <sup>3</sup> or less	<ol> <li>Full face piece air purifying respirator with HEPA filters</li> <li>Any full face piece supplied air respirator</li> <li>Any full face piece self-contained breathing apparatus (SCBA)</li> </ol>	
10,000 ug/m <sup>3</sup> or less (10mg/m <sup>3</sup> )	Powered air purifying respirators in all inlet face coverings with HEPA filters     Half-face supplied air respirator operated in positive pressure mode	
20,000 ug/m <sup>3</sup> or less (20mg/m <sup>3</sup> )	Supplied air respirator with full face piece, hood, or helmet or suit and operated in positive pressure mode	

### 15.14 MEDICAL SURVEILLANCE PROGRAM

All workers potentially exposed to arsenic at or above the OSHA Action Level for 30 or more days per year are required to enter the medical surveillance program to reveal medical conditions which could predispose an individual to excess risk from working on this job, and clearance to wear a negative-pressure respirator.

## 15.14.1 PROGRAM ELEMENTS

The program elements listed below are for exposures at or above the Action Level to arsenic, additional testing may be required if exposed to other toxic metals.

## 15.14.1.1 INITIAL MEDICAL EXAMINATION

- 1. A work history and a medical history which will include a smoking history and the presence and degree of respiratory symptoms such as breathlessness, cough sputum production and wheezing.
- 2. A 14 inch by 17 inch posterior-anterior chest x-ray.
- 3. A nasal and skin examination.
- 4. Other criteria as specified in 29 CFR 1926.1118 or by the examining physician.

## 15.14.1.2 PERIODIC MEDICAL EXAMINATIONS

- 1. Workers who are under 45 years of age with fewer than 10 years of exposure over the action level will be required to have annual examinations in accordance with section 15.14.1.1.
- 2. All other workers will be required to have semi-annual examination in accordance with section 15.14.1.1 except the chest x-ray which will be conducted annually.

### 15.14.2 NOTIFICATION OF WORKERS

All workers tested and/or examined under this medical surveillance program will be notified in writing of the results of testing within five working days after Atlas Painting and Sheeting has received the results. A good practice is to have employees sign the original copy of the results and maintain this copy with the employee's records.

### 15.14.3 RECORD KEEPING

Medical records will be maintained for the duration of employment plus 30 years, or a total of 30 years, whichever is longer. Workers or their appointed representatives will be able to access those records upon written request to Atlas Painting and Sheeting. Access will be provided within 15 days after the employee's request, unless Atlas Painting and Sheeting states the reason for the delay and the earliest date when the records will be made available. Those records will include but not be limited to the following items:

- 1. Name, social security number and job description.
- 2. Copy of physician's written opinion, including clearance to wear a respirator.
- 3. Results of exposure monitoring and medical testing and examinations.
- 4. Records of medical complaints related to arsenic exposure.

If an individual worker is removed from exposure to arsenic, the following records will be kept as well:

- 5. Date of each occasion that the individual was removed from exposure, and returned to work.
- 6. A brief explanation of how each removal was or is being accomplished.
- 7. A statement indicating the reason for removal and blood level results.

### 15.15 TRAINING FOR ARSENIC

All workers must be trained prior to starting any project where the exposures will be above the OSHA Action Level for arsenic in the hazards of arsenic. Signed and dated training records will be required stating that each worker has received the training. Copies of the OSHA Arsenic Standard, and the site specific Health and Safety Plan will be made available to all workers. Training will include:

- a. The osha arsenic standard 29 CFR 1926.1118
  - 1. Health hazards associated with arsenic exposure
  - 2. The osha arsenic standard 29 CFR 1926.1118
  - 3. Personal protective equipment
  - 4. Personal hygiene & decontamination
  - 5. Medical surveillance program
  - 6. Exposure monitoring
  - 7. Engineering controls and work practice
  - 8. Employee rights to information under 29 CFR 1926.33(g)(1) and (2)
- **b.** The health and safety plan
- c. Hazardous waste procedures (40 CFR 265.16)
- **d.** Emergency response
- e. The osha hazard communication standard 29 CFR 1926.59
- **f.** Respiratory protection program 29 CFR 1910.134
- g. Basic safety and health training 29 CFR 1926.21

## 16.0 HEXAVALENT CHROMIUM EXPOSURE CONTROL PLAN

OSHA has established a health standard for Hexavalent Chromium (Chromium (VI)) works on many projects that have either lead or zinc chromate which have the potential for hexavalent chromium above the action level.

### 16.1 POTENTIAL SOURCES AND TASK EVALUATION

During the cleaning and painting of chromium (VI)-based paint projects, several job categories may have potential exposure to chromium (VI) dust. Each job category having potential exposure to chromium (VI) will be subjected to initial exposure monitoring to determine if exposures are within acceptable limits, and what additional requirements, corrective measures or actions must be taken. Workers will be informed of the monitoring results within five days of receiving the results.

Until laboratory results of personnel samples are available, respiratory protection, personal protective equipment (PPE), change areas, hand wash facilities, biological monitoring and chromium (VI) training must be provided based upon the exposure hazard of the job category.

### **16.2 ACTION LEVEL**

An Action Level (AL) of 2.5 ug/m<sup>3</sup> is the exposure to chromium (VI) without regard to respirators, at which the following requirements will be implemented.

- a. Written Worker Protection Plan
- b. Exposure Monitoring
- c. Housekeeping
- d. Employee Medical Surveillance and Medical Removal Protection
- e. Employee Information and Training
- f. Signs and Regulated Areas
- g. Record keeping

#### 16.3 PERMISSIBLE EXPOSURE LIMIT

The Permissible Exposure Limit (PEL) of 5.0 ug/m³ is the 8-hour Time-Weighted-Average.

In addition to complying with the requirements identified when exceeding the Action Level, the following protective measures will be incorporated when exposure exceed the PEL.

- a. Engineering and Work Practice Controls
- b. Respiratory Protection
- c. Protective Clothing and Equipment
- d. Hygiene Facilities and Practices

### 16.4 DELINEATED AREAS

Work areas and support areas will be delineated using signs and tape to prevent inadvertent contamination from leaving the work site and to minimize contamination to the workers during the work shift. Work areas include containment enclosures and all work areas involved in chromium (VI) paint removal, clean-up, set-up or equipment involved in these operations.

The work area will have access limited to workers who have received the required training, medical surveillance and are wearing the personal protective equipment for the job they are performing, and supervisors and/or authorized visitors wearing appropriate clothing and/or protective equipment. No food, beverages, tobacco products, gum are to be present or consumed in the work area.

## **16.5 SIGNS**

Signs will be used to identify work areas where exposures could exceed the Action Level. Signs will read as follows:

DANGER
CHROMIUM CANCER HAZARD
AUTHORIZED PERSONNEL ONLY
NO SMOKING OR EATING

### 16.6 DECONTAMINATION FACILITIES

#### **16.6.1 SHOWERS**

The Support Area will consist of a decontamination trailer equipped with a shower separating clean and contaminated sides of the trailer. All street clothing worn to the job will be removed and stored in lockers on the clean side of the trailer. Work clothing, once used and contaminated will remain on the contaminated side of the trailer. Workers wearing contaminated work clothing must pass through the trailer after leaving the Work Area and remove their contaminated work clothing. At the end of each work day workers exposed to chromium (VI) above the PEL must shower completely with soap, including hair washing.

## 16.6.2 HANDWASH FACILITIES

Handwash stations will be located between the Work and break area located in the Support Area. Hands and face must be washed before eating, drinking or smoking.

### 16.7 LUNCH FACILITY

Lunch facilities will be set up in a clean area near the work area, away from all sources of contamination. The lunch area will be located away from the work area as designated by the Competent Person.

# **16.8 PROTECTIVE WORK CLOTHING (PWC)**

Workers entering chromium (VI) work area and other job categories in which exposure to chromium (VI) dust may exceed the PEL will change their clothing before entering the work areas for work, and again at the end of the day before leaving the Decontamination Area. Street clothing may not be worn during work, unless fully covered by PWC. Contaminated work clothing should be vacuumed of loose dust using a HEPA vacuum, but may not be taken away from the job site after work. Work clothing consisting of cloth shirts and trousers, disposable or cloth coveralls, and gloves will be provided and maintained by for workers involved in these designated job functions.

Bags or containers of contaminated protective clothing or equipment that are removed from change rooms for laundering, cleaning, maintenance or disposal will be labeled appropriately.

### 16.9 LAUNDERING OF WORK CLOTHING

Do not remove or clean the clothing by any means which reintroduces chromium (VI) into the ambient air such as brushing, shaking or blowing. Use vacuums equipped with HEPA filters for cleaning. Work clothing will be laundered and/or replaced on a weekly basis or more often if the clothing becomes dirty and/or wet.

Work boots must remain at the job site or decontamination trailer for the duration of the job. Contaminated work clothing will be placed in plastic bags and either given to a laundry service, or disposed of as hazardous waste by. If a laundry service is used, will advise them in writing that the clothing may be contaminated with chromium (VI) or other hazard-bearing dust and must be handled in such a fashion as to minimize the generation of air-borne dust, and/or contamination of skin or surfaces that may come into contact with the clothing.

Bags or containers used to store contaminated clothing will be labeled with the following:

DANGER
CONTAINS CHROMIUM (VI)
CANCER HAZARD
CAN DAMAGE SKIN, EYES, NASAL PASSAGES AND LUNGS

### 16.10 HOUSEKEEPING

All work areas will be maintained as free as practical of accumulation of chromium (VI) dust. In order to minimize the likelihood of dust becoming airborne again, cleaning will be conducted daily in all work areas using a vacuum equipped with a HEPA filter or by wet cleaning.

## 16.11 EXPOSURE MONITORING

Air sampling will be conducted in the worker's breathing zone (six to nine inches from the nose and mouth) to determine actual worker exposures and recommend respiratory protection that is adequate for those levels.

### 16.11.1 PERSONNEL AIR SAMPLING

Initial air sampling will be conducted to represent actual worker exposures to chromium (VI) in each job category suspected of exposure to chromium (VI) at or above the Action Level. Additionally, sampling will be conducted for a full work shift, minimally 7 hours.

If initial exposure monitoring results are above the PEL, then additional worker exposure monitoring will be collected every three months.

If the initial results are above the Action Level but below the PEL, then additional sampling will be conducted every six months.

If the initial results are below the Action Level then additional exposure monitoring is not required., unless the results are from a project that had results above the Action level. Then two sets of samples collected at least seven days later with results below the Action Level will be required for the project or specific job category to no longer be an exposing job category.

Additional air samples will be taken whenever site conditions change from those observed during the initial exposure monitoring, equipment or process changes, a significant change in the workforce, or at different structures.

Air samples will be collected and analyzed in accordance with NIOSH Methods. The laboratory used to analyze the samples will have current accreditation by the American Industrial Hygiene Association (AIHA). In addition, some states require additional accreditations such as by the state department of health.

Employees and other workers in the same job category will be notified in writing of the monitoring results within five (5) days after receiving the results.

#### 16.11.2 OBSERVATION OF MONITORING

All workers or their designated representatives will be given the opportunity to observe the personal exposure monitoring procedures. The observer will be allowed to receive an explanation of the monitoring procedures, observe all steps related to the monitoring of chromium (VI) and receive copies of the results when returned from the laboratory.

## 16.11.3 RECORD KEEPING

Detailed records of the exposure assessments will be maintained as given below. All worker exposure sampling results will be maintained by or its sub-contractors for at least 30 years.

1. The date(s), number, duration, location and results of each sample taken, including a description of the sampling procedure used to determine representative employee exposure where applicable.

- 2. A description of the sampling and analytical methods used and evidence of their accuracy.
- 3. The type of respiratory protective devices worn.
- Name, social security number, and job category of the employee monitored 4. and all other employees whose exposure the measurement is intended to represent.
- 5. The environmental variables that could affect the measurement of employee exposure.

## 16.12 ENGINEERING CONTROLS

All feasible engineering controls will be used to minimize chromium (VI) dust exposure. Additional control measures may be implemented based on the results of air monitoring once the project begins. The following engineering controls will be used.

Job Task	Control Methods
Abrasive Blast Operation Vacuuming during Abrasive Blast Operations	Dust collector with natural or forced ventilation
Power tool cleaning	HEPA vacuums
Hand tool cleaning	Wet misting
Clean up after paint removal	HEPA vacuums

Engineering controls selected above are the industry standards, when new technology is produced that would reduce worker exposures and costs, will evaluate that method or will seek others in the industry for their evaluation. In addition, this specification requires the use of abrasive material for cleaning the structures. Additional control measures will be re-evaluated if exposures are found to exceed the protection factor of respiratory protection normally used for this type of work.

### 16.13 JOB ROTATION

Job rotation will not be used to achieve compliance with the PEL.

## 16.14 RESPIRATORY PROTECTION

Prior to wearing a respirator, employees must comply with Section 10.0 of this Health and Safety Plan and the OSHA Respirator Standard 29 CFR 1910.134.

### 16.15 MEDICAL SURVEILLANCE PROGRAM

All workers potentially exposed to chromium (VI)

- 1. At or above the PEL for 30 or more days per year.
- 2. Experiencing signs or symptoms of adverse health effects associated with chromium(VI) exposure.
- 3. Exposed in an emergency

Will be offered medical surveillance at no cost to the employee.

### 16.16 PROGRAM ELEMENTS

All medical examinations will be conducted by or under the supervision of a physician or other licensed health care professional (PLHCP).

## 16.16.1 MEDICAL EXAMINATION FREQUENCY

- 1. Whenever an employee shows signs or symptoms of the adverse health effects associated with chromium (VI) exposure.
- 2. Within 30 days after exposure during an emergency which results in an uncontrolled release of chromium (VI).
- 3. Within 30 days after a PLHCP's written medical opinion recommends an additional examination.

### 16.16.2 MEDICAL EXAMINATION CONTENTS

- 1. A medical and work history with emphasis on past, present and anticipated future exposure to chromium (VI).
- 2. History of respiratory system dysfunction; history of asthma; dermatitis; skin ulceration; or nasal septum perforation; and smoking status and history.
- 3. A physical examination of the skin and respiratory tract.
- 4. Any additional tests deemed appropriate by the examining PLHCP.

### 16.16.3 NOTIFICATION OF WORKERS

All workers tested and/or examined under this medical surveillance program will be notified in writing of the results of testing within two weeks after has received the results. A good practice is to have employees sign the original copy of the results and maintain this copy with the employee's records.

### 16.16.4 RECORD KEEPING

Medical records will be maintained for the duration of employment plus 30 years, or a total of 30 years, whichever is longer. Workers or their appointed representatives will be able to access those records upon written request to . Access will be provided within 15 days after the employee's request, unless states the reason for the delay and the earliest date when the records will be made available. Those records will include but not be limited to the following items:

- 1. Name, social security number and job description.
- 2. Copy of physician's written opinion, including clearance to wear a respirator.
- 3. Results of exposure monitoring and medical testing and examinations.
- 4. Records of medical complaints related to chromium (VI) exposure.

If an individual worker is removed from exposure to chromium (VI), the following records will be kept as well:

- 5. Date of each occasion that the individual was removed from exposure, and returned to work.
- 6. A brief explanation of how each removal was or is being accomplished.
- 7. A statement indicating the reason for removal and blood level results.

# 16.17 TRAINING FOR CHROMIUM (VI)

All workers must be trained prior to starting work where the exposures will be above the OSHA Action Level for chromium (VI) and on an annual basis thereafter. Signed and dated training records will be required stating that each worker has received the training. Copies of the OSHA Chromium (VI) Standard, and the site specific Health and Safety Plan will be made available to all workers. Training will include:

- a. The osha chromium (vi) standard 29 CFR 1926.1126
  - 1. Health hazards associated with chromium (vi) exposure
  - 2. The location, manner of use and release of chromium in the workplace
  - 3. Personal protective equipment
  - 4. Personal hygiene & decontamination
  - 5. Medical surveillance program
  - 6. Exposure monitoring
  - 7. Engineering controls and work practice
- b. The health and safety plan
- c. Hazardous waste procedures (40 CFR 265.16)
- d. Emergency response
- e. The osha hazard communication standard 29 CFR 1926.59
- f. Respiratory protection program 29 cfr 1910.134
- g. Basic safety and health training 29 cfr 1926.21

## 17.0 ASBESTOS

## 17.1 PURPOSE

The purpose of this program is to establish guidelines and procedures during construction operations of asbestos containing materials in addition to the regulations found in the OSHA Asbestos Standard 29 CFR 1926.1101. These operations include, but are not limited to, demolition, removal, alteration, repair, maintenance, installation, clean-up, transportation, disposal and storage of asbestos or asbestos containing materials. The program is intended to protect all Atlas Painting and Sheeting employees, contractors, visitors and vendors from potential health hazards of asbestos related diseases.

## 17.2 ASBESTOS HAZARD

Asbestos is a common, naturally occurring group of fibrous minerals. Asbestos fibers have been used in a variety of building materials. Generally, most asbestos is found in pipe insulation, doors, textured paints and plasters, structural fireproofing, and floor tiles. Friable asbestos (that is, material that contains more than 0.1% asbestos by weight and can be crumbled by hand) is a potential hazard because it can release fibers into the air if damaged. Long term exposure to airborne asbestos is necessary for chronic lung disease. Significant and long-term exposure to asbestos from activities that directly disturb asbestos-containing materials (such as asbestos mining) can lead to a variety of respiratory diseases, including asbestosis and mesothelioma (cancer of the lung lining). Asbestosis is a non-malignant, irreversible disease resulting in fibrosis of the lung. Asbestos-related cancers tend also to result from substantial long-term exposure, however, mesothelioma may result from much smaller exposures to asbestos.

### 17.3 DEFINITIONS

**Asbestos** - includes chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos, and any of these materials that has been chemically treated and/or altered. Asbestos-containing materials (ACM) - means any material containing more than one percent asbestos.

Authorized person - any person authorized by the employer and required by work duties to be present in regulated areas.

Competent person - one who is capable of identifying existing asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, who has the authority to take prompt corrective measures to eliminate them

Fiber - a particulate form of asbestos, 5 micrometers or longer, with a length to diameter ration of at least 3 to 1.

Presumed asbestos containing material (PACM) - thermal system insulation and surfacing materials found in buildings constructed no later than 1980.

### 17.4 ASBESTOS WORK CATEGORIES

- 1. Class I activities involving the removal of TSI and surfacing CM and PACM.
- 2. **Class II** activities involving the removal of ACM which is not thermal system installation or surfacing material. This includes, but not limited to, removal of asbestos -containing wallboard, sheeting, roofing and construction mastics.
- 3. **Class III** repair and maintenance operations where ACM including TSI and surfacing ACM and PACM is likely to be disturbed.
- 4. **Class IV** maintenance and custodial activities during which employees contact but do not disturb ACM or PACM and activities to clean up dust, waste and debris resulting from Class I, II and II activities.

## 17.5 GENERAL RULES

- 1. When in doubt, treat all material as containing asbestos and comply with all applicable rules and regulations and protective measures.
- 2. All Asbestos Containing Material (ACM) will be handled by certified and licensed asbestos abatement personnel. The friability of the ACM will dictate the type of removal/maintenance required.
- 3. Employees who are uncertified and unlicenced will not handle any ACM >1%. This will include encapsulation projects, renovation/removal and/or demolition of any type of structure. This will prevent the potential for accidental exposure from the mishandling of any ACM.
- 4. When an uncertified, unlicenced employee questions whether they may be handling suspect ACM, the employee will immediately contact their supervisor. The employee shallnot resume working at the site until the area has been checked to verify the material is not ACM.
- 5. Uncertified, unlicenced employees will not cross over a barrier/containment area where asbestos projects are in progress.
- 6. Any employee who discovers ACM or suspect ACM in damaged or poor condition should report it to their supervisor so the identified material is repaired.

### 17.6 MEDICAL EXAMINATIONS

Employees assigned to asbestos removal will be given medical examinations at Atlas Painting and Sheeting's expense in compliance with 29 CFR 1926.1101 and 40 CFR 763 - Subpart G.

- 1. Within 30 days of first employment or assignment to a job exposing the employee to asbestos containing material.
- 2. Annually.
- 3. Within 30 days of termination of employment.

Medical examination for employees assigned to asbestos removal will include:

- 1. Medical and work history with special emphasis directed to symptoms of the respiratory system, cardiovascular system and digestive tract.
- 2. Medical questionnaire contained in 29 CFR 1926.1101.
- 3. A physical examination including a chest roentgenogram and pulmonary function testthat includes measurement of the employee's forced vital capacity and expiratory volume.

No employee shall be assigned to tasks requiring the use of respirators if an examining physician determines the employee will be unable to function normally while using it or that the employee might otherwise be impaired.

Records of all physical examinations performed for asbestos work related activities will be maintained for the duration of employment plus least 30 years by Atlas Painting and Sheeting.

### 17.7 TRAINING

All Atlas Painting and Sheeting employees who remove, repair or work around asbestos and those whose work might disturb asbestos-containing material will be trained to carry out their work without endangering themselves or their co-workers. Supervisors and competent persons are to attend the EPA model course for supervisors. All other affected employees are to attend:

- 1. Class I operations and Class II operations that require the use of critical barriers and/or negative pressure enclosures, employees will be trained in accordance with EPA Model Accreditation Plan asbestos abatement workers training (40 CFR 763 subpart E, appendix C).
- 2. Class II operations not included above, employees will be trained on the specific work practices and engineering controls. The training will include a hands-on portion and will take at least 8-hours.
- 3. Class III operations, employees will be trained in accordance with EPA requirements 40 CFR 763.92 (a) (2). The training will include a hands-on portion and will take at least 16-hours.
- 4. Class IV operations, employees will be trained in accordance with EPA requirements 40 CFR 763.92 (a) (1). The training will take at least 2-hours.

In addition to the above requirements, all employees will be trained and informed of the following:

- 1. Methods of recognizing asbestos.
- 2. Health effects associated with asbestos exposure.
- 3. Relationship between smoking and asbestos in producing lung cancer.
- 4. Operations which could result in exposure to asbestos, the importance of protective control, engineering controls, work practices, respirators, housekeeping procedures, hygiene facilities, emergency procedures and waste disposal procedures.
- 5. The purpose, proper use, fitting instructions, and limitations of respirators in accordance with OSHA 29 CFR 1910.134.
- 6. The appropriate work practices for performing the asbestos job.
- 7. Medical surveillance program requirements.
- 8. OSHA 29 CFR 1926.1101
- 9. The names, addresses and phone numbers of public health organizations which provide materials and/or conduct programs concerning smoking cessation.
- 10. The requirements for posting signs and affixing labels.

## 17.8 PERMISSIBLE EXPOSURE LIMIT (PEL)

The Permissible Exposure Limit for asbestos is 0.1 fiber per cubic centimeter of air as an 8-hour Time Weighted Average (TWA). The Excursion Limit is 1 fiber per cubic centimeter of air over 30 minutes.

PEL = 0.1 f/cc over 8-hour TWA

Excursion Limit = 1.0 f/cc over 30 minutes

## 17.9 EXPOSURE MONITORING

Exposure monitoring is essential to implementing and maintaining proper industrial hygiene practices at the job site. By conducting air sampling in the worker's breathing zone (six to nine inches from the nose and mouth) we can verify the actual exposures are below the Permissible Exposure Limit (PEL) and Excursion Limit or that respiratory protection is adequate for those levels.

## 17.9.1 PERSONNEL AIR SAMPLING

Initial air sampling will be conducted on each job classification that has potential air exposure to asbestos, and each such job classification several times and on multiple individuals doing the same job. The monitoring will be full shift for an 8-hour Time Weighted Average and 30-minute short-term employee exposures.

For Class I asbestos work, Atlas Painting and Sheeting will assume that employees are exposed above the PEL and/or Excursion limit, until initial exposure monitoring indicates otherwise. Class I and Class II operations Atlas Painting and Sheeting will conduct daily monitoring that is representative of the exposure of each employee who is assigned to work in the regulated areas.

For all other operations that are not Class I and Class II, periodic monitoring will be conducted where employees are exposed above the PEL. The periodic monitoring will be at sufficient intervals to document the validity of the exposure prediction.

If the initial and/or periodic monitoring results are below the PEL and Excursion Limit, then additional sampling is not required. Additional air samples will be taken when there has been a change in production, process, control equipment, personnel or work practices that may result in a new or additional exposures to asbestos.

Prior to documentation of asbestos exposure assessment, workers must use respiratory protection. If exposures exceed the PEL even after implementation of all feasible engineering or work practice controls, assigned protection factors (APF's) for respiratory protection will be used to assess compliance with the PELs. Initial and follow-up air sampling results will be used to establish and verify that exposures are still within the allowable limits.

Employees and other workers in the same job classifications will be notified in writing of the monitoring results as soon as possible after receiving the results. The notification can in writing either individually or by posting at a centrally located area (such as a decon) that is accessible to affected employees.

## 17.10 OBSERVATION OF MONITORING

All workers or their designated representatives will be given the opportunity to observe the personal exposure monitoring procedures in accordance with 29 CFR 1926.1101. The observer will be allowed to receive an explanation of the monitoring procedures, observe all steps related to the monitoring of asbestos and receive copies of the results when returned from the laboratory.

### 17.11 RECORDKEEPING

Detailed records of the exposure shall be in compliance with 29 CFR 1926.1101, as given below. All personal air sampling results will be maintained by Atlas Painting and Sheeting or its subcontractors for at least 30 years.

- 1. The date(s), number, duration, location and results of each of the samples taken, including a description of the sampling procedure used to determine representative employee exposure where applicable.
- 2. A description of the sampling and analytical methods used and evidence of their accuracy.
- 3. The type of respiratory protective devices worn.
- 4. Name, social security number, and job classification of the employee monitored.
- 5. The environmental variables that could affect the measurement of employee exposure.

### 17.12 ENGINEERING CONTROLS

All feasible engineering controls will be used to minimize asbestos exposures to the greatest extent possible from the very beginning. Engineering controls which may be available for dealing with exposures above the PEL and/or Excursion Limit are provided below. Additional control measures may be necessary depending on the results of air monitoring once the project begins.

Job Task	Control Methods
Use of a containment or isolation where exposure are above PEL and excursion limit	Dust collector with natural intake ventilation
Power tool cleaning	HEPA vacuums
Hand tool cleaning	Wet methods or wetting agents
Clean up	HEPA vacuums or wet methods

## 17.13 RESPIRATORY PROTECTION

Atlas Painting and Sheeting has established a Respiratory Protection Plan in accordance with OSHA 29 CFR 1910.134. The Respiratory Protection Plan will be followed during asbestos operations with the exception of the Assigned Protection factors (APF) assigned to each type of respirator.

Airborne concentration of asbestos	Required respirator	
Not in excess of 1 f/cc (10 x PEL)	Half-mask air purifying respirator other than a disposable respirator, with HEPA filters	
Not in excess of 5 f/cc (50 x PEL)	Full facepiece air-purifying respirator with HEPA filters	
Not in excess of 10 f/cc (100 x PEL)	Any powered air-purifying respirator with HEPA filters or any supplied air respirator operated in the continuous flow mode	
Not in excess of 100 f/cc (1,000 x PEL)	Full facepiece supplied air respirator operated in the pressure demand mode	
Greater than 100 f/cc (1,000 x PEL) or unknown concentration	Full facepiece supplied air respirator operated in the pressure demand mode, equipped with an auxiliary positive pressure self-contained breathing apparatus	

## 17.14 PROTECTIVE WORK CLOTHING (PWC)

All workers involved in operations in which exposure to asbestos may exceed the PEL and/or Excursion Limit will change their clothing before entering the work areas for work, and again at the end of the day before leaving the Decontamination Area. Street clothing may not be worn during work on this project, unless fully covered by PWC. Contaminated work clothing should be vacuumed of loose dust using a HEPA vacuum, but may not be taken away from the job site after work. Work clothing consisting of coveralls or similar whole body clothing, head coverings, foot coverings and gloves will be provided and maintained by Atlas Painting and Sheeting for workers involved in these designated job functions.

Disposable coveralls will not be used as the sole means of PWC if such garments are likely to become torn or fall apart under normal use. In these cases cloth coveralls, or similar PWC shall be used.

Use of PWC, can result in additional heat stress during hot weather. The Competent Person will monitor potential heat stress problems and modify the work regime as necessary. Actions may include frequent water breaks, use of salt tablets, use of short sleeve clothing underneath the PWC, etc. Heat stress conditions will be identified by the Competent Person as dependent on temperature and relative humidity, and as advised by the Competent Person.

### 17.15 LAUNDERING OF WORK CLOTHING

Do not remove or clean the clothing by any means which reintroduces the asbestos into the ambient air such as brushing, shaking or blowing. Use vacuums equipped with HEPA filters for cleaning. Contaminated work clothing will be placed in sealed impermeable plastic bags, or other closed impermeable containers and either given to a laundry service, or disposed of as hazardous waste by Atlas Painting and Sheeting. If a laundry service is used, Atlas Painting and Sheeting will advise them in writing that the clothing may be contaminated with asbestos or other hazard-bearing dust and must be handled in such a fashion as to minimize the generation of air-borne dust, and/or contamination of skin or surfaces that may come into contact with the clothing.

#### 17.16 HOUSEKEEPING

All work areas will be maintained as free as practical of accumulation of asbestos. In order to minimize the likelihood of asbestos becoming airborne again, cleaning will be conducted using a vacuum equipped with a HEPA filter, or wet cleaning will be used for such housekeeping purposes. Dry sweeping and shoveling may be used only where HEPA vacuuming or similar methods have been found to be ineffective. Cleaning with compressed air will be used only in conjunction with a ventilation system designed to capture the airborne dust. Waste, scraps, debris, bags, containers, equipment and clothing contaminated with asbestos consigned for disposal will be collected and disposed of in sealed impermeable bags, or other closed, impermeable containers.

### 17.17 DELINEATED AREAS

To prevent inadvertent contamination leaving the work site, and to minimize contamination to the workers during the workshift, areas will be delineated using signs and tape; work areas where the exposure to hazards is above the PEL and/or Excursion Limit, and support areas where all other work is performed. The work areas include the containment enclosure and all work areas involved in asbestos removal, clean up, set up or equipment involved in these operations.

The work area will have access limited to workers who have received the required training, medical surveillance and are wearing the protective clothing required for the job they are performing, and supervisors and/or authorized visitors wearing appropriate clothing and/or protective equipment. No food, beverages or tobacco products are to be present or consumed in the work area.

## **17.18 SIGNS**

Signs that will be used as to designate the regulated areas include the following:

DANGER
ASBESTOS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
AUTHORIZED PERSONNEL ONLY

Warning labels must be placed on all raw materials, mixtures, scrap, waste, debris, and other products containing asbestos fibers. The label will include the following:

DANGER
CONTAINS ASBESTOS FIBERS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
DO NOT BREATH DUST
AVOID CREATING DUST

### 17.19 DECONTAMINATION FACILITIES

The Support Area will consist of a decontamination trailer equipped with shower(s) separating clean and contaminated sides of the trailer. All street clothing worn to the job will be removed and stored in lockers on the clean side of the trailer. Work clothing, once used and contaminated shall remain on the contaminated side of the trailer. Workers wearing contaminated work clothing must pass through the trailer after leaving the Work Area and remove their contaminated work clothing. At the end of each work day workers exposed to asbestos above the PEL must shower completely with soap, including hair washing. Sinks for hand washing will be set up in and near the decontamination trailer. If initial exposure monitoring is below the PEL then a handwash station will be used by workers to clean up at the end of the day.

Handwash stations will be located between the Work and break area located in the Support Area. Hands and face must be washed before eating, drinking or smoking.

On construction sites, it may not be feasible to have the decon trailer located next tot he work area, where this is the case the decon trailer will be located in a centralized location. Workers will leave their own vehicles at the decon trailer. If workers are required to travel by work vehicle to and from the decon, the work vehicle will be cleaned daily using a HEPA vacuum and/or wet wiping. Once workers have changed into their protective work clothing and that clothing has become contaminated with toxic metal dust, they will not be permitted to enter or use their vehicles again until they have removed the PWC and/or have decontaminated and are once again wearing their clean street clothing.

## 17.19.1 DECONTAMINATION AREA ENTRY PROCEDURE

- 1. Enter the decontamination area through the clean room.
- 2. Remove and deposit street clothing within a locker provided for their use.
- 3. Put on protective clothing and respiratory protection before leaving the clean room.
- 4. Before enter the regulated area, Atlas Painting and Sheeting will ensure workers pass through dirty side of decontamination area.

### 17.19.2 DECONTAMINATION EXIT PROCEDURE

- 1. Before leaving the regulated area, employees are to vacuum themselves off using HEPA vacuums.
- 2. Employees are to remove their protective clothing inside the dirty area of the decontamination area.
- 3. Employees are to enter shower area, remove their respirators, then take a shower.
- 4. After showering, employees will enter the clean area and change into their street clothing.

### 17.20 LUNCH AREA

Lunch facilities will be set up in a clean area near the work area, away from all sources of contamination. The competent Person will determine the location of the lunch area. Contaminated disposable coveralls must be removed, and hands and face must be washed prior to eating, drinking or smoking. All work clothing must be cleared of loose dust by vacuuming with a HEPA vacuum prior to entering the lunch area.

### 17.21 SUBCONTRACTED WORK

Major asbestos removal is normally contracted to external firms who specialize in asbestos removal work. Atlas Painting and Sheeting requires that all such work be carried out in accord with the requirements established by Local, State and Federal regulations. At all such projects the contractor will ensure that clean-up is properly completed and that all asbestos and asbestos contaminated material is collected, and disposed of in accord with Local, State and Federal regulations. The contractor will be required to submit air testing results to demonstrate that the clean-up has been carried out properly and the area can be re-occupied safely.

Atlas Painting and Sheeting requires that contractors carrying out tasks which could potentially create asbestos-containing dust,

- 1. Follow work practices that reduce to the extent practical the creation of airborne asbestos dust and which meet the asbestos safety standards set by OSHA.
- 2. Employ only workers who have been trained in asbestos safety and provide documentation to Atlas Painting and Sheeting upon request.
- 3. Employee only workers who have received medical surveillance appropriate for the job task and provide documentation to Atlas Painting and Sheeting upon request.

## 17.22 METHODS OF ASBESTOS REMOVAL

## 17.22.1 Non-friable ACM Work

Asbestos that is effectively bonded in a non-asbestos matrix cannot easily become airborne. As such, provided the material is not broken or abraded, there is little risk of inhalation exposure to asbestos. To ensure that minor work involving non-friable asbestos (including vinyl asbestos tile, asbestos asphalt roofing, and asbestos ceiling and wall tile) the following procedure will be followed:

### Procedure:

- 1. Before beginning the work the worker will carefully inspect the asbestos- containing material to ensure that the planned work will not create airborne asbestos dust.
- 2. Where dust that might contain asbestos fibre is present, the worker will clean the material using a wet method or a HEPA filtered vacuum.
- 3. Following completion of the task the worker will carry out any required clean wet methods or a HEPA filtered vacuum and will then carefully bag for disposal all asbestos containing waste.

Note: Cutting, drilling, sanding or breaking the material are likely to create airborne asbestos dusts and will require additional precautions.

# 17.22.2 Single Use Glove Bag Procedure

The following procedure will be followed when single-use asbestos removal glove bags are used. The procedure may only be used on tasks that are small enough to be completely enclosed in the glove bag and which do not leave exposed asbestos in place when the bag is removed.

## Preparation:

- 1. Only a staff member who has completed level 3 training and who is wearing appropriate coverall and an air purifying respirator (3M 6000 Series with a purple, 6240 particulate filter or equivalent) will carry out glove bag removal of asbestos.
- 2. Before beginning removal work, access to the area will be restricted. If the work site is located in areas where other Maintenance Department staff might be exposed to asbestos and in all work sites located in publicly accessible areas, warning notices will be posted.
- 3. Steps will be taken to prevent accidental movement, contact with heat, cold or electricity, or release of chemicals.
- 4. The work area will be cleaned using a HEPA filtered vacuum or wet cleaning to remove asbestoscontaining material contaminating the immediate work area. Where possible a plastic sheet will then be placed beneath the pipe or fitting from which the asbestos is to be removed.
- 5. Steps will be taken to prevent exposure where damage to the insulation might allow release of fibers. Steps include making temporary repairs using duck tape or wetting the exposed fibre using amended water.

## 17.22.3 Glove Bag Removal

- 1. The asbestos-containing material will be thoroughly wetted using amended water.
- 2. With tools in bag, the single-use bag will be positioned and secured using adhesive and tape as necessary.
- 3. Working through the gloves, the asbestos will be removed exercising care to avoid puncturing the bag.
- 4. When removal is compete or bag is full, sprayer (containing amended water) will be inserted into the bag and the pipe or fitting, tools and the bag interior will be washed. Tools will then be placed in an inverted glove withdrawn from bag and the glove sealed from the bag using duct tape.
- 5. The tools will then be removed by cutting through the duct tape ensuring that both the bag and the glove remain sealed.
- 6. The tools will then be submerged in water and the glove opened. Tools will be cleaned under water.

7. The glove bag will then be carefully removed, sealed and placed in a sealed container pending packaging for disposal.

# Clean Up:

- 1. The surface of the pipe or fitting will be carefully wet wiped and treated with sealer.
- 2. The plastic sheet will then be carefully wet wiped and rolled up.
- 3. All solid waste created during removal jobs including glove bags, disposable coveralls, wipe rags and plastic sheeting will be treated as asbestos containing waste and handled as detailed in the disposal procedure.

# 17.22.4 Multiple-Use Glove Bag Procedure

This procedure describes the use of multiple use glove bags. It may be used on tasks that require the bag to be repositioned to complete the entire job. Preparation:

- 1. Only a staff member who has completed level 3 training and who is wearing appropriate coverall and an air purifying respirator (3M 6000 Series with a purple, 6240 particulate filter or equivalent) will carry out glove bag removal of asbestos.
- 2. Before beginning removal work, access to the area will be restricted. If the work site is located in areas where other Maintenance Department staff might be exposed to asbestos and in all work sites located in publicly accessible areas, warning notices will be posted.
- 3. Steps will be taken to prevent accidental movement, contact with heat, cold or electricity, or release of chemicals.
- 4. The work area will be cleaned using a HEPA filtered vacuum or wet cleaning to remove asbestoscontaining material contaminating the immediate work area. Where possible a plastic sheet will then be placed beneath the pipe or fitting from which the asbestos is to be removed.
- 5. Steps will be taken to prevent exposure where damage to the insulation might allow release of fibers. Steps include making temporary repairs using duck tape or wetting the exposed fibre using amended water.

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### 17.23 SITE CLEAN-UP PROCEDURES

All materials, equipment, etc. that may be potentially contaminated must be properly decontaminated prior to leaving the site or be categorized as hazardous as disposed of as hazardous waste.

### 17.23.1 SITE CLEAN-UP

Asbestos only poses a health hazard when it becomes airborne and people inhale the fiber. When asbestos-containing material has been disturbed, effective clean up will ensure that asbestos does not present a health hazard. Clean up of dust which might contain traces of asbestos, such as a custodian might encounter in routine cleaning in buildings where asbestos is present, will not require special precautions. To ensure that clean up of significant quantities of asbestos will not cause a health hazard, the following procedure will be followed:

- 1. Clean up of significant amounts of asbestos containing material will be only be done by employees who have been trained and who are wearing appropriate protective clothing and a fitted, air-purifying respirator.
- 2. Dry sweeping of asbestos-containing waste or other clean up activities which will create airborne dust are not permitted
- 3. Large pieces of asbestos containing material will be collected by hand and properly bagged in accord with the disposal procedure.
- 4. When ever possible, asbestos dust will be thoroughly wetted and clean up with a wet mop or a wet vac. Contaminated water will be discharged to a sewer. Containers, mops and other equipment which might be contaminated with asbestos will be rinsed with water and the rinse water discharged to a sewer.
- 5. If additional clean up is need it will be carried out using a vacuum equipped with a HEPA filter.

## 17.23.2 VERIFICATION OF SITE CLEAN-UP

A visual inspection of the worksite will be conducted prior to removing paint removal equipment or containment materials that will be used again on another project.

At the end of the project a complete visual inspection will be made of the site. If paint debris, spent abrasive or litter is found it will be cleaned in accordance with 1.22.1.

# 17.24 DISPOSAL OF ASBESTOS CONTAINING WASTE MATERIALS

Handling and disposal of asbestos containing waste is regulated by both State and Federal regulations. To ensure compliance with these regulations and to ensure that no-one is exposed to asbestos the following procedure is to be followed:

1. Only a staff member who has completed Level 2 training and who is wearing appropriate air purifying respirator will package asbestos waste.

- 2. Waste asbestos will be thoroughly wetted and then placed in specially labeled 6 mil plastic bags. The bag will be securely sealed using duct tape. The bagged asbestos will then be placed in a second, labeled 6 mil plastic gab which is again taped closed
- 3. Asbestos waste may be transported from the location where it was produced to an interim storage location if the bags are free from punctures or tears and if the outside of the bag is free of asbestos. Asbestos waste will be transported in an enclosed vehicle or beneath a secured tarpaulin. No other cargo may be carried while the waste asbestos is being moved. After the waste asbestos is moved to an interim storage site, the driver will, if necessary clean the vehicle to remove asbestos contamination.
- 4. Asbestos waste must be disposed of at a waste disposal site which is approved to receive asbestos. Shipment of waste asbestos must be co-ordinated with the waste disposal site which is to receive the waste. Asbestos disposal will normally be carried out by external contractors
- 5. Shipments for disposal must be done in accord with Local, State and Federal regulations and must be accompanied by a properly completed shipping document.

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# 18.0 OTHER TOXIC METALS

Paint removal projects have the potential to have other toxic metals which may cause a worker exposure above the OSHA Action Levels or Permissible Exposure Limits. These metals include, but are limited to:

Metal	OSHA PEL (ug/m³)	
Aluminum	5,000	
Arsenic	10	
Beryllium	2	
Cadmium	5	
Copper	1,000	
Hexavalent C	hromium 5	
Magnesium	10,000	
Manganese	5,000	
Vanadium	100	
Zinc	5,000	

Atlas Painting and Sheeting or its Safety Consultant will determine which metals will be sampled during worker exposure monitoring.

For other metals that are found in paint coatings, and for which no Action Level exists, establish the Action Level at ½ of the PEL. If a PEL does not exist, establish the Action Level at ½ of the Threshold Limit Value (TLV) found in Appendix A of 29 CFR 1926.55.

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## 19.0 RESPIRABLE CRYSTALLINE SILICA EXPOSURE CONTROL PLAN

This section of the Health and Safety Plan details the procedures used to minimize worker exposures to respirable crytalline silica and its various forms.

### 19.1 POTENTIAL SOURCES OF SILICA

Several job categories may have potential exposure to silica dust, as follows:

- -demolition or concrete and masonry structures
- -crushing, loading, hauling and dumping of rock
- -chipping, hammering and drilling of rock
- -sawing, hammering, drilling, grinding and chipping of concrete or masonry
- -dry sweeping or pressurized air blowing of concrete, rock or sand dust
- -concrete mixing

## 19.2 PERMISSIBLE EXPOSURE LIMIT

The Permissible Exposure Limit (PEL) is 50 ug/m as an 8-hour Time-Weighted-Average.

## 19.3 ACTION LEVEL

The Action Level (AL) is 25 ug/m as an 8-hour Time-Weighted-Average.

### 19.4 SELECTED EXPOSURE CONTROL MEASURES

From Table 1 of 1926.1153, the list below is only a small sample of Table 1, for items not listed, refer to the Table.

Equipment/ Task	Engineering and Work Practice Control	Respirator and APF ,:; 4 hours/ shift	Respirator and APF > 4 hours/ shift
Stationary masonry saw	Use saw equipped with water delivery system that continuously feeds water to the blade	None	None
Handheld power saws	Use saw equipped with water delivery system that continuously feeds water to the blade - when used outdoors - when used indoors or in an enclosed area	None APF 10	APF 10 APF 10

Equipment/ Task	Engineering and Work Practice Control	Respirator and APF ,;; 4 hours/ shift	Respirator and APF > 4 hours/ shift
Handheld power saws for cutting fiber cement board	For tasks performed outdoors only. Use saw equipped with commercially available dust collection system	None	None
Walk behind saws	Use saw equipped with water delivery system that continuously feeds water to the blade - when used outdoors - when used indoors or in an enclosed area	None APF 10	None APF 10
Drivable saws	For tasks performed outdoors only. Use saw equipped with integrated water delivery system that supplies water to cutting surface	None	None
rig-mounted core saws or drills	Use saw equipped with integrated water delivery system that supplies water to cutting surface	None	None
Jackhammers and handheld powered chipping tools	Use tool with water delivery system that supplies a continuous stream or spray of water at the point of impact - When used indoors - When used outdoors or in an enclosed area	None APF 10	APF 10 APF 10
Handheld grinders for mortar removal	Use grinder equipped with commercially available shroud and dust collection system	APF 10	APF 25

Equipment/ Task	Engineering and Work Practice Control	Respirator and APF ,:; 4 hours/ shift	Respirator and APF > 4 hours/ shift
Handheld grinders for uses other than mortar removal	For tasks performed outdoors. Use grinder equipped with integrated water delivery system that continuously feeds water to the grinding surface Or; Use grinder equipped with commercially available shroud and dust collection system - When used outdoors _ When used indoors or in an enclosed area	None None None	None None APF 10

## 19.5 HIERARCHY OF EMPLOYEE PROTECTION METHODS

The Occupational Safety and Health Administration (OSHA) uses the following hierarchy of employee protection methods when determining how to properly protect employees. OSHA recognizes that all these methods may not be suitable for each project location.

- a. Engineering
- b. Work Practice Controls
- c. Respiratory Protection

## 19.6 ENGINEERING CONTROLS

Job tasks not listed on Table 1, implement one or more of the following engineering controls.

- -use of ventilation systems such as dust collectors
- -use of localized exhaust ventilation
- -wet agents on the surface to minimize dust
- -use of HEPA vacuums attached to equipment
- -use equipment that provides water to the cutting surface

### 19.7 WORK PRACTICE CONTROLS

Work practice controls are used to minimize the potential exposure to the employees by utilizing one or more of the following practices:

- -wash the hands and face prior to eating, drinking or smoking
- -wear the appropriate protective work clothing and remove prior to breaks
- -where a shower is provided, use it

### 19.8 DELINEATED AREAS

To prevent inadvertent contamination leaving the work site, and to minimize contamination to the workers during the work shift, areas where there is a potential exposure at or above the PEL will be delineated using signs, tape or barricades;

## 19.9 HOUSEKEEPING

All work areas will be maintained as free as practical of accumulation of silica dust. In order to minimize the likelihood of dust becoming airborne again, cleaning will be conducted using a vacuum equipped with a HEPA filter, or wet cleaning will be used for such housekeeping purposes.

The use of compressed air will only be permitted when used in conjunction with a ventialtion system that effectively captures the dust cloud.

#### 19.10 EXPOSURE MONITORING

- 1. If initial monitoring indicates an exposure is below the action level, monitoring may be discontinued for that job task.
- 2. Where the most recent monitoring indicates results are at or above the action level, but below the PEL, then follow-up monitoring will be conducted within six months of the most recent monitoring.
- 3. Where the most recent monitoring indicates results are above the PEL, then follow-up monitoring will be repeated within three months of the most recent monitoring.
- 4. Where the most recent results (non-initial) monitoring indicate results are below the action level, the monitoring will be repeated until two results taken seven or more days apart, are below the action level, then the job task can be classified as being below the action level.
- 5. When there is a change in production, process, control equipment, personnel, or work practices, that may result in a new or additional exposure at or above the action level, then the job task will be reassessed by monitoring.
- 6. Within five working days after completing an exposure assessment, each affected employee will be notified wither in writing, or by posting the results in a location accessible to all employees.

### 19.10.1 OBSERVATION OF MONITORING

All workers or their designated representatives will be given the opportunity to observe the personal exposure monitoring procedures. The observer will be allowed to receive an explanation of the monitoring procedures, observe all steps related to the monitoring of silica and receive copies of the results when returned from the laboratory.

### 19.10.2 RECORD KEEPING

Record of employee exposure monitoring will contain:

- 1. The date of measurement for each sample taken.
- 2. The task monitored.
- 3. Sampling and analytical method used.
- 4. Number, duration and results of samples taken.
- 5. Identity of the laboratory that performed the analysis.
- 6. The type of personal protective equipment worn by employees.
- 7. Name, social security number (to be maintained in company files and not with worker exposure records), and job classification of all employees represented by the monitoring, indicating which employees were actually monitored.

### 19.11 MEDICAL SURVEILLANCE PROGRAM

All workers potentially exposed to silica dust above the OSHA PEL are required to enter the medical surveillance program to reveal medical conditions which could predispose an individual to excess risk from working on this job, and clearance to wear a respirator.

## 19.11.1 INITIAL EXAMINATION.

- 1. An initial (baseline) medical examination is required within 30 days after initial assignment, unless the employee has received a medical examination that meets the OSHA requirements within the previous three years.
- A medical and work history, with emphasis on past, present and anticipated exposure to respirable crystalline silica, dust and other agents affecting the respiratory system; and history of respiratory system disfunction, including signs and symptoms of respiratory disease.
- 3. Physical examination with special emphasis on respiratory system.
- 4. A chest x-ray interpreted and classified according to the International Labour Office (ILO) International Classification of Radiographs of Pneumoconioses by a NIOSH-certified B Reader.
- 5. A pulmonary function test (PFT) to include forced vital capacity (PVC) and forced expiratory volume in 1 second (FEV<sub>1</sub>) and FEV<sub>1</sub>/ FVC ration, administered by a spirometry technician with a current certificate from a NIOSH approved spirometry course.
- 6. Testing for latent tuberculosis infection.
- 7. Any other test deemed appropriate by the PLHCP.

### 19.11.2 PERIODIC EXAMINATIONS

1. Medical examination as listed in 19.14.1 and the OSHA regulation will be made available every three years, or more frequently if recommended by the PLHCP.

