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**Submittal No.: 03: Lead Health & Safety Plan, Site Specific, Environmental Monitoring Plan, Waste Management Plan & Contingency Plan**

**Date: November 12, 2015**

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**Description**: Proposal/Contract Number: Bennington-Mt Tabor BF BPNT (16)
Letting Date: 06/05/15; Award Date: 07/01/15
Project Description: Bridge Painting of Five Bridges
In the Towns of Bennington & Mt. Tabor, VT
Contract Amount: $2,122,323.00; Completion Date: 09/02/16

Contractor: **MONOKO, LLC**

Reviewed & Approved By: *Keri Monokandilos*
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Revision:

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## WORKER HEALTH & SAFETY PLAN
## including
## ENVIRONMENTAL MONITORING PLAN, WASTE MANAGEMENT PLAN, AND CONTINGENCY PLAN

**For**

**Vermont Agency of Transportation**

**Prepared: March 22, 2015**
**by:**
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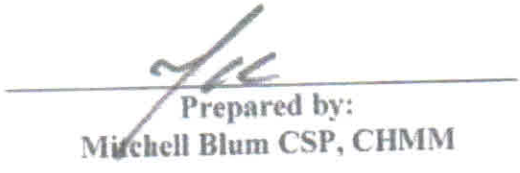

**Prepared by:**
**Mitchell Blum CSP, CHMM**

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This Site Specific Worker Health and Safety Plan was prepared by Mr. Mitchell Blum CSP, CHMM of MB Environmental Consulting, Inc., for Monoko. 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.

Monoko shall be responsible for ensuring and enforcing the project complies with the Plan, Federal, State and Local regulations. Monoko shall be responsible for contacting MB Environmental Consulting for Industrial Hygiene services. MB Environmental Consulting shall not exercise direct or indirect control of Monoko, nor have direct or indirect oversight of its employees.

## SAFETY COMMITMENT

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

**Monoko also recognizes the hazards imposed to both its employees and the environment by certain materials and processes during the course of its operations. Monoko 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. Monoko follows all health and safety regulations established by OSHA, EPA and state and local government.**

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

**Drosso Monokandilos**
**Safety Director**

11/11/15
**Date**

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## 1.0 INTRODUCTION

This Site Specific Worker Health and Safety Plan is established to provide Monoko (Monoko) employees with guidelines and rules that will be established and followed at the Vermont Agency of Transportation (Vtrans) the cleaning and repainting of Five Bridges. At the time of the writing, the writing, the Plan is written based upon the latest Vermont Occupational Health and Safety (VOSHA) and Occupational Health and Safety (OSHA) regulations and Vtrans standard specifications and is intended to supplement those regulations. Where there exists Federal, State or Local regulation that conflict with this Plan, the more stringent regulation shall be followed. Monoko is responsible for enforcing this Plan and VOSHA and OSHQA regulations on its job site.

### 1.1 SITE SPECIFIC WORKER HEALTH AND SAFETY PLAN

This section of the Site Specific Worker Health and Safety Plan breaks down the actual activities on this project into the safety concerns for each operation. For more detailed procedures, refer to the appropriate section of this Site Specific Worker Health and Safety Plan. The steel will be cleaned by abrasive blasting in accordance with project specifications and the following hazardous operations may be present: rigging, pressure wash, abrasive blasting operations. The following bridges are on this contract.

| Bridge # | Location | Town/City |
|---|---|---|
| BR 11 | US Route & over Roaring Branch (MM 4.03) | Bennington |
| BR D15 | TH NO 14 over US Route 7 (MM 5.77) | Bennington |
| BR 16N | US Route 7over Benn North SH (MM 6.41) | Bennington |
| BR 16S | US Route 7 over Benn North SH (MM 6.41) | Bennington |
| BR 56C | US Route 7 over Mill Brook (MM 3.00) | MT Tabor |

### 1.2 LEAD HEALTH AND SAFETY PLAN REQUIREMENTS

Below are the item within this Plan and their location within the Plan.

1. General instructions – See entire plan
2. Lead Health and Safety organization and responsibilities – See Part 3.0
3. Exposure monitoring – See Section 12.0 Part 12.12 and Section 13.0
4. Engineering and Administrative controls – See Section 12.0 Part12.13 and 12.14
5. Respiratory protection – See Section 12.0 Part 12.5 and Section 9.0
6. Protective work clothing – See Section 12.0 Part 2.9 and Section 8.0
7. Hygiene facilities and practices – See Section 12.0 Part 12.7 and 12.11
8. Housekeeping – See Section 12.0 Part 12.11
9. Medical surveillance – See Section 12.0 Part 12.16
10. Decontamination procedures – See Section 12.0 Part 12.7
11. Employee information and training – See Section 12.0 Part 12.7 and 12.16.4
12. Record keeping – See Section 12.0 Part 12.12.4 and 12.16.4

Additional items and their location within this Plan.

1. Environmental Monitoring Plan
    a. Visual Inspection
    b. Clean up of soil and water
    c. Daily visible emissions observations
    d. Corrective actions
2. Waste Management Plan - See Section 23.0
3. Contingency Plan - See Section 18.0

## 1.3 WORKER PROTECTION PROGRAM

Below are the items and their location within this Plan.

1. Training - See Part 1.12, Section 12.0 Part 12.17
2. Medical monitoring - See Section 12 part 12.16
3. Respiratory protection - See Section 9.0
4. Medical monitoring - See Section 12 Part 12.16
5 Protective equipment - See Section 8.0 and Section 12.0 Part 12.9

At the start of work, Monoko will provide the Engineer with a copy of each employee's medical records including blood lead and zinc protoporphyrin testing, fit testing and lead training.