## 19.11.3 INFORMATION PROVIDED TO THE PLHCP

- 1. A description of the employee's former, current and anticipated duties as they relate to the employee's occupational exposure to respirable crystalline silica.
- 2. The employee's former, current and anticipated levels of occupational exposure to respirable crystalline silica.
- 3. A description of any personal protective equipment used or to be used by the employee.
- 4. Information from records of employment related medical examinations previously provided to the employee and currently within the control of the employer.

## 19.11.4 PLHCP'S WRITTEN MEDICAL REPORT FOR EMPLOYEE

- 1. A statement indicating the results of the medical examination, including any medical condition(s) that would place the employee at increased risk of material impairment to health from exposure to respirable crystalline silica and any medical condition that require further evaluation or treatment.
- 2. Any recommended limitations on the employee's use of respirators.
- 3. Any recommended limitations on the employee's exposure to respirable crystalline silica.
- 4. A statement that the employee should be examined by a specialist if the chest X-ray provided in accordance with the OSHA regulation is classified as 1/0 or higher by the B Reader, or if referral to a specialist is deemed appropriate by the PLCHP.

### 19.11.5 NOTIFICATION OF WORKERS

All workers tested and/or examined under this medical surveillance program will be notified in writing of the results of testing within five working days after Atlas Painting and Sheeting has received the results.

### 19.11.6 RECORD KEEPING

Medical records will be maintained for the duration of employment plus 30 years, or a total of 30 years, whichever is longer. Workers or their appointed representatives will be able to access those records upon written request to Atlas Painting and Sheeting . Access will be provided within 15 days after the employee's request, unless Atlas Painting and Sheeting states the reason for the delay and the earliest date when the records will be made available. Those records will include but not be limited to the following items:

- 1. Name and social security number
- 2. A copy of the PLHCP's and specialists' written medical opinion.
- 3. A copy of the information provided to the PLCHP and specialist.

### 19.12 TRAINING FOR SILICA

All workers must be trained prior to starting any project where the exposures will be above the OSHA Action Level for lead in the hazards of silica. A training class will be conducted for all workers to attend. Signed and dated training certificates will be required stating that each worker has received the training. Workers must attend annual refresher training. Training shall include:

### A. Silica

- 1. Health hazards associated with exposure to respirable crystalline silica
- 2. Specific tasks in the workplace that could result in exposure to respirable crystalline silica
- 3. Specific measures the employer has implemented to protect employees from exposure to respirable crystalline silica, including engineering controls, work practices and respirators to be used.
- 4. Personal protective equipment
- 5. Personal hygiene & decontamination
- 6. Medical surveillance programs
- 7. Exposure monitoring
- 8. Employee rights to information
- B. The OSHA hazard communication standard 29 CFR 1910.1200 including the following hazards: cancer, lung effects, immune system effects and kidney effects.
- C. Respiratory protection program 29 CFR 1910.134

## 20.0 BERYLLIUM EXPOSURE CONTROL PLAN

OSHA has implemented a beryllium standard for construction 29 CFR 1926.1024. This standard will be implemented on projects that may have beryllium exposures, or if beryllium was found at or above the Action Level during worker exposure monitoring.

## 20.1 POTENTIAL BERYLLIUM SOURCES AND TASK EVALUATION

During cleaning of beryllium based paint projects or by using abrasives that may contain beryllium, several job categories may have potential exposure to beryllium dust including the abrasive blaster and workers vacuuming during the blast.

## **20.2 ACTION LEVEL**

The Action Level (AL) of 0.1 ug/m<sup>3</sup> is the exposure to beryllium, at which the following requirements of the OSHA Beryllium in Construction Standard must first be implemented.

- a. Written Worker Protection Plan
- b. Exposure Monitoring
- c. Housekeeping
- d. Employee Medical Surveillance and Medical Removal Protection
- e. Employee Information and Training
- f. Signs and Regulated Areas
- g. Record keeping

#### 20.3 PERMISSIBLE EXPOSURE LIMIT

The Permissible Exposure Limit (PEL) of 0.2 ug/m<sup>3</sup> is the 8-hour Time-Weighted-Average.

In addition to complying with the requirements identified when exceeding the Action Level, the following protective measures will be incorporated when exposure exceed the PEL.

- a. Engineering and Work Practice Controls
- b. Respiratory Protection
- c. Protective Clothing and Equipment
- d. Hygiene Facilities and Practices

## **20.4 SHORT-TERM EXPOSURE LIMIT (STEL)**

The Short-Term Exposure Limit (STEL) is in excess of 2.0 ug/m<sup>3</sup> as determined by a 15 minute sampling period.

### 20.5 COMPETENT PERSON

When exposures are at or above the PEL or STEL, a competent person will be designated. The competent person will:

- 1. Make frequent and regular inspections of job sites, materials and equipment.
- 2. Implement the written exposure control plan.
- 3. Ensure that all employees use respiratory protection.
- 4. Ensure that all employees use personal protection clothing and equipment.

## 20.6 DELINEATED AREAS

Work areas and support areas will be delineated using signs and tape to prevent inadvertent contamination from leaving the work site and to minimize contamination to the workers during the work shift. Work areas include containment enclosures and all work areas involved in beryllium paint removal, clean-up, set-up or equipment involved in these operations.

The work area will have access limited to workers who have received the required training, medical surveillance and are wearing the personal protective equipment required for the job they are performing, and supervisors and/or authorized visitors wearing appropriate clothing and/or protective equipment. No food, beverages or tobacco products are to be present or consumed in the work area.

## **20.7 SIGNS**

Signs will be used to identify work areas where exposures could exceed the Action Level. Signs will read as follows:

DANGER
CONTAINS BERYLLIUM
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
AVOID CREATING DUST
DO NOT GET ON SKIN

#### 20.8 DECONTAMINATION FACILITIES

## **20.8.1 SHOWERS**

The Support Area will consist of a decontamination trailer equipped with a shower separating clean and contaminated sides of the trailer. All street clothing worn to the job will be removed and stored in lockers on the clean side of the trailer. Work clothing, once used and contaminated will remain on the contaminated side of the trailer. Workers wearing contaminated work clothing must pass through the trailer after leaving the Work Area and remove their contaminated work clothing. At the end of each work day workers exposed to beryllium above the PEL must shower completely with soap, including hair washing.

### 20.8.2 HANDWASH FACILITIES

Handwash stations will be located between the Work and break area located in the Support Area. Hands and face must be washed before eating, drinking or smoking.

## 20.9 LUNCH FACILITY

Lunch facilities will be set up in a clean area near the work area, away from all sources of contamination. The lunch area will be at least 50 feet upwind from the work area. All work clothing must be cleared of loose dust by vacuuming with a HEPA vacuum prior to exiting the work area and the outer layer of the abrasive blasters work clothing will be removed just outside the work area to minimize transporting any hazardous waste around the support and clean areas. The lunch facility will be cleaned using a HEPA vacuum on a daily basis.

# 20.10 PROTECTIVE WORK CLOTHING (PWC)

Workers entering beryllium work areas where exposures to beryllium dust may exceed the PEL will change their clothing before entering the work areas for work, and again at the end of the day before leaving the Decontamination Area. Contaminated work clothing should be vacuumed of loose dust using a HEPA vacuum, but may not be taken away from the job site after work. Work clothing consisting of cloth shirts and trousers, disposable or cloth coveralls, and gloves will be provided and maintained by Atlas Painting and Sheeting for workers involved in these designated job functions.

Disposable coveralls will not be used as the sole means of PWC if such garments are likely to become torn or fall apart under normal use. In these cases cloth coveralls, or similar PWC will be used.

### 20.11 LAUNDERING OF WORK CLOTHING

Do not remove or clean the clothing by any means which reintroduces beryllium into the ambient air such as brushing, shaking or blowing. Use vacuums equipped with HEPA filters for cleaning. Work clothing will be laundered and/or replaced on a weekly basis or more often if the clothing becomes dirty and/or wet.

Work boots must remain at the job site or decontamination trailer for the duration of the job. Contaminated work clothing will be placed in plastic bags and either given to a laundry service, or disposed of as hazardous waste by Atlas Painting and Sheeting. If a laundry service is used, Atlas Painting and Sheeting will advise them in writing that the clothing may be contaminated with beryllium or other hazard-bearing dust and must be handled in such a fashion as to minimize the generation of airborne dust, and/or contamination of skin or surfaces that may come into contact with the clothing.

Warning labels for containers of beryllium protective clothing, equipment, waste and scrap or debris will include a minimum of the following: *Danger, Contains beryllium, may cause cancer, causes damage to lungs and kidneys, avoid creating dust.* 

### 20.12 HOUSEKEEPING

All work areas will be maintained as free as practical of accumulation of beryllium dust. In order to minimize the likelihood of dust becoming airborne again, cleaning will be conducted daily in all work areas using a vacuum equipped with a HEPA filter or by wet cleaning.

### 20.13 EXPOSURE MONITORING

Exposure monitoring is essential to identifying the need for proper industrial hygiene controls at the job site. Air sampling will be conducted in the worker's breathing zone (six to nine inches from the nose and mouth) to determine actual worker exposures and recommend respiratory protection that is adequate for those levels.

## 20.13.1 PERSONNEL AIR SAMPLING

- 1. Initial air sampling will be conducted to represent actual worker exposures to beryllium in each job category and each such job category several times and on multiple individuals doing the same job.
- 2. Sampling will be conducted to assess the 8-hour TWA for each employee, or are presentative fraction of the exposed employees per job task.
- 3. STEL sampling will be conducted on one employee with the potentially highest exposure.
- 4. Follow-up exposure monitoring.
  - a. If the initial monitoring results are below the Action Level and at or below the STEL, then monitoring may be discontinued.
  - b. If the most recent exposure monitoring is at or above the Action Level but at or below the PEL, then monitoring will be repeated within six months of the most recent monitoring.
  - c. If the most recent results are above the PEL, the monitoring will be repeated within three months of the most recent monitoring.
  - d. If the most recent results are below the Action Level, then the monitoring will be repeated within six months of the most recent monitoring, until two consecutive measurements, taken seven days apart, are below the Action Level. Then additional montioring will not be required.
- 5. Employees and other workers in the same job category will be notified of the monitoring results within fifteen (15) days after completing an assessment. This may be accomplished either in writing or by posting the results in a location accessible to each affected employee.

### 20.13.2 OBSERVATION OF MONITORING

All workers or their designated representatives will be given the opportunity to observe the personal exposure monitoring procedures in accordance with 29 CFR 1926.1024 (d)(7). The observer will be allowed to receive an explanation of the monitoring procedures, observe all steps related to the monitoring of beryllium and receive copies of the results when returned from the laboratory.

When observation of monitoring requires entry into an area where the use of personal protective equipment is required, Atlas Painting and Sheeting will provide each observer with the appropriate PPE at no cost to the observer. (Note: Atlas Painting and Sheeting is not responsible to verify if the observer(s) is medically cleared to wear respiratory protection, has current fit testing, or has medical clearance to enter the work area).

### 20.13.3 RECORD KEEPING

Detailed records of the exposure will be in compliance with 29 CFR 1926.1127, as given below. All personal air sampling results will be maintained by Atlas Painting and Sheeting or its subcontractors for at least 30 years.

- 1. The date(s),job tasks, number, duration, location and results of each sample taken, including a description of the sampling procedure used to determine representative employee exposure where applicable.
- 2. A description of the sampling and analytical methods used and evidence of their accuracy.
- 3. The type of personal protective clothing and equipment and respiratory protective devices worn.
- 4. Name, social security number, and job category of the employee monitored and all other employees whose exposure the measurement is intended to represent.
- 5. The environmental variables that could affect the measurement of employee exposure.

## **20.14 ENGINEERING CONTROLS**

All feasible engineering controls will be used to minimize beryllium dust exposure. Additional control measures may be implemented based on the results of air monitoring once the project begins. The following engineering controls will be used.

Job Task	Control Methods
Abrasive Blast Operation Vacuuming during Abrasive Blast Operations	Dust collector with natural or forced ventilation
Power tool cleaning	HEPA vacuums
Hand tool cleaning	Wet misting
Clean up after paint removal	HEPA vacuums

### 20.15 RESPIRATORY PROTECTION

Prior to wearing a respirator, employees must comply with Section 10.0 of this Health and safety Plan and the OSHA Respirator Standard 29 CFR 1910.134.

## 20.16 MEDICAL SURVEILLANCE PROGRAM

Medical surveillance will be performed by or under the direction of a licensed physician and will be provided at no cost to the employee who meets one or more of the following:

- 1. Who is or is reasonable expected to be exposed at or above the OSHA Action Level for 30 or more days per year.
- 2. Who shows signs or symptoms of CBD or other beryllium-related health effects.
- 3. Who is exposed to beryllium during an emergency.
- 4. Whose most recent medical opinion recommends periodic medical surveillance.

## **20.16.1 FREQUENCY**

- 1. Within 30 days of meeting Section 20.16.
- 2. At least every two years for employees meeting Section 20.16.
- 3. At the termination of employment for each employee meeting Section 20.16, unless an examination was conducted within the previous six months of the date of termination.

## 20.16.2 CONTENT OF THE EXAMINATION

- 1. A medical and work history, with emphasis on past and present airborne exposure to ordermal contact with beryllium, smoking history, and any history of respiratory system dysfunction.
- 2. A physical examination with emphasis on the respiratory system.
- 3. A physical examination for skin rashes.
- 4. Pulmonary function test.
- 5.A standardize BeLPT, or equivalent test, upon the first examination and at least every two years thereafter.
- 6. A low dose computed tomography (LDCT) scan, when recommended by the PLHCP.
- 7. Any other test required by the PLHCP.

### 20.16.3 MEDICAL REPORT FOR THE EMPLOYEE

All workers tested and/or examined under this medical surveillance program will be notified in writing of the results of testing within forty-five working days of the examination. This may be completed by the PLHCP sending the medical report directly to the employee, or by Interstate Painting sending the results it receives to the employee.

### 20.16.4 MEDICAL OPINION FOR THE EMPLOYER

Atlas Painting and Sheeting will obtain a written medical opinion from the licensed physician within 45 days of the medical examination (including any follow-up BeLPT required by the standard. The written medical opinion will contain only the following:

- 1. The date of the examination.
- 2. A statement that the examination has met the requirements of the standard.
- 3. Any recommended limitations on the employee's use of respirators, protective clothing or equipment.
- 4. A statement that the PLHCP has explained the results of the medical examination to the employee, including any tests conducted, any medical conditions related to airborne exposure that require further evaluation or treatment, and any special provisions for use of personal protection clothing or equipment.
  - a. If the employee provides written authorization, the written opinion will alos contain any recommended limitations on the employee's airborne exposure to beryllium.
  - b. If the employee is confirmed positive or diagnosed with CBD or if the licensed physician otherwise deems it appropriate, and the employee provides written authorization, the written opinion will also contain a referral for an evaluation at a CBD center.
  - c. If the employee is confirmed positive or diagnosed with CBD and the employee provides written authorization, the written opinion will also contain a recommendation for continued periodic medical surveillance.
  - d. If the employee is confirmed positive or diagnosed with CBD and the employee provides written authorization, the written opinion will also contain a recommendation for medical removal from airborne exposure to beryllium.

### 20.16.5 MEDICAL REMOVAL

An employee is eligible for medical removal, if an employee works in a job with an airborne exposure at or above the Action Level and either:

- 1. The employee provides Atlas Painting and Sheeting with:
  - a. A written medical report indicating a confirmed positive finding or CBD diagnosis or;
  - b. A written medical report recommending removal from airborne exposure to beryllium.
- 2. Atlas Painting and Sheeting receives a written medical opinion recommending removal from airborne exposure to beryllium.
- 3. If an employee is eligible for medical removal, Atlas Painting and Sheeting willprovide the employee with the employee's choice of:
  - a. Removal from job tasks where there are exposures to airborne beryllium at or above the Action Level.
  - b. Remain on the job task, provided that Atlas Painting and Sheeting ensures the employee uses the proper respiratory protection.

### 20.16.6 RECORD KEEPING

Medical records will be maintained for the duration of employment plus 30 years, or a total of 30 years, whichever is longer. Workers or their appointed representatives will be able to access those records upon written request to Atlas Painting and Sheeting. Access will be provided within 15 days after the employee's request, unless Atlas Painting and Sheeting states the reason for the delay and the earliest date when the records will be made available. Those records will include but not be limited to the following items:

- 1. Name, social security number and job description.
- 2. Copy of physician's written opinion, including clearance to wear a respirator.
- 3. Results of exposure monitoring and medical testing and examinations.
- 4. Records of medical complaints related to beryllium exposure.

If an individual worker is removed from exposure to beryllium, the following records will be kept as well:

- 5. Date of each occasion that the individual was removed from exposure, and returned to work.
- 6. A brief explanation of how each removal was or is being accomplished.
- 7. A statement indicating the reason for removal and blood level results.

### 20.17 TRAINING FOR BERYLLIUM

All workers must be trained prior to starting any project where the exposures will be above the OSHA Action Level for beryllium in the hazards of beryllium and on an annual basis thereafter. Signed and dated training records will be required stating that each worker has received the training. Copies of the OSHA Beryllium Standard, and the site specific Health and Safety Plan will be made available to all workers. Training will include:

- a. The osha beryllium standard 29 CFR 1926.1024
  - 1. Health hazards associated with beryllium exposure
  - 2. The osha beryllium standard 29 CFR 1926.1127
  - 3. The written exposure control plan, with emphasis on the specific nature of operations that could result in airborne exposures.
  - 4. The purpose, proper selection, fitting, proper use and limitations of personal protective clothing and equipment
  - 5. Applicable emergency procedures
  - 6. Measures employees can take to protect themselves from airborne exposure and dermal contact with beryllium
  - 7. Personal hygiene & decontamination
  - 8. The purpose and a description of the medical surveillance program including risks and benefits of each test to be offered.
  - 9. The purpose and description of the medical removal protection.
  - 10. Exposure monitoring
  - 11. Engineering controls and work practice
  - 12. Employee rights to information under 29 CFR 1910.1020
- **b.** The health and safety plan
- c. The osha hazard communication standard 29 CFR 1926.59
- **d.** Respiratory protection program 29 CFR 1910.134
- Basic safety and health training 29 CFR 1926.21

## 21.0 HISTOPLASMOSIS

## 21.1 INTRODUCTION

Pigeon droppings may be encountered on bridges, tanks and other exterior steel structures where pigeons and other birds have nested, usually for long periods. This nesting can result in a substantial build-up of droppings, a condition which can be harmful to humans if the material is disturbed and made airborne. Histoplasmosis is a fungal infection resulting from exposure to pigeon droppings. Infectious material enters the body usually by inhalation into the lungs, but in some cases by ingestion through the mouth into the gastrointestinal tract. Pigeons do not carry the organism that causes histoplasmosis. Histoplasmosis is caused by a soil organism that requires the moist, nutrient-rich environment that large masses of droppings offer. Areas with small amounts of dried droppings pose minimal hazard.

## 21.2 PROCEDURE

Prior to work in any area where pigeons nest, a thorough inspection should be made to determine if, and to what extent there is a build-up of material. Inspection itself requires minimum precautions such as the use of personal protective equipment, which may include gloves, disposable coveralls, goggles and a HEPA filtered respirator.

If substantial material is found in the immediate work area, cleaning must be performed. Employees engaged in cleaning activity must wear all of the personal protective equipment specified above. A high powered water hose is an effective means to remove material. If the material is to be scraped away, it must be kept wet during the entire process. Application of a cleaning agent (bleach, for example), before removal may help dissolve the material, and may be applied as a disinfectant upon the affected surfaces after the droppings have been removed. Compressed air will not be used to remove pigeon droppings because it increases the potential for inhalation and ingestion of airborne particles and the area of potential exposure.

When cleaning has been successfully completed, the personal protective equipment specified above is no longer required. All other personal protective equipment appropriate for the task and/or location will be used, such as fall protection, hard hat, etc.

Employees engaged in cleaning, or other activity which involves exposure to pigeon droppings should receive training on these special precautions, and observe a high degree of personal hygiene including washing hands thoroughly before eating or smoking.

## 22.0 HEAT STRESS

## 22.1 WORKING IN ELEVATED AIR TEMPERATURE

- 1. Working in elevated air temperature, high humidity or operations with radiant heat sources have the potential for causing heat stress. It is important for the foreman and competent person to ensure that when working in hot weather, workers are allowed more time to drink fluids and rest.
- 2. Workers should be encouraged to wear light weight clothing when working in hot weather. In addition, the company should provide clothing that is able to breath to allow an exchange of air to allow the body to cool.

### 22.2 HEAT STROKE

- 1. Heat Stroke occurs when the body's system of temperature regulation fails and body temperature rises to critical levels.
- 2. Symptoms include:
  - a. Confusion
  - b. Irrational behavior
  - c. Loss of consciousness
  - d. Convulsions
  - e. Lack of sweating
  - f. Hot, dry skin
  - g. Abnormally high body temperature
- 3 If a worker shows signs of heat stroke or possible heat stroke, the following will occur:
  - a. Contact emergency services immediately
  - b. Place the worker in a shady area (if possible)
  - c. Wet the worker's skin
  - d. Increase air movement around the worker
  - f. **DO NOT** allow the worker to leave the site or be left unattended.

# 22.3 HEAT EXHAUSTION

- 1. Heat Exhaustion results from the loss of fluid through sweating.
- 2. Symptoms include:
  - a. Headache
  - b. Nausea
  - c. Vertigo
  - d. Weakness
  - e. Thirst
  - f. Giddiness
- 3. Treatment includes:
  - a. Remove the worker from the hot environment
  - b. Provide fluid
  - c. Allow the worker to rest

## 22.4 HEAT CRAMPS

1. Typically caused by hard physical labor in a hot environment. The cramps are usually caused by the lack of water replenishment.

## 22.5 ENGINEERING CONTROLS

- 1. General and/ or local ventilation
- 2. Shielding from the heat source
- 3. Cooling fans

## 22.6 ADMINISTRATIVE CONTROLS

- 1. Reduce the physical demands of the work
- 2. Provide recovery area(s) with fluids
- 3. Work in the early morning or night time
- 4. Provide rest and fluid breaks
- 5. Use worker pacing

# 22.7 TRAINING FOR WORKING IN HOT WEATHER WILL INCLUDE:

- 1. Hazards of heat stress
- 2. Recognition of the danger signs and symptoms
- 3. First aid procedures
- 4. Danger of using drugs or alcohol in hot environments
- 5. Protective clothing and equipment
- 6. Medical programs

## 23.0 WORKING IN COLD TEMPERATURES

### 23.1 WORKING IN COLD TEMPERATURES

When working in cold temperatures, workers are susceptible to hypothermia.

## 23.2 HYPOTHERMIA

1. Hypothermia is a condition when the body temperature falls and the body loses heat faster than it produces.

## 23.3 SYMPTOMS

- 1. Shivering
- 2. Fumbles
- 3. Mumbles
- 4. Stumbles
- 5. Cool abdomen
- 6. Muscles are rigid
- 7. Skin is ice cold and blue

## 23.4 TREATMENT

- 1. Call for emergency services
- 2. Block the worker from wind exposure
- 3. Keep the worker in a horizontal position
- 4. Provide clean dry clothing
- 5. Start CPR if the worker is not breathing only if trained in CPR

## 23.5 ENGINEERING CONTROLS

1. Add heating ventilation

## 23.6 TRAINING

- 1. Working in cold weather
- 2. Use layering when dressing
- 3. Signs and symptoms of hypothermia

## 24.0 FALL PROTECTION

When working at heights, Atlas Painting and Sheeting maintains a safe working environment for its employees by enforcing fall protection rules on all its job sites. Fall protection will comply with OSHA standard 29 CFR 1926 Subpart M and the provision of this section. Scaffolds, Ladders and Aerial Lifts are discussed in other sections.

Failure to follow all project fall protection rules and to use and inspect your fall protection equipment is considered a serious safety hazard and can be cause for termination from employment.

Atlas Painting and Sheeting will use engineering controls prior to personal protective equipment where feasible. A Qualified Person will be required to prepare a fall protection plan per project location. Atlas Painting and Sheeting will use a Certified Safety Professional (CSP) or a foreman with at least ten years of experience to prepare the Plan.

All incidents involving falls will be investigated per Section 37.0.

## 24.1 PERSONAL FALL ARREST SYSTEM

When workers are required to work more than six feet off the ground, safety harnesses and lanyards must be worn and used to arrest falls. The lanyards must be of the locking snap hood type, and be no longer than six feet in length.

Where required, two legged lanyards must be worn and used to provide 100% tie off at all times, i.e., when moving from one anchorage to another one lanyard is always connected or when working over water and a US Coast Guard approved life jacket is not being worn.

A safety cable will be installed on all elevated work areas to allow workers to tie off. This cable will not be used for other purposes, such as supporting scaffolding.

## 24.1.1 PERSONAL FALL ARREST SYSTEMS

- 1. Lanyards and vertical lifelines will have a minimum breaking strength of 5,000 pounds.
- 2. Life lines will be protected against being cut or abraded.
- 3. Ropes and straps used in lanyards and lifelines will be made from synthetic fibers.
- 4. Lifelines will be protected against cuts or abrasions.
- 5. Be rigged to limit free fall to 6 feet or stop before hitting a lower level.
- 6. Dee-rings and snaphooks are proof-tested to a minimum tensile load of 3,600 pounds and have a minimum tensile strength of 5,000 pounds.
- 7. Horizontal lifelines are installed by a qualified person and maintain a safety factor of at least two.
- 8. When stopping a fall a body harnesses limit the maximum arresting force on an employee to 1,800 pounds.
- 9. Anchorages used for attachment of personal fall arrest equipment are capable of supporting at least 5,000 pounds per employee.

10 Never tie-off to a guardrail system unless you have explicit direction from the competent

- person the guardrail can also act as an anchorage.
- 11. All fall protection equipment purchased and the selected points of attachment must meet the equipment specifications required by OSHA and this program.
- 12. The attachment point of the body harness is the center of the employee's back near shoulderlevel
- 13. Ropes and straps used in lanyards and strength components of body harnesses are to be made of synthetic fibers.
- 14. All equipment to be worn by an employee will comply with the applicable OSHA, ANSI and/or ASTM standards and will be certified by the manufacturer to meet the applicable standards.

### 24.1.2 INSPECTIONS

- 1. Personal fall arrest systems will be inspected prior to each use for wear, damage and other deterioration by the worker and weekly by the competent person.
- 2. Inspect the harness for the following:
  - a. Nylon webbing for torn, frayed, broken fibers, pulled stitches or frayed edges and burnmarks.
  - b. D-ring for wear, pits, deterioration, deformation or cracks.
  - c. Buckles are not deformed or cracked and they work properly.
  - d. If grommets are on the harness, check to see they are secured and not deformed.
- 3. Inspect the lanyard for the following:
  - a. Cuts, burns, abrasions, links, knots and broken stitches.
  - b. Snaphook for distortion.
  - c. The warning tag is not visible.
  - d. manufacturer's tag is visible.
- 4. Follow the manufacturer's recommendations for any other required inspections.
- 5. Defective equipment will be removed from service immediately.

### 24.1.3 FALL DISTANCES WITH PERSONAL FALL ARREST SYSTEMS

The typical lanyard used by Atlas Painting and Sheeting is a 6 foot lanyard with a shock absorber that can extend 3 ½ feet when deployed. Keeping this in mind, wearers must tie off at or above their shoulders to minimize the free fall distance and total fall distance. A total fall with a 6 foot lanyard and shock absorbed can be as far as 18 feet.

## 24.2 LEADING EDGE

A leading edge is an unprotected side or edge where there is a change in elevation. In addition, the leading edge is also the area of a bridge platform system six feet from the edge of outside of the outside fascia beam. When working near a leading edge, workers will use either a personal fall arrest system or warning lines. The warning line will be flagged not more than every six feet with highly visible markings such as yellow or red tape.

On bridge painting projects, a leading edge is the edge of the platform system during erection, modification or dismantling of a platform and the outside 6 feet of the platform is a guard rail system is not installed or the area outside of the beams.

#### 24.3 WARNING LINE SYSTEM

- 1. Warning line system will be erected not less than six feet from the leading edge. This may not work on a bridge platform system where the warning line system may be erected at the edge.
- 2. Warning lines will consist of ropes, wires or chains and supporting stanchions.
- 3. The warning line will be flagged at nor more than six foot intervals with highly visible material.
- 4. The warning line will be no lower than 34 inches from the working surface and no higherthan 39 inches from the working surface.
- 5. The warning line will be capable of resisting, without tipping over, a force of at least 16 pounds applied horizontally.

### 24.4 HOUSEKEEPING RULES

- 1. All work areas, passageways, storerooms, and service rooms will be kept clean and orderly and in a sanitary condition.
- 2. The floor of every area will be maintained in a clean and, so far as possible, a dry condition. Where wet processes are used, drainage will be maintained and gratings, mats, or raised platforms will be provided.
- 3. Every floor, work area and passageway will be kept free from protruding nails, splinters, holes, or loose boards.

#### 24.4.1 AISLES AND PASSAGEWAYS

- 1. Aisles and passageways will be kept clear and in good repair with no obstruction across or in aisles that could create a hazard.
- 2. Permanent aisles and passageways will be appropriately marked.
- 3. Where mechanical handling equipment is used, aisles will be sufficiently wide. Improper aisle widths coupled with poor housekeeping and vehicle traffic can cause injury to employees, damage the equipment and material, and can limit egress in emergencies.

## 24.4.2 GUARDING FLOOR AND WALL OPENINGS

Floor openings and holes, wall openings and holes, and the open sides of platforms may create hazards. People may fall through the openings or over the sides to the level below. Objects, such as tools or parts, may fall through the holes and strike people or damage machinery on lower levels.

- 1. Standard railings will be provided on all exposed sides of a stairway opening, except at the stairway entrance. For infrequently used stairways, where traffic across the opening prevents the use of a fixed standard railing, the guard will consist of a hinged floor opening cover of standard strength and construction along with removable standard railings on all exposed sides, except at the stairway entrance.
- 2.A "standard railing" consists of top rail, mid rail, and posts, and will have a vertical height of 42 inches nominal from the upper surface of top rail to floor, platform, runway, or ramp level. Nominal height of mid rail is 21 inches.
- 3.A "standard toe board" is 4 inches nominal in vertical height, with not more than ¼-inch clearance above floor level.

- 4. Floor openings may be covered rather than guarded with rails. When the floor opening cover is removed, a temporary guardrail will be in place, or an attendant will be stationed at the opening to warn personnel.
- 5. Every floor hole into which persons can accidentally walk will be guarded by either:
  - a. A standard railing with toe board, or
  - b. A floor hole cover of standard strength and construction.
- 6. While the cover is not in place, the floor hole will be constantly attended by someone or will be protected by a removable standard railing.

### 24.5 SAFETY NETS

- 1. Safety nets are used where personal fall arrest systems, guardrails or other conventional protective equipment are impractical or infeasible.
- 2. Safety nest are to be installed as close as practicable under the working surface but in no case more than 30 feet below the working surface.
- 3. Sufficient clearance must be maintained under the net to prevent contact with any object.
- 4. Safety nest are to be inspected at least once a week for wear, damage and other deterioration.
- 5. The maximum size of each safety net mesh opening will not exceed 36 square inches nor be longer than 6 inches on any side.
- 6. A competent person must certify that the net installation is in compliance with OSHA regulation.
- 7. Safety nets must extend outward from the furthest projection of the working level as follows:

Vertical distance from working level to horizontal plane of net	Min Minimum required horizontal distance of outer edge of net from the edge of the working surface
Up to 5 feet	8 feet
5 feet to 10 feet	10 feet
10 feet to 30 feet	13 feet

## 24.6 CONTROLLED ACCESS ZONES

Atlas Painting and Sheeting does not used controlled access zones.

## 24.7 SAFETY MONITORING SYSTEM

Atlas Painting and Sheeting does not use safety monitoring systems.

### 24.8 TRAINING

Employees exposed to fall hazards will be trained in the following:

- 1. The nature of the fall hazards in the work area
- 2. The correct procedure for erecting, maintaining, disassembling and inspecting the fall protection system to be used.
- 3. The use and operation of guardrail systems, personal fall arrest systems, safety net systems, warning line systems, safetymonitoring systems, controlled access zones, and other protection to be used.
- 4. The role of each employee in the safety monitoring system when used.
- 5. The correct procedures for the handling and storage of equipment and materials and the erection of overhead protection.

- 6. The role of employees in fall protection plans
- 7. Any pertinent sections of 29 CFR 1926 Subpart M.
- 8. The manufacturer's recommendations, procedures and inspections of fall protection equipment.

Employees will be retrained when:

- 1. There is a change in the workplace render initial training obsolete.
- 2. A change in the type of fall protection system or equipment is used.
- 3. The competent person observes a worker who shows inadequacies in knowledge of the fall protection system in use.
- 4. There is a deficiency in training.
- 5. Work place changes.
- 6. Fall protection systems or equipment changes that render previous training obsolete.

Fall protection training will be documented. The documentation will include the employee's name and signature, date of training, instructor's name and signature.

## 24.9 DUTIES OF THE COMPETENT PERSON

- 1. The competent person will be trained and have experience to be able to recognize fall hazards.
- 2. The competent person will warn employees if they are unaware of fall hazards or if an employee is acting in an unsafe manner.
- 3. Conduct safety meetings with employees on fall protection which includes how to don a harness, how to inspect their equipment, anchorage points and any other relevant topic.

## **24.10 RESCUE**

Rescue is required to start immediately upon an event. The foreman and competent person will control the rescue, which will involve calling for emergency services.

Prior to starting any project where a fall may occur, a method of rescue must be planned. The use of Emergency Services (911) may not be available in many sections of the country. Some of the more common forms of rescue for a person who has fallen and is still suspended in the harness and lanyard include:

- 1. Ladders for lower structures
- 2. Aerial lift or scissor lift
- 3. Block and tackle
- 4. Hoist
- 5. Rescue team
- 6. Self-rescue
- 7. Emergency services

All employees working on a project which involves heights, must be provided rescue training which includes employee roles during and after a fall.

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If a rescue is required,

- 1. The first person on the scene will contact others in the working crew to advise of the situation, then (if possible) talk with the victim(s) and determine if he is ok and what happened. This may not be possible as the victim(s) may be unconscious.
- 2. Determine if the area where the fall occurred is safe for others to use, if you cannot make that determination, DO NOT ENTER.
- 3. If feasible determine the method of rescue, or wait till others in the crew are available to assist.
- 4. The foreman or competent person will be in charge of any rescue.
- 5. The foreman or competent person will contact emergency services for rescue or for medical services.
- 6. If possible, keep track of how long the victim(s) are in a fall position.
- 7. Implement the fall rescue plan.
- 8. After the rescue, investigate the incident and determine the cause.

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## 25.0 SCAFFOLDS

All scaffolds will comply with OSHA regulations 29 CFR 1926, Subpart L and the provisions of this section.

OSHA requires that a Competent Person be available on-site, and be capable of making decisions regarding fall protection, safe access and scaffold integrity. The Competent Person must be familiar with the manufacturer's specifications and instructions for safe use. The Competent Person must actually supervise the work being performed. The Competent Person will conduct scaffold inspection as required such as the daily inspection prior to each use.

### 25.1 DEFINITIONS

Catenary scaffold a suspension scaffold consisting of a platform supported by two essentially horizontal and parallel ropes attached to structure members of a building or other structure.

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

**Coupler** a device for locking together the tubes of a tube and coupler scaffold.

Guardrail system a vertical barrier, consisting of, but not limited to, toprails, midrails, and posts, erected to prevent employees from falling off a scaffold platform or walkway to lower levels.

Maximum intended load the total load of all persons, equipment, tools, materials, transmitted loads, and other loads reasonably anticipated to be applied to a scaffold or scaffold component at any one time.

Outrigger the structural member of a supported scaffold used to increase the base width of a scaffold in order to provide support for and increased stability of the scaffold.

**Platform** a working surface elevated above lower levels. Platforms can be constructed using individual wood planks, fabricated planks, fabricated decks, and fabricated platforms.

Qualified one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated his/her ability to solve or resolve problems related to the subject matter, the work, or the project.

Scaffold any temporary elevated platform (supported or suspended) and its supporting structure (including points of anchorage), used for supporting employees or materials or both.

Suspension scaffold one or more platforms suspended by ropes or other non-rigid means from an overhead structure(s).

#### 25.2 TRAINING

All employees who work on a scaffold must be trained by a qualified person. The training will include the following:

- 1. Electrical hazards
- 2. Fall hazards
- 3. Falling object hazards
- 4. Proper use of the scaffold
- 5. Proper handling of materials on the scaffold
- 6. Maximum intended load,
- 7. Load carrying capacity
- 8. Any other pertinent requirements.
- 9. If tags are placed on equipment, what a tag means.

Additional training will be conducted when:

- 1. When a change in the work site adds a new hazard for which the employee(s) have not been trained
- 2. Where a change in the type of scaffold, fall protection or other equipment add a new hazard forwhich the employee(s) have not been trained.
- 3. When the competent person believes the employee's knowledge is insufficient.

## 25.3 GENERAL REQUIREMENTS FOR ALL SCAFFOLDS

There are three types of scaffolds: stationary, suspension and mobile. Each scaffold must meet the following requirements:

- 1. Support own weight and four times the maximum intended load. To determine the maximum intended load, add the weight of the workers and the weight of the tools and materials before assembling the scaffold.
- 2. Suspension rope and hardware must support six times the maximum intended load.
- 3. Stall load of scaffold hoist must not exceed three times its rated load.
- 4. Designed by a qualified person and built and loaded to design.
- 5. Scaffold must be inspected prior to each shift by a Competent Person.

## 25.3.1 SCAFFOLD PLATFORM CONSTRUCTION

- 1. The platform will be fully decked or planked with no more than 1" gaps. The deck will be a minimum of 18" wide and planking will be a maximum of 9½" wide.
- 2. The front edge of the platform will be no more than 14" from the face of the work and 3" from the face of the outrigger scaffolds.
- 3. When overlapping platforms are used, a 12 inches overlap is required.
- 4. Do not mix scaffold components unless compatible and integrity is maintained.
- 5. Do not modify scaffold components or use dissimilar metals unless approved by the Competent Person.
- 6. When working near power lines maintain a safe working distance of at least 10 feet, for higher voltages maintain a safe distance of 35 feet.
- 7. Wood planks that have been painted are not to be used since the paint can hide cracks or other damage.

8. Ensure that all planks are scaffold grade and that all components are inspected for defects prior to erection.

#### 25.3.2 PLATFORMS ON BRIDGES

On many bridges, a platform is erected that is not listed under the scaffold standard as one of the listed types of scaffolds. When the platform will be used on a project the following will apply:

- 1. When required by project specifications, the platform will be designed by a licensed Professional Engineer (P.E.). If P.E. does not design the platform, then a qualified person and a drawing of the system will be required..
- 2. The platform will be erected in accordance with the drawings.
- 3. Modifications will be made with consent of the P.E. or qualified person and a change to the engineering drawing will be required.
- 4. The foreman or other qualified competent person will make daily or pre-shift inspections of the platform system.

### 25.3.3 SUSPENSION SCAFFOLDS

Hang from overhead supports by wire, synthetic or fiber ropes

- 1. Support devices, direct connections and counterweights used to balance adjustable suspension scaffolds must resist 4 times the intended load.
- 2. The stall load will be at least 3 times its rated load.
- 3. Wire rope will be able to support 6 times the intended load, is long enough to reach the lowest intended platform position and provide four wraps around the drum and is free of kinks, birdcages, corrosion and damage.
- 4. Tiebacks must be equal in strength to the hoisting rope, are secured to a sound anchorage and are never secured to standpipes, vents, piping systems or electrical conduits.
- 5. When U-bolt clips are used, the U-bolt will be placed over the dead end of the rope, and the saddle will be placed over the live end of the rope.
- 6. A minimum of 3 wire rope clips will be installed, with the clips a minimum of 6 rope diameters apart.
- 7. Ropes will be inspected for defects by the Competent Person prior to each workshift. Ropes will be replace when:
  - a. Any physical damage which impairs the function and strength of the rope.
  - b. Kinks that may impair the tracking or wrapping of rope around drum(s) or sheave(s).
  - c. Six randomly distributed broken wires in one rope lay or three broken wires in one strandin one rope lay.
  - d. Abrasive, corrosion, scrubbing, flattening or preening causing loss of more than one third of the original outside diameter of the outside wires.

### 25.3.4 CATENARY SCAFFOLDS

- 1. No more than one platform will be placed between consecutive vertical pickups, and no more than two platforms will be sed on a catenary scaffold.
- 2. Platforms supported by wire ropes will have hook shaped stops at each end to prevent the platform from slipping off the wire ropes.
- 3. Wire ropes will not be over tightened which could overstress them. Follow the manufacturer of the wire ropes guidelines.

4. Wire ropes will be continuous and without splices between anchors.

## 25.3.5 MOBILE SCAFFOLDS

- 1. Mobile scaffolds will be braced by cross, horizontal, diagonal or a combination of braces to prevent racking or collapse.
- 2. Mobile scaffold casters and wheels will be locked to prevent movement of the scaffold when it is in use.
- 3. Mobile scaffolds will be stabilized to prevent tipping during movement or when in use.
- 4. A mobile scaffold may be moved with an employee riding as long as the employee is aware of the move.
- 5. Mobile scaffolds will be erected in accordance with manufacturer's instructions.

### 25.4 ACCESS

- 1. When scaffold platforms are more than 2 feet above or below a point of access, a ladder, stair, ramp, walkway or similar surface will be used.
- 2. Hook-on and attachable ladders will be positioned so the bottom rung is no more that 24 inches above he scaffold supporting level.
- 3. Hook-on and attachable ladders will have a minimum rung length of 11 ½ inches with a maximum spacing between rungs of 16 3/4 inches.
- 4. Integral prefabricated scaffold access frames will be specifically designed and constructed for use as ladder rungs.

### 25.5 SAFE WORK PRACTICES

- 1. Climb up and down the scaffold using the ladder, stairway or ramp. Do not climb up and down the scaffold superstructure.
- 2. Clear the scaffold of snow, ice or any other slipper material prior to the start of work. Keep the platform and walkways clean of debris.
- 3. Never erect, dismantle or alter a scaffold without Competent Person supervision and direction.
- 4. Stop work on a scaffold during a storm or high winds.
- 5. Use tag lines to prevent contact with the scaffold when cranes or other swinging loads are present.
- 6. Do not jump on to planks or platforms.
- 7. Keep the scaffold clear of tools, material or debris which could cause a hazard.
- 8. Maintain safe distances from electrical power lines at all times.
- 9. If a defective piece of equipment is found it will be tagged "Do Not Use" and removed from service.

### 25.6 FALL PROTECTION

- 1. Required at 10 feet and above on scaffolds.
- 2. Personal fall arrest system and/or guardrails can be used.
- 3. When vertical life lines are used they will be fastened to a fixed safe point of anchorage, and be independent of the scaffold and protected from sharp edges and abrasion.
- 4. When guardrails are used, the toprail capable of sustaining 200 pounds of side force and midrailmust be installed prior to work. Toe boards are also required to prevent objects from falling.
- 5. When guardrails are used, the top rails will be between 38" and 45" above the platform surface.

#### 25.7 FALLING OBJECT PROTECTION

- 1. Hard hats will be worn by all workers.
- 2. Toe boards will be at the edges of all platform surfaces.
- 3. When necessary, the area around the scaffold will have barricades to prevent unauthorized personnel from entering the work zone.
- 4. When necessary, a canopy, debris net or catch platform strong enough to withstand the impact of falling objects will be erected to catch falling objects.

## 25.8 ELECTRICAL SAFETY

The clearance between scaffolds and power lines will be maintained as follows:

### **Insulated lines**

Voltage	Minimum Distance
Less than 300 volts	3 feet
300 Volts to 50 kv	10 feet
More than 50 kv	10 feet plus 0.4 inches for each 1 kv over 50 kv

### Uninsulated lines

Voltage	Minimum Distance
Less than 50 kv	10 feet
More than 50 kv	10 feet plus 0.4 inches for each 1 kv over 50 kv

Scaffolds may be located closer to electrical lines if necessary only under the following conditions:

- 1. The utility company or owner of the electrical line(s) has been contacted and they can
  - a. relocate the line(s)
  - b. de-energize the line(s)
  - c. install a protective covering to the line(s) and provide the safe working distance

### **25.9 RESCUE**

Prior to starting any project where a fall from scaffold or scaffold collapse may occur, a method of rescue must be planned. The use of Emergency Services (911) may not be available in many sections of the country. Some of the more common forms of rescue for a person who has fallen and is still suspended in the harness and lanyard include:

- 1. Ladders for lower structures
- 2. Aerial lift or scissor lift
- 3. Block and tackle
- 4. Hoist
- 5. Rescue team
- 6. Self-rescue

## 7. Emergency services

All employees working on a project which involves heights, must be provided rescue training which includes employee roles during and after a fall.

# If a rescue is required,

- 1. The first person on the scene will contact others in the working crew to advise of the situation, then (if possible) talk with the victim(s) and determine if he is ok and what happened. This may not be possible as the victim(s) may be unconscious.
- 2. Determine if the area where the fall occurred is safe for others to use, if you cannot make that determination, DO NOT ENTER.
- 3. If feasible determine the method of rescue, or wait till others in the crew are available to assist.
- 4. The foreman or competent person will be in charge of any rescue.
- 5. The foreman or competent person will contact emergency services for rescue or for medical services.
- 6. If possible, keep track of how long the victim(s) are in a fall position.
- 7. Implement the fall rescue plan.
- 8. After the rescue, investigate the incident and determine the cause.

### 25.10 GENERAL RESCUE PROCEDURE FOR WORKER SUSPENDED IN HARNESS

## 25.10.1 ELEVATING WORK PLATFORM AVAILABLE

- 1. Bring it to the site and use it to reach the suspended worker.
- 2. Ensure that rescue workers are protected against falling.
- 3. Ensure that the EWP has the load capacity for both the rescuers and the victim.
- 4. If the victim is not conscious, 2 rescuers will be probably be needed to safely handle the weight of the victim.
- 5. Position the EWP platform below the worker and disconnect his lanyard when it is safe to do so.
- 6. Treat the victim for Suspension Trauma and any other injuries.
- 7. Arrange for transport to nearest hospital.

### 25.10.2 ELEVATING WORK PLATFORM NOT AVAILABLE - USE OF LADDER

- 1. Where possible, use ladders to reach victim.
- 2. Rig separate lifelines for rescuers to use while carrying out the rescue from the ladder.
- 3. If worker is not conscious or cannot reliably help with his/her own rescue, at least 2 rescuers may be needed.
- 4. If the worker is suspended from a lifeline, where possible, move the suspended victim to an area that can be safely reached by the ladder.
- 5. If victim is suspended directly from his/her lanyard or from a lifeline, securely attach a separate lowering line to the victim's harness.
- 6. Other rescuers should lower the victim while he/she is being guided by the rescuer on the ladder.
- 7. Once the victim has been brought to a safe location, administer First Aid and treat the person for Suspension Trauma.
- 8. Arrange for transport to nearest hospital.

## 25.10.3 ELEVATING WORK PLATFORM NOT AVAILABLE - USE OF SCAFFOLD

- 1. Rescuers will evaluate the location of the fall to determine if an existing scaffold is available and ensure its integrity was not affected. If the existing scaffold was affected, an alternate scaffold such as a catenary scaffold will be slid across the existing scaffold cables.
- 2. Rig separate lifelines for rescuers to use while carrying out the rescue from a scaffold.
- 3. If worker is not conscious or cannot reliably help with his/her own rescue, at least 2 rescuers may be needed.
- 4. If the worker is suspended from a lifeline, where possible, move the suspended victim to an area that can be safely reached by the ladder.
- 5. If victim is suspended directly from his/her lanyard or from a lifeline, securely attach a separate lowering line to the victim's harness.
- 6. Rescuers will determine if they can safely lower the victim to the ground, or to a rescue boat, or if they will be required to raise the victim up to the scaffold.
- 7. Once the victim has been brought to a safe location, administer First Aid and treat the person for Suspension Trauma.
- 8. Arrange for transport to nearest hospital.

## 26.0 AERIAL LIFTS

Aerial lifts will comply with OSHA standard 29 CFR 1926.453 and ANSI A92.2 and the provisions of this section.

- 1. Aerial lifts include the following types of vehicle mounted aerial devices used to elevate personnel to job-site above ground, these devices include:
  - a. Extensible boom platforms
  - b. Aerial ladders
  - c. Articulating boom platforms
  - d. Vertical towers
  - e. A combination of the above devices
- 2. Aerial lifts may be field modified for uses other than intended by the manufacturer provided the modification has been certified in writing by the manufacturer or by equivalent entity.

#### 26.1 TRAINING

- 1. Only trained personnel will operate aerial lifts.
- 2. Training will include: how to operate an aerial lift, how to safely drive an aerial lift, weight restrictions, how to inspect and test the aerial lift prior to use, fall protection when in the aerial lift and manufacturer's requirements.

### 26.2 INSPECTION AND TESTING

- 1. Lift control devices (upper and lower controls) will be tested each day prior to use to determine the controls are in good working order.
- 2. The person who will operate the aerial lift will conduct a visual inspection of the aerial lift per the manufacturer's requirements.

## **26.3 SAFETY PROCEDURES**

- 1. Prior to using any aerial lift, the lift operator will survey the area to determine if there are obstacles, obstructions or other areas which may cause the lift to tip over.
- 2. If the aerial lift will be operated on an active roadway or where there are overhead power lines, a spotter will be required. On the roadway, the spotter will be equipped as a flagger.
- 3. Aerial lifts will not be operated within 10 feet of high voltage lines (up to 50 Kv)
- 4. Ground controls will not be operated without the permission of the workers in the basket, except in an emergency.
- 5. Belting off to adjacent structures while in the lift will not be permitted.
- 6. If workers leave the basket to gain access to a work area, the worker will maintain 100% fall protection by connecting to a safety line or secure structure then disconnecting from the basket.
- 7. Workers will keep both feet on the floor of the platform.
- 8. Workers will not stand on the toeboard, mid-rail or top-rail, or use planks, ladders or other devices to raise the working height.
- 9. A harness and lanyard will be worn at all times when in the basket or boom.
- 10. Boom and basket loads will not be exceeded. The load rating will be placed in the basket or boom of an aerial lift.
- 11. To safely position the aerial lift, wheel chocks or outriggers will be used on inclined positions.
- 12. The gate to the basket will be securely closed when the lift is in use.

## 27.0 LADDER AND STAIRWAYS

In accordance with OSHA 29 CFR 1926 Subpart X, a ladder or stairway must be provided at all worker points of access where there is a break in elevation of 19 inches or more and no ramp, runway, embankment or personnel hoist is provided.

#### 27.1 STAIRWAYS

- 1. Stairways that are not a permanent part of a structure must have a landing at least 30 inches deep and 22 inches wide at every 12 feet or less of vertical rise.
- 2. Stairways must be installed at least 30 degrees and no more than 50 degrees from the horizontal surface.
- 3. Variations in riser height or stair tread depth must not exceed ¼ inch.
- 4. If doors open onto the stairway, a platform must be provided that extends at least 20 inches beyond the swing of the door.
- 5. Stairways with 4 or more risers or greater than 30 inches, whichever is less, must have at least one handrail. A stairrail must also be installed along each unprotected side or edge.
- 6. Handrails and the top rails of the stairrails must be able to withstand at least 200 pounds of weight within inches of the top edge.

## **27.2 LADDERS**

There are two types of ladders, portable and fixed. A portable ladder is one that can readily be moved and a fixed ladder cannot because it is an integral part of a building or structure.

# **27.2.1 GENERAL REQUIREMENTS**

- 1. Ladder rungs, cleats and steps must be parallel, level and uniformly spaced.
- 2. Rungs, cleats and steps of ladders must not be spaced less than 10 inches apart nor more than 14 inches apart.
- 3. Ladders must not be tied together to create longer sections unless they are specifically designed for such use.
- 4. A metal spreader or locking device must be provided on each stepladder to hold the front and back sections in an open position when the ladder is in use.
- 5. Two or more separate ladders used to reach an elevated work area must be offset with a platform or landing between the ladders.
- 6. Wood ladders must not be coated with any opaque covering.
- 7. Ladders must be free of oil, grease and other slipping hazards.
- 8. Ladders must have the proper load capacity for the job. Do not exceed the rated load limit.
- 9. Ladders are to be used as ladders (their intended purpose) and not as a scaffold or other use.
- 10. All ladders that are used by Atlas Painting and Sheeting will meet OSHA/ ANSI specifications.

### 27.2.2 PORTABLE LADDERS

1. Non-self-supporting and self-supporting ladders must be capable of supporting 4 times the maximum intended load, extra heavy duty type 1A metal or plastic ladders must sustain 3.3 times the maximum intended load.

- 2. Minimum distance between the side rails must be 11.5 inches.
- 3. The rungs or portable metal ladders must be corrugated, knurled, dimpled or coated with skid-resistant materials to minimize slipping.
- 4. Side rails of a portable ladder must extend at least 3 feet above the upper landing surface.
- 5. Ladders are to be placed at a 4:1 ratio (four feet up to one foot out).
- 6. Ladders are to be secured at the top to a rigid support.
- 7. Extension ladders must have the proper overlap, depending upon their length.
  - a. 3 foot over lap for a 32 foot ladder
  - b. 4 foot over lap for 32 to 36 foot ladder
  - c. 5 foot over lap for 36 to 48 foot ladder
  - d. 6 foot over lap for ladders over 48 feet
- 8. Choose the right extension ladder, follow the chart below for guidance.

Height to top support	Extension ladder size
9'	16'
9' to 13'	20'
13' to 17'	24'
17' to 21'	28'
21' to 25'	32'
25' to 28'	36'
28' to 31'	40'

### 27.2.3 INSPECTION AND MAINTENANCE OF PORTABLE LADDERS

Ladders must be kept in good working condition at all times. Daily inspection by personnel using the ladder and weekly inspection by the competent person and/or foreman is required. The inspection should include:

- 1. Look for broken or missing steps or rungs.
- 2. Check the rungs and steps to ensure skid resistance is in good working shape.
- 3. Look for broken or split side rails or other defects.
- 4. On wooden ladders, check for soft areas.
- 5. On metal ladders, check for rust or weakness.
- 6. Check the connections between the rungs and side rails.
- 7. Movable parts should operate freely without binding or undue play.
- 8. Check the rungs for grease or oil or other slippery conditions.
- 9. When the ladder is set-up, does it wobble or does not sit flat.
- 10. Tag defective ladders DO NOT USE or cut up and dispose

## 27.2.4 SAFETY PRECAUTIONS FOR PORTABLE LADDERS

- 1. Have a co-worker help raise and lower an extension ladder.
- 2. Have a co-worker foot the ladder prior to climbing the first time. The first person up the ladder must securely tie off the ladder at the upper worker level.
- 3. Do not stand above the highest safe standing level.
- 4. Do not stand or sit on the top step or pail shelf, they are not designed to carry an employees weight.
- 5. Do not reach over, lean to one side or try to move the ladder while on it, this could cause you to lose your balance.
- 6. Do not use metal ladders where contact with electrical lines or circuits may occur.
- 7. Maintain three points of contact when ascending and descending a ladder (i.e two feet and one hand or two hands and one foot).
- 8. While the OSHA regulation does not require fall protection on a portable ladder, the competent person should determine if fall protection will add a level of safety while ascending or descending a portable ladder.

### 28.0 WORKING OVER WATER

Prior to working over water, Atlas Painting and Sheeting will evaluate the water to determine if there exists the potential for drowning in the water. At this time, Atlas Painting and Sheeting will also determine if a rescue boat is feasible. Water that is less than two feet typically is too shallow for a rescue boat since the outboard motor or oars will be hitting the bottom and for a life jacket and ring buoy as their effectiveness is questionable. During the project, the competent person will access the height of the water to determine if the water has risen to cause a drowning hazard

# 28.1 EQUIPMENT

- 1. U.S. Coast Guard approved lifejackets
- 2. Rescue boat
- 3. Ring buoy(s) with at least 90 feet of line
- 4. Harness and lanyard and/or a harness with a two legged lanyard.

#### 28.2 TRAINING

- 1. Workers will be trained on the hazards of working over water
- 2. Safety equipment to be used
- 3. Rescue procedures.

#### 28.3 TYPICAL METHOD FOR RIGGING PLATFORMS ON BRIDGES

- 1. Where the bridge is over or adjacent to the water, workers rigging a platform, cables or scaffolds will be required to wear 100% fall protection which means a harness with a double lanyard.
- 2. If a two legged lanyard is not in use, then a harness and lanyard will be worn along with a U.S. Coast Guard approved life jacket.
- 3. Once a scaffold platform has been erected in accordance with Scaffold Drawings, workers on the platform will be required to tie-off when;
  - A. Exposed to falls at the outside edges of the platform (outside the outside beam or 6 feet from a leading edge), unless a guardrail system has been erected, then fall protection will not be required.
  - B. Where there are holes in the platform.
  - C. If there are any other recognized safety hazard where a fall hazard could exist.
- 4. A rescue boat must be immediately available and ring buoys with at least 90 feet of line will be available.
- 5. The rescue boat will have at least two U.S. Coast Guard approved life jackets.

#### 28.4 APPLICABLE OSHA LETTER OF INTERPRETATION

- 1.OSHA Standards Interpretation and Compliance Letters 9/28/1999, Fall Protection, lifejacket and lifesaving requirements when working over or near water. Allows workers who use 100% tie-off are not required to wear a life jacket.
- 2. OSHA Standards Interpretation and Compliance Letters 12/05/2003 Life jacket and skiff requirements when working over or near water.

### 29.0 EMERGENCY ACTION PLAN

On all projects, a pre-project assessment of potential emergency situations will be conducted. The potential emergencies include fire, containment collapse with contaminated materials, fuel spills, employee injury, etc. Where there may be a release of a contaminant, Atlas Painting and Sheeting will consult the Environmental Protection Agency (EPA) and state guidelines to determine when a release is required to be reported.

Prior to starting the project, Atlas Painting and Sheeting will provide the necessary equipment or supplies to prevent or minimize potential emergency situations. Equipment or supplies may include diesel fuel tanks with double walls, absorbent materials, shovels and fire extinguishers. No Atlas Painting and Sheeting employee is to remain with any critical plant equipment. If an emergency situation does arise at a Atlas Painting and Sheeting job site, the following are the procedures.

#### 29.1 GENERAL

- 1. Coordination between local, State and federal disaster and emergency management personnel will be communicated prior to work commencing. The proper authorities will be given a copy of this section of the plan and the necessary information from the Health and Safety Plan.
- 2. The local hospital(s) will be sent a letter documenting the hazards of the project and provided with the necessary SDS, in the event site workers are transported to the hospital.
- 3. Directions to the hospital will be posted on site and a copy will be placed in a centrallocation when the Health and Safety Program is in effect.
- 4. Employees will be trained on the emergencyprocedures. The training will be both verbally and by providing a copy of this plan to the employees.
- 5. Contact information will be provided to employees who need additional information pertaining to the plan and/ or their respective duties.

### 29.2 PRE-EMERGENCY PLANNING

- 1. The project superintendent, competent person, or company safety Director will establish a line of communications with local hospitals, government agencies and other emergency response organizations prior to site activities.
- 2. During the pre-job safety meeting and bi-monthly thereafter, all employees will be trained in the provisions of the emergency response plan, communication systems, and evacuation routes.
- 3. The plan will be reviewed and revised if necessary, on a regular basis.

### 29.3 TRAINING

Employees will receive training on the emergency action plan as follows:

- 1. When the plan is developed.
- 2. When an employee is initially assigned to a job and on an annual basis thereafter.
- 3. When an employee's responsibilities under the plan change.
- 4. When the plan is changed.

#### 29.4 LINES OF AUTHORITY

- 1. The project superintendent will have primary responsibility for responding to and correcting emergency situations. This includes taking appropriate measures to ensure the safety of site personnel and the public.
- 2. The project superintendent will be relieved of his responsibility only by the appropriate police or fire chief.

#### 29.5 EVACUATION PROCEDURES

Prior to an evacuation, all employees will be trained as to the evacuation route(s), designated meeting location and if an employee is required to assist other employees, their roles and responsibilities.

- 1. If a fire, chemical spill or release or other emergency action is discovered at the project, the person making the discovery will immediately notify the competent person or project superintendent.
- 2. The project superintendent and/or the competent person, will make the decision to evacuate the area if necessary.
- 3. The primary response to any emergency will be to protect the health and safety of employees, contractors, sub-contractors and visitors on-site, as well as the community and environment.
- 4. After step 3 is completed, and if the project superintendent and/or competent person deems it safe, steps will be taken to identify, contain, treat, and properly dispose of the materials involved as a secondary response.
- 5. In the event of an emergency which necessitates an evacuation of the site, the following alarm procedures will be implemented:

### THREE LONG BLASTS OF A COMPRESSED AIR HORN

- \* Workers in a high noise exposure area, i.e. blasting or using power tools, may not hear the air horn. The foreman or equipment operator will be responsible to shut off the compressor and then sound the air horn again.
- 6. When notified to evacuate, all personnel will be expected to proceed to the closest designated safe. The safe area will be set upwind and at least 100 feet from the hazard..
- 7. Personnel will remain at that area until authorized by the project superintendent or competent person who will complete a head count to verify all employees have been evacuated safely.

#### 29.6 EMERGENCY MEDICAL TREATMENT PROCEDURES

- 1. Employees are to inform the competent person or foreman immediately of any person(s) who become injured.
- 2. The competent person or superintendent will decide if emergency services are required. At this time the person onsite who has current training in first-aid will be summoned to assist the injured person(s).

- 3. Any person who becomes ill or injured in the work area must be decontaminated, if exposed to or potentially exposed to contaminated or regulated materials, to the maximum extent possible. If the injury or illness is minor, full decontamination should be completed and first aid administered prior to transport. If the patient's condition is serious, at least partial decontamination should be completed (i.e., complete disrobing of the victim and redressing in clean coveralls or wrapping in a blanket). First aid should be administered while awaiting an ambulance or paramedics. All injuries and illnesses must be immediately reported to the competent person.
- 4. Decontamination will be conducted in the decontamination trailer if possible. If not, a HEPA vacuum will be used to clean off the injured from any contaminated material as well as possible.
- 5. Where an ambulance is used to transport an employee, inform the ambulance staff of the potential for contamination.
- 6. Any person being transported to a clinic or hospital for treatment should take with them information on the chemical(s) (SDS) they have been exposed to at the site. If the person cannot take the SDS with them, a copy will be provided to the ambulance staff or directly to the hospital.
- 7. All work related fatalities are to be reported to OSHA within 8 hours, and all work related inpatient hospitalizations, amputations and loss of an eye are to be reported to OSHA within 24 hours.

#### 29.7 FIRE OR EXPLOSION

- 1. In the event of a fire or explosion, the local fire department should be summoned immediately.
- 2. If safe to do so, stop operations and shut off equipment in the immediate work area and other equipment that may feed the fire.
- 3. The project supervisor and/or the competent person will advise the fire commander of the location, nature, and identification of the hazardous materials on-site.
- 4. If it is safe to do so; site personnel may:
  - a. Use fire fighting equipment available on site to control or extinguish the fire and,
  - b. Remove or isolate flammable or other hazardous materials which may contribute to the fire.
- 5. Report to the designated safe area if the warning system is activated until the project supervisor and/or competent person provides further instruction.

# 29.8 CHEMICAL SPILLS OR LEAKS

- 1. In the event of a spill or leak, site personnel will:
  - A. Inform their supervisor immediately;
  - B. Locate the source of the spillage and stop the flow if it can be done safely.
  - C. Prevent the spill from entering waterways or drains.
  - D. Begin containment and recovery of the spilled materials if it can be done safely.
- 2. If the spill or release is expected to pose significant hazards or is beyond the capabilities of the immediate personnel, then the competent person will be contacted immediately.

- A. The competent person will assess the following:
  - 1. The material spilled or released
  - 2. Location of the release or spill
  - 3. an estimate of the quantity released and the rate at which it is being released
  - 4. any injuries involved
  - 5. fire and/or explosion or possibility of these events occurring
  - 6. the area and materials involved in the location of the fire or explosion
- 3. In the event of a chemical spill that is not contained within a dike or bermed area, an area of isolation will be established around the spill. The size of the area will generally be dependent on the size of the spill and the material(s) involved.
- 4. When any spill occurs, only those persons involved in the oversight or performance of the emergency cleanup operations will be allowed within the designated hazard area.
- 5. If an incident may threaten the health or safety of the surrounding community, the public will be informed and possibly evacuated from the area. The competent person will inform the proper agencies in the event that this is necessary.
- 6. If the control and cleanup of the spill or release is within the capabilities of on-site personnel then the Police or emergency management personnel will NOT be notified unless the release migrates beyond the perimeter of the site. Reporting of spills or releases in accordance with other federal, State and local regulations is also the responsibility of the competent person.

#### 29.9 LEAD CONTAMINATED MATERIAL SPILL OR RELEASE

- 1. In the event of a spill or release of lead or other metal contaminated material, site personnel will:
  - A. Inform their supervisor immediately;
  - B. Locate the source of the spill or release and stop the spill or release by stopping the operation that is causing the spill or release.
  - C. Prevent the spill or release from entering waterways or drains.
- 2. The affected area(s) will be cleaned up as soon as possible using HEPA vacuums for smaller areas and industrial vacuums from the recycler, Supersucker or Vec Loader.
- 3. The competent person will document the spill or release and the corrective actions in the daily inspection report.
- 4. The Owner will be informed of all spills or releases that require notification of a governmental agency.
- 5. If the spill or release involves 10 pounds or more of lead, the competent person will notify the The appropriate authority.

#### 29.10 EMERGENCY EQUIPMENT

- 1. Emergency equipment will be decided on a project to project basis and may include the following:.
  - A. First Aid Kit
  - B. Fire Extinguisher
  - C. Eye Wash Station
  - D. Emergency Shower (decontamination trailer)
  - E. Two-way radio or mobile phone

#### 29.11 MEDIA RELATED EVENTS

If an emergency occurs that warrants a visit from the media, site personnel will not be authorized to speak with the media. The site competent person or foreman will contact management for direction. If given permission by management, the person selected to speak with the media will:

- 1. Provide information that is factual.
- 2. Record in the site log book all information provided to the media.
- 3. Avoid speculation on the cause of the events, amount of damage and seriousness of injuries.
- 4. DO NOT release names of injured person(s).

### 29.12 INCIDENT FOLLOW-UP

- 1. Following all emergency response actions and activation of this plan, the competent person will conduct a debriefing session of all key personnel involved.
- 2. The response will be critiqued, documented, and response plans revised, if necessary. Corrective actions will be listed where procedures were inadequate or need improvement.
- 3. Employees will be advised of any corrective actions and results of the critique as soon as possible.

### 30.0 RAILROAD SAFETY

Prior to working on or near the tracks, workers may be required receive safety training from the railroad authority and follow all its rules and requirements, including the use of railroad flag persons whenever necessary.

Work near railroads will not begin until a railroad representative has inspected, if requested, the construction site to determine the need for either standard railroad precautions or special precautions. If a job-specific plan is warranted by the situation, the railroad representative should work with the contractor and Industrial hygienist to help develop an appropriate railroad safety plan. The plan should address how exposure of equipment and workers to railroad operations will be controlled, how oncoming rail traffic will be detected, and how workers and equipment operators will be warned of oncoming trains.

Those operations requiring written approval of the railroad may include, but are not limited to:

- 1. Any construction affecting the operation or maintenance of railroad facilities. This work may include constructing, repairing or removing structures, temporary track detours, erecting falsework, or alteration of track clearances.
- 2. Any time an operated track or overhead wire is to be fouled by the contractor's equipment. (An operated track is fouled when any object is brought closer than eight feet from the center line of the track unless it is lower than the top of the rail.) At least 8 days notice will be given so that proper protection can be arranged..
- 3. Any agreement between the contractor and the railroad companyto install a private grade crossing at the site for the private use of the contractor.
- 4. Whenever work may affect the safety or movement of trains, or may cause damage to the tracks or other railroad facilities. The method of doing such work will be submitted to the railroad and written approval must be granted.

## 30.1 WORKING NEAR ELECTRIFIED TRACKS

Prior to starting any project with electrified tracks, or a third rail, Atlas Painting and Sheeting will determine if the tracks or rail can be de-energized prior to the start of work till the time work has been completed and all workers are away from the tracks or rail. In addition, the following will apply:

- 1. Attend training as required by the railroad.
- 2. Ensure all workers onsite that will be working on or next to the tracks or rail have complete the required training.
- 3. Ensure workers are wearing the specified safety equipment per the railroad's requirements.
- 4. If the track or rail is to be energized during the time of work, determine from the railroad the required safety precautions which could include a third rail box, rubber mats, or other approved items by the railroad.
- 5. Equipment may be required to be grounded, refer to the railroad's requirements.
- 6. Use of non-metallic equipment such as ladders will be required.

Each railroad has its own rules and procedures. Refer to the project documents and the railroad requirements prior to starting anywork involving energized tracks, or a third rail, even if its not energized. A project specific safety plan will be prepared for this type of work.

### 31.0 MAINTENANCE AND PROTECTION OF TRAFFIC

Prior to starting any project that will be on or next to an active roadway, consideration must be given to the Maintenance and Protection of Traffic (MPT) to prevent vehicle intrusions into the work zone, prevent vehicle accidents due to the work zone and prevent workers from getting struck-by vehicles. Atlas Painting and Sheeting will use the current Manual on Uniform Traffic Control Devices (MUTCD), state MUTCD and/or project specifications on how and where to set-up MPT. This Section is intended solely for the worker safety when setting up and removing traffic control equipment, and is not intended to override the MUTCD, State MUTCD or project specifications.

#### 31.1 MPT OFFICER

This person is responsible for the safe establishment, maintenance and removal of traffic control devices that make up a MPT pattern. Where a MPT pattern is established, the MPT Officer will conduct frequent checks of the MPT pattern to ensure that all traffic control devices are in place and that the MPT pattern is working effectively. The MPT officer will decide when flaggers are required and that they understand their jobs prior to flagging. In addition, the MPT Officer must ensure where flagger(s) are used, they remain alert to oncoming traffic and are courteous to the public.

#### 31.2 FLAGGER

The flagger(s) will be alert at all times, on their feet and facing oncoming traffic. The flagger(s) will stand in a highly visible location, but not directly in the path of oncoming vehicles. Additionally, the flagger(s) should look for an escape path in the event an erratic vehicle approaches.

For daytime work, the flagger's vest, shirt or jacket will be either orange, yellow, yellow-green or a flourescent version of htese colors. For nighttime work, the outside garments will be retroreflective using either orange, yellow, white, silver, yellow-green or a flourescent version of these colors and will be visible at a minimum distance of 1,000 feet.

The flagger(s) will use stop/ slow paddles with an octagonal shape. When used at night, the stop/ slow paddles will be retroreflectorized.

## 31.3 TRAINING

All persons involved in MPT will be trained in MPT by Atlas Painting and Sheeting. If the state or locality has specific training regulations, these must be followed.

# 31.4 SAFETY EQUIPMENT

All persons, other than the flagger(s), working on or near a roadway will wear highly visible vests in accordance with project specifications or ANSI/ISEA 107-1999 which has defined three categories for ANSI-compliant apparel.

a. Class 1- users who have ample separation from vehicular traffic, the traffic is 25 mph or less and the background is not complex.

- b. Class 2- users who need greater visibility in inclement weather conditions and activities near roadways where traffic speeds exceed 25 mph.
- c. Class 3- use in wide range of weather conditions, traffic exceeds 50 mph and/or no ample separation from vehicular traffic.

Hard hats worn at night will have reflective strips on all four sides. Additionally, workers crossing the road will use a red flag to warn oncoming traffic of their presence.

#### 31.5 TRAFFIC CONTROL DEVICES

Traffic control devices used by Atlas Painting and Sheeting will conform to the current MUTCD and/or project specifications, whichever is the more stringent. Traffic control devices is defined as all signs, signals, markings and other devices used to regulate, warn, or guide traffic, placed on, over, or adjacent to a street, highway, pedestrian facility, or bikeway by authority or a public body or official having jurisdiction.

#### 31.6 SETTING UP AND REMOVING TRAFFIC PATTERNS

The installation of a traffic pattern will be performed with the flow of traffic and the removal of the traffic pattern will be against the flow of traffic, except for detours which are set up the opposite way. Alternate methods for installation and removal may be used, if they provide at least the same level of safety for the workers and traveling public. The MPT Officer must determine the actual means and methods and inform the workers of the procedures.

If setting up a pattern by having worker(s) walk in the roadway and placing traffic cones, an attenuator truck or shadow truck will follow closely behind the workers to prevent on-coming traffic from entering the area where the workers are setting up the pattern. If setting up the pattern from a truck, the truck will travel 10 mph or slower and workers will remain sitting in the back of the vehicle. When removing the traffic pattern, remove it using the same method as setting up.

After each set-up and removal of the traffic pattern, the MPT officer should evaluate the procedure used to ensure the maximum safety for workers, construction equipment and vehicle traffic and make any adjustments necessary.

# 32.0 VEHICLE AND JOBSITE SAFETY

All on-road, off-road and material handling vehicles and equipment are to be used in accordance with 29 CFR 1926.600 and 1926.601 and this section.

#### 32.1 VEHICLES

- 1. All vehicles are to be provided with working seat belt. The seat belt anchorages will comply with the requirements of 49 CFR Part 571.
- 2. All vehicles operated on public property are to be register and inspected in the state where ownership exists and equipped with all the required safety and operating features inaccordance with state law.
- 3. Vehicles used to transport workers will have seats firmly secured and an adequate amount of seats for the number of workers transported.
- 4. All vehicles used to transport employees will be equipped with properly workingheadlights, brakes, horns, turn signals, tires, mirrors, and windshield.
- 5. All vehicles will have the appropriate lights or reflectors to help identify their locations.
- 6. Only authorized employees will be allowed to operate vehicles which includes a valid license.
- 7. Employees are not authorized to allow another employee use of a company vehicle without management's approval.
- 8. Company vehicles are to be used only for company work and are not to be used for personal business.
- 9. The use of drugs or alcohol is strictly prohibited when operating company vehicles. Prescription medicine may be used under the supervision of a licensed physician and a letter from the physician to the company describing the need and restrictions of any prescribed medicine.

#### 32.2 EMPLOYEES

- 1. Employees designated to operate vehicles must have a current driver's license or CDL.
- 2. Each employee in a vehicle will wear a seat belt.
- 3. Employees will only operate a company vehicle that they are assigned by management.

### **32.3 SAFETY**

- 1. Tools and materials will be secured to prevent movement when transported in the same compartment with employees.
- 2. Tools and materials in the bed of a truck will be secured to prevent movement or loss during transportation.
- 3. The parking brake will be set when the vehicle is not in use or parked. Vehicles parked on inclines will have the wheels chocked and parking brakes set.
- 4. Employees must not be permitted to ride on top of any load that can shift and topple.
- 5. When reversing a vehicle other than a car or pick-up truck, a spotter will assist the driver. The driver will not move unless the spotter can be seen in a mirror and the spotter give the signal to reverse.

#### 32.4 CELLULAR PHONES AND/OR OTHER DRIVING DISTRACTIONS

### CELLULAR PHONE USAGE PROHIBITED WHILE DRIVIG A VEHICLE

- 1. Employees will not be permitted to use cellular phones or two-way radios while driving or operating equipment/machinery. When driving, either a hands-free adapter must be used or the employee will pull over in a safe area, such as a rest stop, and talk.
- 2. Employees will not be permitted to eat or drink while driving company vehicles.
- 3. If another employee is causing the driver to become distracted, the other employee will be asked to stop the distraction or be removed from the vehicle at a safe location.

### USE OF CELLULAR PHONS ON THE JOB-SITE

One of the biggest safety concerns with mobile phones is the distraction they can create for people when they are working. Construction sites can be dangerous places if you don't pay attention to your surroundings, you can hurt yourself or someone else around you. People who are looking or texting or talking on their phones can walk right into something that could get them hurt or hurt someone else.

Construction takes two hands to work; if you are using one hand for your phone all day then you're not working with both and you're not working productively. Workers that texts to each other on the same site are even more dangerous because now you have two people that are endangering themselves and everyone around them.

- > Use of mobile phones is strictly prohibited when operating tools, equipment, machinery or vehicles. NO EXCEPTIONS !!!
- ➤ Use of mobile phones on the jobsite is limited to the supervisors and managers as it corresponds with their jobs, all other workers should not carry their phones on the job-site..
- ➤ Workers can check on their phones at breaks and lunch. In special circumstances, if a worker needs to check their phone more frequently, they will have to ask their supervisor for permission.
- ➤ Under normal circumstances, there is no reason for people to need to communicate all day with other people while they are working.
- ➤ Using your mobile phone on a job-site is not a right it's a privilege, that privilege does not triumph the safety of the workers around them or the overall site safety of the job-site.
- > So keep the phone off of the job-site. Your life could depend on it.

#### 32.5 ACCIDENTS

- 1. All accidents, regardless of the amount of damage to the company vehicle, other vehicle orto property are to be reported to management as soon as possible after the accident.
- 2. The driver is to take pictures of the scene and record the following information:
  - a. Date and time of the accident
  - b. Location
  - c. Name, address and phone number of other driver and any other people involved
  - d. Name, address and phone number of witnesses
  - e. Name of other driver's insurance carrier and policy number
  - f. Any other pertinent information

### 33.0 FIRE PREVENTION

#### 33.1 FIRE PREVENTION AND PROTECTION

Paint solvents and other flammable materials will be properly stored and handled according to all OSHA regulations, 29 CFR 1926.150, 151, 152 and 153. Each storage area will be equipped with a fire extinguisher for solvent fires which will be inspected monthly and serviced annually. All workers will be trained in the OSHA requirements, including prohibiting smoking and the use of spark generating equipment in areas where flammable materials are stored or used.

#### 33.1.1 FIRE TRIANGLE

The following fire elements must be controlled or eliminated to prevent fires.

- 1. Fuel: Combustible materials that include solids, liquids and gases.
- 2. Oxygen: The air around us has plenty of oxygen to sustain a fire.
- 3. The energy necessary to increase the temperature of the fuel to a level which it will burn.
- 4. Chemical Reaction: This is the reaction that occurs when other three elements are present in the right conditions.

#### 33.1.2 RULES TO REMOVE THE FIRE ELEMENTS

- 1. Housekeeping Trash and debris will be kept to a minimum at all times. The work area will be clearly cleaned of debris at the end of every day.
- 2. Smoking restrictions inside the work area will be strictly enforced (disciplinary action will be clearly outlined prior to the start of employment on this project).
- 3. "No Smoking" and "Flammable/Combustible Area" signs will be conspicuously posted.
- 4. Do not refuel equipment while it is running or hot.
- 5. Do not refuel in confined spaces.
- 6. Keep flammable liquids stored in tightly closed self-closing approved spill proof containers.
- 7. Store flammable liquids in proper containers away from ignition sources i.e., open flames, cigarettes, and or spark providing sources.
- 8. Do not overload outlets and circuits.
- 9. Only OSHA-approved metal safety fuel cans, with self-locking spouts and flame arresters will be used.
- 10. All fueling equipment will incorporate grounding wires.

# 33.1.3 FIRE PROTECTION

- 1. If a fire should strike, keep in mind the following rules:
  - a. Make sure everyone gets out
  - b. Call the Fire Department at once
  - c. Do not attempt to fight the fire unless your party has a qualified fire watch
  - d. Stay near an exit so you can escape if need be. Stay low, away from heat and smoke. If the fire gets large, get out.

- 2. Knowing the classification of fires will help you in using the proper extinguisher, the following is a list of classes of fires that Atlas Painting and Sheeting may encounter on its projects and the proper extinguisher to use in fighting the different fires.
  - a. Class "A" Fires: Ordinary combustibles such as rubbish, paper, rags, scraps of lumber, etc. These are fires that require a cooling agent for extinguishers are watered through use of a hose, pump-type water cans, pressurized extinguishers and soda-acid extinguishers.
  - b. Class "B" Fires: Flammable Liquids, oils, gases and grease. These are fires that require a smothering effect for extinguishing. The recommended extinguishers are Carbon Dioxide, Dry Chemical and Foam.
  - c. Class "C" Fires: Electrical Equipment. Fires that require a non-conducting extinguishing agent. Recommended extinguishers are Carbon Dioxide and Dry Chemical.

### 33.1.4 TRAINING

- 1. Workers who may fight fires will be trained by the Competent Person, the training will include:
  - a. The proper use of the fire extinguishers.
  - b. The location of each and every fire extinguisher.
  - c. Where to meet in the event of a fire in order to account for personnel.
  - d. How to alert the local fire service authorities, i.e. Posted Phone Numbers.
  - e. The manner in which emergencies are announced, i.e. three blasts from an air horn.
  - f. Emergency escape procedures.
  - g. The areas of greatest potential fire hazards.
  - h. Names and job titles of the persons responsible for the maintenance of fire prevention equipment.
  - i. Safe operating procedures for all industrial painting equipment.
  - j. Identification and information regarding all potentially dangerous chemicals used on the job site.
- 2. All persons entering the work area will be familiarized with the evacuation alarms and procedures. The Competent Person will be conducting weekly tool box safety meetings to discuss all pertinent health and safety issues.
- 3. Training will be provided prior to the time of assignment and on an annual basis thereafter.

### 33.1.5 STORAGE OF FLAMMABLE AND COMBUSTIBLE MATERIALS

Only approved containers will be used for storage and handling of flammable and combustible liquids. When storing flammable liquids indoors not more than 25 gallons will be stored outside of an approved storage facility. Not more than 60 gallons of flammable or 120 gallons of combustible liquids will be stored in any one storage area.

When storing flammable liquids outside, not more than 1,100 gallons will be stored in any one pile and piles will be separated by a 5 foot clearance. Piles of flammable liquids will be maintained 20 feet or greater from any structure.

At least one portable fire extinguisher having a rating not less than 20-B units will be located not less than 25 feet or more than 75 feet from any flammable liquid storage area.

#### 33.2 FIRE EXTINGUISHERS

### 33.2.1 LOCATION AND MARKING OF EXTINGUISHERS

Extinguishers will be conspicuously located and readily accessible for immediate use in the event of fire. They will be located along normal paths of travel and egress. Wall recesses and/or flush-mounted cabinets will be used as extinguisher locations whenever possible.

Extinguishers will be clearly visible. In locations where visual obstruction cannot be completely avoided, directional arrows will be provided to indicate the location of extinguishers and the arrows will be marked with the extinguisher classification.

If extinguishers intended for different classes of fire are located together, they will be conspicuously marked to ensure that the proper class extinguisher selection is made at the time of a fire. Extinguisher classification markings will be located on the front of the shell above or below the extinguisher nameplate. Markings will be of a size and form to be legible from a distance of 3 feet.

#### 33.2.2 CONDITION

Portable extinguishers will be maintained in a fully charged and operable condition. They will be kept in their designated locations at all times when not being used. When extinguishers are removed for maintenance or testing, a fully charged and operable replacement unit will be provided.

# 33.2.3 MOUNTING AND DISTRIBUTION OF EXTINGUISHERS

Extinguishers mounted in cabinets or wall recesses or set on shelves will be placed so that the extinguisher operating instructions face outward. The location of such extinguishers will be made conspicuous by marking the cabinet or wall recess in a contrasting color which will distinguish it from the normal decor.

Extinguishers must be distributed in such a way that the amount of time needed to travel to their location and back to the fire does not allow the fire to get out of control. OSHA requires that the travel distance for Class A and Class D extinguishers not exceed 75 feet. The maximum travel distance for Class B extinguishers is 50 feet because flammable liquid fires can get out of control faster that Class A fires. There is no maximum travel distance specified for Class C extinguishers, but they must be distributed on the basis of appropriate patterns for Class A and B hazards.

#### 33.4 INSPECTION AND MAINTENANCE

Fire extinguishers will be inspected monthly to ensure that they are in proper working condition and have not been tampered with or physically damaged. The results of the inspection will be recorded on a tag on each fire extinguisher and in project records.

### 34.0 OVERHEAD UTILITIES

Prior to starting any project, a pre-job hazard analysis will be conducted. Part of the pre-job hazard analysis will be to determine if any overhead power lines or other utility line such as telephone or cable are present in the work area and who is the owner of the lines. Atlas Painting and Sheeting will first attempt to have the lines de-energized or temporarily relocated by the owner, if this is not possible then have the owner insulate the line.

### 34.1 SAFE DISTANCES FOR ELECTRICAL LINES

- 1. Stay at least 10 feet from overhead lines if 50 kV or less.
- 2. For overhead lines 50 kV or greater stay 10 feet plus 4 inches for every additional 10 kV.

#### 34.2 SAFE PRACTICES

- 1. Do not operate equipment around overhead lines unless authorized.
- 2. Use wooden or fiberglass ladders.
- 3. Avoid storing materials under overhead lines.
- 4. Wear the proper personal protective equipment such as rubber gloves, hoods and sleeves.
- 5. Tools must be designed and constructed to withstand the voltages and stresses they may be exposed.

### 34.3 VEHICLE SAFETY

- 1. When a crane, scissor lift, aerial lift or other vehicle is to work in an area where an overhead utility line exists, a spotter will be designated to warn the operator and other people in the area when the minimum safe distance is not maintained.
- 2. If a vehicle is in contact with an overhead line, DO NOT allow anyone to come near ortouch the vehicle.

### 35.0 ELECTRICAL

Electrical Systems and components are designed and installed according to OSHA standard 29 CFR 1926.402-408 and the most current edition of NFPA 70, National Electric Code. This section covers the installation safety requirements for electrical equipment and installations used to provide electric power and lights at the job site. This applies to temporary and permanent installations but not permanent installations that were in place prior to the commencement of construction activities.

Atlas Painting and Sheeting uses Ground Fault Circuit Interrupters (GFCI) for the protection of its workers on all projects and locations. An assured ground program will only be instituted when required by a client or general contractor.

- 1. The electrical equipment will be checked prior to use to ensure that it is free from recognized hazards that are likely to cause death or injury to employees based upon:
  - a. Suitability for installation and use in accordance with OSHA regulations.
  - b. Mechanical strength and durability.
  - c. Electrical insulation.
  - d. Heating effects under conditions of use.
  - e. Arcing effects.
  - f. Classification by type, size, voltage, current capacity and specific use.
  - g. Other factors which contribute to the safeguarding of employees using or likely to come in contact with the equipment.
- 2. Either Ground Fault Circuit Interrupters (GFCI) or an assured grounding program will be established for each project location.
  - a. Where GFCI are in use, all 120-volt single phase 15 and 20-ampere receptacle outlets on construction sites not part of the permanent wiring of the building or structure which are used by employees, will have GFCI for personnel protection.
  - b. Where an assured grounding program is established:
    - 1. A written program will be established.
    - 2. A competent person will be designated to implement the program.
    - 3. Each cord set, attachment cap, plug and receptacle of cord sets and any equipment connected by cord and plug will be visually inspected prior to use.
    - 4. A testing program for all cord sets, receptacles and plug and plug connected equipment will be established.
- 3. Extension cords used will be the three-wire type and equipped with a three-wire grounding type receptacle and attachment plug of non-conductive material.
- 4. When an extension cord is worn, frayed or the grounding plug is removed, it will be immediately placed out of service until appropriate repairs can be made or disposed of.
- 5. Work areas and walkways are to be kept clear of electrical cords so they do not become a trip hazard.
- 6. Qualified employees will adhere to 29 CFR 1910.304(c)(2) Table S6 for safe distances when working in the vicinity of overhead power lines.
- 7. Electric equipment and wiring will be installed or use based upon the properties of the flammable vapor, liquids or gases, or combustible dusts or fibers which may be present. The following is the hazardous locations table.

Class	Groups	Div 1	Div 2
Fumes, Gases, Vapors and Liquids	B. Hydrogen	explosive	Normally not explosive and hazardous
F.	Metal dust Carbon black, coal, coke Flour, Starch, Grain, Dust		
Fibers, Flyings No	groups in this class		

- 8. Employees will not be allowed to work in proximity to any part of an electric power circuitunless protected against electric such by de-energizing the equipment and grounding it or by guarding it effectively.
- 9. De-energized parts will be treated as if they are live when working on or around the equipment.
- 10. Lockout/ Tagout of the equipment is required prior to performing any electrical work.
- 11. Only trained and qualified personnel may perform electrical work.
- 12. Proper illumination (Section 5.0) is required prior to entering work areas containing exposed energized parts.

### 35.1 SAFE WORK PRACTICES

- 1. Test all new or repaired extension cords prior to use.
- 2. Purchase on UL-listed or equivalent extension cords.
- 3. Visually inspect each cord prior to use.
- 4. Do not drape extension cords over hot surfaces such as steams lines
- 5. Do not run extension cords through standing water or wet surfaces.
- 6. Use only grounding (3 prong) extension cords.
- 7. When cords cross passageways or work areas, protect the cords and provide appropriate warnings.
- 8. All ladders will be made of non-conductive material with non-conductive side rails.
- 9. All apparel that is conductive will be removed. If unable to remove the apparel it will be rendered non-conductive by covering, wrapping or other acceptable means.

#### 35.2 TRAINING

Employees working on or near electrical systems, or who face a risk of electrical shock will be trained on the following:

- 1. The contents of the OSHA regulation 1910.331 through 1910.335, specifically the safety related work practices required per the employees job task.
- 2. Unqualified persons will also be trained in and familiar with any electrically related safety practices not specifically addressed in the OSHA regulation, but is necessary for their safety.
- 3. Qualified personnel will receive additional training on the following:

- a. The skills and techniques necessary to distinguish exposed live parts from the other parts of electrical equipment.
- b. The skills and techniques necessary to determine the nominal voltage of exposed live parts.
- c. The clearance distances as specified in the OSHA regulation, and the corresponding voltages to which the qualified person will be exposed.
- 4. The training will be documented with the name and signature of the trainee and the name and signature of the trainer.

# 35.3 QUALIFIED PERSON RESPONSIBILITIES

- 1. A qualified person will operate the equipment operating controls or otherwise verify that the equipment cannot be restarted.
- 2. A qualified person will use test equipment to test the circuit elements and electrical parts of equipment to which employees will be exposed and will verify that the circuit elements and equipment parts are de-energized. The test will also determine if any energized conditions exist as a result of inadvertently induced voltage or unrelated voltage backfeed even though specific parts of the circuit have been deenergized and presumed to be safe.
- 3. A qualified person will conduct tests and visual inspections, as necessary, to verify that all tools, electrical jumpers, shorts, grounds and other such devices have been removed so that the circuits and equipment can be safely energized.
- 4. Only qualified persons may work on electric circuit parts or equipment that have not been deenergized. Such persons will be capable of working safely on energized circuits and will be familiar with the proper use of special precautionary techniques, personal protective equipment, insulation and shielding materials and insulated tools.

## 35.4 UNQUALIFIED PERSONS

When an unqualified person is working in an elevated position near overhead lines, the location will be such that the person and the longest conductive object he or she may contact cannot come closer to any unguarded energized overhead line than the following distances.

- 1. For voltages to ground 50kV or below 10 feet (305 cm).
- 2. For voltages to ground over 50 kV 10 feet (305 cm) plus 4 inches (10cm) for every 10 kV over 50 kV.

### 35.5 VEHICLES AND MECHANICAL EQUIPMENT

- 1. Any vehicle or mechanical equipment capable of having parts of its structure elevated near energized overhead lines will be operated so that a clearance of 10 feet (305 cm) is maintained. If the voltage is higher than 50 kV, the clearance will be increased by 4 inches (10 cm) for every 10-kV over that voltage.
- 2. If insulating barriers are installed to prevent contact with the lines, and if the barriers are rated for the voltage of the line being guarded and are not a part of or an attachment to the vehicle or its raised structure, the clearance may be reduced to a distance within the designated working dimensions of the insulating barrier.

3.	If any vehicle or mechanical equipment capable of having parts of its structure elevated near energized overhead lines is intentionally grounded, employees working on the ground near the point of grounding may not stand at the grounding location whenever there is a possibility of overhead line contact. Additional precautions, such as the use of barricades or insulation, will be taken to protect employees from hazardous ground potentials.

### 36.0 FIRST AID

- 1. First aid will comply with OSHA regulations 29 CFR 1926.50.
  - a. Atlas Painting and Sheeting will ensure the availability of medical personnel for advice and consultation on matters of occupational health.
  - b. Prior to a job, provisions will be made for prompt medical attention in case of a serious injury, this may require transportation by Atlas Painting and Sheeting or an ambulance.
  - c. A first aid kit will be readily accessible in a weatherproof container with individually sealed packages for each type of item. The contents of the first aid kit will be checked by the Competent Person prior to each job and at least weekly thereafter.
  - d. Proper equipment for the transportation of an injured person, or a communication system to contact an ambulance will be provided.
  - e. The telephone numbers of the consulting physician, hospitals, or ambulance will be conspicuously posted.
  - f. Where the eyes or body of any person may be exposed to corrosive materials, facilities will be available at the work site for immediate emergency use for the quick drenching or flushing of the eyes and body. The facility must be able to supply 1 15 minute continuous eye wash.
- 2. A current First-Aid/CPR trained person will be on all project locations if the hospital is located more than 3 to 4 minutes away.
  - a. If the project requires a designated first-aid responder(s), then the responder(s) will be trained in Bloodborne pathogen safety.
  - b. If the project does not require a designated first-aid responder(s), then the responder(s) will be acting under the Good Samaritan Act and will not require Bloodborne pathogen training. However, if an incident does occur, the responder(s) will be offered a Hepatitis B vaccination.
- 3. First Aid Kits should contain the items in accordance with ANSI Z308.1-1998.
  - a. The first aid kit may contain other project specific items, which will be determined by the Safety Director on a project by project basis.
- 4. First aid/ CPR personnel will be certified by the American Red Cross, or an equivalent agency.

### 37.0 ACCIDENT INVESTIGATION

Accidents are usually complex. An accident may have 10 or more events that can be causes. A detailed analysis of an accident will normally reveal three cause levels: basic, indirect and direct. At the lowest level, an accident results only when a person or object receives and amount of energy or hazardous material that cannot be absorbed safely. This energy of hazardous material is the direct cause of the accident. The direct cause is usually the result of one or more unsafe acts or unsafe conditions. Unsafe acts or unsafe conditions are indirect causes or symptoms. Indirect causes can usually be traced to basic causes, which are poor management policies and decisions, personal or environmental factors.

All accidents requiring more than first aid and occupational illnesses must be recorded in accordance with 29 CFR 1904. The accident will be recorded on the OSHA 300 Log within seven calender days of the incident or notification of an illness.

All work related fatalities are to be reported to OSHA within 8 hours and to the host facility within 24 hours, and all work related in-patient hospitalizations, amputations and loss of an eye are to be reported to OSHA within 24 hours and to the host facility within 24 hours. This can be reported by:

- 1. Calling OSHA's confidential number (800) 321-OSHA (6742).
- 2. Calling the closest Area Office during normal business hours.
- 3. Using an online form on OSHA .gov

In addition, for each incident a full report will be made in writing using OSHA Form 301 or similar format describing what happened, and control measure taken to prevent additional similar occurrences. The basic purpose of the investigation is to determine, in terms of unsafe acts, personal factors, unsafe conditions and their sources, the true cause(s) of the accident that produced the reported injury, and to develop a means to prevent recurrences.

At the time of the accident, Atlas Painting and Sheeting will have either first aid trained personnel onsite to assist the injured party(s) and/or will summon emergency services. After the accident, the area will be secured by Atlas Painting and Sheeting personnel to ensure another accident does not occur. To do this, all equipment will be shut-down and all personnel will be removed to a safe location.

#### 37.1 RESPONSIBILITIES

### **37.1.1 MANAGEMENT**

- 1. Ensure all accidents and injuries are investigated.
- 2. Ensure immediate and log-term corrective actions are taken to prevent re-occurrence.
- 3. Maintain accident reports on file and in employee records.
- 4. Ensure proper entries are made on the OSHA 300 log and accident investigation report.
- 5. If required, notify OSHA and/or worker's compensation in a timely manner.
- 6. Provide all necessary medical care for injured workers.

#### 37.1.2 SUPERVISORS/ COMPETENT PERSON

- 1. Provide immediate first aid for injured person(s).
- 2. Eliminate or control hazards.
- 3. Document accident scene information to determine the cause.
- 4. Interview the witnesses and victims immediately.

#### **37.1.3 EMPLOYEES**

- 1. Immediately report all accidents & injuries to their supervisors.
- 2. Assist in accident investigations if requested.
- 3. Report all hazardous conditions and near-misses.

#### 37.2 CONTROLLING ADDITIONAL LOSS

Immediately after an accident, onsite employees under the supervisor of the senior person onsite will take the following steps.

- 1. Evacuate all non-essential employees and visitors to a safe location away from the scene of the accident.
- 2. Shut down all non-essential equipment (i.e. compressors, blast equipment, dust collectors)
- 3. Determine if emergency services are required and call as soon as possible.
- 4. Check hazardous materials are in a safe condition. If they are not, render the hazardous materials safe, if safe to do so. If it is not safe, ensure first responders know the hazards.
- 5. If a part of a structure is weakened, brace the structure if safe to do so.
- 6. If in a host facility, follow the host facility requirements.

# 37.3 INVESTIGATING AN ACCIDENT

Investigating an accident requires the investigator to seek the root cause of the accident and not immediately place blame on the worker affected.

The accident investigator must be qualified to conduct an inspection. Atlas Painting and Sheeting will use either a Certified Safety Professional (CSP) with at least five years of experience in the construction industry or an in-house person with over ten years of experience and has completed training in the relevant areas of the accident (example: if the accident involved a fall, training would include fall protection). Training is required prior to the time of assignment and at least every three years.

Prior to conducting an investigation, the accident investigator must have the appropriate equipment and personal protective equipment to perform the job. Equipment may include a camera, video camera, tape recorder, measuring tape and small tools.

The following steps will be taken during an accident investigation.

- 1. Prior to an accident investigator starting an investigation, the site foreman will:
  - a. Take pictures of the site and the accident location

- b. Will record who was onsite
- c. Who witnessed the accident
- d. Materials involved
- e. Temperature and other environmental factors
- f. Illumination of the work place
- g. Noise level of the work place
- h. Ventilation of the work place.
- 2. The foreman will then secure and preserve the site, which may involve using caution tape.
- 3. When the accident investigator arrives onsite, define the scope of the investigation.
- 4. Select the investigators. Assign specific tasks to each.
- 5. Present a preliminary briefing to the investigating team which may include: description of the accident, normal operating procedures, location of the accident, witnesses and known events that proceeded the accident.
- 6. Visit the accident site and get updated information for personnel at the site.
- 7. Inspect the accident area, take pictures and secure the area if possible.
- 8. Interview each victim and witness. Also interview personnel onsite prior to the accident and those who arrived shortly after the accident occurred. Keep records of each interview. If possible interview personnel separately.
- 9. At this point the investigator(s) should determine what was the root cause of the accident and the events leading up to the accident that may have contributed to the accident.
- 10. Conduct a post-investigation briefing.
- 11. Prepare a summary report which includes recommendations to prevent a recurrence of the accident.

#### 37.4 INVESTIGATING AN INCIDENT

All incident will be investigated to determine the cause and how to ensure it will not re-occur.

- 1. Define the scope of the investigation.
- 2. Select the investigator.
- 3. Present a preliminary briefing to the investigating team which may include: description of the incident, normal operating procedures, location of the incident, witnesses and known events that proceeded the incident.
- 4. Visit the incident site and get updated information for personnel at the site.
- 5. At this point the investigator(s) should determine what was the root cause of the incident and the events leading up to the accident that may have contributed to the incident.
- 6. Prepare a summary report which includes recommendations to prevent a recurrence of the Incident.

#### 37.5 WORK-RELATED INJURIES AND ILLNESSES THAT ARE RECORDABLE

- 1. Death
- 2. Loss of Consciousness
- 3. Days away from work
- 4. Restricted work activity or job transfer

- 5. Medical treatment beyond first aid.
- 6. Needlestick injury or cut from a sharp object that is contaminated with another person's blood.
- 7. Medical removal under any of OSHA's health standards.

## 37.6 FIRST AID INCIDENTS THAT ARE NOT RECORDABLE

- 1. Use of non-prescription medications at non-prescription strengths.
- 2. Administering a tetanus immunization.
- 3. Cleaning, flushing or soaking wounds on the skin surface.
- 4. Use of band-aids, gauze pads or butterfly band-aids.
- 5. Use of hot or cold therapy.
- 6. Draining fluids from blisters.
- 7. Drinking fluids to relieve heat stress.
- 8. Use of simple irrigation to remove foreign bodies not embedded in or adhered to the eye.

#### 37.7 CORRECTIVE ACTIONS

After the accident investigation is completed, the investigator along with company management will determine the root cause of the accident and take corrective measures to prevent recurrences. The corrective measure can include process modification, additional safety equipment purchase and training.

The accident investigator will document the accident investigation and will provide the accident investigation report to Atlas Painting and Sheeting's Safety Director for review, then it will be provided to the Members of Atlas Painting and Sheeting. The report will include the accident, the investigation and pictures, a narrative of events, witness statements, the root cause of the event and corrective measures that should be taken to prevent a future event.

The Safety Director and Members will determine if changes are required to the Corporate Health and Safety Plan, if additional training is required, if new equipment is required, or any other changes to company policy, means and methods or equipment is required.

#### 37.8 RECORD KEEPING

The OSHA 300 Log and OSHA 301 Incident Report form (or similar) will be maintain for five years following the end of the calender year that the record covers in accordance with 29 CFR 1904.33.

## 37.8 ANNUAL POSTING REQUIREMENTS

OSHA's Form 300A, Summary of Work-Related Injuries ans Illnesses will be posted in each establishment in a conspicuous place from February 1 to April 30. The annual summary will be certified by a company executive.

## 38.0 BLOODBORNE PATHOGEN PROGRAM

Atlas Painting and Sheeting and its employees have a minimal potential to be exposed to bloodborne pathogens which include hepatitis B virus (HBV), human immunodeficiency (HIV), malaria, syphilis and brucellosis. Atlas Painting and Sheeting's work is in the construction industry and should reasonable anticipate minor first air issues. Atlas Painting and Sheeting will utilize emergency personnel such as EMTs and emergency room personnel to treat affected workers. Atlas Painting and Sheeting first aid trained workers are not designated first aid responders unless a project requires this in the specifications. All exposure determinations are to be made without regard of personal protective equipment.

#### 38.1 RESPONSIBILITIES

The Safety Director is responsible for this program and will ensure this program is effective through site inspections, record keeping and programs audits. The Safety Director will also ensure proper posting of any exposures to the OSHA 300 log.

### **38.2 DEFINITIONS**

- **Biological Hazard** any viable infectious agent that presents a risk or potential risk to the well being of humans.
- **Bloodborne pathogens** pathogenic microorganisms that are present in human blood and can cause disease in humans. This includes hepatitis B virus (HBV) and human immunodeficiency virus (HIV).
- **Exposure Incident** a specific eye, mouth, other mucous membrane, non-intact skin or parenteral contact with blood or other potentially infectious materials that results from the performance of an employee's duties.
- **Medical Waste** All waste resulting from human tissue, blood or blood products or fluids. This includes used first aid bandages, contaminated personal protective clothing and materials used in spill cleanup.
- Universal Precautions a system of infectious disease control that assumes every direct contact with body fluids is infectious and requires every employee exposed to be protected as though such body fluids were infected with bloodborne pathogens.

### 38.3 AFFECTED JOB CATEGORIES

The following job categories may have potential exposure to blood borne pathogens. During any exposure, the responder will consider all fluids as potentially infectious and will implement universal precautions such as barriers, gloves and any other method to prevent exposures.

- 1. Designated first-aid first responder
- 2. First-aid trained employees
- 3. Cleanup workers

#### 38.4 TRAINING

All workers in the above job categories will complete training as required. Training will be required at the time of initial assignment and on an annual basis thereafter. Below is a list of training that may be required and training providers that may be utilized:

- 1. Red Cross first aid training or;
- 2. National Safety Council first aid training

Refresher training for the above courses will be in accordance with that training agencies requirements.

In addition, the following training is required

- 1. Atlas Painting and Sheeting Bloodborne Pathogen Program and OSHA 29 CFR 1910.1030 annual training required
- 2. How bloodborne pathogens are transmitted.
- 3. Explanation of the use and limitations of engineering controls, work practice controls and personal protective equipment.
- 4. First aid kits and their contents
- 5. How to report exposure incidents.
- 6. Information on the hepatitis B vaccination.
- 7. What types of incidents Atlas Painting and Sheeting workers may and may not respond.
- 8. Site specific training at each project location including location of hospitals and emergency contact phone numbers.
- 9. Label and signs that will be used in the workplace.

Training records will be maintained for at least three years.

### 38.5 HEPATITIS-B VIRUS (HBV) VACCINATIONS

First aid designated responders and other first aid trained workers will be offered Hepatitis-B Virus (HBV) vaccinations at our company doctor's facility. New workers who are designated or trained in first aid will be offered the HBV vaccination within 10 days of the training or designation.

Workers who chose not to have the HBV vaccination will be required to sign a letter of declination. If a worker who did not have the HBV vaccination chooses to have the vaccination in the future or is exposed to a potential infectious agent may have the vaccination at no cost to the worker at a later date.

# 38.6 ENGINEERING CONTROLS

Atlas Painting and Sheeting will utilize resuscitation bags and mouthpieces as its engineering controls. Since needles and sharps are not utilized, engineering controls for these items are not required.

#### 38.7 WORK PRACTICE CONTROLS

Workers who respond to assist with first-aid are required to wash their hands, face and anyother body part that may have become contaminated at the decontamination trailer hand wash station or any other handwash station. The handwash will have hot water, anti-bacterial soap and paper towels. Any equipment that may be contaminated will be cleaned thoroughly using a solution of bleach and water.

# 38.8 PERSONAL PROTECTIVE EQUIPMENT

Atlas Painting and Sheeting supplies first-aid designated and trained workers the following personal protective equipment in the first-aid kit. All personal protective equipment will be provided to the employee at no cost to the employee. All personal protective equipment will be maintained in good working condition which may include laundering or disposal.

- 1. Latex or latex type gloves
- 2. Goggles or safety glasses with side shields
- 3. Resuscitation bags and mouthpieces

After use, all personal protective equipment will be disposed in accordance with 3.11.

### 38.9 POST EXPOSURE EVALUATION

Following a report of an exposure incident, Atlas Painting and Sheeting will make available to the affected worker(s) a confidential medical evaluation and follow-up, including:

- 1. Documentation of the route(s) of exposure and how the exposure occurred.
- 2. Identification of the source of the exposure.
- 3. Collection and testing of blood for hepatitis B virus (HBV) and human immunodeficiency virus (HIV) upon affected worker(s) consent.
- 4. Post exposure prophylaxis.
- 5. Counseling.
- 6. Evaluation of reported illnesses.
- 7. Within 15 days after evaluation, a copy of the healthcare professional's written opinion will be provided to the affected worker(s).

## 38.10 POST EXPOSURE FOLLOW-UP

After any exposure the Safety Director, foreman and competent person will evaluate the exposure to determine if additional safety procedures need to be implemented. In addition, at the next weekly safety meeting at that project location, all workers will be informed of the exposure, the types of safety precautions in use and if any additional safety precautions will be implemented.

#### 38.11 CLEANUP AFTER AN INCIDENT

Workers who clean-up after an incident will be required to don two layers of tyvek protective clothing, protective boots and latex or latex type gloves. Workers will use disposable rags or paper towels to cleanup any spills. If water is used to cleanup affected areas, the water will be treated with a bleach solution. All rags, paper towels, PPE and any other item that is potentially contaminated will be disposed in a trash bag then placed into a second trash bag. The outer trash bag will then be label "Infectious Waste" and "Biohazard".

#### 38.12 RECORD KEEPING

If an exposure occurs, Atlas Painting and Sheeting will record the following information:

- 1. Worker's name and social security number.
- 2. Workers hepatitis B vaccination status including vaccination date(s).
- 3. Results of examinations, medical testing and post exposure evaluations and follow-up procedures.
- 4. Health care professional's written opinion.
- 5. A copy of any information provided to the health care professional.

Medical records are to be kept for the duration of employment plus 30 years.

### 38.13 ACCESS TO PLAN

Each employee has the right to access this Plan as needed.

### 38.14 REQUESTS FOR RECORDS

All records of exposure or medical records will be made available to employees and the Assistant Secretary & Director for examination and copying upon request. Medical records will not be released without the consent of the affected employee(s).

If Atlas Painting and Sheeting ceases to do business, they will follow 29 CFR 1910.1020(h) for the transfer of records.

### 39.0 ABRASIVE BLASTING SAFETY

Each project will be tested to ensure that workers are not exposed to dusts, vapors, mists, fumes or gases that exceed the limits as set in 29 CFR 1955(a). To prevent an exposure at or above a Permissible Exposure Limit or Threshold Limit Value (TLV), both ventilation of the work location and the use of abrasive blasting helmets with an Assigned Protection Factor (APF) of 1,000 will be required inside of an enclosures.

Prior to the start of each project, a pre-job hazard analysis will be required to be completed.

Abrasive blasting operations will cause the abrasive and material being removed to be shattered or pulverized and each worker must be protected from the hazards through the use of proper personal protective equipment.

#### 39.1 WORKER SAFETY

Prior to any employee conducting abrasive blasting operations, the employee will be trained on the safe operating practices (SOP) of abrasive blasting. The SOPs below are not a complete list and the company must refer to the manufacturer's procedures.

- 1. Wear protective clothing such as blast coveralls or tow layers of protective clothing, noise protection, blast helmets, work boots and gloves when abrasive blasting to prevent injury. The blast helmet must have an Assigned Protection Factor (APF) of 1,000 or greater and will provide head and face protection.
- 2. Breathing air must meet Grade D, which is odor free, free of harmful dusts, mists or noxious gases and a carbon monoxide detector will be required. See Respiratory Protection Section of this Plan for more details.
- 3. Workers outside of the abrasive blast work area will be required to wear safety glasses, ear plugs, work clothing, work boots and hard hats.
- 4. Thoroughly examine the condition of hoses, hose fittings, couplings and unions prior to blasting. Replace any worn parts.
- 5. At couplings on the blast hose, ensure whip checks or other positive methods are in use to prevent hoses from becoming disconnected.
- 6. Never mix and match equipment, use only equipment recommended by the manufacturer.
- 7. During blast operations, the equipment operator must stay near the blast equipment.
- 8. Signals, hand signals or radios will be used to establish communications between the blasters and equipment operators.
- 9. When working above 6 feet, fall protection must be used.
- 10. When working on scaffolding, the blast line will be secured to the scaffold allowing enough hose for the blaster to use.
- 11. The blast helmet will be donned and removed either in a vestibule or outside the containment.
- 12. Never aim an operational blast nozzle at another person.
- 13. Adequate ventilation and lighting must be used to allow workers to see the substrate.
- 14. A deadman (remote control valve) is required at each blast nozzle. Blasters will not lock the deadman in the operating position.

- 15. To minimize electrical shock to the blaster, the deadman will not use more than 24 volts of electricity.
- 16. To minimize electrical shock, each abrasive blast line and nozzle will bonded and grounded to prevent the build up of a static charge. Do not make any changes to your blast line or nozzle without approval from your foreman.
- 17. At the end of each shift, a HEPA vacuum will be used to vacuum dusts that may have accumulated outside of the abrasive blast enclosure. If an area outside the abrasive blast enclosure has excessive dusts or may be harmful to people on the outside, the area will be cleaned immediately.
- 18. Compressed air will not be used to blow down a worker's clothing or equipment unless a reducer is attached that reduces the air to less than 30 p.s.i. and will also have an effective chip guard. Proper personal protective equipment will be required.

#### 39.2 VENTILATION

Adequate ventilation is required to minimize worker exposure to toxic dusts and allow visibility inside the work area. OSHA 29 CFR 1926.57 and The Society for Protective Coatings (SSPC) in Guide 6 recommend the following minimum air velocities.

- 1. Cross draft (horizontal) air velocity of 100 feet per minute (fpm).
- 2. Downdraft air velocity of 60 to 100 fpm.

### 39.3 VENTILATION INSPECTION

- 1. Visual Inspection periodic inspections performed during the work day.
  - A. Prior to use, check the inside of all duct hoses for clogging or plugging.
  - B. Inspect duct work for deterioration, excessive bends and/or collapsed sections.
  - C. Inspect make-up air louvers, baffles or flaps to ensure they are in good shape with no rips or tears.
  - D. Inspect condition of tarps to ensure that any rips or tears are repaired prior to use.
  - E. Check joints and seams of the tarps are tightly sealed.
  - F. During paint removal operations, inspect the containment for evidence of negative pressure. (the tarps are pulled into the containment)
- 2. Air Velocity Inspections
  - A. General
    - 1. Air velocity measurements are made using velometers or anenometers or other similar devices capable of measuring air flow.
    - 2. Air movement inside of a containment is not uniform, therefore several readings must be taken to achieve an average.
    - 3. Measurements are taken
      - a. Prior to the initial blast
      - b. Weekly if the containment systems are similar
      - c. Daily if containment or equipment changes
  - B. Measurements
    - 1. Divide the containment into equal sub-sections.
    - 2. Set the instrument on slow reading.

- 3. Take a reading in each sub-section, this reading should be in the work zone.
- 4. Average all the readings.
- 3. Static Pressure Measurements
  - A. Measurements are made using magnehelic gauges or similar to access negative pressure inside the containment.
  - B. Typical measurements are 0.03 inches of water. If readings are below the criteria, abrasive blasting will stop and corrective measures will be implemented.

# **39.4 PRESSURE VESSELS (BLAST POT)**

Abrasive blast pots are considered pressure vessels and require a certification plate that is traceable to the maker of the pressure vessel. If the pate is missing, a new certification will be required to verify the pressure vessel will meet ASME code.

If there are cracks, holes or other damage on the tank, or if the tank was welded, re-certification will be required.

#### 39.5 BLAST POT SAFETY

- 1. Always bleed off air and shut down compressors(s) prior to any maintenance. Lockout/ tagout may be required.
- 2. When equipped, never try to open the hatch to look into the blast when the blast pot is pressurized.
- 3. Inspect the blast pot and its components prior to each use. A more thorough inspection may be required by the manufacturer.
- 4. When bleeding air from the blast pot, wear hearing protection with a high noise reduction rating.
- 5. During operation, the equipment operator will be required to wear hearing protection, safety glasses and may be required to wear respiratory protection.

# 39.6 EQUIPMENT SAFETY

- 1. The exhaust system and all electrical wiring will conform with ANSI Z33.1.
- 2. To minimize electrical shock, each abrasive blast line and nozzle will bonded and grounded to prevent the build up of a static charge. Do not make any changes to your blast line or nozzle without approval from your foreman.
- 3. The abrasive blast enclosure, dust collector ducts and the dust collectors will be constructed with loose panels or explosion venting areas, located on sides away from any occupied areas to provide pressure relief in the event of an explosion. Reference NFPA 68.
- 4. Inside of all enclosures with the potential for flammable atmosphere, explosion proof lighting will be required.

# **40.0 WATER JETTING OPERATIONS**

- 1. The operator and personnel in the close vicinity of the operator will wear the appropriate personal protective equipment which may include rain gear, respirator, eye protection, hearing protection and boots as specified by the Competent Person.
- 2. Prior to starting water jetting operations, thoroughly examine the condition of hoses, hose fittings, couplings and unions. Replace or repair parts as necessary.
- 3. Prior to starting water jetting check the lance for nicks, dents, bends and any other signs of defects. If any defect is observed, remove the lance from service.
- 4. Hoses should be arranged so a tripping hazard does not occur.
- 5. When starting water jetting operations, check the pressure lines and lance for leaks.
- 6. The operator is to keep both hands firmly on the lance and not on the threads or connectors.
- 7. Never point the lance at anyone.
- 8. Never tie down the operating lever.
- 9. When operating the lance, stand with two feet firmly on the ground.
- 10. Do not operate when on a ladder or catenary scaffold, unless secured from a fall by safety harness or other approved safety measures.
- 11. Do not operate at or near energized electrical systems.
- 12. Prior to removing the nozzle, depressurize the system.
- 13. Remove or cover all electrical equipment or connections in the work area.
- 14. Never leaving the system unattended.
- 15. The hose near the nozzle must be secured to the staging at the working level. Leave only enough free hose so the worker can properly and safely handle the hose weight.
- 16. Only use approved tools to make repairs.
- 17. Follow equipment manufacturer's Safe Operating Procedures (SOP).

# 41.0 COATINGS OPERATIONS

#### 41.1 COATING OPERATIONS

- 1. Prior to coating operations, the competent person and/or foreman will review the SDS for the chemicals in the coating materials and the Personal Protective Equipment (PPE) required by the manufacturer.
- 2. During coatings operations, personnel will wear at a minimum, goggles and work clothing. The competent person and/or foreman will review the SDS to determine if additional PPE is required.
- 3. Ventilation is necessary to reduce the build up of volatile organic compounds (VOC) which can cause harm to the employees. If adequate ventilation cannot be provided, then workers will be required to wear respiratory protection in accordance with Section 10.0 of this Plan.
- 4. When wearing an air-purifying respirator, the end of service life for the cartridge must be established prior to starting the project and the employees informed of the change schedule.

### 41.2 AIRLESS SPRAY OPERATIONS

- 1. Prior to using any spray equipment, adequate ventilation must be assured. The use of dust collectors, windows and respirators are all acceptable methods to ensure workers have adequate breathing air.
- 2. The spray area must be at least 25 feet from open flames, sparks or other ignition sources.
- 3. Fire extinguishers must be located near the work area.
- 4. Explosion proof lamps may be required.
- 5. Check the work area for combustible materials and remove to prevent fires.
- 6.Check all valves and gauges to insure that they are in proper working order. Equipment with damaged or missing parts will be removed from service.
- 7. The safety shut-off valve must be closed when spray operations are not underway.
- 8. Wear safety goggles when operating the spray equipment, or during any work on making repairs to spray lines.
- 9. All connectors must be securely connected, when checking the connections, beware of the potential for rupture (this may occur anywhere in the line).
- 10. **Never** point the spray gun at anyone or yourself. Spray guns can cause coating materials to be injected under the skin causing severe injury.
- 11. **Never** put your hand or fingertips over the spray tip.
- 12. If you are injected, seek immediate help at the local emergency room. Do not assume it is only apin prick. Bring the SDS of the coating being applied with you to the emergency room.
- 13. Prior to removing the spray gun, ensure the spray line is depressurized.
- 14. When the spray gun is not is use, set the safety latch to the safe position.
- 15. Only use spray guns with safety mechanisms and leave the gun in the "safe" position when not in use.
- 16. Prior to cleaning, disconnect all air lines.
- 17. Follow manufacturer's Safe Operating Procedures.

### **41.3 SOLVENT HANDLING**

- 1. Store and dispense flammable or combustible materials in designated areas. Electrically bondand ground the containers before pouring solvents from one container to another.
- 2. Keep containers tightly closed when not in use.
- 3. Clean up all spills as they occur. Where proper personal protective equipment and spill clean up materials.
- 4. Dispose of waste solvents per the Environmental Compliance Plan.
- 5. Wear the proper personal protective equipment when handling and dispensing. Refer to the safety data sheet (SDS) for recommendations.
- 6. Provide adequate ventilation.
- 7. Do not smoke within 25 feet.

#### 42.0 THERMAL SPRAY

Thermal spraying can present various hazards to the operator and people in the immediate vicinity. The hazards include exposures to vapors, dust, fumes, noise and arc ultraviolet (UV) radiation. Prior to thermal spraying, the competent person should review the safety data sheet (SDS) to determine the hazards associated with the materials to be applied.

- 1. Personal protective equipment will be selected based upon the work location, hazards presentand what type of material the thermal spray is being applied to. Personal protective equipment that should be considered includes:
  - a. Body covering such as coveralls.
  - b. Hearing protection.
  - c. Eye protection from UV light.
  - d. Work boots.
  - e. Head covering.
- 2. Hearing protection will be required for the person conducting thermal spraying. The typical noise levels during thermal spray can exceed 120 dBA. Job rotation, or reducing the actual time thermal spraying may be required to reduce the noise exposure to below 90 dBA.
- 3. Worker exposure monitoring of thermal spraying should be conducted to determine the level of respiratory protection required. A minimum of a half-face air purifying respirator with P100 filters will be required, unless the level of exposure to toxic dust is known. Then the level may be adjusted upward or downward, based upon the results.
- 4. In an enclosed area, or indoors, ventilation will be required.
- 5. Eye protection from the UV light will be required. Use a welding shield with UV protection lens.
- 6. The work area will be cleaned of combustible and flammable materials.
- 7. A fire extinguisher will be located in the work area.

#### 43.0 HAND AND POWER TOOL SAFETY

#### 43.1 GENERAL SAFETY

The misuse of common electrical and power tools is a prolific source of injury to the industrial worker. As part of every job instruction program should be detailed training in the proper use of both electrical and power tools. A good safety program to control tool misuse and accidents should include the following activities:

- 1. Train employees to select the right tools for the right job.
- 2. Establish regular tool inspections procedures and provide good repair facilities to ensure that tools will be maintained in safe condition.
- 3. Train and supervise employees in the correct use of tools for each job.
- 4. Establish a procedure for control of company tools, such as a check-out system at the job site.
- 5. Provide proper storage facilities for electrical and power tools at the job site.
- 6. All frayed extension cords and faulty electrical tools must be replaced or repaired as soon as possible.
- 7. All hand and power tools are to be maintained in good and safe working condition. This includes tools supplied by both Atlas Painting and Sheeting and an employee.
- 8. Guards that come with power tools are to remain in place and are not to be removed. Prior to each use, the guard will be checked.
- 9. Prior to using any hand and/or power tool, the foreman will determine the appropriate personal protective equipment. This may include eye protection, hearing protection, face protection, hand protection and protective work clothing.
- 10. Any hand and/or power tool not in good and safe working condition will be removed from service immediately. If the tool remains at the job site, it will be tagged "Do Not Use".

#### **43.2 HAND TOOLS**

Hand tools will comply with OSHA regulations 29 CFR 1926.301, power-operated hand tools will comply with OSHA regulation 29 CFR 1926.302, and as provided in this section of the Plan.

#### 43.2.1 HAND TOOLS

- 1. Atlas Painting and Sheeting will not issue or permit the use of unsafe hand tools.
- 2. Wrenches, including adjustable, pipe, end and socket wrenches will not be used when the jaws are sprung to the point that slippage occurs.
- 3. Impact tools will be kept free of mushroomed heads, this includes drift pins, wedges and chisels.
- 4. Tools with wooden handles will be kept free of splinters or cracks and the handles will be kept tight in the tool.
- 5. Keep your tools clean, sharp and in good working order. Inspect tools periodically and replace those with defective or worn parts.

- 6. Protect tools and materials from dirt and debris while you work. Always use the proper tool for the job at hand.
- 7. Keep your tools or tool kit out of walkways. Don't leave tools, equipment or material where they may become a tripping hazard.
- 8. Protect your eyes with protective glasses when you are working with power tools. Never look at a welding arc-light unless you are wearing safety glasses with protective filters.
- 9. Keep your cutting tools sharpened. See that files, mauls and hammers are fitted with the proper handles.
- 10. Do not place tools in elevated positions unless you are sure they are secure and cannot fall or be knocked down.

## 43.2.2 POWER-OPERATED HAND TOOLS

All power-operated hand tools will be used in accordance with the manufacturer's safe operating procedures.

- 1. Electric power-operated tools.
  - a. Electric power operated tools will be the approved double insulated type or grounded in accordance with Subpart K of the OSHA Standards.
  - b. Electric cords will never be used to raise or lower tools.

# 2.Pneumatic power tools

- a. Pneumatic power tools will be secured to the hose or whip by some positive means to prevent the tool from becoming disconnected.
- b. Safety clips or retainers will be securely installed and maintained on pneumatic impact tools.
- c. Compressed air will not be used for cleaning purposes unless reduced to less than 30 p.s.i. and then only with effective chip guarding and personal protective equipment.
- d. Hoses will not be used for raising or lowering tools.
- e. All hoses greater than ½" inside diameter will have a safety device at the source of supply or branch line.
- f. High pressure airless spray guns will be equipped with an automatic, visible manual safety devices, or diffuse nut to prevent the release of paint or fluid.

### 44.0 WELDING AND CUTTING

Welding and cutting operations will comply with OSHA standard 29 CFR 1926 Subpart J and the provisions of this section.

#### 44.1 GAS WELDING AND CUTTING

- 1. Cylinders will be moved by tilting and rolling them on their bottom edges.
- 2. Valve protection caps will not be used for lifting cylinders from one vertical position to another.
- 3. A cylinder truck, chain or other steadying device will be use to prevent cylinders from being knocked down during use.
- 4. When work is finished, the cylinder is empty, or when cylinders are relocated, the cylinder valve must be closed.
- 5. Compressed gas cylinders are to be stored upright.
- 6. Compressed gas cylinders will be located far enough away from the actual welding or cutting so sparks, hot slag or flames will not reach them.
- 7. Compressed gas cylinders are to be legibly marked to identify the content inside with either the chemical or trade name of the gas.
- 8. Hoses, cables and other equipment will be kept clear of passageways, aisles, ladders and stairs.

### 44.2 ARC WELDING AND CUTTING

- 1. Current carrying parts passing through the portion of the holder which the arc welding grips in his hand will be fully insulated against the maximum voltage encountered to ground.
- 2. Welding cables will be completely insulated, flexible type and capable of handling the maximum current requirements of the work.
- 3. Cables in need of repair will be place out of service until repairs can be made.
- 4. The frames of the arc welding machine will be grounded either be a third wire in the cable or through a separate wire.
- 5. When the arc welder or cutting needs to leave the work area for any appreciable length of time, the power supply switch to the equipment will be opened.

### **44.3 FIRE PREVENTION**

- 1. Remove all fire hazards when possible prior to hot work, if this is not possible positive means will be employed to confine the heat, sparks and slag.
- 2. No welding, cutting, or heating will be conducted where the application of flammable paints, flammable compounds or heavy dusts concentration creates a hazard.
- 3. Suitable fire extinguishing equipment will be in the immediate vicinity of the work area.
- 4. When welding, cutting or heating operations is such that normal fire prevention precautions are not sufficient, additional personnel will be assigned to guard against fire and will remain in place for a sufficient time after completion of hot work (30 minutes in most cases will be sufficient).
- 5. When welding, cutting or heating operations is performed on walls, floors and ceilings the same precautions will be in place as the side the work is being conducted.

## 44.4 VENTILATION AND PROTECTION IN WELDING, CUTTING AND HEATING

- 1. General mechanical ventilation will be of sufficient capacity and arranged a to produce the number of air changes as necessary.
- 2. Contaminated air exhausted from the working space will be discharged into the open air and clear of the intake air. When working with lead, cadmium, chromium and beryllium and HEPA dust collection system may be required.
- 3. All air replacing the air that was withdrawn will be clean and respirable.

## 44.5 GENERAL PROVISIONS

- 1. Employees performing welding, cutting or heating will be trained on the proper and safe use of the equipment.
- 2. When fire watches are required, the fire watch will have no other duty assigned during the fire watch.
- 3. Prior to commencing welding, cutting or heating operations, the supervisor, welder and fire watch will walk through the area to ensure all hazards have been removed or covered.
- 4. Employees performing welding, cutting or heating must be provided and wear suitable eye, face and body protection.
- 5. When a fire watch is assigned, they will be provided and wear the same eye protection as the person performing the work.
- 6. The following table is a guide in the proper selection of filter lenses or plates used in welding.

Welding operations	Shade number
Shielded metal arc welding 1/16, 3/32, 1/8 and 5/32 inch diameter electrodes	10
Gas shielded arc welding (nonferrous) 1/16, 3/32, 1/8 and 5/32 inch diameter electrodes	11
Gas shielded arc welding (ferrous) 1/16, 3/32, 1/8 and 5/32 inch diameter electrodes	12
Shielded metal arc welding 3/16, 7/32 and 1/4 inch diameter electrodes	12
5/16 and 3/8 inch diameter electrodes	14
Carbon are welding	14
Soldering	2
Torch blazing	3 or 4
Light cutting, up to 1 inch	3 or 4
Medium cutting. 1 to 6 inches	4 or 5
Heavy cutting, over 6 inches	5 or 6
Gas welding (light) up to 1/8 inch	4 or 5
Gas welding (medium) 1/8 to ½ inch	5 or 6
Gas welding (heavy) over ½ inch	6 or 8

# 45.0 PERMIT REQUIRED CONFINED SPACE PROGRAM - GENERAL INDUSTRY

This Permit Required Confined Space program applies to General Industry and meets 29 CFR 1910.146. This program applies to all employees and any sub-contractor employees entering confined spaces. The Supervisor will be responsible for all aspects of this program. If there are multiple contractors entering into a confined space. Atlas Painting and Sheeting will work with the General Contractor, Contract management Company, or all contractors to determine how to enter safely and what will be required of Atlas Painting and Sheeting.

#### **45.1 DEFINITIONS**

**Attendant** is an individual stationed outside a permit space who monitors the entrants and performs other duties described in this program.

**Confined Space** a space that meets all of the following criteria:

- 1. Is large enough and so configured that an employee can bodily enterand perform assigned work.
- 2. Has limited or restricted means of entry or exit.
- 3. Is not designed for continuous employee occupancy.

**Engulfment** the surrounding and effective capture of a person by liquid or finely divided (flowable) solid substance that can be aspirated to cause death by filling of plugging the respiratory system or that can exert enough force on the body to cause death by strangulation, constriction, or crushing.

**Entrant** an employee authorized by the employer to enter a permit-required space.

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

**Hazardous atmosphere** an atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue, injury, or acute illness from one or more of the following causes:

- 1. Flammable gas, vapor, or mist in excess of 10% of its lower flammable limit (LFL).
- 2. Airborne combustible dust at a concentration that meets or exceeds its lower explosive limits (LEL).
- 3. Atmospheric oxygen concentration below 19.5% or above 23.5%;
- 4. Atmospheric concentration of any substance for which a dose or permissible exposure limit (PEL) is 29 CFR 1910, Subpart G, Occupational Health and Environmental Control, or in 29 CFR 1910, Subpart Z, Toxic and Hazardous Substances, and which could result in employee exposure in excess of its dose or PEL.
- 5. Any other atmospheric condition that is immediately dangerous to life or health (IDLH).

**Job supervisor** the person responsible for determining if acceptable entry conditions are present at a permit space, for authorizing entry and overseeing and terminating entry operations. This may also be the Competent Person.

**Immediately dangerous to life of health (IDLH)** any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects or that would interfere with and individual's ability to escape unaided from a permit space.

**Non-permit space** a confined space that does not contain or have the potential to contain any hazard capable of causing death or serious physical harm.

**Permit** means the document that authorizes and controls entry into a permit space. **Permit-required space** means a confined space that has one or more of the following characteristics:

- 1. Contains or has a potential to contain a hazardous atmosphere.
- 2. Contains a material that has the potential for engulfing an entrant.
- 3. Has an internal configuration such that an entrant could be trapped or engulfed.
- 4. Has energy sources such as electrical, mechanical, pneumatic or hydraulic.

### **45.2 SIGNS**

Either a danger sign or other effective means will be used to inform all employees of spaces that are classified as confined spaces. Other effective means can include initial training of all employees and semi- annual refresher training. Where signs are used, the sign will read:

DANGER-PERMIT-REQUIRED CONFINED SPACE, DO NOT ENTER Other similar language may be used.

### 45.3 CONFINED SPACE CLASSIFICATION

Atlas Painting and Sheeting recognizes two classes of confined space: Permit-Required and Non-Permit confined space. Atlas Painting and Sheeting may reclassify a confined space or use alternate procedures to minimize the hazards.

Reclassification- is a space where the hazards have been eliminated. In order to reclassify the space the following must be completed.

- 1. Space poses no actual or potential atmospheric hazards.
- 2. Certify that all hazards within the space have been eliminated such as lockout/tagout.
- 3. Certification is made available to all entrants.

Alternate Entry Procedures- is a space where the hazards are controlled by continuous forced air ventilation.

- 1. Follow 29 CFR 1910.146 (c) (5) (ii).
- 2. The only hazard is actual or potential hazardous atmosphere.
- 3. Certification is made available to all entrants.
- 4. Permits are not required, however written certification is required.
- 5. Attendants and supervisors are not required.
- 6. Training is required.

To the extent practical, permit-required confined space should have danger signs permanently posted at the entrances where practical. The Supervisor is responsible for ensuring a sign is posted as permit-required confined spaces are identified.

### **45.4 CHANGE IN CLASSIFICATION**

If there is a change in the use of configuration of the space that might increase or decrease the hazards, the Supervisor should reevaluate the space. The Supervisor may upgrade a space from non-permit to permit-required without prior approval, but must notify the Competent Person as soon as possible. To downgrade a space from permit-required to non-permit, the Job Supervisor must get approval from the Competent Person prior to changing the classification. The Supervisor will document the change in classification.

# 45.5 GENERAL REQUIREMENTS FOR CONFINED SPACE ENTRY

The Supervisor will ensure that the following requirements are met before a confined space is entered for any reason:

#### **45.5.1 GENERAL**

- 1. The requirements the Lock Out/Tag Out Procedures are implemented.
- 2. Appropriate protective clothing is worn in accordance with Sections 9-11 of the Health and Safety Plan and other protection is used as indicated by specific hazards and conditions.
- 3. Access covers/plates will not be removed until unsafe conditions are eliminated. After removal, the space will be guarded with a suitable barrier to prevent inadvertent entry.
- 4. Where their exist the potential for outside hazards such as vehicles, pedestrians or bicyclists to enter the work area, barriers such as ropes, concrete barriers or other effective means will be implemented.

#### 45.5.2 ATMOSPHERIC TESTING

- 1. Testing will be performed:
  - a. Only by the Supervisor or other personnel who have been trained to use the instrument.
  - b. Using only approved, calibrated direct-reading instruments.
  - c. In the sequence of oxygen content, flammable gas or vapor, and airborne toxic contaminants (if present). (Note: most instruments measure these simultaneously).
- 2. The atmosphere must be tested prior to entry for a non-permit space.
- 3. Sample the area just outside the space, then reach into the space while remaining outside. If acceptable entry conditions exist, continue sampling inside the space to ensure the entire area has been tested.
- 4. If the measurements exceed acceptable entry conditions, the space should be ventilated. If acceptable entry conditions are still not preset, contact the Supervisor. Entry will only be allowed after additional purging and/or donning of appropriate respiratory protection. Non-sparking equipment will be used in flammable atmospheres.

5. If toxic substances are known to exist or are suspected, or if chemical products are taken into the space, the SDS must be on the job site. Notify the competent person if there are unknown or potential hazards - SDSs will be used to evaluate the hazards and determine the appropriate classification.

### 45.6 ENTRY INTO A NON-PERMIT CONFINED SPACE

The requirements of the section "General Requirements for Confined Space Entry" must be completed prior to allowing entry into a non-permit space. Continuous monitoring does not need to be performed. Employees should inform their Supervisor of any changes in the space that may increase the hazards in the space. There are no special training requirements for entry into a non-permit space, other than listed in General Requirements.

# 45.7 ENTRY INTO PERMIT-REQUIRED CONFINED SPACE

The Supervisor will complete the "General Requirements for Confined Space Entry".

The Supervisor will complete the following prior to entry into a permit-required confined space.

- 1. Complete the general information of the confined space entry permit
- 2. Identify the potential hazards.
  - a. Atmospheric hazards must be continuously monitored. Consider atmospheric hazards that are present or taken into the space. The SDS will be on the job site for nay chemicals taken into the space. Consult with the Supervisor if potential/unknown hazards exist.
  - b. Note any physical hazards that are present, such as electrical shock, engulfment, heat stress or mechanical hazards.
  - c. The space may be re-monitored if changes occur, if an employee requests additional monitoring or an employee's authorized representative requests additional monitoring.
- 3. Prepare for entry by:
  - a. Eliminating hazards where possible by purging or blanking supplylines/pipes--Consult the Lock Out/Tag Out Procedure.
  - b. Using forced ventilation Consider if the atmospheric hazards are lighter/heavier than air and ventilate accordingly.
  - c. Doing initial atmospheric testing and log results on the permit.
  - d. Completing other necessary permits, such as a hot work permit.
- 4. List the protective equipment required for safe entry.
  - a. Check all personal protective equipment that may be needed based on the hazards identified in Section 2 of the permit and the monitoring results. All Entrants must wear a full body harness to facilitate rescue.
    - b. Ensure the safety of tools, equipment and methods meet the following:
      - 1. Matches or open flames are not used for illumination.
      - 2. Portable, hand-held lighting provides adequate illumination and does not exceed 12 volts and is connected to a ground-fault circuit interrupter.
      - 3. Fixed lighting provides adequate illumination and does not exceed 12 volts unless all the lights are installed out of the normal reach of employees. Guarded to prevent possible contact with live circuits. Connected to a Ground-Fault Circuit Interrupter.

- 4. Electric power tools will be connected to a Ground-Fault Circuit interrupter. Pneumatic tools are preferred to electric power tools.
- 5. Compressed gas cylinders remain outside the confined space at all times unless they are part of an SCBA or fire extinguisher.
- 6. All equipment that may be used in a flammable atmosphere is approved as explosion proof or intrinsically safe for the atmosphere by a recognized testing laboratory such as MSHA, the Underwriters Laboratories, or Factory Mutual.
- 5. Plan a means of continuous communication between the Attendant and the Entrants. The Supervisor will also conduct a pre-job briefing to include:
  - a. Job, purpose of entry, and duration of the permit
  - b. Methods to be employed, and tools to be used
  - c. Existing and possible hazards and remedial actions
  - d. Develop a rescue plan for emergency escape and rescue. Rescue plans will include non-entry rescue methods whenever possible -
  - e. Specific procedures and roles during work and during emergencies
  - f. Questions and suggestions concerning the specific job
- 6. Find the location of the nearest cellular phone and verify it is working. The Attendant will call the Supervisor in an emergency.
- 7. Sign and give one copy of the completed permit to the Supervisor must initial the permit that verifies a rescue service is available.
- 8. The entry must be terminated by the Supervisor when the work is compete or if an evacuation occurs. All canceled permits including the competed log and monitoring sheet will be retained by Atlas Painting and Sheeting.
- 9. Log the names of entrants and times as they enter and leave the space.
- 10. If an unauthorized person enters a space, or a new hazard is identified, all work in the space will stop immediately, all workers will be required to exit the space and the Supervisor will determine if additional safety measures are required.
- 11. Conduct continuous atmospheric monitoring and observation of the entrants. The monitoring results must be logged on the second page of the permit once per hour (or more if appropriate). Entrants should take a personal air monitor in the space if they are located remotely from the Attendant.

These duties will be reviewed by the Attendant for completion prior to issuing a permit.

### 45.7.1 DUTIES OF THE ATTENDANT

- 1. The Attendant will also have the following knowledge and duties:
  - a. Know the hazards faced during entry and the symptoms resulting from exposure.
  - b. Is aware of possible behavioral effects of hazard exposures.
  - c. Prevent entry by unauthorized persons or order them to immediately exit.
  - d. Remain outside the confined space during entry unless relived by another attendant.
  - e. Maintain an accurate count of entrants in the confined space.
  - f. Maintains communication as often as necessary
  - g. Order entrants to immediately exit the confined space if:
    - 1. Entrants exhibit symptoms attributable to unsafe conditions

- 2. Unsafe or unacceptable conditions arise within the space or outside the space
- 3. The Attendant can no longer safely perform the assigned duties
- 4. Summon rescue personnel in the event of an emergency.
- 5. Remain outside the space at all times unless relieved by another trained Attendant.
- 6. Sign out and notify entrants when being relieved.
- h. At no time will an attendant oversee more than one confined space at any given time.

#### 45.7.2 DUTIES OF THE ENTRANT

- 1. Prior to entering a confined space, the entrant will understand:
  - a. The hazards of the space including the signs and symptoms and consequences of exposure.
  - b. The proper use of all equipment that will be used while in the confined space.
  - c. Maintain communication with the attendant as necessary.
  - d. Alert the attendant if:
    - 1. The entrant recognizes signs or symptoms of exposure.
    - 2. A prohibited condition is detected.
  - e. The entrant will exit the confined space immediately if given the order by the attendant or entry supervisor.
  - f. The entrant will also be given the opportunity to participate in and review calibrated air monitoring data and what the air is tested for and how often.
  - g. The entrant has the authority to review the results of confined space atmospheric testing results and continuous monitoring results, prior to entry and at their request.

#### **45.8 TRAINING**

Training is required prior to the time of assignment, prior to a change in duties and whenever a new hazard exists or any other change or deviation occurs.

Training will be conducted by Atlas Painting and Sheeting. The training certificate will include the employee's name, trainer's signature and date(s) of training. The certificate will be made available to the employee and their authorized representative.

#### 45.8.1 ENTRANTS AND ATTENDANTS

Initial training is required for all Entrants and Attendants with a refresher course given every 3 years. The Entrants and Attendants will be trained in the following:

- 1. The contents and intentions of this Confined Space Program
- 2. The proper methods for calibrating and using test equipment
- 3. The duties and responsibilities of Attendants a specified in this Confined Space Program

#### 45.8.2 JOB SUPERVISORS

Persons that assume the role of Job Supervisor must attend the entrant/attendant course, plus additional training to meet the duties of the Job Supervisors. Initial training is required with a refresher course given every 3 years.

#### 45.9 OUTSIDE RESCUE SERVICES

In most cases Atlas Painting and Sheeting can reasonably expect to use an outside rescue service. Use of an outside rescue service will be planned well in advance and documented. Careful consideration should be given to using outside services since they cannot guarantee 100% availability.

### **45.10 RESCUE EQUIPMENT**

# Rescue/Retrieval Systems

To facilitate non-entry rescue, rescue/retrieval systems will be used if the space configuration allows whenever an authorized entrant enters a permit space. The only situation for which they are not used is if the rescue/retrieval system would increase the overall risk of entry or would not contribute to the rescue of the entrant.

Atlas Painting and Sheeting will ask the host facility if they are qualified and ready to provide rescue services for permit-required confined space entry. If the host facility cannot provide this service, Atlas Painting and Sheeting will have an outside rescue service available, The outside rescue service will be provided the opportunity to examine the site, practice rescue at the site and decline rescue services as appropriate. Rescue services will be on-site for all IDLH conditions.

#### 45.11 PROGRAM REVIEW

The permit-required confined space program will be reviewed on an annual basis by Atlas Painting and Sheeting Management and any affected Supervisor. The review will include a review of all permit-required confined space work, permits issued, accidents and incidents, methods to improve, methods of rescue and any other relevant topics.

## 46.0 CONFINED SPACE IN CONSTRUCTION

#### **46.1 DEFINITIONS**

**Attendant** is an individual stationed outside one or more permit spaces who assess the status of authorized entrants and who performed the duties as specified in 1926.1209.

Confined Space a space that meets all of the following criteria:

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

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

**Hazardous atmosphere** an atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue, injury, or acute illness from one or more of the following causes:

- 1. Flammable gas, vapor, or mist in excess of 10% of its lower flammable limit (LFL).
- 2. Airborne combustible dust at a concentration that meets or exceeds its lower flammable limits (LFL).
- 3. Atmospheric oxygen concentration below 19.5% or above 23.5%;
- 4. Atmospheric concentration of any substance for which a dose or permissible exposure limit (PEL) is 29 CFR 1926, Subpart D, Occupational Health and Environmental Control, or in Subpart Z, Toxic and Hazardous Substances, and which could result in employee exposure in excess of its dose or PEL.
- 5. Any other atmospheric condition that is immediately dangerous to life or health (IDLH).

**Immediately dangerous to life of health (IDLH)** any condition that would interfere with an individual's ability to escape unaided from a permit space and that poses a threat to life or that would cause irreversible adverse health effects.

**Non-permit space** a confined space that meets the definition of a confined space but does not meet the requirements for a permit-required confined space..

**Permit-required space** means a confined space that has one or more of the following characteristics:

- 1. Contains or has a potential to contain a hazardous atmosphere.
- 2. Contains a material that has the potential for engulfing an entrant.
- 3. Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls by a floor which slopes downward and tapers to a smaller cross section.
- 4. Contains any other recognized serious safety or health hazard.

#### **46.2 SIGNS**

Either a danger sign or other effective means will be used to inform all employees of spaces that are classified as confined spaces. Other effective means can include initial training of all employees and semi- annual refresher training. Where signs are used, the sign will read:

DANGER-PERMIT-REQUIRED CONFINED SPACE, DO NOT ENTER Other similar language may be used.

## **46.3 ALTERNATE PROCEDURE**

Atlas Painting and Sheeting may use an alternate procedure when entering a permit space if the following conditions are met.

- 1. All the physical hazards in the space are eliminated or isolated through engineering controls so the only hazard posed in the space is an actual or potential hazardous atmosphere.
- 2. Forced air ventilation alone is sufficient to maintain the permit space safe for entry.
- 3. Forced air ventilation is sufficient to maintain the permit space safe for entry, and that in the event the ventilation system stops working, entrants can exit the space safely.
- 4. Monitoring and inspection data supports items 1 and 2 above.
- 5. When entrance covers are removed, the opening is immediately guarded by a railing, temporary cover or other temporary barrier that would prevent an accident fall through the opening.

#### 46.4 RECLASSIFYING A CONFINED SPACE

A space classified as a permit-required confined space, may be reclassified as a non-permit confined space when a competent person determines the requirements below are met.

- 1. The permit space poses no actual or potential atmospheric hazards and if all the hazards within the space are eliminated or isolated.
- 2. The hazards of the space are eliminated or isolated, unless it can be demonstrated that is is infeasible.
- 3. All the hazards in the space have been eliminated or isolated, through certification that contains the date, the location of the space and the signature of the person making the determination.
- 4. If hazards arise within a permit space that has been reclassified as non-permit space, then each employee shall exit the confined space, and the space will be reevaluated by the competent person.

#### 46.5 EMPLOYER RESPONSIBILITIES

- 1. Evaluate the hazards of the permit space prior to entry.
- 2. Develop and implement the means, procedures and practices necessary for safe permit space entry operations.
- 3. Provide the necessary equipment at no cost to each employee and maintain the equipment properly, and ensure that each employee uses the equipment properly.
- 4. Evaluate the permit space by testing, monitoring and providing an early warning systemthat continuously monitors for non-isolated engulfment hazards.
- 5. Provide at least one attendant outside the permit space into which entry is authorized.
- 6. Develop and implement procedures for summoning rescue and emergency procedures.
- 7. Review the permit system, using the canceled permits within one year after each entry and revise the program as necessary.

### **46.6 ENTRY PERMIT**

The entry permit will identify the following:

- 1. Identify the space to be entered.
- 2. The purpose of the entry.
- 3. The date and the duration of the entry permit.
- 4. The authorized entrants.
- 5. Means of detecting an increase in atmospheric hazard levels in the event the ventilation system stops working.
- 6. Name of each attendant.
- 7. Name of the entry supervisor
- 8. The hazards of the permit space to be entered.
- 9. The measures to be used to control the hazards present in the permit space.
- 10. Rescue procedures.
- 11. Personal protective equipment, testing equipment, communication equipment, alarm systems and rescue equipment to be provided.
- 12. Any other information necessary to ensure employee safety.

## **46.7 TRAINING**

Training will include and be provided when:

- 1. Training will be in a language and vocabulary that the employee can understand.
- 2. Provided prior to a worker first being assigned duties under the Standard.
- 3. There is a change in the assigned duties.
- 4. When there is a change in permit space entry operations that present a hazard about which the employee has not been previously been trained.
- 5. Whenever there is any evidence of a deviation from the permit space entry permit space entry procedures as required by 29 CFR 1926.1204 (c) or there are inadequacies in the employee's knowledge or use of these procedures.
- 6. The training will establish employee proficiency in the duties required by the Standard and will introduce new or revised procedures, as necessary for compliance with the Standard.

7. Training records will contain the employee's name, the name of the trainer and the date of the training.

#### **46.8 DUTIES OF THE ENTRANT**

- 1. Use equipment as required by 29 CFR 1926.1204(d).
- 2. Communicate with the attendant as necessary.
- 3. Alert the attendant if there are any warning signs or symptoms of exposure to a dangerous situation or a prohibited condition.
- 4. Exit the permit space as quickly as possible when notified by the attendant to evacuate, notified by the entry supervisor to evacuate, the entrant notices a prohibited condition or an evacuation alarm is activated.

### **46.9 DUTIES OF THE ATTENDANT**

- 1. Understands the hazards that may be encountered during entry.
- 2. Is aware of possible behavioral effects of hazard exposure in authorized entrants.
- 3. Continuously maintains an accurate count of authorized entrants in the permit space.
- 4. Remains outside of the permit space during entry operations until relieved by another attendant.
- 5. Communicates with authorized entrants as necessary.
- 6. Assess activities and conditions inside and outside of the permit space to determine if it is safe for entrants to remain in the space.
- 7. Orders an evacuation of a permit space if a prohibited condition occurs, behavioral effects of hazard exposure are apparent in authorized entrant(s), a situation outside of the space could endanger the entrants, or if the attendant cannot effectively or safely perform their duties.
- 8. Summons rescue and other emergency services as soon as the attendant determines that authorized entrants may need assistance to escape the permit space.
- 9. Perform non-entry rescue as specified by the rescue procedure.
- 10. Performs no duties that might interfere with the attendants primary duty to assess and protect the authorized entrants.

### **46.10 DUTIES OF THE ENTRY SUPERVISOR**

- 1. Is familiar with and understands the hazards that may be faced during entry, including information on the mode, signs or symptoms and consequences of the exposure.
- 2. Verifies, by checking that the appropriate entries have been made on the permit, that all tests specified by the permit have been conducted and that all procedures and equipment specified by the permit are in place before endorsing the permit and allowing entry to begin.
- 3. Verifies, by checking that the appropriate entries have been made on the permit, that all tests specified by the permit have been conducted and that all procedures and equipment specified by the permit are in place before endorsing the permit and allowing entry to begin;
- 4. Terminates the entry and cancels or suspends the permit as required by § 1926.1205(e);

- 5. Verifies that rescue services are available.
- 6. Removes unauthorized individuals who enter or who attempt to enter the permit space during entry operations.
- 7. Determines, whenever responsibility for a permit space entry operation is transferred, and at intervals dictated by the hazards and operations performed within the space, that entry operations remain consistent with terms of the entry permit and that acceptable entry conditions are maintained.

#### 46.11 RESCUE AND EMERGENCY SERVICES

- 1. Rescue teams or services will:
  - A. Be capable to reach victim(s) within a time frame that is appropriate for the permit space hazard(s) identified.
  - B. Is equipped for and proficient in the needed rescue services.
  - C. Have access to all permit spaces where rescue or emergency services may be required.
  - D. Each rescue employee will be trained in basic first aid and cardiopulmonary resuscitation (CPR).
- 2. Rescue equipment will be onsite and in good working condition prior to entry into the permit space.

### 47.0 CONTROL OF HAZARDOUS ENERGY

The Control of Hazardous Energy standard 29 CFR 1910.147 (also referred to as Lockout/Tagout) covers the servicing and maintenance of machines and equipment in which the unexpected startup or the release of stored energy could cause injury or death to employees. This standard applies to any source of mechanical, hydraulic, pneumatic, chemical, thermal or other energy, but does not cover electrical hazards. Subpart S of 29 CFR 1910 covers electrical hazards and 29 CFR 1910.333 contains specific lockout/tagout provisions for electrical hazards. In construction, 29 CFR 1926.417 covers the logout and tagging of circuits and 29 CFR 1926.702 covers the requirements for equipment and tools.

#### 47.1 DEFINITIONS

Authorized (Qualified) Employees are the only ones certified to lock and tagout equipment or machinery. Whether an employee is considered to be qualified will depend upon various circumstances in the workplace. It is likely for an individual to be considered "qualified" with regard to certain equipment in the workplace, but "unqualified" as to other equipment. An employee who is undergoing on-the-job training and who, in the course of such training, has demonstrated an ability to perform duties safely at his or her level of training and who is under the direct supervision of a qualified person, is considered to be "qualified" for the performance of those duties. Only qualified employees may work on energized parts.

**Affected employees** are those employees who operate machinery or equipment upon which lockout or tagging out is required under this program.

**Other employees** are identified as those that do not fall into the authorized, affected or qualified employee category. Essentially, it will include all other employees.

#### 47.2 PREPARATION FOR LOCKOUT/TAGOUT PROCEDURES

- 1. A lockout/tagout survey has been conducted to locate and identify all energy sources to verify which switches or valves supply energy to machinery and equipment. Dual or redundant controls have been removed.
- 2. A tagout Schedule has been developed for each piece of equipment and machinery. This schedule describes the energy sources, location of disconnects, type of disconnect, special hazards and special safety procedures. The schedule will be reviewed each time to ensure employees properly lock and tag out equipment and machinery.
- 3. If a tagout schedule does not exist for a particular piece of equipment, machinery and process, one must be developed prior to conducting a lockout/tagout.

### 47.3 LOCKS, HASPS AND TAGS

All Qualified Personnel will be assigned a lock with one key, hasp and tag. All locks will be keyed differently, except when a specific individual is issued a series of locks for complex lockout-tagout tasks. In some cases, more than one lock, hasp and tag are needed to completely de-energize equipment and machinery.

All locks and hasps will be uniquely identifiable to a specific employee. All locks and hasps will be capable of withstanding the environment where they will be used. In a case of multiple locks or tags, all affected and authorized personnel will be informed of the lockout/ tagout and will be provided the same level of protection as the person(s) actually applying the lockout/ tagout.

An overall authorized person will oversee the lockout/ tagout per work shift. This person will ensure that this program is being followed. The authorized employee will have primary responsibility for a set number of employees working under the protection of a group lockout/ tagout device.

### 47.4 GENERAL LOCKOUT/TAGOUT PROCEDURES

Before working on, repairing, adjusting or replacing machinery and equipment, the following procedures will be utilized to place the machinery and equipment in a neutral or zero mechanical state. Atlas Painting and Sheeting will use locks for all lockout procedures, unless it is not feasible to use a lock. The locks will be padlock type devices and will have two keys, one maintained by the person conducting the lockout and one in a secure location. Each lock and/or tag will identify the name of the employee who is using the device.

- 1. Preparation for Shutdown. Before authorized or affected employees turn off a machine or piece of equipment, the authorized employee will have knowledge of the type and magnitude of the energy, the hazards of the energy to be controlled, and the means to control the energy. Notifyall affected Employees that the machinery, equipment or process will be out of service.
- 2. Machine or Equipment Shutdown. The machine or equipment will be turned or shut down using the specific procedures for that specific machine. An orderly shutdown will be utilized to avoid any additional or increased hazards to employees as a result of equipment de-energization.
- 3. Machine or Equipment Isolation. All energy control devices that are needed to control the energy to the machine or equipment will be physically located and operated in such a manner as to isolate the machine or equipment from the energy source.
- 4. Lockout/Tagout Device Application. Lockout/tagout devices will be affixed to energy isolating devices by authorized employees. Lockout devices will be affixed in a manner that will hold the energy isolating devices from the "safe" or "off" position.
- 5. Stored Energy: Following the application of the lockout or tagout devices to the energy isolating devices, all potential or residual energy will be relieved, disconnected, restrained, and otherwise renderedsafe.

- 6. Verification of Isolation: Prior to starting work on machines or equipment that have been locked or tagged out, the authorized employees will verify that isolation or de-energization of the machine or equipment have been accomplished. After assuring that no Employee will be placed in danger, test all lock and tag outs by following the normal start up procedures (depress start button, etc.).
- 7. Extended Lockout Tagout: Should the shift change before the machinery or equipment can be restored to service, the lock and tag out must remain. If the task is reassigned to the next shift, those Employees must lock and tag out before the previous shift may remove their lock and tag. Interstate Painting will assign an individual to be in charge of a group or shift change lockout operations.

### 47.5 RELEASE FROM LOCKOUT/TAGOUT

Before lockout/tagout devices are removed and the energy restored to the machine or equipment, the following actions will be taken:

- 1. The work area will be thoroughly inspected to ensure that nonessential items have been removed and that machine or equipment components are operational.
- 2. The work are will be checked to ensure that all employees have been safely positioned or removed.

Before the lockout/tagout devices are removed, the affected employees will be notified that the lockout/tagout devices are being removed.

1. Each lockout/tagout device will be removed from each energy isolating device by the employee who applied the device.

#### 47.6 TEMPORARY REMOVAL FROM LOCKOUT/ TAGOUT

- 1. Clear away tools.
- 2. Remove employees.
- 3. Remove the lockout/ tagout device.
- 4. Energize and proceed with testing.
- 5. De-energize and re-apply control measures.

# 47.7 LOCKOUT/TAGOUT PROCEDURE FOR ELECTRICAL PLUG-TYPE EQUIPMENT

This procedure covers all Electrical Plug-Type Equipment such as Battery Chargers, some Product Pumps, Office Equipment, Powered Hand Tools, Powered Bench Tools, Lathes, Fans, etc. When working on, repairing, or adjusting the above equipment, the following procedures must be utilized to prevent accidental or sudden startup:

- 1. Unplug Electrical Equipment from wall socket or in-line socket.
- 2. Attach "Do Not Operate" Tag and Plug Box & Lock on end of power cord.

  An exception is granted to not lock & tag the plug is the cord & plug remain in the exclusive control of the Employee working on, adjusting or inspecting the equipment.
- 3. Test Equipment to assure power source has been removed by depressing the "Start" or On" Switch.
- 4. Perform required operations.
- 5. Replace all guards removed.
- 6. Remove Lock & Plug Box and Tag.

7. Inspect power cord and socket before plugging equipment into power source. Any defects must be repaired before placing the equipment back in service.

### 47.8 LOCKOUT/TAGOUT PROCEDURES INVOLVING MORE THAN ONE EMPLOYEE

In the preceding procedures, if more than one Employee is assigned to a task requiring a lock and tag out, each must also place his or her own lock and tag on the energy isolating device(s).

### 47.9 MANAGEMENT'S REMOVAL OF LOCKOUT/TAGOUT

Only the Employee that locks and tags out machinery, equipment or processes may remove his/her lock tag. However, should the Employee leave before removing his/her lock and tag, the project foreman may remove the lock and tag only after informing the Employee by phone or attempting to call the Employee. The project foreman must be assured that all tools have been removed, all guards have been replaced and all Employees are free from any hazard before the lock and tag are removed and the machinery, equipment or process are returned to service.

## **47.10 TRAINING**

Training will be conducted initially when lockout/tagout procedures are to be used and workers will be retained as necessary. Training will include:

- 1. Authorized employees:
  - a. Recognition of applicable hazardous energy sources.
  - b. Details about the type and magnitude of the hazardous energy sources present in the workplace.
  - c. Methods and means required to isolate and control energy sources.
  - d. Clearance distances
- 2. Affected employees:
  - a. The purpose and use of the energy control procedure.
  - b. Electrical related safety practices
  - c. Clearance distances
- 3. Other employees:
  - a. Instructed about the procedure.
  - b. Prohibition relating to attempts to restart or re-energize machines or equipment which are locked or tagged out.
- 4. Retraining is required when:
  - a. Whenever there is a change in job classifications, change in equipment or change in process that presents new hazards.
  - b. believes the employee's knowledge to be inadequate.

Training will be documented and certified. The documentation will include the employee's name and signature, date of training, instructor's name and signature.

### **47.11 PERIODIC INSPECTION**

An annual inspection of the energy control procedures is required and will be documented.

- 1. The inspection will be performed by an authorized employee other than the one(s) using the energy control procedures being inspected. The company may use an outside expert to conduct this inspection.
- 2. The inspection will look for deviations or inadequacies and make corrections.
- 3. The inspection will include interviews each authorized and affected employee of their responsibilities for the energy control program.

## **47.12 OTHER REQUIREMENTS**

- 1. Employees are not to enter into spaces containing energized parts, unless the space has adequate lighting. Additional lighting maybe required.
- 2. Protective shields, protective barriers or insulating materials may be required as necessary when working in a confined space where electrical hazards may exist.
- 3. When handling long ducts or pipes that may touch electrical systems, the duct will be insulated or other safe practices used.
- 4. Portable ladders will have non-conductive side rails.
- 5. Prior to working around electrical equipment, all conductive material on the employee will be removed. If it is not possible to remove the conductive material it will be covered, wrapped or other insulating means used.
- 6. When working on or near de-energized parts, the parts will be considered live unless properly lockout or tagged out.

## 48.0 CRANES

The OSHA crane and derrick standard, 29 CFR 1926.1400 applies to power-operated equipment that can hoist, lower and horizontally move a suspended load. This includes articulating cranes, crawler cranes, mobile cranes, truck mounted cranes and overhead and gantry cranes.

## **48.1 GROUND CONDITIONS**

- 1. Ground conditions are the ability of the ground to support the equipment.
- 2. Prior to equipment use or assembly, the ground will be checked for the following conditions:
  - a. The ground is firm.
  - b. The ground is properly drained.
  - c. The ground is graded to properly support the equipment.
  - d. Meets the manufacturer's specifications for adequate support and degree of level are met.

## 48.2 EQUIPMENT ASSEMBLING AND DISASSEMBLING

- 1. The manufacturer's procedures and prohibitions will be complied with when assembling and disassembling equipment.
- 2. Assembling and disassembling will under the supervision of a competent person and a qualified person.

### 48.3 POWER LINE SAFETY UP TO 350 KV

- 1. Prior to working in an area, a hazard assessment will be performed to identify the work zone and to determine if any part of the equipment could get closer than 20 feet to a power line.
- 2. Prior to working an area with power lines the boundary will be demarcated using flags and range limiting devices to prohibit the operator from going past the boundary, or the area will be clearly defined in a 360° area the crane.
- 3. Ensure that no part of the equipment, load line or load could get closer than 20 feet to a power line.
- 4. If the equipment, load line or load will get closer than 20 feet from the power line, one of the following options must be in place prior to moving the load.
  - a. Deenergize and ground the power line.
  - b. Ensure that the equipment, load line or load does stay at least 20 feet from the power line.
  - c. Ensure the equipment, load line or load maintains clearance listed below:

Minimum Clearance in feet
10
15
20
25
35
45
Per utility owner or operate

- d. If either option b or c are chosen, then the following will be implemented.
  - 1. Conduct a planning meeting with the operator and other affected workers.
  - 2. If tag lines will be used, they will be non-conductive lines.
  - 3. Erect and maintain an elevated warning line, barricade or line of signs in view of the operator at 20 feet from the power line.

- 4. Implement at least one of the following:
  - a. Proximity alarm.
  - b. Dedicated spotter.

### 48.4 POWER LINE SAFETY OVER 1,000 KV

- 1. The requirements as set in Section 52.2 will apply with the following exception.
  - a. For power lines in excess of 1,000 kV, the Owner or Operator of the power line will be required to determine the safe distances.

### 48.5 INSPECTIONS

- 1. Equipment that has been modified will be inspected prior to use for the following requirements.
  - a. Modifications were made in accordance with 1926.1434.
  - b. Functional testing of the equipment.
  - c. Modifications are made with the manufacturer's approval in writing.
  - d. A Registered Professional Engineer (RPE) qualified in the equipment to be modified will ensure the original safety factor of the equipment is not reduced.
- 2. Equipment that has been repaired or adjusted will be inspected prior to use for the following requirements.
  - a. A qualified person will verify the repair or modification meets the manufacturer's criteria.
  - b. If the manufacturer has not set a criteria for the repair or adjustment, either a Registered Professional Engineer (RPE) or a qualified person will be required to ensure criteria is developed.
  - c. The equipment will be inspected prior to use.
- 3. Post assembly of equipment.
  - a. A qualified person will ensure the equipment was configured in accordance with the manufacturer equipment criteria.
  - b. If the manufacturer has not set a criteria for the assembly, either a Registered Professional Engineer (RPE) or a qualified person will be required to ensure criteria is developed.
  - c. The equipment will be inspected prior to use.
- 4. Each shift, the equipment will be inspected for the following:
  - a. A competent person will conduct a visual inspection prior to the shift where the equipment will be used. The inspections will include as a minimum:
    - a. Control mechanisms for maladjustments interfering with proper operation.
    - b. Control and drive mechanisms for apparent excessive wear of components and contamination by lubricants, water or other foreign matter.
    - c. Air, hydraulic, and other pressurized lines for deterioration or leakage, particularly those which flex in normal operation.
    - d. Hydraulic system for proper fluid level.
    - e. Hooks and latches for deformation, cracks, excessive wear, or damage such as from chemicals or heat.
    - f. Wire rope reeving for compliance with the manufacturer's specifications.
    - g. Wire rope, in accordance with 1926.1413(a).
    - h. Electrical apparatus for malfunctioning, signs of apparent excessive deterioration, dirt or moisture accumulation.
    - i. Tires (when in use) for proper inflation and condition.

- j. Ground conditions around the equipment for proper support, including ground settling under and around outriggers/stabilizers and supporting foundations, ground water accumulation, or similar conditions.
- k. Operator cab windows for significant cracks, breaks or other deficiencies that would hamper the operator's view.
- 5. Monthly Inspections will be conducted to inspect all of the requirements of the inspections conducted each shift and any other requirements as set by the equipment manufacturer. The inspections will be documented and will include the items inspected, the name and signature of the person conducting the inspection and the date of the inspection. Documentation will be retained for a minimum of three months.
- 6. Annual inspections will be conducted by a qualified person. As a minimum the following items will be inspected.
  - a. Equipment structure (including the boom and, if equipped, the jib):
  - b. Structural members: Deformed, cracked, or significantly corroded.
  - c. Bolts, rivets and other fasteners: loose, failed or significantly corroded.
  - d. Welds for cracks.
  - e. Sheaves and drums for cracks or significant wear.
  - f. Parts such as pins, bearings, shafts, gears, rollers and locking devices for distortion, cracks or significant wear.
  - g. Brake and clutch system parts, linings, pawls and ratchets for excessive wear.
  - h. Safety devices and operational aids for proper operation (including significant inaccuracies).
  - i. Gasoline, diesel, electric, or other power plants for safety-related problems and conditions, and proper operation.
  - j. Chains and chain drive sprockets for excessive wear of sprockets and excessive chain stretch.
  - k. Travel steering, brakes, and locking devices, for proper operation.
  - 1. Tires for damage or excessive wear.
  - m. Hydraulic, pneumatic and other pressurized hoses, fittings and tubing.
  - n. Hydraulic and pneumatic pumps and motors.
  - o. Hydraulic and pneumatic valves.
  - p. Hydraulic and pneumatic cylinders.
  - q. Slider pads for excessive wear or cracks.
  - r. Electrical components and wiring for cracked or split insulation and loose or corroded terminations.
  - s. Warning labels and decals as originally supplied by the equipment manufacturer.
  - t. Originally equipped operator seat.
  - u. Steps, ladders, handrails and guards are in good working condition.
- 7. The annual inspection will be documented with the items that were inspected, the name and signature of the person conducting the inspection and the date of the inspection.

## 48.6 SAFETY DEVICES

- 1. Safetydevices are required to be on the equipment and in the proper working condition before using the equipment. Safety devices include: crane level indicator, boom stops, jib stops, foot pedal brake locks, horns, seat belts, etc.
- 2. If the safety devices are not in proper working condition, the equipment will be removed from service and the equipment will not be used until repairs are completed.

#### 48.7 OPERATIONS

- 1. The employer will comply with all manufacturer procedures applicable to the operational functions of the equipment which also includes any attachments.
- 2. If the manufacturer procedures are unavailable, then the employer will develop and ensure compliance with all procedures necessary for the safe operation of the equipment and attachments.
- 3. The procedures for the operation of the equipment will be in the cab for use by the operator. The procedures include rated capacities (load charts), recommended operating speeds, special hazard warnings, instructions and operator's manual.

## 48.8 AUTHORITY TO STOP OPERATION

1. The operator has the authority to stop work, and to refuse to handle loads unless a qualified person has determined that the safety has been assured.

#### 48.9 SIGNALS

- 1. Signals will conform with Appendix A of the crane standard.
- 2. The equipment operator must have line of site to the person conducting the signaling.
- 3. Only one person will be allowed to provide signals to the equipment operator.
- 4. If the line of site is blocked, an alternate method will be required. The most common method is two way radio with a dedicated channel just to the lift.
- 5. A signal person will be required for the following:
  - a. The point of the operation is not in the full view of the operator.
  - b. The view is obstructed when the equipment is traveling.
  - c. The operator or the person handling the load determines a signal person is necessary.

#### 48.10 FALL PROTECTION

- 1. Fall protection will be required when walking or inspecting the equipment when exposed to a fall of six feet or greater.
- 2. Fall protection may be through the use of a harness and lanyard to an approved anchorage point, or by a guardrail system.

### **48.11 SWING AREA CONTROL**

- 1. To prevent a person from getting struck by the equipment, all employees will be trained as to where the swing area will be and the area will be demarcated using warning lines, railing, barriers or other acceptable means.
- 2. If an employee needs to enter into the swing area, the employee will get the attention of the operator, get the operator's approval for entering, then enter the swing area.

### 48.12 OPERATOR QUALIFICATION AND CERTIFICATION

- 1. Operator qualification and certification is not required for operators of derricks (see 1926.1436), sideboom cranes (see 1926.1440), or equipment with a maximum manufacturer-rated hoisting/lifting capacity of 2,000 pounds or less.
- 2. Where operator qualification and certification is required, one of the following options is required.
  - a. Certification by an accredited crane operator testing organization.
  - b. Qualification by an audited employer program.

- c. Qualification by the U.S. military.
- d. Licensing by a government entity.
- 3. Employees not qualified or certified may operate equipment as an operator in training under the supervision of a trainer.

# **48.13 SIGNAL PERSON QUALIFICATION**

- 1. Employees who will be signal persons will be required to meet one of the following qualification requirements.
  - a. Third party qualified evaluator.
  - b. Employer's qualified evaluator.
- 2. Documentation will be available onsite for the qualification. The documentation will specify the type of signaling for which the signal person meets the requirements.
- 3. The signal person must have the following knowledge:
  - a. Know and understand the types of signals used.
  - b. Be competent in the application of the type of signals used.
  - c. Have a basic understanding of equipment operation and limitations.
  - d. Know and understand the relevant requirements of 1926.1419 through 1926.1422 and 1926.1428.
  - e. Pass either an oral or written test, and a practical test.

## 49.0 HOIST SAFETY

#### 49.1 RESPONSIBILITIES

#### **49.1.1 FOREMAN**

- 1. Ensure employees under their supervision receive the required training and are certified and licensed to operate the cranes and hoists in their areas.
- 2. Provide training for prospective crane and hoist operators. This training must be conducted by a qualified, designated instructor who is a licensed crane and hoist operator.
- 3. Evaluate crane and hoist trainees using the Crane Safety Checklist.
- 4. Ensure hoisting equipment is inspected and tested monthly by a responsible individual and that rigging equipment is inspected annually.

#### 49.1.2 CRANE AND HOIST OPERATORS

- 1. Operating hoisting equipment safely.
- 2. Conducting functional tests prior to using the equipment.
- 3. Selecting and using rigging equipment appropriately.
- 4. Having a valid operator's license on their person while operating cranes or hoists.
- 5. Participating in the medical certification program, as required.

#### 49.2 CRANE AND HOIST OPERATORS

To be qualified as a Crane and Hoist Operator, the candidate will have received hands-on training from a licensed, qualified crane and hoist operator designated by the candidate's supervisor.

## 49.3 CRANE AND HOIST SAFETY DESIGN REQUIREMENTS

Following are the design requirements for cranes and hoists and their components:

- 1. The design of all commercial cranes and hoists will comply with the requirements of ASME/ANSI B30 standards and Crane Manufacturer's Association of America standards (CMAA-70 and CMAA-74).
- 2. All crane and hoist hooks will have safety latches.
- 3. Hooks will not be painted (or re-painted) if the paint previously applied by the manufacturer is worn.
- 4. Crane pendants will have an electrical disconnect switch or button to open the main-line control circuit.
- 5. Cranes and hoists will have a main electrical disconnect switch. This switch will be in a separate box that is labeled with lockout capability.
- 6. Crane bridges and hoist monorails will be labeled on both sides with the maximum capacity.
- 7. Each hoist-hook block will be labeled with the maximum hook capacity.
- 8. Directional signs indicating N-W-S-E will be displayed on the bridge underside, and a corresponding directional label will be placed on the pendant.
- 9. A device such as an upper-limit switch or slip clutch will be installed on all building cranes and hoists. A lower-limit switch may be required when there is insufficient hoist rope on the drum to reach the lowest point.

- 10. All cab and remotely operated bridge cranes will have a motion alarm to signal bridge movement.
- 11. All newly installed cranes and hoists, or those that have been extensively repaired or rebuilt structurally, will be load tested at 125% capacity prior to being placed into service.
- 12. If an overload device is installed, a load test to the adjusted setting is required.
- 13. Personnel baskets and platforms suspended from any crane will be designed in accordance with the specifications in 29 CFR 1926.550(g).

#### 49.4 GENERAL SAFETY RULES

- 1. Do not engage in any practice that will divert your attention while operating the crane.
- 2. Respond to signals only from the person who is directing the lift, or any appointed signal person. Obey a stop signal at all times, no matter who gives it.
- 3. Do not move a load over people. People will not be placed in jeopardy by being under a suspended load. Also, do not work under a suspended load unless the load is supported by blocks, jacks, or a solid footing that will safely support the entire weight. Have a crane or hoist operator remain at the controls or lock open and tag the main electrical disconnect switch.
- 4. Ensure that the rated load capacity of a crane's bridge, individual hoist, or any sling or fitting is not exceeded. Know the weight of the object being lifted or use a dynamometer or load cell to determine the weight.
- 5. Check that all controls are in the OFF position before closing the main-line disconnect switch.
- 6. If spring-loaded reels are provided to lift pendants clear off the work area, ease the pendant up into the stop to prevent damaging the wire.
- 7. Avoid side pulls. These can cause the hoist rope to slip out of the drum groove, damaging the rope or destabilizing the crane or hoist.
- 8. To prevent shock loading, avoid sudden stops or starts. Shock loading can occur when a suspended load is accelerated or decelerated, and can overload the crane or hoist. When completing an upward or downward motion, ease the load slowly to a stop.

#### 49.5 RIGGING

Only select rigging equipment that is in good condition. All rigging equipment will be inspected annually; defective equipment is to be removed from service and destroyed to prevent inadvertent reuse. The load capacity limits will be stamped or affixed to all rigging components. Prior to each use on each shift, the rigging equipment will be inspected. When rigging equipment is not in use, it will be removed from the work environment and placed into a clean area.

Atlas Painting and Sheeting policy requires a minimum safety factor of 5 to be maintained for wire rope slings.

The following types of slings will be rejected or destroyed:

- 1. Nylon slings with
  - a. Abnormal wear.
  - b. Torn stitching.
  - c. Broken or cut fibers.
  - d. Discoloration or deterioration.

- 2. Wire-rope slings with
  - a. Kinking, crushing, bird-caging, or other distortions.
  - b. Evidence of heat damage.
  - c. Cracks, deformation, or worn end attachments.
  - d. Six randomly broken wires in a single rope lay.
  - e. Three broken wires in one strand of rope.
  - f. Hooks opened more than 15% at the throat.
  - g. Hooks twisted sideways more than 10 deg. from the plane of the unbent hook.
  - h. Wear of one-third the original diameter of outside individual wires.
  - i. Wire rope safety will follow ANSI B30.5-1968 or SAE J959-1966.
- 3. Alloy steel chain slings with
  - a. Cracked, bent, or elongated links or components.
  - b. Cracked hooks.
  - 4. Shackles, eye bolts, turnbuckles, or other components that are damaged or deformed.

#### 49.6 RIGGING A LOAD

- 1. Determine the weight of the load. Do not guess. Do not load in excess of the load rating.
- 2. Determine the proper size for slings and components.
- 3. Do not use manila rope for rigging.
- 4. Make sure that shackle pins and shouldered eye bolts are installed in accordance with the manufacturer's recommendations.
- 5. Where hooks are used, the hook will be equipped with a latch to eliminate the hook throat opening.
- 6. Make sure that ordinary (shoulderless) eye bolts are threaded in at least 1.5 times the bolt diameter.
- 7. Use safety hoist rings (swivel eyes) as a preferred substitute for eye bolts wherever possible.
- 8. Pad sharp edges to protect slings. Remember that machinery foundations or angle-iron edges may not feel sharp to the touch but could cut into rigging when under several tons of load. Wood, tire rubber, or other pliable materials may be suitable for padding.
- 9. Do not use slings, eye bolts, shackles, or hooks that have been cut, welded, or brazed.
- 10. Install wire-rope clips with the base only on the live end and the U-bolt only on the dead end. Follow the manufacturer's recommendations for the spacing for each specific wire size.
- 11. Determine the center of gravity and balance the load before moving it.
- 12. Initially lift the load only a few inches to test the rigging and balance.
- 13. Tag lines will be required to help guide a load. When tag lines are used, the person handling the tag line will have a clear line of site where he will be walking and to the load being moved.
- 14. At no time will employee be allowed to stand or walk under a suspended load.

#### 49.7 HAND SIGNALS

Signals to the operator will be in accordance with the standard hand signals unless voice communications equipment (telephone, radio, or equivalent) is used. Signals will be discernible or audible at all times. Some special operations may require addition to or modification of the basic signals. For all such cases, these special signals will be agreed upon and thoroughly understood by both the person giving the signals and the operator, and will not be in conflict with the standard signals.

## **49.8 ELECTRICAL SAFETY**

Prior to using a crane, a walk thru of the job site will be conducted to look for any overhead electrical distribution and transmission lines. If overhead lines are present, the line rating must be determined.

- 1. For lines rated 50 kV or less, a minimum clearance between the lines and any part of the crane or load will be 10 feet.
- 2. For lines rated over 50 kV, a minimum clearance between the lines and any part of the crane or load will be 10 feet plus 0.4 inch for each 1 kV.
- 3. Where the crane operator has a restricted view, a spotter will assist the crane operator in observing the clearance of the crane.
- 4. Wherever possible, Atlas Painting and Sheeting will contact the owner of the line and arrange for the line to be shut down while crane operations are in use.
- 5. The crane will be provided with an electrical ground directly to the upper rotating structure supporting the boom.

### 50.0 POWERED INDUSTRIAL TRUCKS

Powered industrial trucks (forklift) include: forklifts, tractors, platform lift trucks, motorized hand trucks, and other specialized industrial trucks powered by electric or combustion engines.

#### 50.1 TRAINING

Atlas Painting and Sheeting will train and evaluate each worker (operator) who will operate a forklift. Training will be conducted in a classroom setting or by one-on-one lecture from a supervisor. The evaluation will be conducted on the forklift the operator will be operating. A course will be set up to simulate the normal conditions the operator may expect. Prior to operating a forklift, the worker will be trained in the following:

#### **50.1.1 INITIAL TRAINING**

- 1. Operating instructions, warnings and precautions for the type of forklift that the worker will be authorized to operate.
- 2. Differences between a forklift and an automobile.
- 3. Forklift controls and instrumentation- where they are located, what they do and how they work.
- 4. Engine or motor operation.
- 5. Steering and maneuvering.
- 6. Visibility.
- 7. Fork and attachment adaption.
- 8. Vehicle capacity and stability.
- 9. Inspection and maintenance.
- 10. Refueling or recharging procedures.
- 11. Operating limitations.
- 12. Any site specific instructions such as surface conditions and types of loads.

### 50.1.2 REFRESHER TRAINING

Refresher training will be conducted when:

- 1. The operator has been observed to operate the vehicle in an unsafe manner.
- 2. An accident or near-miss has occurred.
- 3. Buys or rents a different type of forklift that the operator was trained to operate.
- 4. A change in the workplace that could affect the safe operation of the forklift.
- 5. At least every three years.

### **50.2 SAFETY**

- 1. Employees will not be allowed to stand or pass under the elevated portion of the forklift.
- 2. Riders are not authorized unless a safe place to ride is provided.
- 3. When a forklift is not in use, the forks will be lowered and the forklift will be shut-off and the brake set.
- 4. The operator will maintain a safe distance between the forklift and the sides of ramps or platforms.

- 5. If the forklift has a seat belt, the operator will be required to use it.
- 6. Pedestrians have the right of way.

### **50.3 FORKLIFT DESIGNATIONS**

Prior to using a forklift, the operator and will ensure that it is safe to use in the environment it will be use in. The following table provides the current designations for forklifts.

Class	Type of Forklift
Type D	Diesel powered: few safeguards against hazards.
Type DS	Diesel powered: more safeguards that Class D, such as exhaust, fuel and electrical safety features.
Type DY	Diesel powered: more safeguards that Class DS and has no electrical equipment, but includes a temperature limitation feature.
Type E	Electric powered: few safeguards against fire and electrical shock hazards.
Type ES	Electric powered: more safeguards that Class E such as sparkarresting features.
Type EE	Electric powered: more safeguards that Class ES, by enclosing all electrical equipment.
Type EX	Electric powered: more safeguards that Class EE, constructed for use around certain flammable vapors, dusts and fibers.
Type G	Gasoline powered: few safeguards against fire hazards.
Type GS	Gasoline powered: more safeguards that Class G, such as fuel, exhaust and electrical safety features.
Type LP	Propane gas powered: few safeguards against fire hazards.
Type LPS	Propane gas powered: more safeguards than Class LP, such as fuel, exhaust and electrical safety features.

## **50.4 ON-ROAD FORKLIFTS**

- 1. Follow all traffic regulations.
- 2. When crossing railroad tracks, cross diagonally when possible and do not park within 8 feet of any railroad track.
- 3. On all grades, the load and load engaging means will be tilted back and raised only as far as necessary to clear the road surface.
- 4. Emergency vehicles will have the right of way.

#### **50.5 INSPECTION AND MAINTENANCE**

Prior to use, the operator will inspect the forklift. If any problems are revealed during the inspection, the operator will not operate the forklift until it has been inspected and any problems corrected by a qualified maintenance person.

#### 50.5.1 INSPECTION

Check the following:

- 1. Fluid levels
- 2. Tires
- 3. Hoses/belts/cables
- 4. Mast and forks
- 5. Fuel or battery level
- 6. Safety equipment
- 7. Gauges and controls
- 8. Horns and alarms
- 9. Steering and brakes
- 10. Anything else as recommended by the forklift manufacturer.

### **50.5.2 MAINTENANCE**

- 1. Prior to making repairs to the electrical equipment, disconnect the battery.
- 2. No repairs will be made in Class I, II and II hazardous locations.
- 3. Replace parts only with equivalent parts.

### 50.6 PICKING UP, TRAVELING AND PLACING A LOAD

## **50.6.1 PICKING UP A LOAD**

- 1. Make sure the load does not exceed the capacity of the forklift.
- 2. Center the forks to evenly distribute the load.
- 3. Check for overhead obstructions.
- 4. Drop the forks to the floor.
- 5. Drive into the load as far as possible.
- 6. Tilt the load back slightly and then lift.
- 7. Back out slowly to clear any obstacles.
- 8. Lower the load to the safe traveling height.

## 50.6.2 TRAVELING WITH A LOAD

- 1. Pedestrians always have the right of way.
- 2. Keep the load tilted back slightly.
- 3. Keep the forks 2 to 4 inches above the traveling surface.
- 4. Prior to moving, look behind and around the forklift for pedestrians and obstacles.
- 5. If the load is large and blocks the operator's view, travel in reverse.
- 6. Drive at safe speeds.
- 7. Sound the horn when approaching intersections or near pedestrians.

8. On ramps and inclines, drive a loaded forklift with the load in the uphill direction. (Except on roadways)

## **50.6.3 PLACING A LOAD**

- 1. Stop the forklift in front of the desired location.
- 2. Slowly raise the load to the required height.
- 3. Move forward slowly with the load raised.
- 4. Position the load for placement, tilting the load forward to level it.
- 5. Place the load square and straight.
- 6. Once the load has settled, back up slowly.
- 7. Prior to backing, check behind and around the forklift for pedestrians and obstacles.

### 51.0 EXCAVATION AND TRENCHING

This program outlines procedures and guidelines for the protection of employees working in and around excavations and trenches. This program requires compliance with OSHA Standards described in Subpart P (CFR 1926.650) for the construction industry.

Compliance is mandatory to ensure employee protection when working in or around excavations. The programs in this manual on confined space, hazard communication, lock-out/tag-out, respiratory protection, and any other safety programs or procedures deemed essential for employee protection, are to be used in conjunction with this program.

#### **51.1 RESPONSIBILITIES**

It is the responsibility of each superintendent and supervisor to implement and maintain the procedures and steps set forth in this program. Each employee involved with excavation and trenching work is responsible to comply with all applicable safety procedures and requirements of this program.

#### 51.2 DEFINITIONS

**Benching** a method of protecting employees from cave-ins by excavating the sides of an excavation to form one or a series of horizontal levels or steps, usually with vertical or near vertical surfaces between levels.

**Cave-In** the separation of a mass of soil or rock material from the side of an excavation, or the loss of soil from under a trench shield or support system, and its sudden movement into the excavation, either by failing or sliding, in sufficient quantity so that it could entrap, bury, or otherwise injure and immobilize a person.

**Competent Person** 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.

**Excavation** any man-made cut, trench, or depression in an earth surface, formed by earth removal.

Hazardous Atmosphere an atmosphere which by reason of being explosive, flammable, poisonous, corrosive, oxidizing, irritating, oxygen deficient, toxic, or otherwise harmful, may cause death, illness, or injury.

**Protective System** a method of protecting employees from cave-ins, from material that could fall or roll from an excavation, or from the collapse of adjacent structures. Protective systems include support systems, sloping and benching systems, shield systems, and other systems that provide necessary protection.

**Shield** a structure that is capable of withstanding the forces imposed on it by a cave-in and thereby protects employees within the structure. Shields can be permanent structures or can be designed to be portable and moved along as work progresses. All shields must be in accordance with 29 CFR 1926.652(c)3 or (c)4.

**Sloping** a method of protecting workers from cave-ins by excavating to form sides of an excavation that are inclined away from the excavation to prevent cave-ins. The angle of incline required to prevent a cave-in varies with differences such as soil type, length of exposure, and application of surcharge loads.

**Trench** a narrow excavation below the surface of the ground, less than 15 feet wide, with a depth no greater than the width.

**Undermining** can be caused by such things as leaking, leaching, caving or over-digging. Undermined walls can be very dangerous.

**Vibration** a force that is present on construction sites and must be considered. The vibrations caused by backhoes, dump trucks, compactors and traffic on job sites can be substantial.

# **51.3 GENERAL REQUIREMENTS**

Before any work is performed and before any employees enter the excavation, a number of items must be checked and insured:

- 1. Before any excavation, underground installations must be determined. This can be accomplished by either contacting the local utility companies or the local "one-call' center for the area. All underground utility locations must be documented on the proper forms. All overhead hazards (surface encumbrances) that create a hazard to employees must be removed or supported to eliminate the hazard.
- 2. If the excavation is to be over 20 feet deep, it must be designed by a registered professional engineer who is registered in the state where work will be performed.
- 3. Adequate protective systems will be utilized to protect employees. This can be accomplished through sloping, shoring, or shielding.
- 4. The work site must be analyzed in order to design adequate protection systems and prevent caveins. There must also be an excavation safety plan developed to protect employees.
- 5. Workers must be supplied with and wear any personal protective equipment deemed necessary to assure their protection.
- 6. All spoil piles will be stored a minimum of four (4) feet from the sides of the excavation. The spoil pile must not block the safe means of egress.
- 7. If a trench or excavation is 4 feet or deeper, stairways, ramps, or ladders will be used as a safe means of access and egress. For trenches, the employee must not have to travel any more than 25 feet of lateral travel to reach the stairway, ramp, or ladder.
- 8. No employee will work in an excavation where water is accumulating unless adequatemeasures are used to protect the employees.
- 9. A competent person will inspect all excavations and trenches daily, prior to employee exposure or entry, and after any rainfall, soil change, or any other time needed during the shift. The competent person must take prompt measures to eliminate any and all hazards.

- 10. Excavations and trenches 4 feet or deeper that have the potential for toxic substances or hazardous atmospheres will be tested at least daily. If the atmosphere is inadequate, protective systems will be utilized.
- 11. If work is in or around traffic, employees must be supplied with and wear orange reflective vests. Signs and barricades must be utilized to ensure the safety of employees, vehicular traffic, and pedestrians.

### **51.4 COMPETENT PERSON**

The OSHA Standards require that the competent person must be capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and have authorization to take prompt corrective measures to eliminate them and, if necessary, to stop the work.

A competent person is required to:

- 1. Have a complete understanding of the applicable safety standards and any other data provided.
- 2. Assure the proper locations of underground installations or utilities, and that the proper utility companies have been contacted.
- 3. Conduct soil classification tests and reclassify soil after any condition changes.
- 4. Determine adequate protective systems (sloping, shoring, or shielding systems) for employee protection.
- 5. Conduct all air monitoring for potential hazardous atmospheres.
- 6. Conduct daily and periodic inspections of excavations and trenches.
- 7. Approve design of structural ramps, if used.

### 51.5 SOIL CLASSIFICATION AND IDENTIFICATION

The OSHA Standards define soil classifications within the Simplified Soil Classification Systems, which consist of four categories: Stable rock, Type A, Type B, and Type C. Stability is greatest in stable rock and decreases through Type A and B to Type C, which is the least stable. Appendix A of the Standard provides soil mechanics terms and types of field tests used to determine soil classifications. Stable rock is defined as natural solid mineral matter that can be excavated with vertical sides and remain intact while exposed.

### Type A soil is defined as:

- 1. Cohesive soils with an unconfined compressive strength of 1.5 tons per square foot (TSF) or greater.
- 2. Cemented soils like caliche and hardpan are considered Type A.

# Soil is NOT Type A if:

- 1. It is fissured.
- 2. The soil is subject to vibration from heavy traffic, pile driving or similar effects.
- 3. The soil has been previously disturbed.
- 4. The material is subject to other factors that would require it to be classified as a less stable material.
- 5. The exclusions for Type A most generally eliminate it from most construction situations.

#### Type B soil is defined as:

- 1. Cohesive soil with an unconfined compressive strength greater than .5 TSF, but less than 1.5 TSF.
- 2. Granular cohesionless soil including angular gravel, silt, silt loam, and sandy loam.
- 3. The soil has been previously disturbed except that soil classified as Type C soil.
- 4. Soil that meets the unconfined compressive strength requirements of Type A soil, but is fissured or subject to vibration.
- 5. Dry rock that is unstable.

### Type C soil is defined as:

- 1. Cohesive soil with an unconfined compressive strength of .5 TSF or less.
- 2. Granular soils including gravel, sand and loamy sand.
- 3. Submerged soil or soil from which water is freely seeping.
- 4. Submerged rock that is not stable.

#### **52.0 DIG SAFE**

Prior to conducting digging, trenching or excavating operations, a call must be placed to the State's Dig Safe number. This call must be placed at least 48 hours but not more than 5 days prior to the day when digging is to begin (some States may have different requirements). The company will then record the Dig Safe number that is provided and record the list of utilities that will be contacted. Prior to digging, the company willensure that all of the utilities that were to be contacted were contacted.

#### 52.1 DIG SAFE PROCEDURES

- 1. Call the State Dig Safe phone number 48 hour to 5 days prior to digging.
- 2. Mark out the work area using white spray paint.
- 3. Verify that all companies were notified and that the area is marked. Record this process.
- 4. Begin digging operations, if digging within 2 feet of a marking, then the digging must be by hand, and/or follow State regulations.
- 5. Where markings have been removed or are no longer visible, the company will contact the utilities to remark the area.
- 6. At the completion of digging operations, follow the State regulations which may require a follow-up call to Dig Safe.

#### **52.2 UNDERGROUND UTILITY LINE COLOR CODES**

- 1. Red electric
- 2. Yellow gas-oil-steam
- 3. Orange communication CATV
- 4. Blue water
- 5. Green sewer
- 6. Pink temporary survey markings
- 7. White proposed excavation

#### **52.3 DIG SAFE TELEPHONE NUMBERS**

The national Dig Safe Number is 811

#### 52.4 INFORMATION REQUIRED WHEN CALLING DIG SAFE

STATE:	MUNICIPALITY:
ADDRESS/LOCATION:	
INTED SECTING STREET.	
TYPE OF WORK:	
DEPTH OF WORK	
NAME OF CALLER:	TITLE:
START DATE:	TIME:
PHONE:	FAX:
COMPANY:	
<b>EXCAVATOR DOING WORK</b>	
AREA PREMARKED? Y or N	

#### 53.0 PLANTS AND INSECT HAZARDS

The competent person and foreman, upon initially arriving upon a project location should identifyif there may be any plant or insect hazards. These hazards may include poison ivy, poison oak, poison sumac, bees and insects that carry the West Nile Virus.

#### **53.1 PLANTS**

Urushiol is the oil in poison ivy, oak and sumac that causes the reaction. Typically a rash will appear in one to three days and may last up to several weeks. If a worker suspects an exposure to a poisonous plant, wash the affected area immediately five to six times and if rubbing alcohol is available use this during one of the washings. Remove any clothing that may have come in contact with the plant..

#### 53.1.1 POISON IVY

- 1. Poison ivy has three notched leaves.
- 2. Grows as vines and shrubs.
- 3. Can grow as high as 60 feet.
- 4. Red in the early spring, shiny green in the summer and red or orange in the fall.
- 5. Grows as a bush in the North and Great Lakes and as a vine in the East, Midwest and South.

#### 53.1.2 POISON OAK

- 1. Three leaflets, lobbed like oak leaf.
- 2. Turns red in the fall.
- 3. Eastern poison oak can be found from the southern tip of New Jersey to Florida and west to Texas and Oklahoma. Western poison oak grows from the Peninsula of California to British Columbia.

#### 53.1.3 POISON SUMAC

- 1. Long leaves with several leaflets at the end of a twig.
- 2. Grows in dense clusters and up to 25 feet high.
- 3. Found in bogs and swamps in the Atlantic and great lakes regions.

#### 53.1.4 CONTROL METHODS

The competent person and project foreman should carefully walk around the project site to determine if any poisonous plants are onsite. If any are found, the area should be delineated using caution tape and all worker informed at a pre-job safety meeting.

#### 53.2 INSECTS

There are numerous insects that may cause workers harm such as bees, ticks that cause Lyme Disease and the insects that carry the West Nile Virus. Prior to starting work on any project, the competent person and foreman should determine what types of insect hazards may be present.

#### **53.2.1 BEES**

Prior to starting, the competent person and foreman should determine if the structure and the surrounding area may have bees and/or bee nests. If any are found in areas that work will be conducted, the area will be sprayed using bee spray. Additional control measures may be required. All workers must be interviewed to determine if any are allergic to bees. If so, then the worker should be required to maintain epinephrine onsite.

#### 53.2.2 LYME DISEASE

#### 53.2.2.1 PREVENTATIVE MEASURES

When in tick-infested habitat special precautions to prevent tick bites should be taken, such as wearing light-colored clothing (for easy tick discovery) and tucking pants into socks and shirt into pants. Consider the use of repellents. Check after every two to three hours of outdoor activity for ticks on clothing or skin. Brush off any ticks on clothing before skin attachment occurs. A thorough check of body surfaces for attached ticks should be done at the end of the day.

#### 53.2.2.2 HOW SHOULD A TICK BE REMOVED?

Grasp the mouthparts with tweezers as close as possible to the attachment (skin) site. Be careful not to squeeze, crush or puncture the body of the tick, which may contain infectious fluids. After removing the tick, thoroughly disinfect the bite site and wash hands. See or call a doctor if there are concerns about incomplete tick removal. Do not attempt to remove ticks by using petroleum jelly, lit cigarettes or other home remedies because these may actually increase the chance of contracting a tick-borne disease.

#### 53.2.3 WEST NILE VIRUS

West Nile Virus is a mosquito-borne infection that can cause encephalitis. There are many different species of mosquitoes, but only a small percentage have been associated with West Nile Virus.

#### 53.2.3.1 SAFETY PRECAUTIONS

- 1. Reduce mosquito-breeding areas by making sure that wheelbarrows, buckets, and other containers are turned upside down when not being used so that they do not collect standing water.
- 2. Wear shoes, long pants with bottoms tucked into boots or socks, and a long-sleeved shirt when outdoors for long periods of time, or when many mosquitoes are most active (between dusk and dawn).
- 3. Use mosquito repellent according to label directions when outdoors for long periods of time and when mosquitoes are most active. Look for repellent with DEET.

#### 54.0 LIFTING SAFETY

Prior to lifting a load, whether manually or using a hand truck, take a moment to review the lift to determine if the lift can be completed safely by one person or if a second person or if mechanical help such as a hand truck is required.

#### 54.1 LIFTING A LOAD MANUALLY

- 1. Check your path of travel for tripping hazards. Remove the hazards if possible.
- 2. Avoid slippery or uneven surfaces when lifting.
- 3. Be sure you have a tight grip on the object before you lift.
- 4. Lift with the legs and keep the back straight.
- 5. Use slow and smooth movements during the lift
- 6. Keep your body facing the object while lifting.
- 7. Make sure you can see over the object during movement.
- 8. Keep the load close to the body.

#### 54.2 HAND TRUCK AND DOLLY

- 1. When moving large loads such as a drum, push the load, do not pull.
- 2. Make sure the load is secured to the hand truck during the move.
- 3. Check the path of travel for tripping hazards.

#### 55.0 SAFE OPERATING PROCEDURES

#### 55.1 SAFE OPERATING PROCEDURES

Prior to using any equipment, read the manufacturer's Safe Operating Procedures (SOPs). These procedures will allow the user to work safely and prevent harm to himself and others in the work place. If the manufacturer's SOPs are unavailable, contact the Project Superintendent or Competent Person for guidance. Below are general guidelines on equipment found at the work place.

#### 55.2 TRAINING

Employees will receive training on the safe operating procedures of the equipment or process they will or may operate on the following schedule:

- 1. Within the first 30 days of employment with .
- 2. Annually.
- 3. When new equipment or process is brought onsite that the employee will or may operate.
- 4. If any employee is observed violating the SOPs, the employee will be retrained.

#### 55.3 ABRASIVE BLAST CLEANING NOZZLES

- 1. All abrasive blast cleaning nozzles will be equipped with a "Dead Man" switch prior to use.
- 2. Never block the "Dead Man" switch in the open position. This could cause severe injuries.
- 3. Follow manufacturer's Safe Operating Procedures.

#### 55.4 ABRASIVE BLASTING SAFETY

- 1. Wear protective clothing, noise protection, blast helmets and gloves when abrasive blasting to prevent injury.
- 2. Breathing air must be odor free and a carbon monoxide detector in use as required by OSHA regulations.
- 3. Thoroughly examine the condition of hoses, hose fittings, couplings and unions prior to blasting. Replace any worn parts.
- 4. At couplings on the blast hose, ensure whip checks or other positive methods are in use to prevent hoses from becoming disconnected.
- 5. Never mix and match equipment, use only equipment recommended by the manufacturer.
- 6. During blast operations, the equipment operator must stay near the blast equipment.
- 7. Signals, hand signals or radios will be used to establish communications between the blasters and equipment operators.
- 8. When working above 6 feet, fall protection must be used.
- 9. When working on scaffolding, the blast line will be secured to the scaffold allowing enough hose for the blaster to use.
- 10. The blast helmet will be donned and removed either in a vestibule or outside the containment.
- 11. Never aim an operational blast nozzle at another person.
- 12. Each blast nozzle will be equipped with a deadman switch.
- 13. Follow manufacturer's Safe Operating Procedures.

#### 55.5 VACUUM RECOVERY EQUIPMENT (TITAN, VEC-LOADER)

- 1. Always wear heavy duty protective clothing, respiratory protection, and hearing protection as required.
- 2. Prior to starting, examine the condition of hoses, hose fittings, couplings and unions. Any piece of equipment that shows wear must be reported to your supervisor immediately and replaced.
- 3. Safety couplings will be installed on all air hose connections to prevent coupling failure.
- 4. During vacuuming operations, the machine operator must stay close to the vacuum in case of an emergency.
- 5. If a Y connection is attached to the vacuum line, and only one hose will be used, place a cover over the unused hose to prevent it from sucking up harmful materials.
- 6. When raising and lower hoses use rope or manlifts.
- 7. When personnel operating the vacuum are working on staging, they must wear the proper fall protection.
- 8. Equipment operators must stay away of all pinch points while vacuum operation are underway. If work is to be done next to the pinch points, ensure the vacuum is off using lockout/tagout procedures.
- 9. If waste is to be place in 55 gallon drums, use hand trucks to move the drum.
- 10. Only qualified personnel are to operate any vacuum equipment.
- 11. Follow manufacturer's Safe Operating Procedures.

#### 55.6 SUPERSUCKER

- 1. Always wear heavy duty protective clothing, respiratory protection, and hearing protection as required.
- 2. Prior to starting, examine the condition of hoses, hose fittings, couplings and unions. Any piece of equipment that shows wear must be reported to your supervisor immediately and replaced.
- 3. Safety couplings will be installed on all air hose connections to prevent coupling failure.
- 4. During vacuuming operations, the machine operator must stay close to the vacuum in case of an emergency.
- 5. If a Y connection is attached to the vacuum line, and only one hose will be used, place a cover over the unused hose to prevent it from sucking up harmful materials.
- 6. When personnel operating the vacuum are working on staging, they must wear the proper fall protection.
- 7. Equipment operators must stay away of all pinch points while vacuum operation are underway. If work is to be done next to the pinch points, ensure the vacuum is off using lockout/tagout procedures.
- 8. Never move the Supersucker with the collector body up.
- 9. Check all guards and safety devices are in place and functional.
- 10. Do not use hands or feet to remove obstructions from end of hose.
- 11. Only qualified personnel are to operate any vacuum equipment.
- 12. Follow manufacturer's Safe Operating Procedures.

#### 55.7 COMPRESSED AIR

- 1. Do not use compressed air to clean hair or clothing. Never turn compressed air against another employee for any reason.
- 2. Compressed air can readily enter skin and blood vessels. Free air in the blood stream can prove fatal.
- 3. Compressors will be equipped with a pressure relief device and pressure gauges, relieve pressure before removing filler plugs/caps, fittings or covers.
- 4. Use safety clips, whip checks or other positive restraints on all airline attachments.
- 5. Safety devices on compressors will be checked prior to use qualified person.
- 6. Obey all safety signs located on the compressor.
- 7. When refueling, shut the compressor off. Ground the fuel nozzle against the filler neck to avoid sparks.
- 8. Never smoke while refueling.
- 9. Keep sparks and other open flames away from the batteries.
- 10. Do not operate compressor without machine guard in place.
- 11. Follow manufacturer's Safe Operating Procedures.

#### 55.8 DUST COLLECTOR

- 1. Do not remove any screens or guards while the machine is in use.
- 2. Do not allow personnel into hoppers or plenums while the dust collector is operating.
- 3. Keep wood, canvas, rags and other large items from entering the dust collector.
- 4. Do not allow any burning materials such as cigarettes to enter into the dust collector as it may cause a dust explosion.
- 5. Do not use the dust collector as a vacuum to clean-up dust from a containment floor.
- 6. Wear the appropriate personal protective equipment when working in, on or around the dust collector.
- 7. Do not operate a dust collector unless properly trained and authorized.
- 8. Follow manufacturer's Safe Operating Procedures

#### 55.9 ELECTRICAL SAFETY

- 1. All electric tools will either be grounded using GFCI outlets or double insulated.
- 2. Cages will be used on extension lights.
- 3. All employees will be made aware of all emergency shut-off devices.
- 4. Electrical tools will be repaired by qualified personnel only.
- 5. Lockout/tagout procedures will be used where applicable.
- 6. Extension cords must be the three wire type (grounding plug). The ground must be in place and the cord shall not be frayed.
- 7. Follow manufacturer's Safe Operating Procedures.

#### 55.10 HAND TOOLS

- 1. Hand tools will comply with 29 CFR 1926.301
- 2. Hand tools will be inspected prior to use for wear and tear that would affect the use of the tool.
- 3. Wrenches, including adjustable, pipe, end and socket wrenches will not be used when the jaws are sprung to the point that slippage occurs.
- 4. Impact tools will be kept free of mushroomed heads.
- 5. Tools with wooden handles will be kept free of splinters and cracks and the handles will bekept tight in the tool.
- 6. Safety glasses will be worn whenever using hand tools.
- 7. Don't leave tools on scaffolds or over head when not in use.
- 8. Don't throw tools from one location to the next.
- 9. Follow manufacturer's Safe Operating Procedures.

#### 55.11 POWER TOOLS

- 1. Power-operated hand tools will comply with 29 CFR 1926.302
- 2. All power-operated hand tools will be used in accordance with manufacturer's safe operating procedures.
- 3. Electric power operated tools will either be double insulated or grounded in accordance with Subpart K of 29 CFR 1926.
- 4. Electric cords will not be used to raise or lower the tool.
- 5. Pneumatic power tools will be secured to the hose by a whip check, safety clips or other positive means to prevent the tools from becoming disconnected.
- 6. Hoses greater than ½" inside diameter will have a safety device at the source of supply or branch line.
- 7. Keep guards in place and in working order.
- 8. When adjusting tools, unplug the tools first.
- 9. Use a clamp or vice, not your hands to secure your work.
- 10. Safety glasses will be worn whenever using power operated tools.
- 11. Other safety equipment such as respirators, noise protections, gloves and safety shoes will be worn as directed by the safety officer.
- 12. Follow manufacturer's Safe Operating Procedures.

#### **55.12 AERIAL LIFTS**

- 1. Prior to using any aerial lift, the lift operator will survey the area to determine if there are obstacles, obstructions or other areas which may cause the lift to tip over.
- 2. If the aerial lift will be operated on an active roadway or where there are overhead power lines, a spotter will be required. On the roadway, the spotter will be equipped as a flagger.
- 3. Aerial lifts will not be operated within 10 feet of high voltage lines (up to 50 Kv)
- 4. Ground controls will not be operated without the permission of the workers in the basket, except in an emergency.
- 5. Belting off to adjacent structures while in the lift will not be permitted.

- 6. If workers leave the basket to gain access to a work area, the worker will maintain 100% fall protection by connecting to a safety line or secure structure then disconnecting from the basket.
- 7. Workers will keep both feet on the floor of the platform.
- 8. Workers will not stand on the toeboard, mid-rail or top-rail, or use planks, ladders or other devices to raise the working height.
- 9. A harness and lanyard will be worn at all times when in the basket or boom.
- 10. Boom and basket loads will not be exceeded. The load rating will be placed in the basket or boom of an aerial lift.
- 11. To safely position the aerial lift, wheel chocks or outriggers will be used on inclined positions.
- 12. The gate to the basket will be securely closed when the lift is in use.
- 13. Know the capacity and operating characteristics of the aerial platform. Do not overload the platform.
- 14. Follow manufacturer's Safe Operating Procedures.

#### 55.13 SCISSOR LIFT

- 1. Operator must be familiar with the lift prior to operating it.
- 2. Operator should walk around the area where the lift will be used to look for unevenground, bumps and grades, also check overhead for electrical lines.
- 3. Maintain the minimum safe distance from electrical lines.
- 4. Where the operator's vision is limited, use a lookout and sound the horn.
- 5. While refueling, shut down the lift.
- 6. Never overload a platform, refer to manufacturer's instructions.
- 7. During entry or exit above ground, safety belts must be attached to the structure beingentered.
- 8. Always stand on the platform floor, not on railings or planks.
- 9. Do not operate without handrails in place and secured.
- 10. Check the floor of the platform for oils, greases, mud and other slippery substances and clean before using the lift.
- 11. Ensure all tools and equipment is properly stowed prior to moving.
- 12. If the scissor lift is supplied with fall protection attachments, workers must wear a harness and lanyard when operating the scissor lift.
- 13. Follow manufacturer's Safe Operating Procedures

#### 55.14 AIRLESS SPRAY EQUIPMENT

- 1. Prior to using any spray equipment, adequate ventilation must be assured. The use of dust collectors, windows and respirators are all acceptable methods to ensure workers have adequate breathing air.
- 2. The spray area must be at least 25 feet from open flames, sparks or other ignition sources.
- 3. Fire extinguishers must be located near the work area.
- 4. Explosion proof lamps may be required.
- 5. Check the work area for combustible materials and remove to prevent fires.
- 6. Check all valves and gauges to insure that they are in proper working order. Equipment with damaged or missing parts will be removed from service.

- 7. The safety shut-off valve must be closed when spray operations are not underway.
- 8. Wear safety goggles when operating the spray equipment, or during any work on making repairs to spray lines.
- 9. All connectors must be securely connected, when checking the connections, beware of the potential for rupture (this may occur anywhere in the line).
- 10. **Never** point the spray gun at anyone or yourself. Spray guns can cause coating materials to be injected under the skin causing severe injury.
- 11. Never put your hand or fingertips over the spray tip.
- 12. If you are injected, seek immediate help at the local emergency room. Do not assume it is only a pin prick. Bring the SDS of the coating being applied with you to the emergency room.
- 13. Prior to removing the spray gun, ensure the spray line is depressurized.
- 14. When the spray gun is not is use, set the safety latch to the safe position.
- 15. Only use spray guns with safety mechanisms and leave the gun in the "safe" position when not in use.
- 16. Prior to cleaning, disconnect all air lines.
- 17. Follow manufacturer's Safe Operating Procedures.

#### 55.15 PRESSURE WASHER

- 1. Always operate pressure washer in a well ventilated area free of flammable vapors, combustible dusts, gases or other combustible materials.
- 2. Do no use pressure washer to spray flammable materials.
- 3. Do not smoke while filling engine.
- 4. Turn engine off and wait two minutes prior to filling or re-filling.
- 5. Disconnect battery ground prior to servicing.
- 6. Do not jump start the battery unless both batteries are of equal voltage and amperage.
- 7. Use the washer only in well ventilated areas.
- 8. Never point the guns at yourself or anyone else.
- 9. Do not wire the trigger open.
- 10. Use the proper Personal Protective Equipment (PPE) for the job.
- 11. Block the wheels prior to using to prevent the unit from rolling.
- 12. Follow the manufacturer's Safe Operating Procedures.

#### **55.16 LIGHT TOWER**

- 1. Ensure adequate ventilation prior to using.
- 2. Do not operate electrical equipment while standing in water, wet ground, with wet hands or shoes.
- 3. Do not tow in excess of 50 mph.
- 4. Do not fill fuel tank when engine is running. Do not smoke while fueling.
- 5. Keep clear of rotating parts and potential pinch points.
- 6. Prior to using, make sure all guards and safety devices are in place and working.
- 7. Check for overhead lines prior to raising light tower.
- 8. Follow manufacturer's Safe Operating Procedures.

#### **56.0 HAZARDOUS WASTE SITE OPERATIONS**

#### **56.1 SCOPE**

The requirements of this section apply to personnel and operations involved in investigation and remediation efforts associated with improperly disposed of hazardous, toxic, and/or radioactive wastes. This section does not apply to activities involving the generation and collection of hazardous wastes which are being temporarily stored prior to proper disposal.

#### 56.2 HAZARDOUS WASTE OPERATIONS SAFETY AND HEALTH PROGRAM

- 56.2.1 The program will designate, in writing, a program manager who will have the responsibility and authority to direct all hazardous waste operations within the scope of this section.
- 56.2.2 Each project that falls under the general category of "hazardous waste operation" will have a comprehensive work plan, as well as a site-specific safety and health plan, in place prior to commencing operations.
- 56.2.3 The written program, work plan, and site-specific safety and health plan will specify the means to implement the requirements of these standards.

#### **56.3 WORK PLAN**

- 56.3.1 The plan will identify the personnel requirements and methods to accomplish the identified tasks and objectives.
- 56.3.2 For uncontrolled hazardous waste sites, characteristics such as location, size, boundaries ,topography, accessibility, contaminant concentrations, and contaminant dispersion pathways must be included
- 56.3.3 The plan must specify the means for providing required information to employees, contractors, and others who enter the site.
- 56.3.4 The plan must include the requirements for training, medical evaluations, and record- keeping not specified in site-specific documents.

#### 56.4 SITE-SPECIFIC HEALTH AND SAFETY PLAN (HASP)

- 56.4.1 A site specific HASP including an emergency response plan will be developed and implemented to handle anticipated emergencies prior to the start of work.
- 56.4.1 The site specific HASP will be written and available to all employees, their representatives and OSHA at the work site.
- 56.4.2 The plan must indicate specific expectations for meeting the standards, including programs for Chain of command, inspection, training, medical evaluation, contaminant/exposure monitoring, site control, decontamination, personal protective equipment (PPE), emergency response, confined space entry, and spill containment requirements associated with site operations.

#### 56.5 HAZARD EVALUATION AND CONTROL

- 56.5.1 Evaluation of the site and operations will be conducted to identify the specific hazards and determine procedures appropriate for controlling exposure to those hazards.
- 56.5.2 Controls must be implemented prior to initiating site activities.

#### 56.6 HAZARD COMMUNICATION

- 56.6.1 Personnel must be informed of all identified risks and entry/work requirements before their entry into a contaminated or restricted area and/or before starting a hazardous activity covered by the requirements of this section.
- 56.6.2 Briefings will be conducted at intervals necessary to ensure personnel are knowledgeable of most current information and requirements of the site-specific HASP.

#### **56.7 TRAINING**

- 56.7.1 All personnel including equipment operators, general laborers, supervisors and management will receive the appropriate training prior to being allowed to participate in or supervise work. The training will also include the duties and functions to be performed.
  - a. They have been certified as having successfully completed the training requirements for their assigned duties and responsibilities, and
  - b. Records of required training and certification have been established and are immediately available at the activity site.
- 56.7.2 Trainers. The training must be conducted by a trainer meeting the qualifications of OSHA standards in 29 CFR 1910.120 (e)(5). Generally, trainer qualification is based upon the satisfactory completion of a training program for teaching the subject matter, or appropriate academic credentials and experience, combined with demonstrated competency in instructional skills and knowledge of the subject matter.
- 56.7.3 The minimum training requirements are based upon OSHA requirements contained in 29 CFR 1910.120 (e) and will include personal protective equipment, work practices, engineering controls, decontamination and medical evaluations. The courses established to meet these requirements must address both time and content standards. Course content and certification must be conducted according to the guidelines in Appendix E of 29 CFR 1910.120.
  - a. A hazardous waste orientation course with sessions totaling 40 hours, plus 24 hours of supervised onsite training, will be required of all persons who:
    - 1. Enter a site unescorted by trained site personnel
    - 2. Enter restricted areas of a site
    - 3. May be exposed to hazardous substances
    - 4. May be exposed to other health hazards of a physical or biological nature
    - 5. May be exposed to safety hazards of any kind
    - 6. Are operators of equipment used in site assessment or remediation operations
    - 7. Are required or expected to wear respiratory protection or PPE when needed
    - 8. Disturb any materials within site boundaries
    - 9. Directly supervise site employees
    - a. Each year thereafter, 8 hours of supplemental training will be provided which augments the basic knowledge provided by the core course.
    - b. All onsite managers and supervisors directly responsible for, or who supervise, personnel engaged in hazardous waste to the management responsibilities associated with the program elements and site requirements.

- c. All employees and their managers and supervisors working onsite who are restricted to duties that are fully characterized as nonhazardous and who are not expected to wear PPE or respond to emergencies under any circumstance must receive:
  - 1. A minimum of 24 hours of off-site training from a certifying instructor,
  - 2. An additional 8 hours of supervised onsite guidance by an experienced person before assuming their full duties associated with the operations
  - 3. Any personnel trained at this level who are reassigned to hazardous duties will be provided an additional 16 hours of training by a certifying instructor as required for the duties and hazard control measures utilized, as well as an additional 16 hours of supervised onsite guidance.
- 56.7.4 First responders, those who are likely witness or discover a hazardous substance release will be required to attend an awareness training class which includes the proper notification of the authorities of the release.

#### **56.8 MEDICAL EVALUATIONS**

Medical evaluations necessary to meet the requirements of these standards (such as respirator clearances or medical qualifications for specific hazardous jobs) must be provided before employees engage in activities requiring such services. Medical surveillance will be provided for employees exposed to or affected by site contaminants. Medical evaluations will be provided at no cost to the employee.

- 56.8.1 All medical services required by this standard must be rendered under the direction of a board-certified occupational health physician.
- 56.8.2 The evaluations must be provided in a timely manner. Time frames for medical screening tests that may become necessary during operations will be specified in the medical surveillance plan before initiating onsite operations.
- 56.8.3 All employees whose exposure to contaminants exceeds permissible exposure limits for 30 days or more per year will be placed in a medical surveillance program. Medical requirements for the respiratory protection program are separate, but may be included as part of the medical surveillance on the employee.
- 56.8.4 All employees who wear a respirator must be medically evaluated according to the respiratory protection requirements of these standards and 29 CFR 1910.134.
- 56.8.5 All employees who wear respiratory protection for 30 days or more per year must be placed in a medical surveillance program.
- 55.8.6 All employees who develop signs or symptoms of illness or exposure to hazardous substances, who become ill, or who are injured due to overexposure to contaminants must be placed in a medical surveillance program and will be offered medical consultation.

#### **56.9 INSPECTIONS**

Inspections will be conducted to assess the proper implementation of hazard control. Identified deficiencies and corrective actions must be documented and appropriate changes made to the plan(s) when necessary.

#### 56.10 CONTAMINANT/EXPOSURE MONITORING

Air monitoring will be performed in a manner according to the provisions contained within these standards and as required within the program, work plan, or HASP. Minimum monitoring requirements are:

- 56.10.1 Upon initial site entry, representative air monitoring will be conducted to identify any Immediately Dangerous to Life and Health (IDLH) condition or potential exposure above permissible exposure limits
- 56.10.2. Periodic monitoring will be conducted when:
  - 1. Work begins on a different portion of the site
  - 2. Contaminants other than those previously identified are being handled
  - 3. A different type of activity is initiated
  - 4. An employee(s) is handling leaking drums or containers, or working in areas with obvious liquid contamination
  - 5. There are indications that potentially hazardous conditions exist
- 56.10.3 Personal monitoring must be performed for personnel who are at high-risk, such as, but not limited to, those handling leaking drums, opening drums containing unknown or hazardous substances, conducting activities in areas with obvious liquid contamination, or during any activity where contaminated substances may be disturbed.
  - 1. After commencing activities, personal exposure monitoring will be performed for employees likely to have the highest exposures to hazardous substances and health hazards or when the airborne concentration of hazardous substances is likely to be above permissible exposure limits.
  - 2. A monitoring result that exceeds permissible exposure limits will be considered a representative exposure of all personnel performing similar duties on the site. The exposure will be accordingly documented until personal monitoring has been accomplished for each person performing similar duties.
- 56.10.4. Representative sampling will be accepted to document exposures of individuals engaged in similar activities.

#### 56.11 CONTROL OF WORKER EXPOSURE TO HAZARDOUS SUBSTANCES

Engineering controls will be the primary means of control for occupational exposure to hazardous substances. Engineering controls include the use of pressurized cabs of control booths on equipment, the use of remote control material handling equipment and ventilation. Engineering, work practice controls and personal protective equipment will be used to reduce and maintain exposure limits to below the OSHA permissible exposure limits.

#### **56.12 PERSONAL PROTECTIVE EQUIPMENT**

PPE must be provided and used according to the provisions contained in these standards and as stipulated in the program, work plan, or HASP. PPE will be based on the performance characteristics of the equipment, relative to:

- 1. The requirements and limitations of the site
- 2. The task-specific conditions and duration
- 3. The hazards and potential hazards identified at the site

#### **56.13 PERSONAL PROTECTIVE EQUIPMENT**

- 56.13.1 The PPE program, as part of the HASP, must address:
  - 1. PPE selection based on site-specific hazards
  - 2. The use and limitations of PPE
  - 3. Activity duration
  - 4. Maintenance and storage of PPE
  - 5. Decontamination and disposal of PPE
  - 6. PPE training and fitting
  - 7. Equipment donning and doffing procedures
  - 8. Procedures for inspecting equipment before, during, and after use
  - 9. Evaluation of the effectiveness of the PPE program
  - 10 Medical considerations, including work limitations due to temperature extremes or physical stress
- 56.13.2 When airline respirators are utilized in hazardous waste operations, an auxiliary self-contained escape air supply system will be incorporated.
- 56.13.3 When totally encapsulating suits are used, they must be capable of maintaining positive air pressure.

#### **56.14 COMMUNICATIONS**

All high-risk activities such as, but not limited to, remote or unobservable operations, waste drum opening/sampling, or confined space entry must be conducted in a way that ensures constant communication between the worker and site management team.

#### 56.15 DECONTAMINATION

Decontamination must be conducted in a way that prevents the spread of hazardous contaminants and waste beyond the boundaries of the site of operations. Decontamination will apply to equipment and personnel.

- 56.15.1 Procedures for all phases of decontamination will be developed, communicated to all personnel, and implemented before any employee or equipment may enter areas on a site where potential exposure to hazardous substances exists. Decontamination procedures, as a part of the site-specific HASP, will specify:
  - 1. Decontamination methods and procedures for testing and evaluating their effectiveness
  - 2. The location, number, layout of decontamination stations and decontamination equipment needed. The location will be as closer to the work area to prevent the contamination of uncontaminated personnel.
  - 3. Procedures to prevent contamination of clean areas and to minimize employee contact with hazardous substances or with contaminated equipment that has contacted hazardous substances
  - 4. Procedures to take if the non impermeable clothing of personnel becomes wetted with hazardous substances.
  - 5. Methods for disposing of contaminated clothing and equipment.
  - 6. Methods for disposing of decontamination water and waste.
  - 7. Method for restricting unauthorized employees in the decontamination change room.
- 56.15.2 Where showers and change rooms are required outside of a contaminated area, the shower and change area will meet the requirements as set in 29 cfr 1910.141.

- 56.15.3 All personnel leaving a contaminated area must be decontaminated; all contaminated clothing and equipment leaving a contaminated area must be appropriately disposed of or decontaminated.
- 56.15.4 Decontamination procedures must be monitored by the site safety and health officer to determine their effectiveness. If such procedures are found to be ineffective, site work will immediately cease and remain shut down until the situation has been corrected.
- 56.15.5 Decontamination must be conducted in geographic areas that minimize the exposure of uncontaminated personnel and equipment to contaminated employees or equipment.
- 56.15.6 All equipment and material used for decontamination must be decontaminated or disposed of properly.
- 56.15.7 Decontamination of Personal Protective Equipment
  - 1.PPE will be decontaminated, cleaned, laundered, maintained, stored, and replaced as appropriate to maintain their effectiveness.
  - 2. Unauthorized employees will not remove PPE from change rooms.
  - 3. Commercial laundries or cleaning establishments that decontaminate protective clothing or equipment will be informed of the potential harmful effects of exposures to hazardous substances.
  - 4. Where the decontamination procedure indicates the need for regular showers and change rooms outside the contaminated area, or if cleanup or removal operations will require 6 months or more to complete, showers and change rooms must be provided. If temperature effects prevent the use of water, other effective means for cleansing must be provided and used.

#### **56.16 EMERGENCY PLANNING**

Planning for site emergencies must be conducted before commencement of hazardous waste activities.

- 56.16.1 Site emergency cleaning must address all anticipated emergency situations.
- 56.16.2 The emergency response plan must be included in the HASP and address:
  - 1. Personnel roles, responsibilities, and lines of communication
  - 2. Emergency recognition and prevention
  - 3. Safe distances and staging areas (safety zones)
  - 4. Site security and control
  - 5. Evacuation routes and procedures
  - 6. Emergency medical treatment
  - 7. Emergency alerting and response procedures
  - 8. Critique of response and followup
  - 9. Procedures for reporting incidents to Federal, State and local governments
  - 10. Decontamination
- 56.16.3 The emergency response plan will be a separate section of the HASP.
- 56.16.4 The emergency response plan will be exercised regularly as part of the overall training program.
- 56.16.5 The emergency response plan will be reviewed periodically and, as necessary, amended to keep it current with new or changing site conditions or operations.

#### 57.0 SUBSTANCE ABUSE POLICY ON PUBLIC WORKS PROJECTS

Employees are an extremely valuable resource for Atlas Painting and Sheeting business. The employees health and safety is a serious concern. Drug or alcohol use may pose a serious threat to driver health and safety. It is therefore, the policy of Atlas Painting and Sheeting to prevent substance use or abuse from having an adverse effect on our employees. Atlas Painting and Sheeting maintains that the work environment is safer and more productive without the presence of alcohol, illegal or inappropriate drugs in the body or on company property. Furthermore, employees have a right to work in an alcohol and drug free environment and to work with employees free from the effects of alcohol and drugs. Employees who use alcohol or use drugs are a danger to themselves, their coworkers and the company's assets.

The adverse impact of substance abuse by employees has been recognized by the federal government. Atlas Painting and Sheeting will comply with these regulations and is committed to maintaining a drug-free workplace. All employees are advised that remaining drug-free is a condition of continued employment with Atlas Painting and Sheeting.

It is the policy of Atlas Painting and Sheeting that the use, sale, purchase, transfer, possession or presence in one's system of any controlled substance (except medically prescribed drugs) by any employee while on Atlas Painting and Sheeting premises, engaged in company business, while operating company equipment, or while under the authority of Atlas Painting and Sheeting is strictly prohibited.

The execution and enforcement of this policy will follow set procedures to screen body fluids (urinalysis), conduct breath testing, and/or search all driver applicants for alcohol and drug use, and those suspected of violating this policy who are involved in a reportable accident or those who are periodically or randomly selected pursuant to these procedures. These procedures are designed not only to detect violations of this policy, but to ensure fairness to each employee. Every effort will be made to maintain the dignity of the employees involved. Disciplinary action will be taken as necessary.

Neither this policy nor any of its terms are intended to create a contract of employment or to contain the terms of any contract of employment. Atlas Painting and Sheeting retains the sole right to change, amend or modify any term or provision of this policy without notice. This policy is effective immediately or upon hire and will supersede all prior policies and statements relating to alcohol or drugs.

#### 58.0 ALCOHOL AND DRUG POLICY

#### 58.1 DRUG AND ALCOHOL POLICY

Atlas Painting and Sheeting is committed to providing a safe work environment and to supporting the well-being and health of its employees. That commitment is jeopardized when any Atlas Painting and Sheeting employee illegally uses drugs or alcohol on the job, comes to work under the influence, or possesses, distributes, or sells drugs or alcohol in the workplace. Atlas Painting and Sheeting has established the following policy:

- 1. It is a violation of Atlas Painting and Sheeting policy for any employee to possess, sell, trade, or offer for sale illegal drugs or alcohol, or otherwise engage in the use of drugs or alcohol on the job.
- 2. It is a violation of the Atlas Painting and Sheeting policy for anyone to report to work under the influence of alcohol or drugs.
- 3. It is a violation of the Atlas Painting and Sheeting policy for anyone to use prescription drugs illegally. The illegal use of drugs will not be tolerated.
- 4. If an employee legally uses prescription drugs that may have an impact on his or her ability to safely perform the functions of the job, he or she must immediately report the use of those prescriptions to his or her supervisor.

In states that have a Medical Marijuana or other drug-related law that conflicts with federal law, the Atlas Painting and Sheeting will interpret the federal law as controlling. This means that the Atlas Painting and Sheeting will not tolerate the use of illegal drugs, such as marijuana, regardless of whether the employee has a Medical Marijuana card or not.

Employees using prescription drugs must observe all label warnings and inform their supervisor of all warnings associated with their prescriptions.

#### 58.2 PRE-EMPLOYMENT DRUG TESTING

All job applicants that have been offered employment at this Atlas Painting and Sheeting will undergo testing for the presence of illegal drugs as a condition of employment. Any applicant with a confirmed positive test result will be denied employment. Pre-employment test results will be interpreted according to the following table:

Lab Results	<b>Atlas Painting and Sheeting Results</b>
Negative	Negative
Positive	Positive
Negative Dilute	Positive*
Out-of-Temperature Range	Positive
Refusal to render sample	Positive
Untestable Sample	Positive

Applicants will only be eligible for employment if they have a negative result as shown under "Atlas Painting and Sheeting Results."

\*In the case of a negative dilute where there is no indication of tampering or an attempt to avoid detection, an employee may be given an opportunity to re-test within 24 hours of receiving the negative dilute result.

#### 58.3 RANDOM DRUG TESTING

All employees are in the random drug testing pool. Random drug screen selections are handled by an independent contractor of Atlas Painting and Sheeting. At the time Atlas Painting and Sheeting notifies the employee that a random test is required, the employee has two hours to report to the designated clinic. An employee exceeding the allotted two hours (between receiving notification by the Atlas Painting and Sheeting and submitting a specimen to the assigned clinic) may be subject to dismissal.

Currently, random drug and alcohol selections are done at a rate of 10% of all field employees on an annual basis. The Atlas Painting and Sheeting reserves the right to increase this rate at its discretion in response to business conditions, more stringent project requirements, or any other factor.

#### 58.4 POST-ACCIDENT TESTING

Post-accident drug testing is conducted when there is reasonable suspicion to believe that an employee is using drugs illegally or is under the influence of drugs or alcohol and the employee is involved in an on-the-job accident that may have involved human error, or otherwise engages in unsafe job-related activity that poses a danger to themselves or fellow employees. Testing will be conducted when there is reasonable suspicion and in accordance with the following criteria:

- · Employees involved in a work-related injury, regardless of severity, that requires professional medical treatment, will be subject to testing.
- Employees involved in an accident or safety-related incident of any kind while in a Atlas Painting and Sheeting vehicle or while on Atlas Painting and Sheeting time or on Atlas Painting and Sheeting property, will be subject to a drug test.
- The Atlas Painting and Sheeting may require an employee who contributed to an accident be tested, if there is reasonable cause to believe that the accident may have resulted from the use of drugs.

#### 58.5 REASONABLE SUSPICION DRUG TESTING

When there is reasonable suspicion to believe that an employee is using illegal drugs or is under the influence of drugs or alcohol, their supervisor may require that the employee submit to a drug or alcohol test. The circumstances leading to this situation must be thoroughly documented by the supervisor requesting the test. The employee must submit to the testing immediately following the Atlas Painting and Sheeting's request for testing.

#### 58.6 EMPLOYEES WITH COMMERCIAL DRIVER'S LICENSES

This portion of the policy applies to Atlas Painting and Sheeting employees with Commercial Driver's Licenses (CDLs) of Class A, B or C as required by federal regulations. All previous portions of this policy are also applicable to employees with CDLs in conjunction with the Atlas Painting and Sheeting DOT Drug Policy for Drivers (distinctions defined in the mandatory Driver Orientation).

#### 58.7 PRE-DUTY DRUG TESTING

As required for the issuance of a CDL, CDL holders will be subject to pre-duty DOT drug testing. Atlas Painting and Sheeting must receive negative results prior to the driver beginning work.

#### 58.8 POST-ACCIDENT DRUG TESTING

- I.The commercial vehicle driver will be required to submit to a drug and/or alcohol test (DOT drug/alcohol test for CDL drivers only. Chauffeur drivers would follow the Atlas Painting and Sheeting Non-DOT post-accident criteria) if the driver is involved in an accident involving a fatality, whether a citation has been issued or not.
- II. The commercial vehicle driver will be required to submit to a drug and/or alcohol (DOT drug/alcoholtest for CDL drivers only. Chauffeur drivers would follow the Atlas Painting and Sheeting Non-DOT post-accident criteria) if the driver is involved in an accident and one or more of the following occur:
- III. If any of the vehicles involved is required to be towed from the scene; or
- IV. If any person involved requires medical attention away from the scene.

Alcohol testing will be conducted within 2 hours following the accident. If it cannot be conducted within 8 hours, documentation must be provided which gives valid reasons why the testing was not conducted.

Drug testing will be conducted within 8 hours following the accident. If it cannot be conducted within 32 hours, documentation must be provided which gives valid reasons why the testing was not conducted.

#### 58.9 RANDOM DOT DRUG TESTING

All employees with CDLs are in the DOT random drug testing pool. Currently, DOT random selections are done at a rate of 25% for drug testing, and 10% for alcohol testing. At the time Atlas Painting and Sheeting notifies the employee that a random test is required, they have 2 hours to report to the designated clinic.

#### 58.10 REASONABLE SUSPICION AND RETURN-TO-DUTY DRUG TESTING

Where an employee was removed from work due to reasonable suspicion, a return-to-duty drug test and/ or alcohol will be required. If the results indicate a negative assessment, Atlas Painting and Sheeting may return the employee back to their previous job. If the results indicate a positive assessment, then the employee will be informed of the result and will not be offered the employee's previous position back.

#### 58.11 Atlas Painting and Sheeting RESPONSIBILITIES AND GOALS

It is the responsibility of the Atlas Painting and Sheeting's supervisors to counsel employees whenever they see changes in performance or behavior that suggests an employee has a drug or alcohol problem. Although it is not the supervisor's job to diagnose personal problems, the supervisor should encourage such employees to seek help. Everyone shares responsibility for maintaining a safe work environment, and co-workers should encourage anyone whom may have a drug problem to seek help.

The goal of this policy is to balance our respect for individuals with the need to maintain a safe, productive drug- and alcohol-free environment. Employee compliance is a condition of employment.

All employees are expected to comply fully and promptly with instructions issued under the authority of this program. Refusal to submit to testing will result in disciplinary action, up to and including termination of employment.

#### **58.12 SUPERVISOR RESPONSIBILITIES**

Supervisors are required to notify management if there is any suspicion that an employee is in violation of this policy. Failure to do so can result in disciplinary action, up to and including termination of employment.

The intent of this policy is to send a clear message that the illegal use of drugs and alcohol is

# Atlas Painting and Sheeting Corp. 465 Creekside Drive Amherst, NY 14228 PROJECT NAME: DATE: ATLAS JOB #: ADMINISTRATOR:

JOB TASK	POTENTIAL HAZARDS Severity of Hazards	ENG./ ADMIN. CONTROL MEASURES	PERSONAL PROTECTIVE EQUIPMENT	TRAINING
Abrasive Blasting Blasting Support Vacuuming	Lead and other metal dusts	Dust collection system Decontamination trailer Handwash station Exposure monitoring Medical surveillance	Approved blast helmet	Lead HAZCOM Respiratory Protection Safe Operating Procedures
Abrasive Blasting Blasting Support Vacuuming	Struck-by abrasive media and Paint chips		Blast helmet Protective work clothing; Gloves Steel toe boots	Lead HAZCOM Respiratory Protection Safe Operating Procedures
Abrasive Blasting	Blast line whips	Deadman at end of blast line		Safe Operating Procedures
Abrasive Blasting Blasting Support Vacuuming	Carbon Monoxide	CO monitor		
Abrasive Blasting Blasting Support Vacuuming	Noise		Ear plugs/ muffs	Hearing Conservation
All	Histoplasmosis	Use water	Respirator	Histoplasmosis training
Power tool cleaning	Lead and other metal dusts	HEPA vacuum attachment	Respirator Protective work clothing	Lead; HAZCOM Respiratory Protection Safe Operating Procedures
	Struck-by paint chips		Protective work clothing Safety glasses/ goggles or face shield; Gloves	
	Noise	Noise surveillance	Ear plugs/ muffs	Hearing Conservation
	Dust, Organic vapors	Adequate ventilation Exposure monitoring	Respirator w/ organic vapor cartridge Eye protection Protective work clothing; Gloves	
	Airless spray injection	Trigger guard	Gloves	Safe Operating Procedure
Rigging/ De-rigging	Falling	Guard rails Safety Line - horizontal/vertical; Safety net	Harness and lanyard or double lanyard	Fall protection
	Histoplasmosis	Use water	approved respirator	Histoplasmosis training
	Cuts		Gloves	

PRE	PARED BY (NAME):	DATE	PREPARED E	BY (SIGNATURE):
	Cuts		Gloves	
	Histoplasmosis	Use water	approved respirator	Histoplasmosis training
Rigging/ De-rigging	Falling	Guard rails Safety Line - horizontal/vertical; Safety net	Harness and lanyard or double lanyard	Fall protection
	Airless spray injection	Trigger guard	Gloves	Safe Operating Procedure

# **APPENDIX 1 (Continued)**

# Atlas Painting and Sheeting Corp. 465 Creekside Drive Amherst, NY 14228 PROJECT NAME: DATE: ATLAS JOB #: ADMINISTRATOR:

#### The following hazards may apply to all job tasks

JOB TASK	POTENTIAL HAZARDS Severity of Hazards	ENG./ ADMIN. CONTROL MEASURES	PERSONAL PROTECTIVE EQUIPMENT	TRAINING	
Fall exposure of 6 feet or greater	Falling	Guard rails; Safety Line - horizontal/ vertical; Safety net	Harness and Single or Double Lanyard	Fall protection	
Working from a scaffolds with a fall exposure of 10 feet or greater	Falling	Guard rails, Vertical life line Horizontal lifeline	Harness and Single or Double Lanyard	Scaffold safety	
Working over water	Drowning		Life vest; Rescue boat Harness and double lanyard	Working over water	
	Fire	Proper storage	Fire extinguisher(s)	Fire training	
Traffic	Struck-by	Barricades; MPT plan	Safety vests Flagger	Safely Working near traffic	
Working on/ near railroad tracks	Struck-by		Flagger	Railroad safety	
	Electrocution	Ground Fault Circuit Interrupter (GFCI) Double insulated tool		Electrical safety	
High voltage overhead lines	Electrocution	De-energize 10 foot minimum clearance		High Voltage training	
Working at night	Darkness	Adequate lighting Lighting plan			
Working at night on or near an active roadway	Darkness, Struck-by	Adequate lighting Lighting plan	Safety vests with reflective stripes	Night work training	
All	Struck-by Bumping into beams		Hard hat		
Using compressed air	Air lines separating	Whip check or other positive safety device		Safe Operating Procedures	
Working from an aerial lift	Falling	Check work area prior to moving	Harness and lanyard	Aerial lift safety	
Confined space	Toxic atmosphere Limited entrance/ egress Engulfment	Confined space monitoring Permit/ non-permit space		Confined space training	
Digging holes or excavating	Hitting utility lines	Call Dig Safe		Dig Safe training	

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PREPA	RED BY (NAME):		DATE	PREPARED B	Y (SIGNATURE):
Digging holes or excavating	Hitting utility lines	Call Dig Safe			Dig Safe training

# **APPENDIX 1 (Continued)**

# **PRE-JOB HAZARD ANALYSIS Atlas Painting and PROJECT Sheeting Corp.** NAME: DATE: ATLAS JOB #: **465 Creekside Drive** Amherst, NY 14228 ADMINISTRATOR: The following hazards may apply to all job tasks **POTENTIAL HAZARDS** PERSONAL PROTECTIVE **ENG./ ADMIN. CONTROL JOB TASK TRAINING Severity of Hazards MEASURES EQUIPMENT**

DATE

PREPARED BY (SIGNATURE):

PREPARED BY (NAME):

Atlas Painting and Sheeting Corp.	PROJECT NAME:						
RATIC	DATE:		ATLAS J	OB #:			
465 Creekside Drive Amherst, NY 14228	СОМРЕТЕ	NT PERSON:					
Activity/Work Task:		Overall Risk A	ccoccmon	· Codo (P	AC) (Uso bio	shoet code	2)
Project Location:		Risk Assessm		•		Jilest cou	=/
Contract Number:		Nisk Assessin	ent Code (	i (AC) ivia	ш <u>.</u>		
Competent Person:		Severity			Probability		
Date Prepared:		Coverity	Frequent	Likely	Occasional	Seldom	Unlikely
Date i Toparea.		Catastrophic	M	M	Н	Н	M
		Critical	E	Н	Н	M	L
		Marginal	Н	М	M	L	L
		Negligible	M	L	L	L	L
Principal/Job Steps	На	azards		Co	ntrols		RAC
L							
	Training	Requirements / Co	ompetent c	or			
Equipment to be Used			ified Personnel Name(s)  Inspection Requir		equireme	ents	
	I						
PREPARED BY (NA	ME):	DATE		PREPAR	ED BY (SIGI	NATURE)	:
REVIEWED BY (NAM	E):	DATE	-	REVIEW	ED BY (SIGI	NATURE)	:

HEALTH & SAFETY ENFORCEMENT – WRITTEN WARNING						
Atlas Paint Sheeting		PROJECT NAME:				
ACE OF THE	PRATI PRATI			ATLAS JOB#	:	
465 Creeksio Amherst, NY		SAFETY O	FFICER /CP:			
Warning:	Minor ☐ Major ☐	□1 <sup>st</sup> □1 <sup>st</sup>	□ 2 <sup>nd</sup> □ 2 <sup>nd</sup>	□3 <sup>rd</sup>	4 <sup>th</sup> 4 <sup>th</sup>	
Warning Issued To:						
Reason for Wa	Reason for Warning:					
Corrective Action Required:						
Disciplinary Ac	ction Take	n:				
Does Any Equi	pment Ne	ed Repair or R	Replacement?			
Should the Cre	w be Infor	med of Violati	ion?			
Will a Safety Meeting be Required to Inform the Crew ?						
SAFETY	OFFICER'S NA	ME	DATE		EMPLOYEE'S NAME	
		TUDE	2.55		TABLE OVER 10 O'CONTAINE	
SAFETY OF	FICER'S SIGN	ATURE	DATE	E	EMPLOYEE'S SIGNATURE	

		NEW HIR	RE ORIEN	ITATION		
Δ	Atlas Painting and Sheeting Corp.	PROJECT NAME:				
	ACE OF THE PROPERTY OF THE PRO	DATE:		ATLAS JOB #:		
	465 Creekside Drive Amherst, NY 14228	SAFETY OF	FICER /CP:	•		
	Discuss the Corporate He	alth and Safety F	Plan and allow em	nployee to review the Plan.		
	Discuss the training requir	rements the emp	loyee will be requ	uired to attend prior to starting work.		
	Discuss the training requirements the employee will be required to attend prior to starting work.  Lead physical Pulmonary function testing Audiogram. Asbestos physical Other					
	Discuss the employee's "r	ight to know" abo	out the hazards o	n the job (29 CFR 1910.1200).		
	Discuss how to read Safe	ty Data Sheets.				
	•	Painting and She		brings their own personal protective equipment is subject to inspection by the		
	Discuss the employee's ro	ole at the job site				
	Discuss the foreman and	competent perso	n's role on each p	project.		
	Review accident reporting accidents, incidents and n	,	size to the emplo	yee the importance of reporting all		
	Discuss the employee's ri request.	ght to access me	edical and exposu	re records and who to contact to make a		
	Discuss the foreman and	competent perso	n's role on each p	project.		
	Explain that the employee	is not to operate	e any equipment ι	unless proper training has been completed.		
	Ensure the employee und	erstands to repo	rt all unsafe acts t	to the foreman or competent person.		
	Ensure the employee und co-workers are working sa		part of a team and	d as such he should ensure his		
	Discuss the company's dis	scipline policy.				
	ATLAS REPRESENTATIVE	S NAME	DATE	EMPLOYEE'S NAME		
	ATI AS DEDDESENTATIVE'S S	ICNATURE	DATE	EMDLOVEE'S SIGNATURE		

	PRE-JOB SAFETY MEETING				
^	Atlas Painting and Sheeting Corp.	PROJECT NAME:			
	465 Creekside Drive	DATE:		ATLAS JOB #:	
	Amherst, NY 14228	COMPETEN	IT PERSON:		
	Discuss the Corporate He	alth and Safety F	Plan and allow er	nployee to revie	w the Plan.
	Discuss the training requir	ements for this p	project		
	Discuss medical requirements including Lead physical and blood Testing Pulmonary function testing Asbestos physical Cadmium physical Other				
	Discuss the results of the	pre-job hazard a	analysis and prev	entative measu	res that will be implemented
	Explain that the employee	is not to operate	e any equipment	unless proper ti	raining has been completed.
	Discuss the Safe Operation	g Procedures fo	r the equipment t	hat the employe	ee may use on this project.
	☐ Abrasive Recycle ☐ Dust Collector ☐ Pressure Washe	□в	last Pot last Safety erial Lift	Airl	mpressed Air Safety ess Spray Equipment ssor Lift
	Discuss the location of the	Safety Data Sh	eets and what ch	emical are loca	ted onsite
	Discuss the location of the	e emergency pho	one numbers and	hospital direction	ons
	Discuss the employee's ro	ole at the job site			
	Review accident reporting accidents, incidents and n		size to the emplo	yee the importa	nce of reporting all
	Ensure the employee und	erstands to repo	rt all unsafe acts	to the foreman	or competent person.
	Ensure the employee und are working safely.	erstands he is a	part of a team ar	d as such he sh	nould ensure his co-workers
	Discuss the company's discipline policy.				
	ATLAS COMPETENT PERSON	N'S NAME	DATE		EMPLOYEE'S NAME
	ATLAS COMPETENT PERSON'S	SIGNATURE	DATE	EM	IPLOYEE'S SIGNATURE

WI	EEKLY	SA	FETY	MEETII	NG
Atlas Painting and Sheeting Corp.	PROJECT NAME:				
465 Creekside Drive	DATE:		4	ATLAS JOB #:	
Amherst, NY 14228	HSO / COMP	ETENT	PERSON:		
TOPICS COVERED:					
1)					
2)					
3)					
4)					
5)					
NAME				SICN	ATUDE
NAME				SIGN	ATURE
	1			1	
HSO / COMPETENT PERSON	'S NAME		DATE	HSO / COMP	PETENT PERSON' S SIGNATURE

1/6/25

Atlas Painting and Sheeting

# **SAFETY DIRECTOR**

# Atlas Painting and Sheeting Corp.

465 Creekside Drive Amherst, NY 14228

Congratulations,	Robert Cohan	you have been assigned the responsibility of Safety
Director for Atlas Painti	ing and Sheeting Corp.	

The Safety Director reports directly to the Vice President of Atlas Painting and Sheeting. The Safety Director Has the authority to ensure hazardous paint removal operations are carried out according to compliance plans and relevant government regulations.

- 1. Monitor project locations to ensure that the corporate and site specific safety programs are being carried out
- 2. Ensure the most recent safety regulations are distributed to field personnel supervisors and competent persons.
- 3. Review all accident records, check OSHA logs for completeness, and review safety and loss programs
- 4. Confirm project locations are complying with federal, state and local regulations.
- 5. Implement and oversee the Respiratory Protection Program
- 6. Review project specifications for any new health, safety or environmental regulations that are required, and informing the President of the changes.
- 7. Ensure availability, distribution and maintenance of quality control inspection equipment, Personal Protective Equipment (PPE), and Protective Work Clothing (PWC) at all project sites.
- 8. Ensure field personnel working on hazardous paint removal projects participate in the appropriate medical surveillance programs.
- 9. Monitor the company Health and Safety Programs, assuring that the programs are up to date and site safety inspections are routinely conducted.
- 10. Review all accident reports and conducting follow-up interviews as necessary.
- 11. Ensure that the project's competent person is properly trained, is conducting the required inspections, and is filing the proper form through phone conversations and project reviews.
- 12. Stay abreast of health, safety and environmental regulations. If new regulations affect company business, discuss the changes with management and distribute the changes to supervisors and competent person.
- 13. Stay abreast of governmental regulations including OSHA, EPA, DOL, US Coast Guard, Railroad, US Army Corp and other governmental regulations that may affect Atlas Painting and Sheeting's work.
- 14. In January of e ch year, review all OSHA 300 logs and complete the OSHA 300A for review by the President. If there are repeated injuries or illnesses, determine a corrective measure and implement.

APPENDIX 8					
C	COMPETENT	PERS	ON LETTER OF AUTHORITY		
Atlas Painting and Sheeting Corp.		PROJECT NAME:			
465 Creekside Drive Amherst, NY 14228		ATLAS JOB #:			
		DATE #:			
The Competent Person reports directly to the President and Safety Director of Atlas Painting and Sheeting and has management's full support to stop non-conforming work. The Competent Person has the authority to ensure hazardous paint removal operations are carried out according to compliance plans and relevant government regulations. The Competent Person will not routinely work as a member the paint removal crew.					
The will	Competent Person for cont be	ract S/He has	over years' experience in the steel structures industry		
			our C-5 refresher training. An alternate competent person		
will		S/He has			
and	has attended a C-3 training	course or an 8-h	nour C-5 refresher training.		
The	Competent Person is respo	nsible for:			
1.	Ensure the effectiveness and the continued integrity of environmental controls.				
2.	Monitor airborne and biological exposures and report results to employee.				
3.	Ensure implementation of the Hazard Communication program.				
4.	Implement applicable training for site personnel.				
5.	Ensure workers entering contaminated zones are properly protected and trained in the use of personal protective equipment (PPE), exposure control methods, personal hygiene facilities, and decontamination practices.				
6.	Verify the proper functioning and operation of the engineering controls.				
7.	Ensure emissions to air, water and soil and all waste streams are minimized and in compliance with applicable federal, state and local regulations.				
8.	Control access to the site and designate contaminated work zones.				
9.	Maintain project documentation as required by Atlas Painting and Sheeting.				
10.	). Implement and oversee all site specific health and safety programs as directed by the Safety Director and				
	Industrial Hygienist.				
11.	Conduct daily and weekly sequipment.	site inspections. I	nspect job site conditions and workers personal protective		
12.	Oversee daily implementat	tion and enforce	ment of the hazardous waste management procedures.		
13.	3. Set a good example for workers on the project.				
_		<u> </u>			
			i de la companya de		

DATE

**ROBERT COHAN - SAFETY DIRECTOR** 

QUALITATIVE FIT TEST RECORD					
Atlas Painting and Sheeting Corp.	PROJECT NAME:				
ACT OF THE PROPERTY OF THE PRO	DATE:		ATLAS JOB #:		
465 Creekside Drive Amherst, NY 14228	ADMINIST	TRATOR:			
Name:					
Social Security No. (Last 4) or E	Employee No.:				
Respirator Manufacturer:					
Respirator Size:		Res	spirator Model:		
Type of Test: Isoamyl	Acetate Ir	rritant Smoke	Saccharin Solution Bitr	ex	
PRIOR TO QUALITATIVE FIT TEST  The individual been trained to wear the respirator Don respirator for 5 minutes to assess comfort (see below) Adequate strap tension Respirator of proper size to span distance from nose to chin Tendency of respirator to slip Self-observation in mirror to evaluate fit and position Conduct a User Seal Check					
QUALITATIVE FIT TEST         Exercises for the individual during the fit test - (ask individual to keep eyes closed)         ☐ Sensitivity check       ☐ Normal breathing         ☐ Deep Breathing       ☐ Turn head from side to side					
<ul> <li>☐ Move head up and down</li> <li>☐ Talk (read rainbow passage or count backward from 100)</li> <li>☐ Bending over</li> </ul>					
PASS/FAIL: (CHECK ONE BOX) FIT TEST PASSED:  FIT TEST FAILED:  FIT TEST FAILED:					
If fail, reason					
EMPLOYEE'S NAME		DATE	EMPLOYEE' S SIGNATURE		
ADMINISTRATOR'S NA	ME	DATE	ADMINISTRATOR'S SIGNATURE		

1/6/25

## **HAZARD ASSESSMENT AND PERSONAL PROTECTIVE EQUIPMENT SELECTION Atlas Painting and PROJECT Sheeting Corp.** NAME: ATLAS JOB #: DATE: **465 Creekside Drive ADMINISTRATOR:** Amherst, NY 14228 Job Task: Severity S, M, L Exposure Frequency **PPE Selected** Hazard Yes or No C, O, R **Eye and Face Hazards** Flying Particles Molten Metal Liquid Chemicals **Acids or Caustics** Gases or Vapors Light Radiation **Head Hazards** Falling Objects **Electrical Shock** Foot Hazards Falling Objects Rolling Objects Piercing Objects Slippery Surface **Electrical Hazard Hand and Body Hazards** Injection/ Absorption **Cuts or Lacerations** Severe Abrasions Falls **Punctures Chemical Burns** Thermal Burns **Temperature Extremes** Frequency: C= Constant O= Occasional R= Rare Severity: S= Potential for serious injury S= Potential for serious injury L= Potential for minor injury **CONDUCTED BY (NAME):** DATE **CONDUCTED BY (SIGNATURE):**

DISTRIBUTION OF PERSONAL PROTECTIVE EQUIPMENT				
	ROJECT AME:			
	ATE:		ATLAS JOB #:	
465 Creekside Drive Amherst, NY 14228	ADMINISTRATOR:			

I have received the following new personal protective equipment. I understand that I am responsible to inspect my personal protective equipment (PPE) prior to each use. If my personal protective equipment becomes worn where it becomes unsafe, I understand that I may trade the personal protective equipment in for a new piece of personal protective equipment. I have also received training from Atlas Painting and Sheeting on how to properly use and the limitations of all assigned PPE.

Personal Protective Equipment	Make and Model	Trained
☐ Hard hat		☐ Yes
Respirator		☐ Yes
Harness		Yes
Lanyard		☐ Yes
☐ Eye protection		Yes
☐ Ear Muff		Yes
☐ Ear Plugs		Yes
☐ Blast suit		Yes
☐ Safety vest		Yes
Gloves		Yes
Other		Yes
Other		Yes

VOLUNTARY USE OF RESPIRATORY PROTECTION				
Atlas Painting and Sheeting Corp.	PROJECT NAME:			
465 Creekside Drive	DATE:		ATLAS JOB #:	
Amherst, NY 14228	ADMINISTRATOR:			

In accordance with 29 CFR 1910.134 Appendix D, Atlas Painting and Sheeting is providing you the following information.

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If your employer provides respirators for your voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

You should do the following:

- 1. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.
- 2. Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.
- Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke.
- 4. Keep track of your respirator so that you do not mistakenly use someone else's respirator.

I have read and understand the above and acknowledge that I am wearing a respirator voluntarily.

EMPLOYEE NAME:	DATE	EMPLOYEE SIGNATURE:

# **APPENDIX 13** SITE SPECIFIC HEALTH AND SAFETY PLAN FOR TOXIC **METALS Atlas Painting and** (1) PROJECT **Sheeting Corp.** NAME: DATE: ATLAS JOB #: 465 Creekside Drive PREPARED BY: Amherst, NY 14228 (2) Brief Description of Project: (3) Work Schedule Location Work to be Performed Length of Time (4) Personnel: Supervisor/ Foreman: Competent Person: Alte Respiratory Administrator Designated First-Aid/CPR Person: Alternate: Anticipated number of workers: (5) Anticipated hazardous activities (lead, cadmium, arsenic, histoplasmosis): (6) Equipment to be used on this project (dust collect, abrasive blasting, (7) Access to the structure will be by: (8) Additional project safety specifications (list pages from the specification):

Atlas Painting and Sheeting

### **APPENDIX 13 (Continued)**

(9) Federal, State and Local regulations that are more stringent that the Corporate Health and safety plan: (10) Engineering Control Measures: Containment: SSPC Guide 6 - Class: Crossdraft 100 fpm or Downdraft 60 fpm Wet Methods (high pressure water jetting, wet abrasive blasting): HEPA vacuum shrouded equipment: Other: (11) Verification of engineering controls will be conducted by, whom, what method and frequency: (12) Respirators used on this project: Make / Model: Acceptable for use during these operations Type: Half-face negative pressure respirator Yes No with P100 HEPA filter Half-face negative pressure respirator Yes No with P100/organic vapor cartridges Half-face negative pressure respirator Yes with organic vapor cartridges Full-face negative pressure respirator Yes No with P100 HEPA filter Full-face negative pressure respirator Yes No with P100/organic vapor cartridges Full-face negative pressure respirator Yes No with organic vapor cartridges Powered Air-Purifying respirator (Half Yes No or full face) Type CE abrasive blast helmet Yes Supplied Air Respirator No Yes Other type of respirator Yes No Cartridge change schedule: HEPA: Organic Vapor: When not in use, respirators are to be stored in:

### **APPENDIX 13 (Continued)**

(13) Protective Clothing required for the project:	
Coveralls (tyvek, cloth):	Blasters will wear:
Hard hats:	Safety vests:
Hearing protection:	Eye protection:
Fall protection:	Other:
(14) Laundering or disposal of protective clothing:	
On this project the protective clothing will be $\Box$ laundered of	or disposed. If laundering, who is the laundry
facility and are they approved for accepting this type of cloth	ning:
Prior to starting the project, make sure a letter has been sent to the contaminated material such as lead. Also, ensure a letter has been	
(15) Hygiene facilities and location: Running cold and h	ot water, soap and towels will be provided
Decontamination station:	
Handwash station:	
Frequency of Cleaning:	
(16) Worker exposure monitoring:	
Conducted by:	
Frequency:	
What metals will be sampled: Lead Cadm	nium Chromium Chromium (VI)
MB 11 ( Aluminum; Arsenic; Barium; Beryllium; Cadmium	ı; Chromium; Copper; Iron; Manganese; Vanadium; Zinc)
**** Results are reported to employees within 5 days of	f receipt.
(17) Other types of sampling such as wipe, area and am	bient air monitoring:
(18) Inspections to be performed by the Competent Pers	son:
Daily: APPENDIX 16 Yes No	
Weekly: APPENDIX 15 🔲 Yes 🔲 No Ot	iher:
(19) Medical surveillance program for lead:	
Doctor or medical facility for medical testing:	
Blood lead levels are measured before exposure, repeated a **** Results are reported to employees within 5 days of	<u> </u>
Medical removal will occur at µg/dl, if two test	conducted confirm the level. The employee may be
returned back to an exposure activity when 2 medical tests a	

### **APPENDIX 13 (Continued)**

20. Medical Surveillance program for metals other than lead, if applicable. Doctor or medical facility for medical testing: Metal of Concern: ☐ Arsenic ☐ Cadmium ☐ Hexavalent Chromium ☐ Project Specific Concern Medical removal will occur at: Testing frequency: (21) Other contractors working on this project, if so how will they be informed of the lead workarea(s): (22) Training: Workers are required to have completed the following training prior to the start ofwork: (23) Emergency procedures and directions to hospitals: Postedon Jobsite? (24( Section(s) of the Corporate Health and Safety Plan that will apply to this project: (25) Other: (26) Attach the following: APPENDIX 29 emergency contact list APPENDIX 1 pre-job hazard analysis (27) Site Specific Safety Plan was prepared by: PREPARED BY (NAME): DATE PREPARED BY (SIGNATURE): PREPARED BY (SIGNATURE): PREPARED BY (NAME): DATE Distributed to project personnel: **COMPETENT PERSON (NAME): COMPETENT PERSON (SIGNATURE):** DATE **FOREMAN (NAME): FOREMAN (SIGNATURE):** DATE

### APPENDIX 14 SITE SPECIFIC HEALTH AND SAFETY PLAN FOR CONSTRUCTION **Atlas Painting and** (1) PROJECT Sheeting Corp. NAME: DATE: ATLAS JOB #: 465 Creekside Drive PREPARED BY: Amherst, NY 14228 (1) Brief Description of Project: (2) Personnel: Supervisor / Foreman: Competent Person: Alternate: Designated First-Aid/CPR Person: Alternate: Welding **Torch Cutting** Working in Confined Space (3) Job Tasks: Cutting Work Involving Toxic Metals Work Involving Silica Dust Concrete Work Milling Steel Repair Steel Work **Electrical Work** Rebar Paving Other Job Tasks: (4) Personal Protective Equipment required: Safety Vest Safety Glasses Hard Hat Face Shield Hand Protection Harness Lanyard Double Lanyard Retractable Lanyard Rain Suit Work Boots Steel Toed Shoes **Hearing Protection** Respiratory Protection (5) Engineering controls to be implemented: (6) Administrative controls to be implemented: (7) If toxic metals or silica dust is involved, what control measures will be implemented:

## **APPENDIX 14 (Continued)**

(8) Subcontractors working on this project, if so	o, what type of work	will they perform:
(9) Training: Workers are required to have comp	oleted the following	training prior to the start ofwork:
(10) Emergency procedures and directions to h	ospitals Posted ?	Yes
	•	
(11) Section(s) of the Corporate Health and Safe	ety Plan that will app	ly to this project:
(12) Other:		
(13) Complete and attach the following:	ente et liet	
APPENDIX 29 - Emergency Co		
APPENDIX 1 - Pre-job Hazard	Analysis  Yes	
(14) Site Specific Safety Plan was prepared by:		
DDEDADED BY (MAME).		DDEDADED DV (CICNIATUDE).
PREPARED BY (NAME):	DATE	PREPARED BY (SIGNATURE):
PREPARED BY (NAME):	DATE	PREPARED BY (SIGNATURE):

### **WEEKLY JOB SITE SAFETY ASSESSMENT Atlas Painting and** PROJECT NAME: **Sheeting Corp.** ATLAS JOB #: DATE: 465 Creekside Drive COMPETENT PERSON: Amherst, NY 14228 LOCATION AND DESCRIPTION OF WORK BEING PERFORMED: 1. Hygiene Facilities Yes No N/A Comments Decontamination facility onsite or at a nearby location Does the decontamination have power and water Hand wash station outside of regulated work area(s) Are soap, water, towels readily available Are the facilities maintained and are clean 2. Site Layout Yes No N/A Comments Are the lunch and break areas outside of regulated areas Are personal vehicles parked away from the work area Regulated area clearly identified (tape, signs, barriers, etc) Safe route or transportation to DECON facilities 3. Personal Protective Equipment (PPE) Yes No N/A Comments Paint removal personnel wearing proper PPE Outside support personnel wearing proper PPE Respirators worn as required per job task Personnel wearing respirators are clean shaven Respirators are stored properly when not in use Eye protection worn where required Hearing protection is adequate per job task Fall protection worn when exposed to falls Gloves worn are the proper type per job task Safety vests worn by personnel exposed to traffic **4.Site Records** Yes No N/A Comments Blood lead level, ZPP up to date for all employees Respirator fit, PFT & Physicals within one year Training records onsite for all required job tasks Site specific safety plan onsite Safety Data Sheets (SDS) onsite, workers have access Emergency phone numbers and hospital directions posted Federal and state required posters posted Toolbox safety meeting conducted in the past week 5. Worker Exposure Monitoring Yes No N/A Comments Initial worker exposure monitoring for all tasks Did the worker exposure monitoring include other metals Was an area sample collected Is follow-up worker exposure monitoring required When? 6. First Aid Yes No N/A **Comments** Are first aid kits onsite and are the kits is complete Emergency eye wash station onsite (15 min continuous wash) Are eye wash bottles available for immediate use Eye wash bottles and eye wash station within expiration date Is a first aid/ CPR person onsite for each shift

	APPENDIX 15 (	Con	tinι	ıed)			
7. Waste Management and Container Label	ing	Yes	No	N/A	Comments		
Waste solvents / thinners properly labeled							
Non-hazardous waste removed from job site	frequently						
Is the hazardous waste stored in a secured a	rea						
Does each hazardous waste container have o	completed label						
If there is more than one type of hazardous	waste						
Hazardous waste is removed within 90 days	of accumulation						
8. Access to Work Area		Yes	No	N/A	Comments		
Safe access for workers from ground to the v	work location						
Area ladders secured, and extend 3' above v							
Are stairs, ramps or ladders provided for ele	vation changes >19"						
Are ramps in use, if so are guardrails in place	on both sides						
9. Aerial Lifts		Yes	No	N/A	Comments		
Operator tests the upper and lower controls	prior to use each shift				1		
Operators are trained and authorized to use	the aerial lift						
Fall protection is worn and secured to manu	facturer's tie-off points						
Capacity of the aerial lift not being exceeded	1						
Operator and passengers standing on basket	floor						
10. Fire Extinguishers		Yes	No	N/A	Comments		
Fire extinguishers within 50' of liquids, comb	oustibles & flammables						
Are fire extinguishers at each paint storage a	area						
Fire extinguishers proper size and type based	d upon the hazard						
Inspect each fire extinguisher to verify good	working condition						
Monthly fire extinguisher inspection conduc	ted and recorded						
11. Other Site Issues		Yes	No	N/A	Comments		
No smoking within regulated area or near fla	ammables						_
Craft worker cell phones left at a designated							
Are all tools properly grounded by GFCI							
Gasoline cans meet the OSHA requirements							
Whip checks / safety devices on all high pres	sure hoses at coupling						
Is drinking water readily available							
Is the drinking water container clearly marke	ed as to its contents						
Are toilet facilities available and in a sanitary	condition						
2. Randomly inspect PPE and record results	(inspections include resp	irator	s, ha	rness	ss, Lanyard, hard hat. safetv glasses. li	fe jacke	ets)
Name of Worker					pected	Pass	Fa
							—

Name of Worker	Equipment Inspected	Pass	Fail

COMPETENT PERSON'S NAME	DATE	COMPETENT PERSON' S SIGNATURE

	DAII		PAINT R Abrasive								ΤI	ON	
and the second s	Painting a eting Cor		(PROJECT NAME:										
NTIN	RATE AND SERVICE OF THE PARTY O		DATE:			Α	TLA	S JC	)B #:				
77	reekside Dri erst, NY 142	_	COM	MPETENT F	ERSON:								
Location:													
		Co	ontainment					Yes	No	N/A		Comme	nts
During abra	asive blast opera	ations, is	the ventilation s	system opera	ting contin	Jou	sly						
Adequate d	luct layout and a	re the du	ucts in good wor	king conditio	n								
Containmer	nt tarps in good v	working	condition										
Containmer	nt tarps have pro	per ove	rlap										
Make-up air	r inlets operatior	nal											
Containmer	nt cleaned in a ti	mely ma	nner										
Entryway m	neets project spe	ecification	า										
Airflow mea	asurements reco	rded at le	east weekly:	Results:									
Results:	Resul	ts:	Results:		Results:								
Dust Collec	tor Magnehelic	Gage Re	eading:	am		рі	m						
Method 22	Visible Emissi	ion Mon	itoring (15 mir	ute time pe	riods)				<u> </u>				
Time	Result	Time	Result	Time	Resul		-	Time		Resu	ılt	Time	Result
Observation	ons of Negative	e Pressi	ıre	L	1								
Time	Result	Time	Result	Time	Resul		-	Time		Resu	ılt	Time	Result
	rtodit	111110	rtodat	711110	rtocar						an (		rtoodit
										_			
Time	Result	Time	Result	Time	Resul			Time		Resu	ılt	Time	Result
Abrasive Bla	ster				Ye	s 1	No	N/A			C	Comments	
Wearing ap	proved blast hel	lmet				] [							
Using inner	and outer shield	ds				] [							
Breathing a	airlines approved	l by blast	t helmet manufa	ıcturer		] [							
Supplied ai	r checked for ca	rbon mo	noxide			] [							
Air purifying	g system dated a	and signe	ed as to last filte	r change out		] [							
Wearing he	earing protection					][							
Deadman o	control in use and	d not blo	cked			] [							
Blast hoses	s and breathing a	airline ha	ve safety device	es at all coup	lings	] [							

### **APPENDIX 16 (Continued)**

Regulated Area	Yes	No	N/A	Comments
Clearly defined				
Warning signs and/or tape in use				
Hand wash station/ DECON trailer outside of regulated area				
		<u> </u>		
Regulated Area	Yes	No	N/A	Comments
Handwash station in direct line from regulated area to clean area				
Are soap and paper towels available at the handwash station				
Decontamination trailer cleaned on a daily basis				
Decontamination trailer has soap, shampoo and towels				
Decontamination trailer have power and hot water				
Workers wash their hands and face prior to breaks				
Workers exposed above PEL take showers				
Street clothing left in clean side of decontamination trailer				
Is waste water properly contained and disposed				
Personal Protective Equipment	Yes	No	N/A	Comments
Hearing protection worn where noise exposure above 85 dBA				
Coveralls/ Tyvek or Blast Suits worn where required				
Hard hats worn where required				
Safety glasses work where required				
Respirators worn where required				
Respirators and blast helmets properly stored when no in use				
COMPETENT PERSON (NAME): DATE				PETENT PERSON (SIGNATURE):

# Atlas Painting and Sheeting Corp. 465 Creekside Drive Amherst, NY 14228 CHEMICALS ONSITE PROJECT NAME: DATE: ATLAS JOB #: COMPETENT PERSON:

### SDS are located:

No.	Manufacturer	Product Name
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

# Atlas Painting and Sheeting Corp. 465 Creekside Drive Amherst, NY 14228 CHEMICAL INVENTORY PROJECT NAME: DATE: ATLAS JOB #: COMPETENT PERSON:

Location	or	Pro	iect::

Manufacturer	Product Name	Location	Quantity
Manadator	7 100001101110	Location	Quality

Chemical Inventory Conducted By:

EXP	OSURE	MONITOR	ING RESU	LTS
Atlas Painting and Sheeting Corp.	PROJECT NAME:			
SELNI RATI	DATE:		ATLAS JOB #:	
465 Creekside Drive Amherst, NY 14228	СОМРЕТЕ	ENT PERSON:		
Employee Name:				Date:
Sample Date:				
On	, you wo	ore a personal air n	nonitor to access yo	ur exposure to lead / cadmium
/ arsenic or other metal(s):				
Below are the results of this mor	nitoring and any i	recommendations.		
Respirator worn during monitorir	ng:			
The 8 hour Time Weighted Aver	age (TWA) was:		μg/m³ for lead.	
Your exposure was/ was not abo	ove the OSHA Pe	ermissible Exposu	re Limit(PEL) of:	μg/m³
Your exposure was/ was not abo	ove the OSHA A	ction Level (AL) of:		µg/m³
Your exposure was/ was not abo	ove the protection	n factor of your ass	igned respirator of:	μg/m³
The 8 hour Time Weighted Aver	age (TWA) was:	μg/m³	for	Other Metal Sampled
Your exposure was/ was not abo	• , ,		e Limit(PEL) of:	 µg/m³
Your exposure was/ was not abo	ove the OSHA A	ction Level (AL) of:		μg/m³
Your exposure was/ was not abo	ove the protection	n factor of your ass	igned respirator of:	μg/m³
The 8 hour Time Weighted Aver	age (TWA) was:	μg/m³	for	Other Metal Sampled
Your exposure was/ was not abo	ove the OSHA Pe	ermissible Exposu	re Limit(PEL) of:	 μg/m³
Your exposure was/ was not abo	ove the OSHA Ad	ction Level (AL) of:		 μg/m³
Your exposure was/ was not abo	ove the protection	n factor of your ass	igned respirator of:	μg/m³
The 8 hour Time Weighted Aver	age (TWA) was:	μg/m³	for	Other Metal Sampled
Your exposure was/ was not abo	ove the OSHA Pe	ermissible Exposu	e Limit(PEL) of:	 µg/m³
Your exposure was/ was not abo	ove the OSHA A	ction Level (AL) of:		µg/m³
Your exposure was/ was not abo	ove the protection	n factor of your ass	igned respirator of:	µg/m³
The following action(s) will reduce	ce your exposure	e:		
Continue to wear the assign	•			
Continue to follow the estal	olished hygiene p	orocedures		
Upgrade your assigned res	pirator to:			
Engineering controls will be	e modified			
Administrative procedures	will be instituted			
Employee Signa	ature		Date	

After Competent Person:    Date:	Atlas Painting and Sheeting Corp.	PROJECT NAME:			
Employee Name:	AGE Crookside Drive	DATE:		ATLAS JOB #:	
Sample Date:  The results of the blood test are:  blood lead (µg/dl) and  ZPP (µg/dl)  Below the OSHA Action Level (AL) of 40 µg/dl  Above the OSHA Action Level and below the medical removal criteria of 50 µg/dl  Above the OSHA medical removal criteria and a retest must be taken within two weeks  Your next blood test will be in  The following actions apply based upon your blood lead level:  Continue to use your assigned respirator and use good hygiene practices  You will be given additional training by the competent person on the proper use and cleaning of the respirate and personal hygiene practices  You are medically removed from lead exposure activities  You may return to lead exposure activities		СОМРЕТЕ	NT PERSON:		
The results of the blood test are: blood lead (µg/dl) and ZPP (µg/dl)  Below the OSHA Action Level (AL) of 40 µg/dl Above the OSHA Action Level and below the medical removal criteria of 50 µg/dl Above the OSHA medical removal criteria and a retest must be taken within two weeks  Your next blood test will be in  The following actions apply based upon your blood lead level:  Continue to use your assigned respirator and use good hygiene practices  Your assigned respiratory protection will be upgraded to You will be given additional training by the competent person on the proper use and cleaning of the respirate and personal hygiene practices  You are medically removed from lead exposure activities  You may return to lead exposure activities	Employee Name:				Date:
Below the OSHA Action Level (AL) of 40 µg/dl Above the OSHA Action Level and below the medical removal criteria of 50 µg/dl Above the OSHA medical removal criteria and a retest must be taken within two weeks  Your next blood test will be in  The following actions apply based upon your blood lead level:  Continue to use your assigned respirator and use good hygiene practices  Your assigned respiratory protection will be upgraded to  You will be given additional training by the competent person on the proper use and cleaning of the respirate and personal hygiene practices  You are medically removed from lead exposure activities  You may return to lead exposure activities	Sample Date:				
Above the OSHA Action Level and below the medical removal criteria of 50 µg/dl Above the OSHA medical removal criteria and a retest must be taken within two weeks  Your next blood test will be in  The following actions apply based upon your blood lead level:  Continue to use your assigned respirator and use good hygiene practices  Your assigned respiratory protection will be upgraded to  You will be given additional training by the competent person on the proper use and cleaning of the respirate and personal hygiene practices  You are medically removed from lead exposure activities  You may return to lead exposure activities	The results of the blood test are	:	blood lead (μg/dl	) and	ZPP (μg/dl)
Continue to use your assigned respirator and use good hygiene practices  Your assigned respiratory protection will be upgraded to You will be given additional training by the competent person on the proper use and cleaning of the respirate and personal hygiene practices  You are medically removed from lead exposure activities  You may return to lead exposure activities	Above the OSHA Action L	evel and below th	ne medical removal cr	, •	
Continue to use your assigned respirator and use good hygiene practices  Your assigned respiratory protection will be upgraded to  You will be given additional training by the competent person on the proper use and cleaning of the respirate and personal hygiene practices  You are medically removed from lead exposure activities  You may return to lead exposure activities	Your next blood test will be in				
Your assigned respiratory protection will be upgraded to You will be given additional training by the competent person on the proper use and cleaning of the respirate and personal hygiene practices You are medically removed from lead exposure activities You may return to lead exposure activities					
You will be given additional training by the competent person on the proper use and cleaning of the respirate and personal hygiene practices  You are medically removed from lead exposure activities  You may return to lead exposure activities	he following actions apply base	ed upon your bloo	od lead level:		
and personal hygiene practices  You are medically removed from lead exposure activities  You may return to lead exposure activities				practices	
You may return to lead exposure activities	Continue to use your assigned respiratory	gned respirator ar	nd use good hygiene   upgraded to		
	Continue to use your assigned respiratory Your assigned respiratory	gned respirator ar protection will be all training by the c	nd use good hygiene   upgraded to		and cleaning of the respirato
he following additional procedures will be instituted:	Continue to use your assigned respiratory Your assigned respiratory You will be given additions and personal hygiene practice.	gned respirator ar protection will be al training by the octices	nd use good hygiene   upgraded to competent person on		and cleaning of the respirator
The following additional procedures will be instituted.	Continue to use your assigned respiratory You will be given additionally and personal hygiene practically removed.	gned respirator ar protection will be al training by the o ctices ed from lead expos	nd use good hygiene   upgraded to competent person on		and cleaning of the respirator
	Continue to use your assigned respiratory You will be given additions and personal hygiene practy You are medically removed You may return to lead ex	gned respirator ar protection will be al training by the o ctices ed from lead expos sposure activities	nd use good hygiene   upgraded to competent person on sure activities		and cleaning of the respirator
	Continue to use your assigned respiratory You will be given additions and personal hygiene practy You are medically removed You may return to lead ex	gned respirator ar protection will be al training by the o ctices ed from lead expos sposure activities	nd use good hygiene   upgraded to competent person on sure activities		and cleaning of the respirator
	Continue to use your assigned respiratory You will be given additions and personal hygiene practy You are medically removed You may return to lead ex	gned respirator ar protection will be al training by the o ctices ed from lead expos sposure activities	nd use good hygiene   upgraded to competent person on sure activities		and cleaning of the respirator
	Continue to use your assigned respiratory You will be given additions and personal hygiene practy You are medically removed You may return to lead ex	gned respirator ar protection will be al training by the o ctices ed from lead expos sposure activities	nd use good hygiene   upgraded to competent person on sure activities		and cleaning of the respirato

Employee Signature

Date

### **EXIT MEDICAL EXAMINATION NOTIFICATION Atlas Painting and PROJECT Sheeting Corp.** NAME: DATE: ATLAS JOB #: **465 Creekside Drive COMPETENT PERSON:** Amherst, NY 14228 **EXIT MEDICAL EXAMINATION NOTIFICATION**

Atlas Painting and Sheeting Corp. is offering to you an exit exam	ination and biological monitoring in accordance with
29 CFR 1926.62 and our health and safety programs regulations	. The facility that will be used is:
Please check the block below which will be applicable to you and Painting and Sheeting Corp.	d sign and date the form and return it back to Atlas
Yes, I would like an exit medical examination. I understand Of the receipt of the results by Atlas Painting and Sheeting	
No, I would not like to participate in an exit medical examin	ation.
Print Employee Name	Employee Signature
Date	Last 4 of Social Security Number

	CONT	AINMENT VELOCITY M	EASUREMENTS	
Atlas Painting and Sheeting Corp.	PROJECT NAME:			
465 Crockelde Drive	DATE:	ATLAS JOB #:		
465 Creekside Drive Amherst, NY 14228	COMPETE	NT PERSON:		
Instrument used for measurem	nent: Type:	Model:	Serial Number:	-
Document below, location	n of velocity mea	asurements. Draw in location of dust	collector hoses and location of make-up air:	
Q = V x A: Containment I  Containment Length (ft)	Height:	feet x Containment Width:  Average Air Velocity (ft/min)	Feet x Air Velocity (100 or 60 fpm):  Dust Collector Size(s):	CFM
Competent Perso	n's Name		Competent Person's Signature	

### **DAILY SHOWER LOG Atlas Painting and PROJECT Sheeting Corp.** NAME: DATE: ATLAS JOB #: **465 Creekside Drive COMPETENT PERSON:** Amherst, NY 14228

Printed Name	Signature

Competent Person's Name Date Competent Person's Signature

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WEEKLY SHOWER LOG								
Atlas Painting and Sheeting Corp.	PROJECT NAME:							
465 Creekside Drive	DATE:		ATLAS JO	B #:				
Amherst, NY 14228	СОМРЕТЕ	ENT PERSON:						
WEEK OF:		THROUGH _						
Employee Name	)	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Employees Initial Each Day 1	They Take a Sh	nower						
Competent Person's N	ame		Date	_		Competent Pers	son's Signature	
○ MR Safety	Consulting Inc	1/6/25	Page	-253- A	tlas Painting and Sh	neeting Cornor	ate Safety Plan	

DECONTA	MIN	IATI	ON FAC	CILIT	Y CLI	EANIN	G LOG	
Atlas Painting and Sheeting Corp.	PROJ NAME							
465 Creekside Drive	DATE	:			ATLAS JO	)B #:		
Amherst, NY 14228	C	OMPET	ENT PERSON	:				
Location of decontamination fa	acility:							
Date			Cleaned	Ву			Signature	
Competent Person's Na	ame		Date			Competent	Person's Signature	

# SITE SPECIFIC FALL PROTECTION PLAN **Atlas Painting and PROJECT Sheeting Corp.** NAME: ATLAS JOB #: DATE: 465 Creekside Drive PREPARED BY: Amherst, NY 14228 1) Brief Description of Project: 2) Personnel: Supervisor/ Foreman: Fall Protection and Scaffold Competent Person: Alt Fall Protection and Scaffold Competent Person: Engineer designing the scaffold or platform system: Designated First-Aid/CPR Person: Anticipated number of workers: 4) Scaffold or platform to be used: 5) Will aerial lifts be used: 6) Will workers work over water: 7) Access to the structure will be by: 9) Who will inspect the scaffold, fall protection and/ or aerial lift(s) and how often:

# APPENDIX 26 (Continued) SITE SPECIFIC FALL PROTECTION PLAN

10) Section(s) of the Corporate Health and Safety Plan that will apply to this project:					
11) Othor:					
11) Other:					
12) Site Specific Fall Protection and Scaffold Safe	oty Plan was:				
12) Site Specific Fall Frotection and Scanoid Sale	ety Fian was.				
Prepared By (Printed Name):	 Date	Prepared By (Signature):			
Reviewed By (Printed Name):	Date	Reviewed By (Signature):			

### SCAFFOLD INSPECTION **Atlas Painting and PROJECT Sheeting Corp.** NAME: DATE: ATLAS JOB #: 465 Creekside Drive **COMPETENT PERSON:** Amherst, NY 14228 Location: Description Yes No N/A Has the scaffold been designed by a qualified person Is the scaffold drawing available Has the scaffold been constructed and loaded with a safety factor of 4 to 1? Are open sides of a scaffold less than 14 inches from the face of the work? Where opens sides of scaffolds are more than 14 inches, is fall protection in use? Are all platform units cleated, restrained by hooks or equivalent means? Platforms of 10 feet or less extend over their end supports by no more than 12 inches? Platforms of 10 feet or more extend over their end supports no more than 18 inches? Does the scaffold have a 4 to 1 base to height ratio or is it secures by the use of ties? Is safe access provided? Are scaffolds or components loaded beyond their rated capacities? as the scaffold been inspected by a competent person? Are scaffolds or component damaged, if so have the parts been tagged and removed from service? Are scaffolds and any conductive material handled the proper distance from electrical lines? Are slippery conditions (ice, grease, oil) removed as soon as possible? If guardrails are in use, are top and midrails installed on all opens sides. Are top rails between 39 to 45 inches in height? Do guardrails meet the outward strength requirements? Have falling object hazards been eliminated? Catenary scaffold- are platforms secured to prevent them from slipping off the wire ropes? Catenary scaffold- inspect the wire ropes supporting the platform for proper tightness? Catenary scaffold- wire ropes are continuous and without spices between anchors? Inspect all wire ropes Inspect all clips, are sufficient clips used on each wire rope? Are all employees trained to use the scaffold system? Inspected By (Name) Inspected By (Signature) Date

Atlas Painting and Sheeting

		AFFEINDIX 20		
Sca	affold Pl	atform Dai	y Inspecti	on
Atlas Painting and Sheeting Corp.	PROJECT NAME:			
MAN	DATE:		ATLAS JOB #:	
465 Creekside Drive Amherst, NY 14228	COMPET	ENT PERSON:	·	
For each item in the list below fil Note: Multiple designations may ***F-R-C which shows the item of and is now completed  END CONNECTIONS & MAIN	be used in orde called for a follo	er such as:		plain in comment section) n repaired is now completed e
Ancher Plate Assemblies View	ally Inapact for	Wear and/or Damage		1
Anchor Plate Assemblies - Visua Clamping Plates & Post Bracket				Δ
Tubes - Visually Inspect For We		· ·		
Shackle Plates - Visually Inspect		<u> </u>	Doits Have Jain Nu	13
Foundry Hooks - Visually Inspec				
Main Cables - Visually Inspect F				
	or vvcar aria/or	Damage		
TIE-UPS	or Moor and/or	- Damaga		
Tie-Up Clips - Visually Inspect F		<u>-</u>		
Cables - Visually Inspect For We				
Rigid Hangers - Visually Inspect				
Beam Clamps - Visually Inspect	roi weai and/	or Damage		
DECKING				1
Check All Decking For Loose Sh			Secure Overlaps	
Check All Decking For Missing (	Or Loose Decki	ng Clips		
PERIMETER PROTECTION				
Posts - Visually Inspect For Wea		•		
Cable Railing - Visually Inspect Note: Cable Railings				n Of Deck
Brace Diagonals - Visually Inspe Note: Use Brace At A	ect For Wear ar	nd/or Damage		
	, . 3010 111101	- Jazie i tamiigo i lav		
GENERAL  Verify Rubber Softeners - Visual	lly Inspect For \	Wear and/or Damage		
Verify Platform Is Free Of Debris	-			
			ess i form Flationii	
Comments (Specify Areas Inspe	cted):			
Note: Refer to the Approved Dra	wings When Pe	erforming All Inspection	ons.	
Inspector's Name		 Date	In	spector's Signature

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### **APPENDIX 28 (Continued)**

SCAFFOI		THLY OR F	INAL INSPECTION	
Atlas Painting and Sheeting Corp.	PROJECT NAME:			
RATI	DATE:		ATLAS JOB #:	
465 Creekside Drive Amherst, NY 14228	COMPET	TENT PERSON:	L	
For each item in the list below fill Note: Multiple designations may ***F-R-C which shows the item of and is now completed  END CONNECTIONS & MAIN	be used in ord alled for a follo	er such as:	C = Complete F = Follow-up (explain in comment section R = Item has been repaired is now complet X = Not applicable	
Anchor Plate Anchor Bolts - Che	eck Torque			
Clamping Plates & Post Bracket	•	Check All Bolts For P	roper Torque	
Tubes - Check Tubes For Dama			<u> </u>	
Shackle Plates - Check All Bolts				
Foundry Hooks - Verify All Hook		•	Have Safety Retainer	
Main Cables - Check Cable Clip			,	
TIE-UPS	· ·	•		
Tie-Up Clips - Verify Nuts Are Ti	ahtened			
Cables - Verify All Wire Rope Cl		ned		
Rigid Hangers - Verify All Nuts T	<u> </u>			
Beam Clamps - Verify Proper In:			n Clip Installed	
DECKING			· · · · · · · · · · · · · · · · · · ·	
Check All Decking For Loose Sh	neets & Use Se	If Tapping Screws To	Secure Overlaps	
Check All Decking For Missing (			-	
PERIMETER PROTECTION			,	
Posts - Verify All Post Fasteners	Are Tightened	1		
Cable Railing - Verify Railing Is Note: Cable Railings Shall Not D	Taut & Wire Ro	pe Clips Tightened	From Top Of Deck	
Brace Diagonals - Verify All Bolt				
Note: Use Brace At Any Posts V	Vhere Cable Ra	ailings Have Been Te	rminated	
GENERAL			<del>_</del>	
Verify Rubber Softener Has Bee				
Verify Platform Is Free Of Debris	,	at Would Impede Eg	ress From Platform	
Comments (Specify Areas Inspe	cted):			
Note: Refer to the Approved Dra	wings When Po	erforming All Inspecti	ons.	
Inspector's Name		 Date	Inspector's Signature	

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# **EMERGENCY CONTACTS**

ORGANIZATION	EMERGENCY TELEPHONE	LOCAL PHONE
Ambulance	911	
Police	911	
Fire	911	
Hospital		
Poison Control Center	(800) 962-1253	
CHEMTREC	(800) 424-9300	
State Environmental Agency		
National Response Center	(800) 424-8802	
Project Manager's Phone		
Foreman's Phone		
Competent Person's Phone		
Other Designated Phone		

1/6/25

### WORK ZONE TRAFFIC CONTROL INSPECTION **Atlas Painting and PROJECT Sheeting Corp.** NAME: DATE: ATLAS JOB #: 465 Creekside Drive PREPARED BY: Amherst, NY 14228 Traffic Control Supervisor: 1) Inspect the traffic control signs Yes Are any signs missing Signs in good condition Sign at the proper height Signs oriented toward the driver Flashing arrow board working properly Anticipated number of workers: Comments: 2) Channelization Yes No N/A Channelization devices in good condition Taper proper length in transition area Buffer space provided Work zone Termination area Comments: 3) If a flagger is required Yes No N/A Does the flagger have proper training Flagger properly attired Stop/ slow paddle in good condition Flagger have a warning device (horn) Flagger signs properly set-up Flagger have an escape route Comments: 4) Inside the work zone Yes No N/A Is an attenuator provided Are wheels of the attenuator truck turned properly Back-up procedures for trucks being followed Are workers trained to work in the work zone Are workers wearing the proper safety equipment Comments: Work Zone Inspected By (Printed Name): Reviewed By (Signature): Date

RE	EPORT	OF ACCIE	ENT / INJU	RY	
Atlas Painting and Sheeting Corp.	PROJECT NAME:				
ACC Crooks Ido Daire	DATE:		ATLAS JOB #:		
465 Creekside Drive Amherst, NY 14228		REPORTED BY:			
Location of Accident / Injury:					
Date of Occurrence:			Pictures Taken	? 🗌 Yes	□No
INJURED EMPLOYEE INFORI	MATION:				
Name:		Phone	Number:		
Address:					
Job Title:		SS#(	Last 4):		
D.O.B			Date of Hire:		
ACCIDENT INFORMATION:					
Description of Injury:					
Time Injury Occurred:			Shift Starting Time	: <u> </u>	
WITNESSES					
1) Witness Name:		Ph	one Number:		
Statement:					
2) Witness Name:		Ph	one Number:		
Statement:					

### **APPENDIX 31 (Continued)**

3) Witness Name: Phone Number:				
Statement:				
Medical Treatment Needed?	No □	Emergency Room?	Yes	No
Overnight Hospital Stay ? Yes	□No	Ambulance?	☐ Yes	□No
Procedures Performed ?				
MEDICAL PROVIDED INFORMATION.				
MEDICAL PROVIDER INFORMATION:				
	1 Hone #.			
ACCIDENT PREVENTION: Actions T	aken To Preven	t Similar Occurrences:		
REPORTING INFORMATION:				
Title !	Name	Signature		Date
Supervisor/Foreman:				
Project Manager:				
Health & Safety Director:				

WITNESS STATEMENT					
Atlas Painting and Sheeting Corp.	PROJECT NAME:				
465 Creekside Drive	DATE:		ATLAS JOB #:		
Amherst, NY 14228		REPORTED BY:			
Witness location at time of A	ccident /Inju	ry:			
Name of Injured Employee: _					
Date of Statement:			Time of Statem	ent:	
Witness Information:					
Name:		Phone	Number:		
Address:					
Address:					
Describe, to the best of your kn	owledge, wha	at happened just be	fore, during and just a	after the accident/ incident:	
Witness Signatu	re				

	ROO	CAUSE A	ANALYSIS		
Atlas Painting and Sheeting Corp.	PROJECT NAME:				
ALLAN	DATE:		ATLAS JOB #:		
465 Creekside Drive Amherst, NY 14228		REPORTED BY:			
Accidents result from a Direct sequence shown below. Revi	•	•		e. These causes occur in the apply.	
DIRECT CAUSE					
Unsafe	Unsafe Act		Unsafe Condition		
Improper use of tool/equip	Improper use of tool/equipment		Flammable Atmosphere		
Defective tool/equipment	Defective tool/equipment		Toxic Atmosphere		
Failure to use proper PPE	Failure to use proper PPE		Inadequate Illumination		
Improper body position	Improper body position		Poor housekeeping		
☐ Improper lifting/placing	Improper lifting/placing		Worn / Defective tool		
Removing guard	Removing guard		Servicing live equipment		
Defeating safety device	Defeating safety device		Ineffective guard or barricade		
Worn/defective equipment	:		Missing/lack of guarding		
Horseplay			Missing proper anchorage point		
Shortcut/Hurrying					
Other:					
INDIRECT CAUSE — Lack Of	:				
Traini	-		Re	esources	
☐ No training			Time		
_		<del></del>	1 11110		
Poor training			Tools		
<ul><li>☐ Poor training</li><li>☐ Refresher needed</li></ul>			Tools		
Refresher needed			Tools Equipment		
_			Tools Equipment Material		
Refresher needed			Tools Equipment		
Refresher needed Not understood			Tools Equipment Material		
Refresher needed Not understood	onal Failure T	o	Tools Equipment Material		
Refresher needed Not understood Other:		o	Tools Equipment Material Manpower	rganize	
Refresher needed Not understood  Other: BASIC CAUSE — Organization	nel	_	Tools Equipment Material Manpower	rganize nt (tools, personnel, etc.)	
Refresher needed Not understood  Other: BASIC CAUSE — Organization Person	<b>nel</b> superintender	_	Tools Equipment Material Manpower  O Resources not prese	-	
Refresher needed Not understood  Other:  BASIC CAUSE — Organization Person Assign qualified foreman/	<b>nel</b> superintender sonnel	_	Tools Equipment Material Manpower  O Resources not prese	nt (tools, personnel, etc.) r (tools, personnel, etc.)	
Refresher needed Not understood  Other:  BASIC CAUSE — Organization Person Assign qualified foreman/ Assign qualified safety per	<b>nel</b> superintender sonnel	_	Tools Equipment Material Manpower  O Resources not prese Resources not prope	nt (tools, personnel, etc.) r (tools, personnel, etc.)	

# **NEAR-MISS INCIDENT INVESTIGATION REPORT Atlas Painting PROJECT** and Sheeting NAME: Corp. DATE: ATLAS JOB #: **465 Creekside Drive REPORTED BY:** Amherst, NY 14228 1) Date: Day: Su Time of Incident: 2) Weather at the Time of Incident: 3) Lighting Conditions at Time of Incident: 4) Supervisor(s) during the Incident: 5) Employees Involved and Nearby to the Incident: 6) Location of Incident: 7) Describe the Incident: 8) Was the Training Inadequate: Yes ☐ No 9) Describe the Equipment or Process Used Prior to and During the Incident:

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### **APPENDIX 34 (Continued)**

10) Describe the Root Cause	of the Incident:		
11) How Could the Incident be	Prevented in the Future:		
12) Additional Notes:			
	Name	Signature	Date
		g	_ 3.0
ncident Investigated By:			
ncident Reviewed By:			
			_
Safety Director Review:			
_			_

	PROP	ERTY DA	MAGE REPORT	
Atlas Painting and Sheeting	PROJECT NAME:			
Corp. 465 Creekside Drive	DATE:		ATLAS JOB #:	
Amherst, NY 14228		REPORTED BY:	•	
1) Date: Day:	□ M _ T	u W Tr	n F Sa Su Ti	ime of Incident:
2) Weather at the Time of Inc	cident:			
3) Supervisor(s) during the In	ncident:			
4) Employees Nearby to the	Incident:			
5) Location of Property Dam	age:			
6) Describe the incident (incl	ude vehicle li	cense plate numb	pers, drivers names, equipment,	materials involved):
7) Describe the damages: _				
8) Were the police called:	Yes	No	Was a police report writte	
Police Officer Name Who Wrote Report: Report No:				
9) Additional Notes:				
	N	ame	Signature	Date
Incident Investigated By:				
Incident Reviewed By:				
Safety Director Review:				

## **APPENDIX 36 OSHA REPORTING OF FATALITY OR IN-PATIENT HOSPITALIZATION Atlas Painting PROJECT** and Sheeting NAME: Corp. DATE: ATLAS JOB #: **465 Creekside Drive REPORTED BY:** Amherst, NY 14228 Date: Are you reporting a fatality, in-patient hospitalization, amputation or loss of an eye? Yes No Name(s) of affected employee(s): Date incident occurred: Actual time the incident occurred: Notification to OSHA: Date: How was OSHA contacted: Phone Internet Other: If by internet, did you print out the notification: Yes If No, Why? Any other information relevant to the notification, such as OSHA requesting additional information, OSHA coming onsite, etc Name Signature **Date** Reported to OSHA By:: Report Reviewed By:

Corporate Safety Plan

Safety Director Review:

OFFER OF A HEPATITIS-B (HBV) VACCINATION				
Atlas Painting and Sheeting	PROJECT NAME:			
Corp. 465 Creekside Drive	DATE:		ATLAS JOB #:	
Amherst, NY 14228	ı	REPORTED BY:		

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

This offer has been made in accordance with 29 CFR 1910. 1030 Appendix A

S.S. # (Last 4) or Name **Signature Date Employee** Number

1/6/25

			CO	NFINI	ED SPACE EN	TRY P	ERMIT			
Sheet	ainting and ing Corp.	PROJECT NAME:	-							
	ekside Drive st, NY 14228	DATE:		,	ATLAS JOB #:					
Space to be	Entered:						Job Supervisor:			
Date and Tir	me Issued:				Date and Tir	ne Expires _				
Equipment t	to be worked on:				Work to be p	performed:				
	Atmos	pheric Che	cks:		Nam	ne of Entran	t and Time In and (	Out of Confin	ed Space	
Time	O2 LEI CO2 Entrant						Time out	Time in	Time out	
1) Test equi	pment used:				Serial Number	r:	Cali	brated:		
2) Communi	cation between	attendant a	nd entrant is	s by:	Verbal Walkie	e Talkie	Other:			
3) Rescue p	rocedures imple	mented:	Rescue	equipmer	nt onsite Othe	er:				
	Permi	t Prepared E	Bv:				Permit A	pproved By:		

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Atlas Painting and Sheeting

Corporate Safety Plan

#### **CONFINED SPACE PRE-ENTRY CHECKLIST Atlas Painting PROJECT** and Sheeting NAME: Corp. DATE: ATLAS JOB #: 465 Creekside Drive PREPARED BY: Amherst, NY 14228 1) Have all workers received training: Entrant Attendant Supervisor Rescue 2) Equipment: Direct Reading Gas Monitor Hoisting equipment Powered communications SCBA's for Entry and Standby Persons All Electric Equipment Listed Class I, Division I, Group D 3) Rescue Procedure – Rescue To Be Performed By Onsite Personnel Rescue Performed By Client Rescue Team Rescue Performed By Emergency Services 4) Rescue Equipment Onsite - Describe Rescue equipment: 5) If Rescue is Performed by Personnel Onsite, Who is the First Aid/ CPR trained person(s): 6) If Rescue is to be Performed By Others, Describe Who and How to Contact Rescue Team: 7) Engineering Controls, Isolation of: Mechanical Electrical Pneumatic Hydraulic 8) Ventilation: Natural Mechanical Describe Mechanical Ventilation: 9) PPE for entry: Hard Hat Safety glasses Hearing protection Lanyard/Retractable Harness Lifire Resistant Clothing Work Boots Work Clothing Rain boots 10) Confined Space: | Isolated Prior to Entry Purged of Toxic Gases Lockout / Tagout Required to Remove Electrical, Mechanical, Hydraulic or Other Hazards 11) If Lockout/ Tagout is Required, Who Will Perform: 12) List Entrants: 13) List Attendant(s):

	Name	Signature	Date
Permit Prepared By:			
Permit Reviewed By:			

### LOCKOUT/ TAGOUT OF EQUIPMENT **Atlas Painting PROJECT** and Sheeting NAME: Corp. DATE: ATLAS JOB #: 465 Creekside Drive PREPARED BY: Amherst, NY 14228 Equipment Information: **Energy Information:** Type(s) of energy sources: Number of Tags Required: Number of Locks Required: 1) Only trained, authorized employees are permitted to service this equipment. The name(s) of the employee(s) who are authorized are listed below. Name: Name: Name: Name: Name: \_\_\_\_\_\_ Name: 2) All affected employees must be notified that servicing or maintenance is required on this equipment and that it will be shut down and locked out. The names of the affected employees are: Name: Name: Name: Name: \_\_\_\_\_ Name: Name: 3) Shutdown procedure: 4) Start-Up Procedure g. \_\_\_\_\_\_ g. \_\_\_\_ 5) Verification of proper shutdown procedure: C. Prepared By:

Name

Signature

Date

						orkli	ft Ins	pecti	on				
Atlas Painti Sheeting 465 Creeksid	Corp.	PROJE NAME											
Amherst, N			DATE: ATLAS JOB #:										
Forklift make and model: (Write month and date in shaded boxes below											s below)		
Equipment													
Brakes													
Horn													
Lift/Tilt													
Lights													
Oil leaks													
Reach and													
forks													
Steering													
Tires													
Engine Oil													
Backup alarm													
Lift chains													
Inspected By:													

# Atlas Painting and Sheeting Corp. 465 Creekside Drive Amherst, NY 14228 Employee Name: Atlas Painting and PROJECT NAME: DATE: ATLAS JOB #: COMPETENT PERSON:

I have read and will follow the Safe Operating Procedures. I understand that failure to do so will constitute an Infraction of Atlas Painting and Sheeting's safety regulations.

Date	Equipment or Process	Employee Signature
	Abrasive Blasting Safety	
	Abrasive Recycler - Steel Grit	
	Blast Pot - Black Beauty	
	Power Tool Cleaning Safety	
	Vacuum Equipment - Supersucker	
	Vacuum Equipment	
	Compressor	
	Dust Collector	
	Aerial Lift	
	Scissor Lift	
	Light Tower	
	Electrical Safety	
	Pressure Wash Safety	
	Airless Spray Safety	

# **CERTIFICATE OF TRAINING GENERAL SAFETY AND HEALTH TRAINING Atlas Painting PROJECT** and Sheeting NAME: Corp. DATE: ATLAS JOB #: **465 Creekside Drive TRAINED BY:** Amherst, NY 14228 **Employee Name:** Atlas Painting and Sheeting has provided me with training in General Safety and Health Requirements which included the following topics: 1) OSHA General Duty Clause 5(A)(1). 2) Why OSHA was created and its mission. 3)29 CFR 1926.21 Safety Training - is required to provide a safe and healthy workplace. 4) The requirements under 29 CFR 1926 Subpart C. 5) The workplace will be free of recognized hazards, I have been instructed as to the most common hazards in my workplace. 6) If I observe an unsafe condition, I am to report the unsafe condition to the foreman or competent person immediately. 7) I am to report all accidents and near misses to the foreman or competent person immediately. 8) Atlas Painting and Sheeting has established a Corporate Health and Safety Program and each project has a site specific Health and Safety Program. Date Employee's Signature

Trainer's Signature

Date

# **CERTIFICATE OF TRAINING** 29 CFR 1926 SUBPART D **Atlas Painting PROJECT** and Sheeting NAME: Corp. DATE: ATLAS JOB #: **465 Creekside Drive TRAINED BY:** Amherst, NY 14228 **Employee Name:** Atlas Painting and Sheeting has provided me with training in 29 CFR 1926 Subpart D which included the following topics: 1) Medical services and first aid requirement. I have been instructed on how to contact emergency services and location of hospital directions and emergency phone numbers. 2) First aid requirements. 3) Requirement for drinking water. 4) Requirement for sanitation facilities including bathroom and handwash facilities. 5) I understand that as part of my job, when working with a toxic metal such as lead, paint or other recognized hazard I am to wash my hands prior to breaks, lunch and at the end of the shift. 6) OSHA has established Permissible Exposure Limits (PEL) for many toxic substances. Date Employee's Signature Trainer's Signature Date

CERTIFICATE OF TRAINING OCCUPATIONAL NOISE EXPOSURE AND HEARING PROTECTION								
Atlas Painting and Sheeting	PROJECT NAME:							
Corp. 465 Creekside Drive	DATE:	TRAINED BY:	ATLAS JOB #:					
Amherst, NY 14228 TRAINED BY:  Employee Name:  Atlas Painting and Sheeting has provided me with training in 29 CFR 1926.52 occupational noise exposure and 29 CFR 1926.101 hearing protection which included the following topics:								
Locations where Exposure Limit.	anticipate	ed noise leve	els will be at	or above the Permissible				
2) Duration per day	, I am allo	owed to work	cat various n	oise levels.				
3) Basic anatomy o	f the ear.							
4) Consequences of	f hearing	loss.						
5) Hearing protection limitations.	n device	s (ear plugs,	canal caps,	ear muffs) and their				
6) How to properly	wear hea	ring protection	on devices.					
7) How to clean hea	aring prot	ection device	es, when app	olicable.				
8) Engineering conf	rols that	may be utiliz	ed.					
Date		Emplo	oyee's Signatur	re				
 Date		Trair	ner's Signature					

CERTIFICATE OF TRAINING OCCUPATIONAL NOISE EXPOSURE AND HEARING PROTECTION								
Atlas Painting and Sheeting	PROJECT NAME:							
Corp. 465 Creekside Drive	DATE:	TRAINED BY:	ATLAS JOB #:					
Amherst, NY 14228 TRAINED BY:  Employee Name:  Atlas Painting and Sheeting has provided me with training in 29 CFR 1926.52 occupational noise exposure and 29 CFR 1926.101 hearing protection which included the following topics:								
Locations where Exposure Limit.	anticipate	ed noise leve	els will be at	or above the Permissible				
2) Duration per day	, I am allo	owed to work	cat various n	oise levels.				
3) Basic anatomy o	f the ear.							
4) Consequences of	f hearing	loss.						
5) Hearing protection limitations.	n device	s (ear plugs,	canal caps,	ear muffs) and their				
6) How to properly	wear hea	ring protection	on devices.					
7) How to clean hea	aring prot	ection device	es, when app	olicable.				
8) Engineering conf	rols that	may be utiliz	ed.					
Date		Emplo	oyee's Signatur	re				
 Date		Trair	ner's Signature					

		APPEN	DIX 46					
CERTIFICATE OF TRAINING								
LEAD								
Atlas Painting PROJECT and Sheeting NAME:								
Corp. 465 Creekside Drive  DATE:  ATLAS JOB #:								
Amherst, NY 14228 TRAINED BY:								
Employee Name: _								
Atlas Painting and Sl Standard which inclu	_	-		ning in 29 CFR 1926.26 Lead				
1) Hazards of lead in acc	ordance wit	h the Hazard C	ommunication S	tandard 29 CFR 1926.59.				
2) The content of the OS	HA Lead in	Construction St	andard 29 CFR	1926.62.				
3) The specific nature of	the operatio	ons which could	result in exposu	re to lead above the Action Level.				
4) The purpose, proper s	election, fitt	ing, use and lim	itations of respir	rators 29 CFR 1910.134.				
5) The purpose of the me adverse health effect			•	edical removal program and the				
6) Engineering controls a	nd work pra	actice controls th	nat will be utilize	d to minimize the exposure to lead.				
7) The contents of the sit	e specific H	ealth and Safet	y Program and o	corporate Health and Safety Program.				
Instructions that chela measure unless unde			sed to remove le	ead from the body or as a preventative				
9) Access to medical and	l exposure r	ecords.						
10) Hygiene practices an	d how to pro	operly use the fa	acilities.					
11) Hazardous waste pro	cedure (40	CFR 265.16)						
12) Basic safety and hea	Ith training 2	29 CFR 1926.21	l.					
Date		Emplo	oyee's Signatur	re				

Date

Trainer's Signature

# **APPENDIX 47 CERTIFICATE OF TRAINING HAZARD COMMUNICATION Atlas Painting PROJECT** and Sheeting NAME: Corp. DATE: ATLAS JOB #: **465 Creekside Drive TRAINED BY:** Amherst, NY 14228 **Employee Name:** Atlas Painting and Sheeting has provided me with training in 29 CFR 1926.59 (29 CFR 1910.1200) Hazard Communication Standard which included the following topics: 1) Hazards of the chemicals at job site. 2) Requirements of 29 CFR 1926.59. 3) Operations where exposure to chemicals may occur. 4) Location of Safety Data Sheets (SDS). 5) How to read a SDS. 6) How to read pictograms. 7) Where on the SDS to determine the proper personal protective clothing and emergency procedures. 8) Project specific Hazard Communication Program and its location. 9) Proper labeling of all chemical containers. Date Employee's Signature

Date

Trainer's Signature

		APPEN	DIX 48					
CERTIFICATE OF TRAINING PERSONAL PROTECTIVE EQUIPMENT								
Atlas Painting and Sheeting	PROJECT NAME:							
Corp. 465 Creekside Drive	DATE:		ATLAS JOB #:					
Amherst, NY 14228		TRAINED BY:						
Employee Name: _								
Atlas Painting and SI E, Personal Protectiv	_	•		ning in 29 CFR 1926 Subpart ollowing topics:				
1) Requirements for	personal	protective clo	othing and eq	quipment (PPE).				
2) Limitations of PPE	Ξ.							
3) Atlas Painting and	d Sheeting	g's written PF	PE programs.					
4) Hard hats, when i	t will be re	equired, use,	cleaning, ma	nintenance and limitations.				
5) Eye and face prot limitations.	ection, wl	nen it will be	required, use	e, cleaning, maintenance and				
6) Hand and foot pro and limitations.	otection, v	when they will	l be required,	use, cleaning, maintenance				
7) Fall protection equand limitations.	uipment v	hen they will	l be required,	use, cleaning, maintenance				
8) Working over water buoys and rescue		U.S. Coast G	uard approve	ed life jackets will be used, ring				
9) How to inspect PF competent persor		nen to turn da	amaged PPE	in to the foreman or				
 Date		Emplo	oyee's Signatur	re				
 Date		Trair	ner's Signature					

Atlas Painting and Sheeting

		APPEN	DIX 49				
CERTIFICATE OF TRAINING FIRE PROTECTION							
Atlas Painting and Sheeting	PROJECT NAME:						
Corp. 465 Creekside Drive	DATE:		ATLAS JOB #:				
Amherst, NY 14228		TRAINED BY:					
Employee Name: _							
Atlas Painting and S F, Fire Protection wh	_	-		ning in 29 CFR 1926 Subpart			
1) The four classes	of fires.						
2) What type of fire fire.	extinguis	her or exting	juishing ager	nt is used for each class of			
3 Hazards of fightin	g fires.						
4) Proper use of fire	extingui	shers (PASS	S - Pull, Aim,	Squeeze, Sweep).			
5) Preventative mea	asures to	reduce the p	ootential for f	īres.			
6) Use of temporary	/ heating	devices and	ventilation re	equired.			
7) Who is authorize emergency and	•			ed where to go in case of an			
8) If authorized to fi	ght a fire,	demonstrat	e #4.				
Date		Emplo	oyee's Signatuı	re			
 Date		Trair	ner's Signature	<u></u>			

# **CERTIFICATE OF TRAINING SCAFFOLDS Atlas Painting PROJECT** and Sheeting NAME: Corp. DATE: ATLAS JOB #: **465 Creekside Drive TRAINED BY:** Amherst, NY 14228 Employee Name: Atlas Painting and Sheeting has provided me with training in 29 CFR 1926 Subpart L, Scaffolds which included the following topics: 1. Electrical hazards. 2. Fall hazards. 3. Falling object hazards. 4. Proper use of the scaffold. 5. Proper handling of materials on the scaffold. 6. Maximum intended load. 7. Load carrying capacity. 8. Inspection of scaffolds. 9. Procedure for handling damaged scaffold components. 10. Requirement for erecting and dismantling scaffolds. 11. Platforms used on bridges and their hazards. 12. Site specific scaffolds used on this project include: A: B: C: Date Employee's Signature Trainer's Signature Date

1/6/25

CERTIFICATE OF TRAINING FALL PROTECTION								
Atlas Painting and Sheeting	PROJECT NAME:							
Corp. 465 Creekside Drive Amherst, NY 14228	DATE:	TRAINED BY:	ATLAS JOB #:					
Employee Name:								
Atlas Painting and S Subpart M, Fall Prote	•	•		•				
1) The nature of the fall	hazards in	the work area.						
The correct procedur system to be used.	e for erecti	ng, maintaining	, disassembling	g and inspecting the fall protection				
,	3) The use and operation of guardrail systems, personal fall arrest systems, safety net systems, warning line systems, safety monitoring systems, controlled access zones, and other protection to be used.							
4) The role of each emp	oloyee in the	e safety monito	ring system wh	en used.				
5) The correct procedur of overhead protecti		andling and sto	orage of equipm	nent and materials and the erection				
6) The role of employee	s in fall pro	tection plans.						
7) Any pertinent section	s of 29 CFI	R 1926 Subpart	: M.					
8) The manufacturer's r	ecommend	ations, procedu	res and inspec	tions of fall protection equipment.				
9) Fall protection equipr	ment issued	l: Harness:						
		Lanyard:						
		Rope Grab:						
		Other:						
Date Employee's Signature								
Date Trainer's Signature								

CERTIFICATE OF TRAINING INORGANIC ARSENIC									
Atlas Painting and Sheeting	PROJECT NAME:								
Corp. 465 Creekside Drive Amherst, NY 14228	DATE:	TRAINED BY:	ATLAS JOB #:						
Employee Name:									
Atlas Painting and Sheeting has provided me with training in 29 CFR 1926.1118, Inorganic Arsenic which included the following topics:									
1) The arsenic standard	29 CFR 19	926.1118.							
2) Health hazards associ	ciated with	arsenic exposu	re.						
The specific nature o     Level.	f the operat	tions which cou	ıld result in exp	osure to lead	above the Action				
4) Personal protective e	quipment.								
5) Personal Hygiene an	d decontan	nination proced	ures.						
6) Medical surveillance	program.								
7) Exposure monitoring									
8) The purpose, proper	selection, f	itting, use and	limitations of re	spirators 29 (	CFR 1910.134.				
9) Engineering and wor	k practice c	ontrols.							
10)The contents of the Program.	site specific	: Health and Sa	ıfety Program a	nd corporate	Health and Safety				
11) Access to medical a	and exposu	re records.							
12) Hazardous waste pi	rocedure (4	0 CFR 265.16)							
13) Basic safety and health training 29 CFR 1926.21.									
Date	Date Employee's Signature								
Date Trainer's Signature									

	CERTIFICATE OF TRAINING CADMIUM								
Atlas Painting and Sheeting	PROJECT NAME:								
Corp. 465 Creekside Drive Amherst, NY 14228	DATE:	TRAINED BY:	ATLAS JOB #:						
Employee Name:			l						
Atlas Painting and S Cadmium, which incl	•	•	me with training in 29 (pics:	OFR 1926.1127,					
1) The arsenic standard	1 29 CFR 19	926.1127.							
2) Health hazards associ	ciated with	Cadmium expo	sure.						
The specific nature o     Level.	f the operat	tions which cou	ıld result in exposure to lead	above the Action					
4) Personal protective e	quipment.								
5) Personal Hygiene an	d decontan	nination proced	ures.						
6) Medical surveillance	program.								
7) Exposure monitoring									
8) The purpose, proper	selection, f	itting, use and l	limitations of respirators 29 (	CFR 1910.134.					
9) Engineering and wor	k practice c	ontrols.							
10)The contents of the Program.	site specific	Health and Sa	afety Program and corporate	Health and Safety					
11) Access to medical a	and exposu	re records.							
12) Hazardous waste pi	rocedure (4	0 CFR 265.16)							
13) Basic safety and he	alth training	g 29 CFR 1926	.21.						
Date	Date Employee's Signature								
Date Trainer's Signature									

# **CERTIFICATE OF TRAINING AERIAL LIFTS Atlas Painting PROJECT** and Sheeting NAME: Corp. DATE: ATLAS JOB #: **465 Creekside Drive TRAINED BY:** Amherst, NY 14228 Employee Name: Atlas Painting and Sheeting has provided me with training in Aerial Lifts in accordance with 29 CFR 1926.453, Aerial Lifts which included the following topics: 1) Use and limitations of aerial lifts 2) Electrical hazards. 3) Fall hazards and the proper use of fall protection. 4) Falling object hazards. 5) Proper standing position in the basket - feet planted firmly on the basket floor. 6) Maximum intended load of an aerial lift. 7) Inspection of an aerial lift. 8) Aerial lift make and model: 9) Aerial lift use evaluation: Employee's Signature Date Trainer's Signature Date

# **CERTIFICATE OF TRAINING SCISSOR LIFTS Atlas Painting PROJECT** and Sheeting NAME: Corp. DATE: ATLAS JOB #: **465 Creekside Drive TRAINED BY:** Amherst, NY 14228 Employee Name: Atlas Painting and Sheeting has provided me with training in Scissor Lifts, which included the following topics: 1) Operating instructions, warnings and precautions for the type of scissor lifts that the worker will be authorized to operate. 2) Scissor lift controls and instrumentation- where they are located, what they do and how they work. 3) Engine or motor operation. 4) Steering and maneuvering. 5) Visibility. 6) Capacity and stability. 7) Inspection and maintenance. 8) Refueling or recharging procedures. 9). Operating limitations. 8) Scissor lift make and model: 9) Aerial lift use evaluation: Date Employee's Signature Date Trainer's Signature

# **CERTIFICATE OF TRAINING FORKLIFTS Atlas Painting PROJECT** and Sheeting NAME: Corp. DATE: ATLAS JOB #: **465 Creekside Drive TRAINED BY:** Amherst, NY 14228 Employee Name: Atlas Painting and Sheeting has provided me with training in Forkifts in accordance with 29 CFR 1910.178(I) Powered Industrial Trucks, which included the following topics: 1) Operating instructions, warnings and precautions for the type of forklift that the worker will be authorized to operate. 2) Differences between a forklift and an automobile. 3) Forklift controls and instrumentation- where they are located, what they do and how they work. 4) Engine or motor operation. 5) Steering and maneuvering. 6) Visibility. 7) Fork and attachment adaption. 8) Vehicle capacity and stability. 9) Inspection and maintenance. 10) Refueling or recharging procedures. 11) Operating limitations. 12) Any site specific instructions such as surface conditions and types of loads. 13) Forklift make and model: 14) Forklift lift use evaluation: Date Employee's Signature Date Trainer's Signature

## **CERTIFICATE OF TRAINING** RESPIRATORY PROTECTION Atlas Painting **PROJECT** and Sheeting NAME: Corp. DATE: ATLAS JOB #: 465 Creekside Drive **TRAINED BY:** Amherst, NY 14228 Employee Name: Atlas Painting and Sheeting has provided me with training in Respiratory Protection in accordance with 29 CFR 1910.134, Respiratory Protection which included the following topics: 1) Why the respirator is necessary and how improper fit, usage or maintenance can affect the performance. 2) What limitations the respirator has, including cannot provide oxygen, filters made for a specific use, etc. 3) What to do in emergencies. 4) How to inspect, put on, and remove the respirator. 5) Storage and maintenance procedures. 6) How to recognize medical signs and symptoms that may limit or prevent respirator effectiveness. 7) General requirements of 29 CFR 1910.134. 8) Job tasks and work areas at project sites which will require the use of respiratory protection. 9) Fit testing. 10) Medical signs and symptoms that may interfere with the effective use of respirators. 11) Manufacturer's recommendations, procedures and inspections of respiratory protection equipment 12) Respirator issued: Half-Face Air Purifying: Full-Face Air Purifying: Blast Helmet: PAPR: Supplied Air Respirator: Date Employee's Signature Date Trainer's Signature

# **CERTIFICATE OF TRAINING HEXAVALENT CHROMIUM 29 CFR 1926.1126** Atlas Painting **PROJECT** and Sheeting NAME: Corp. DATE: ATLAS JOB #: 465 Creekside Drive **TRAINED BY:** Amherst, NY 14228 Employee Name: Atlas Painting and Sheeting has provided me with training in 29 CFR 1926.1126. Hexavalent Chromium which included the following topics: 1) Hazards of Chromium (VI) in accordance with the Hazard Communication Standard 29 CFR 1926.59. 2) The content of the OSHA Chromium (VI) in Construction Standard 29 CFR 1926.1126. 3) The specific nature of the operations which could result in exposure to Chromium (VI) above the Action Level. 4) The purpose, proper selection, fitting, use and limitations of respirators 29 CFR 1910.134. 5) The purpose of the medical surveillance program including the medical removal program and the adverse health effects associated with Chromium (VI) exposure. 6) Engineering controls and work practice controls that will be utilized to minimize the exposure to Chromium (VI). 7) The contents of the site specific Health and Safety Program and corporate Health and Safety Program. 8) Access to medical and exposure records. 9) Hygiene practices and how to properly use the facilities. 10) Hazardous waste procedure (40 CFR 265.16) 11) Basic safety and health training 29 CFR 1926.21. Date Employee's Signature Trainer's Signature Date

# **CERTIFICATE OF TRAINING** PERMIT-REQUIRED CONFINED SPACE TRAINING **Atlas Painting PROJECT** and Sheeting NAME: Corp. DATE: ATLAS JOB #: **465 Creekside Drive TRAINED BY:** Amherst, NY 14228 Employee Name: Atlas Painting and Sheeting has provided me with training in 29 CFR 1910.146 Permit-Required Confined Spaces which included the following topics: 1) What is a confined space - definition. 2) The difference between permit required confined space and a confined space. 3) Controls that may be used such as lockout/tagout and hot work permit. Duties of Attendants. 5) Duties of Entrants. 6) Duties of the Entry Supervisor. 7) Confined Space Permit, how and when to complete the permit. 8) Atmosphere testing. 9) Rescue and emergency procedures. 10) Atlas Painting and Sheeting's Permit Required Confined Space Program Date Employee's Signature Date Trainer's Signature

CERTIFICATE OF TRAINING RESPIRABLE CRYSTALLINE SILICA TRAINING								
Atlas Painting and Sheeting	PROJECT NAME:							
Corp. 465 Creekside Drive Amherst, NY 14228	DATE:	TRAINED BY:	ATLAS JOB #:					
Employee Name:								
Atlas Painting and Sheeting has provided me with training in 29 CFR 1926.1153 Respirable Crystalline Silica which included the following topics:								
1) Health hazards associa	ted with exp	osure to respira	able crystalline s	illica				
2) Specific tasks in the wo	rkplace that	could result in	exposure to resp	pirable crystalline silica				
, .		•	•	byees from exposure to respirable d respirators to be used.				
4) Personal protective equ	ipment							
5) Personal hygiene & dec	contaminatio	on						
6) Medical surveillance pro	ograms							
7) Exposure monitoring								
8) Employee rights to infor	mation							
9) The OSHA hazard com lung effects, immune s				cluding the following hazards: cancer,				
10) Respiratory protection	program 29	OFR 1910.134	ļ					
Date		Emplo	oyee's Signatur	e				
Date		Trair	ner's Signature					

CERTIFICATE OF TRAINING						
Atlas Painting and Sheeting Corp.	PROJECT NAME:					
465 Creekside Drive Amherst, NY 14228	DATE:	ATLAS JOB #:				
Employee Name: Trainer's Name:						

Atlas Painting and Sheeting has provided me with training on the following topics:

Topic:	Date:	Trainer's Initials	Employee's Initials
General Safety and Health			
29 CFR 1926 Subpart D			
Occupational Noise Exposure and Hearing Protection			
29 CFR 1926.62 Lead			
29 CFR 1910.1200 Hazard Communication			
29 CFR 1926 Subpart E PPE			
29 CFR 1926 Subpart F Fire Protection			
29 CFR 1926 Subpart L Scaffolds			
29 CFR 1926 Subpart M Fall Protection			
29 CFR 1926.118 Inorganic Arsenic			
29 CFR 1926.117 Cadmium			
29 CFR 1926.453 Aerial Lifts			
29 CFR 1910.178 Forklifts			
Scissor Lift Training			
29 CFR 1910.134 Respiratory Protection			
29 CFR 1926.1126 Hexavalent Chromium			
Safe Operating Procedures			

WORKER AND AREA EXPOSURE MONITORING FOR TOXIC METALS										
Shee	Painting eting Co	orp.	PROJECT NAME:							
	eekside [ rst, NY 14		DATE:		ATLAS JOB #:					
Project Location: Actual Work Location:										
Job Task B	eing Perfo	ormed (I.	e. Blast, Paint Ro	emoval):						
Start Time	of Monitor	ing:		Stop Time of Mo	onitoring:	Pu	mp Calibra	ted With: _		
Sample #	Pump#	Nam	e (Last 4 SS)	Jo	b Task	Time On	Time Off	Flow On	Flow Off	Respirator Worn
Engineering	g Controls	: HEF	PA Vacuum:	Yes No	)	Dust Co	ollector Siz	e: 		
Sampled By	Sampled By (Name):									

## **CARBON MONOXIDE ALARM CALIBRATION AND TESTING RECORD Atlas Painting PROJECT** and Sheeting NAME: Corp. DATE: ATLAS JOB #: **465 Creekside Drive TESTED BY:** Amherst, NY 14228 Carbon Monoxide Alarm Manufacturer: Carbon Monoxide Alarm Serial Number: Per the Manufacturer's instructions, calibration is required? Monthly Annually Quarterly Test and/or inspector the carbon monoxide alarm weekly Date Tested or Inspected By: Calibration (Pass / Fail) Date Calibrated By: **Pass** Fail **Pass** Fail Pass Fail **Pass** Fail Pass Fail **Pass** Fail **Pass** Fail **Pass** Fail

Atlas Painting and	PROJECT		ANL	SAFE	ΓΥ PLANNING	
Sheeting Corp.	NAME:	<u> </u>		1	<del>-</del>	
465 Creekside Drive	DATE:			ATLAS JOB #:		
Amherst, NY 14228	COMPETEN	T PERS	ON:			
HAZARD IDENTIFICATION	ON					
The following health and present at this location:	safety hazards	are	The following methods/procedures will be used to control, or prevent accidents associated, with the hazards identified:			
1			1			
2			2			
3			3			
4			4			
5			5			
6			6			
EMERGENCY RESPONS	`F:					
		ncy me	asures r	night be require	d are (check all that apply):	
☐ An exposure-related work	rer illness		Collap	se of containment	system or rigging	
Spill of a contaminated liq	quid or solid		Electri	ical shock		
Explosion or fire			Slippir	ng, tripping, or falli	ing resulting in personal injury	
Heavy equipment related a	accident, or other a	ccident r	resulting i	n personal injury		
Other: (Describe)						
Person during the entire	e project. In the ev hree quick blasts v	ent of a	a sudden	release or fire r	by the On-Site Competent requiring immediate y the Competent Person, or	

#### **APPENDIX 64 (Continued)**

**ESCAPE ROUTES** - In the event of a sudden release of hazardous gases, or a fire, all personnel will

	be required to move upwind, or at 90° away from the location of the release or fire.							
C	EMERGENCY HAND SIGNALS:							
	Hand gripping throat	=	Can't breathe					
	Grip partner's wrist, or place both hands around wrist	=	Leave area immediately, no debate					
	Hands on top of head	=	Need assistance					
	Thumbs up	=	I am all right, OK					
	Thumbs down	=	No, negative					

FIRST AID - At the start up of field activities, the Competent Person will contact Hospital personnel regarding potential hazards and provide chemical fact sheets, MSDS's, etc. for all known contaminants at the site as necessary. First aid will be administered by the Competent Person. If a worker requires further treatment, he will be transported to a Hospital in a vehicle maintained on site for this purpose or by ambulance. All accidents, however insignificant, will be reported as per Section 1.8 of the Company's Health and Safety manual. All personnel designated to administer first aid will have received a minimum of 8 hours first aid training and CPR, and be certified by the American Red Cross.

**EMERGENCY CONTACTS:** At project start up, a map showing the nearest Hospital shall be posted where all employees can view it. Also, phone numbers for emergency services shall be posted.

SITE MAP: - Locations of Hospital/clinic facilities, and directions from the site - POSTED ON SITE

COMPETENT PERSON'S NAME	DATE	COMPETENT PERSON' S SIGNATURE

DAIL	Y CONTAI	INMEN	T INS	SPECTION I	LOG
Atlas Painting and Sheeting Corp.	PROJECT NAME:				
ACE Creekside Drive	DATE of WORK	<b>K</b> :		ATLAS JOE	3 #:
465 Creekside Drive Amherst, NY 14228	REPORT NO:		СО	MPETENT PERSO	ON:
LOCATION OF CONTAINMEN	Г:				
CLASS OF CONTAINMENT:					
TYPE OF DUST COLLECTOR:					
NEGATIVE PRESSURE: YE	ES NO	HOW	VERIFIE	D?	
SOURCE OF MAKE-UP AIR:					
RIPS OR TEARS IN TARPS?	YES	NO	IF YES,	FIXED ?	☐ YES ☐ NO
TYPE OF ENTRYWAY:					
AIR VELOCITY:	t/min:		TIME:		
f	t/min:		TIME:		
VISIBLE EMISSIONS MONITO	RING: TIME	≣:	$\neg$	OBSERVED:	
	TIME	≣:		OBSERVED:	
	TIME	≣:		OBSERVED:	
REMARKS:					
COMPETENT PERSON'S	NAME	DA	ΓΕ	СОМРЕТЕ	NT PERSON'S SIGNATURE

DAI	LY IND	USTR	RIAL HY	GIEN	Ε	REPORT
Atlas Painting and Sheeting Corp.	PROJECT	Γ				
ACE COLUMN TO THE COLUMN TO TH	DATE of \	WORK:			A.	TLAS JOB #:
465 Creekside Drive Amherst, NY 14228	REPORT	NO:	(	СОМРЕ	TEN	IT PERSON:
SUMMARY OF WORK TODAY	:					
INDUSTRIAL HYGIENE MONIT	FORING / N	IEDICAL	SURVEILLA	NCE:		
TRAINING CONDUCTED:	=		NEW LIDE	S and T	145	MINATIONS:
TRAINING CONDUCTED:			NEW HIKE	S and 1	EK	MINATIONS:
WASTE DISPOSAL:						
VISITS FROM OUTSIDE AGEN	ICIES:					
COMMENTS:						
COMMENTS:						
	ΔΙΙΥΙΕΔΙ	O COMP	LIANCE CH	ECKI I	ST	
Prohibit unauthorized persons within the egulated area	□ Eval (dus	uate mechan t collector, et	nical ventilation systc.) effectiveness b	tem y		Ensure that any protective clothing sent to ano site laundry is properly labeled.
Prohibit eating, drinking, and smoking withint egulated area.	the defic	ciencies as co	rements, etc. (Note omments above).			Prohibit removal of lead from protective clothin blowing, shaking, or other means which disper
Maintain demarcation of regulated Area	and	protective ed	er respiratory prote quipment/work_clo	thing		lead into the air.
nspect containment system for integrity.		peing worn in areas.	nside and outside o	of the		Post air sampling, and/or notify employees of biological monitoring results.
Assess visible emissions as per 40 CFR, Appendix A Method 22	lunch		nand washing facili leanliness and t.	ities and		
COMPETENT PERSON'S NAM	IE .		DATE		(	COMPETENT PERSON'S SIGNATURE

# **TOOL BOX MEETING SIGN-IN SHEET** Atlas Painting and **PROJECT Sheeting Corp.** NAME: DATE: ATLAS JOB #: **465 Creekside Drive** Amherst, NY 14228 **COMPETENT PERSON: TOPIC: NAME LAST 4 OF SS# SIGNATURE COMPETENT PERSON'S NAME** DATE **COMPETENT PERSON'S SIGNATURE**

APPENDIX 68								
CERTIFICATE OF TRAINING MOBILE PHONES USE WHILE DRIVING AND ON JOBSITES								
Atlas Painting and Sheeting	PROJECT NAME:							
Corp. 465 Creekside Drive								
Amherst, NY 14228		TRAINED BY:						
Employee Name:								
Atlas Painting and She	eeting has	provided me	with its jobsit	e mobile phone usage policy :				
		-		e Driving or on Jobsites				
Use of mobile phones in c	onstruction	equipment or ve	enicles is strictly	prohibited				
One of the biggest safety concerns with mobile phones is the <b>distraction</b> they can create for people when they are working or drivins. Construction sites can be dangerous places if you don't pay attention to your surroundings, you can hurt yourself or someone else around you. People who are looking or texting or talking on their phones can walk right into something that could get them hurt or hurt someone else.								
working with both and you	're not work	ing productively	. Workers that te	or your phone all day then you're not exts to each other on the same site endangering themselves and				
<ul> <li>Use of mobile phore vehicles. NO EXCI</li> </ul>			hen operating to	ools, equipment, machinery or				
				rs and managers as it corresponds nes on the jobsite				
				pecial circumstances, if a worker ask their supervisor for permission.				
	<ul> <li>Under normal circumstances, there is no reason for people to need to communicate all day with other people while they are working.</li> </ul>							
<ul> <li>Using your mobile phone on a jobsite is not a right it's a privilege, that privilege does not triumph the safety of the workers around them or the overall site safety of the jobsite.</li> </ul>								
So keep the phone off of the jobsite. Your life could depend on it.								
Date		Emplo	yee's Signatur	e				

Date

Trainer's Signature

# Safety Matters Construction

Provided by: Lawley

#### The Dangers of Job Site Cellphone Use

According to a recent study, the average person checks their cellphone 100 times a day. While there is a time and a place for cellphones, using

it at the job site can be extremely dangerous.

If you're distracted for just a second while operating a power tool, working on a roof or driving a forklift, you can injure yourself or a coworker. You can also face civil or criminal liability for damages you cause by operating a motorized vehicle while using a cellphone.

It isn't only operators of machinery who need to be mindful of the dangers of cellphone use on the job site. Simply looking down at your cellphone and not paying attention to your surroundings could put your life in danger.

#### Cellphone Safety Tips When On-Site

The Occupational Safety and Health Administration (OSHA) prohibits cellphone use by operators of cranes and similar equipment. Most organizations prohibit any kind of cellphone use on the job site—not just for crane operators. It is your responsibility to know how your company's rules apply to you and follow them accordingly.

If you struggle with the temptation to check your phone while working on a job site, consider the following safety tips:

- Get in the habit of sending and receiving text messages before or after your shift, or during one of your breaks.
- Remind family and friends that you may

not be able to respond to their messages right away. Provide them with your workplace contact information in case of emergencies.

- Turn off push notifications so you're not distracted by any apps.
- Don't carry your cellphone on you if the temptation to check it is too much.
   Instead, leave it in a safe place where it won't distract you from your job.
- Follow your workplace policy for cellphone use at work and on the job site. Be aware of any cellphone-free zones.

Besides creating enormous safety risks, employees who are texting at work are not doing what they are getting paid to do. For this reason, these workers may be subject to disciplinary action.

If you have questions about Atlas Painting & Sheeting Corp.'s workplace cellphone policy, or if you notice inappropriate cellphone use on the job site, don't hesitate to discuss it with your supervisor or HR.



#### 32.0 VEHICLE AND JOBSITE SAFETY

All on-road, off-road and material handling vehicles and equipment are to be used in accordance with 29 CFR 1926.600 and 1926.601 and this section.

#### 32.1 VEHICLES

- 1. All vehicles are to be provided with working seat belt. The seat belt anchorages will comply with the requirements of 49 CFR Part 571.
- 2. All vehicles operated on public property are to be register and inspected in the state where ownership exists and equipped with all the required safety and operating features inaccordance with state law.
- 3. Vehicles used to transport workers will have seats firmly secured and an adequate amount of seats for the number of workers transported.
- 4. All vehicles used to transport employees will be equipped with properly workingheadlights, brakes, horns, turn signals, tires, mirrors, and windshield.
- 5. All vehicles will have the appropriate lights or reflectors to help identify their locations.
- 6. Only authorized employees will be allowed to operate vehicles which includes a valid license.
- 7. Employees are not authorized to allow another employee use of a company vehicle without management's approval.
- 8. Company vehicles are to be used only for company work and are not to be used for personal business.
- 9. The use of drugs or alcohol is strictly prohibited when operating company vehicles. Prescription medicine may be used under the supervision of a licensed physician and a letter from the physician to the company describing the need and restrictions of any prescribed medicine.

#### 32.2 EMPLOYEES

- 1. Employees designated to operate vehicles must have a current driver's license or CDL.
- 2. Each employee in a vehicle will wear a seat belt.
- 3. Employees will only operate a company vehicle that they are assigned by management.

#### **32.3 SAFETY**

- 1. Tools and materials will be secured to prevent movement when transported in the same compartment with employees.
- 2. Tools and materials in the bed of a truck will be secured to prevent movement or loss during transportation.
- 3. The parking brake will be set when the vehicle is not in use or parked. Vehicles parked on inclines will have the wheels chocked and parking brakes set.
- 4. Employees must not be permitted to ride on top of any load that can shift and topple.
- 5. When reversing a vehicle other than a car or pick-up truck, a spotter will assist the driver. The driver will not move unless the spotter can be seen in a mirror and the spotter give the signal to reverse.

Atlas Painting and Sheeting

#### 32.4 CELLULAR PHONES AND/OR OTHER DRIVING DISTRACTIONS

#### CELLULAR PHONE USAGE PROHIBITED WHILE DRIVIG A VEHICLE

- 1. Employees will not be permitted to use cellular phones or two-way radios while driving or operating equipment/machinery. When driving, either a hands-free adapter must be used or the employee will pull over in a safe area, such as a rest stop, and talk.
- 2. Employees will not be permitted to eat or drink while driving company vehicles.
- 3. If another employee is causing the driver to become distracted, the other employee will be asked to stop the distraction or be removed from the vehicle at a safe location.

#### USE OF CELLULAR PHONS ON THE JOB-SITE

One of the biggest safety concerns with mobile phones is the distraction they can create for people when they are working. Construction sites can be dangerous places if you don't pay attention to your surroundings, you can hurt yourself or someone else around you. People who are looking or texting or talking on their phones can walk right into something that could get them hurt or hurt someone else.

Construction takes two hands to work; if you are using one hand for your phone all day then you're not working with both and you're not working productively. Workers that texts to each other on the same site are even more dangerous because now you have two people that are endangering themselves and everyone around them.

- > Use of mobile phones is strictly prohibited when operating tools, equipment, machinery or vehicles. NO EXCEPTIONS !!!
- > Use of mobile phones on the jobsite is limited to the supervisors and managers as it corresponds with their jobs, all other workers should not carry their phones on the job-site..
- Workers can check on their phones at breaks and lunch. In special circumstances, if a worker needs to check their phone more frequently, they will have to ask their supervisor for permission.
- > Under normal circumstances, there is no reason for people to need to communicate all day with other people while they are working.
- Using your mobile phone on a job-site is not a right it's a privilege, that privilege does not triumph the safety of the workers around them or the overall site safety of the job-site.
- So keep the phone off of the job-site. Your life could depend on it.

#### 32.5 ACCIDENTS

- 1. All accidents, regardless of the amount of damage to the company vehicle, other vehicle orto property are to be reported to management as soon as possible after the accident.
- 2. The driver is to take pictures of the scene and record the following information:
  - a. Date and time of the accident
  - b. Location
  - c. Name, address and phone number of other driver and any other people involved
  - d. Name, address and phone number of witnesses
  - e. Name of other driver's insurance carrier and policy number
  - f. Any other pertinent information

Atlas Painting and Sheeting



# Driver Safety Policy - General Industry

Location: Effective Date: Revision Number: X

Atlas Painting & Sheeting Corp.

#### **Purpose**

Atlas Painting & Sheeting Corp. recognizes that our employees are our most valuable asset and the most important contributors to our continued growth and success. Atlas Painting & Sheeting Corp. will do everything possible to prevent workplace accidents and is committed to providing a safe working environment for all employees.

Motor vehicle accidents are a leading cause of work-related fatalities. The environment in which these accidents occur involves numerous complex factors, many uncontrollable. The purpose of Atlas Painting & Sheeting Corp.'s Driver Safety Policy is to provide the means to reduce such factors to eliminate unnecessary injuries and fatal circumstances. We value our employees not only as employees but also as human beings who are crucial to the success of their families, the local community and Atlas Painting & Sheeting Corp..

To further this goal, we have developed a Driver Safety Policy effective. This policy applies to all employees, whether they are driving a company vehicle, a rental vehicle for company business or a personal vehicle for company business.

#### **POLICY GUIDELINES**

#### **Driver Eligibility:**

 Drivers must possess a valid driver's license for the type of vehicle to be operated, and keep the license(s) with them at all times while driving.

#### **Driver Fitness:**

Drivers who obtain and use a commercial driver's license (CDL) must follow the Federal Motor Carrier Safety Administration's (FMCSA) fitness requirements. This includes obtaining a medical examiner's certificate by being examined by a licensed medical examiner listed on the FMCSA's national registry. Drivers are responsible for maintaining their own fitness records and getting reexamined at least once every two years.

#### **Drug/Alcohol Testing:**

Initial and periodic random drug and alcohol testing is mandatory. Testing will be conducted by a licensed medical facility
designated by Atlas Painting & Sheeting Corp.. Any positive results will be grounds for termination. Driving under the
influence of alcohol or any other illegal substances will be grounds for termination.

#### **Insurance Requirements:**

 Employees who use their personal vehicles for company business are required to carry adequate limits of liability, with a suggested minimum of \$100,000 for property damage and \$300,000 for bodily injury. A copy of the declaration page of your personal automobile insurance policy must be provided to Atlas Painting & Sheeting Corp. annually at your renewal date.

#### **Basic Vehicle Operation Guidelines:**

Employees are required to adhere to the following basic vehicle operation principles:

- Always use seat belts.
- Drive defensively. Always anticipate what other drivers on the road might do wrong and plan your mode of escape. Never
  move through traffic aggressively.

- Respect speed limits and traffic signs. Follow all traffic signals.
- Always lock the vehicle and apply the parking brake when getting out, even if it remains in sight.
- During long trips, take breaks every four hours. Never drive more than 10 hours during a 24-hour period.
- When possible, avoid driving after midnight.
- Avoid driving in dangerous conditions, including drowsiness and inclement weather.

#### Traffic Violations

Atlas Painting & Sheeting Corp. is not responsible for any traffic violations or parking tickets acquired by violation of city ordinance, state or federal laws regarding your driving habits and operation of your motor vehicle. Any ticket issued is the employee's responsibility, even if the ticket is issued while conducting business for Atlas Painting & Sheeting Corp..

#### Refueling Guidelines

For your safety when operating a vehicle, follow these guidelines:

- Turn off the vehicle's engine while refueling.
- Never smoke, light matches or use lighters while refueling.
- Do not get into the vehicle during refueling, as this presents a flash fire hazard.
- Do not overfill or top off the vehicle's fuel tank. The fuel dispenser shuts off automatically when the tank is full.
- Never force the hold-open latch on the gasoline pump with any means other than the latch provided.

#### **Distracted Driving:**

Atlas Painting & Sheeting Corp. is committed to employee safety, and for this reason firmly prohibits all behavior that distracts employees while they are operating a company vehicle. General guidelines for behavior while driving are as follows.

- Use of cellphones while driving is strictly prohibited—this includes all functions of the cellphone including, but not limited to, phone calls, text messaging/SMS, email, MMS, internet use and camera use.
- Use of electronic devices—including laptops, PDAs, cameras and pagers—while driving is strictly prohibited unless specifically outlined below.
- Voicemail must handle all calls while driving, and calls may only be returned when stopped or pulled off the road.
- Passengers making or taking calls for the driver is permissible provided the interaction does not affect the driver's performance.
- Regular callers must be informed that you are unavailable while driving and be notified of the best times to call based on your driving schedule.
- Employees who receive calls from co-workers who are driving are obligated to ask that the co-worker call back at a more appropriate time.

#### Headset/Hands-free Use

The use of headsets or hands-free devices while driving is permissible if:

- Device is preapproved by Atlas Painting & Sheeting Corp. for use
- Use of the device does not cause distraction (for example, fiddling with the device or taking eyes off the road to get it to function properly)
- Any dialing or use of the handset is handled while stopped or pulled to the side of the road
- Conversations do not interfere with the driver's ability to drive safely
- Road conditions are generally good and do not threaten yoursafety

#### Emergency Calls

- The only exception to the cellphone use guideline is calls placed to 911. If placing or accepting an emergency call, it should be kept short, with a hands-free option if available. The vehicle should be pulled over if possible.

#### GPS Systems

Atlas Painting & Sheeting Corp. understands that sometimes, especially when traveling in unfamiliar areas, drivers require assistance with directions. GPS systems are extremely helpful devices, but they can also be distracting if used improperly. Employees must adhere to the following:

- Mounted GPS systems may not block or obstruct the driver's view in any way.
- GPS systems must be voice-narrated and must not require that the driver look away from the road to followinstructions.
- Employees may not program the system while in motion.
- Programming or otherwise engaging with the GPS screen may only occur while stopped or while pulled off the road.

#### MP3 and Other Audio Devices

In some cases, worrying about music selection or touching dials and buttons on the radio, MP3 player or other audio device may be just as dangerous as cellphone use. It takes eyes and concentration off the road, which is not permissible under this Atlas Painting & Sheeting Corp. policy. Atlas Painting & Sheeting Corp. allows employee use of personal, portable audio devices, because we do not want to eliminate employees' ability to enjoy music while behind the wheel. However, employees must follow these guidelines:

- Employees may not take their eyes off the road to adjust music settings.
- Programming music settings while stopped or pulled off the road or before departing is permissible behavior.
- Employees may not, under any circumstances, use MP3 players or other handheld electronic audio devices with headphones—not only is it illegal in most states, it also impedes the driver's ability to properly hear warning signs, signals or sirens.

#### **Accident Investigation Procedures:**

Atlas Painting & Sheeting Corp. realizes some accidents are not preventable. Drivers should seek medical attention immediately, if necessary. Supervisors and drivers will be trained in post-accident procedures to secure the details of the accident and document the damage. Providing detailed facts of the accident will help our insurance carrier deter fraudulent third-party insurance schemes.

All drivers will be supplied with an accident claims kit, a pen and a disposable camera. Drivers are required to document all details of the accident: traffic flow, speed limits, stop lights/signs, weather conditions, citations issued, etc. Pictures should be taken to document the extent of damage to all vehicles involved.

Once this information is secured, the driver is to report all accidents immediately to his or her supervisor.

#### **Prohibited Behavior:**

Behaviors that may result in suspension or termination include:

- Driving while under the influence of drugs or alcohol
- Negligent homicide
- Operating a vehicle with a suspended license
- Using a motor vehicle for commission of a felony
- Aggravated assault with a motor vehicle
- Reckless driving
- Hit and run
- (# of) convictions for moving violations
- Three or more major traffic violations

More than two preventable accidents involving personal injury or property damage in any three-year period

Atlas Painting & Sheeting Corp. Driver Safety Policy

## **Employee Acknowledgement**

Motor vehicle accidents are a leading cause of work-related fatalities. The environment in which these accidents occur involves numerous complex factors, many uncontrollable. The purpose of Atlas Painting & Sheeting Corp.'s Driver Safety Policy is to provide the means to reduce such factors to eliminate unnecessary injuries and fatal circumstances. We value our employees not only as employees but also as human beings who are crucial to the success of their families, the local community and Atlas Painting & Sheeting Corp..

Atlas Painting & Sheeting Corp. encourages its employees to take a proactive approach in identifying potential hazards by promptly reporting them to their supervisor.

A motor vehicle report (MVR) will be requested minimally once per year. Management reserves the right to use its discretion in determining an unsatisfactory MVR. As a guideline, (# of) violations in the past three years will be grounds for an unsatisfactory MVR and may be cause for termination and/or disciplinary actions.

Atlas Painting & Sheeting Corp. conducts mandatory random drug and alcohol testing. Driving under the influence of alcohol or other illegal substances is grounds for termination.

Drivers will be supplied with an accident claim kit, a pen and a disposable camera. Drivers are required to document details of the accident: traffic flow, speed limits, stop lights/signs, weather conditions, citations issued, etc. Pictures should be taken to document the extent of damage to all vehicles involved. REPORT ACCIDENTS IMMEDIATELY TO YOUR DISPATCHER OR SUPERVISOR.

Personal use of company vehicles is prohibited without prior permission from management.

I have read and understand Atlas Painting & Sheeting Corp.'s Driver Safety Policy, and its requirements and expectations of me as an employee.

Employee Name (please print)	_
Employee Signature	Date

CERTIFICATE OF TRAINING MOBILE DEVICE POLICY							
Atlas Painting and	PROJECT NAME:						
Sheeting Corp.	DATE:		ATLAS JOB #:				
465 Creekside		TRAINED BY:					
Employee							

Atlas Painting and Sheeting has provided me with its mobile device policy:

#### **Mobile Device Policy**

Accident statistics show that using mobile devices, such as cellular phones, laptops, personal digital assistants, navigation systems, and portable digital audio and video players, while operating a motor vehicle, is distracting and can substantially increase the risk of being involved in a crash. To help reduce the possibility of vehicle crashes, Atlas Painting and Sheeting Corp. has adopted the following mobile device policy, applicable to all employees while driving a company vehicle at any time, or while driving any other vehicle (rented, leased, borrowed or their own vehicle) while conducting company business.

Our company's policy is as follows:

Name:

- Employees must comply with all applicable laws and regulations regarding the use of mobile technology while driving.
- Use of handheld cellular phones while driving is prohibited.
- Cellular phone calls using hands-free technology while driving is discouraged. To minimize the impact of distraction, calls, if any, should be brief. Extended conversations should be made while not driving.
- Sending or reading text messages or e-mails, dialing cellular phones, viewing television, videos or DVDs and inputting data into laptop computers, personal digital assistants or navigation systems is prohibited while driving.
- Accidents incurred while the employee is using a mobile device may be considered preventable, and subject to disciplinary action.

I have read the above policy and will abide by it.

Date	Employee's Signature