Once employee exposure monitoring has been completed, Monoko will provide the Engineer with a copy of the exposure results.

## 1.4 ACCESS

Access to the bridges will be by a variety of methods including: ladders, catenary scaffolds, scaffold platform and rapid deployment trailer. Safety Concerns during rigging operations is fall exposure and scaffold safety

1. Where ladders are used, the ladder will be extended three feet above the working surface and tied-off at or near the working surface. During initial access to an area, the ladder will be footed by a second employee until the ladder can be tied-off properly.
2. During erection, modification and dismantling of the scaffold platform, workers at the leading edge and outside edges will be required to remain tied-off.
3. Once a scaffold platform has been erected in accordance with Engineering Drawings, workers on the platform will only be required to tie-off when;
    A. Exposed to falls at the outside edges of the platform (outside the outside beam), 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. Workers on a rapid deployment trailer will be required to wear a harness and lanyard and tie-off to the safety cable as provided. An alternate approach will be to use a guardrail system on the outside edges of the rapid deployment trailer. Workers will access the platform portion of the trailer through an existing stairway.

## 1.5 WORKER ACCESS TO THE WORK SITES

Monoko employee will leave their personal vehicles at the yard where the decontamination trailer will be located. Employees will travel to and from the job site only in Monoko vehicles. Employees will access the work location will be by:

1. Employees will be involved with setting-up and removing the temporary Traffic Control Work Zone and will then walk to the Activity Area.
2. Employees are driven to the job site in an Monoko vehicle. Vehicles will access the job site by:
    a. Entering and exiting the end of the temporary Traffic Control Work Zone.
    b. If it is not possible to enter and exit the temporary Traffic Control Work Zone, vehicles will enter the temporary Traffic Control Work Zone where safe and park their vehicle as far away from live traffic as possible and remain outside of the Buffer Zone. When exiting, a flagger will be required to assist vehicles.
    c. Larger equipment will be assisted in pulling into the Activity Area by use of a shadow vehicle equipped with revolving lights following the equipment.

## 1.6 ABRASIVE BLAST OPERATIONS

Monoko will use steel grit to achieve a blast as required by project specifications. In order to reduce workers exposures to toxic metals, Monoko will use dust collector(s) as specified by Engineering drawings with natural make-up air. The containment will be constructed in accordance with Engineering drawings.

A decontamination trailer will be located in an area near each bridge. Workers will use only Monoko work vehicles to travel to and from the job site from the decontamination trailer. Workers who have exposures to lead or other toxic metals above the Permissible Exposure Limit (PEL) will be required to shower at the end of each work shift. All other workers will be allowed to use the decontamination trailer to shower at the end of each shift.

A handwash station will be located outside of each regulated area for workers to wash their hands and face prior to breaks and at the end of the work shift.

Safety Concerns during abrasive blast operations include illumination, air quality, worker exposure to airborne lead and other toxic metals and noise.

1. Personnel performing abrasive blasting operations and other personnel inside the containment during abrasive blast operations will wear a Bullared CE 88 blast helmets.
2. All other lead exposure or potential lead exposure operations such as prime coat painting, vacuuming after the blast, set-up and tear down of the containment system, the workers will wear a half-face air purifying respirator (3m 6000 series) with P100 filters or a higher level of respiratory protection if necessary.
3. Illumination will be provided for each worker performing abrasive blast operations through the use of a light at the end of the blast hose. Additional lighting may be provided for other workers vacuuming if natural light is insufficient.
4. Workers may be exposed to airborne lead dust during abrasive blast operations. The exposures are anticipated to be within the Maximum Use Concentration (MUC) of the Bullard CE 88 blast helmet which has a MUC of 50,000 ug/$m^3$.

5. In order to reduce workers exposures to airborne lead dust, dust collector(s) will be in use during abrasive blast operations.
6. Workers performing abrasive blast operations and support workers near noisy machinery will be required to wear ear plugs with a Noise Reduction Rating of 29 or better.
7. Communication between the workers performing abrasive blasting operations and the equipment operator is by using a series of air checks using high pressure air. The air checks used will be:

    a. one check = more sand
    b. two checks = less sand
    c. three checks = more air pressure
    d. four checks = less air pressure

8. Initial worker exposure monitoring will be conducted within the first 24 hours of blasting operations. The initial monitoring will include lead and one sample from a worker performing blasting operations will also be tested for additional suspect metals. See Section 13.0 for the additional metals. If other metals are present, then the Safety Plan will be updated and workers notified.
9. Prior to exiting the work area or containment, workers are required to use a HEPA vacuum or vacuum line to vacuum themselves to remove any loose debris.

## 1.7 COATING OPERATIONS

1. Adequate air movement is required to minimize volatile organic compound exposures. This may be achieved by opening up the containment tarpaulins to allow for natural ventilation.
2. Workers applying coating are to wear protective work clothing, the appropriate gloves and eye protection along with respiratory protection where necessary. Refer to the manufacturer's material safety data sheet for guidance.
3. When mixing coatings, only authorized personnel will do so.
4. There will be no smoking within 25 feet of paint mixing or paint application work areas.
5. Explosion proof lighting will be required inside enclosed areas during coating application.

## 1.8 RESPIRATOR FILTER/ CARTRIDGE CHANGE SCHEDULE

1. 3M 6000 series P100 HEPA filters will be changes every 40 hours or thirty days, which ever is first. Filters will be changes more frequently if there are rips or tears in the filter or the wearer notices an increased resistance to breathing.
2. Workers will wear respirators per the coating manufacturer's material safety data sheet requirements.

## 1.9 WORKING OVER WATER

The foreman or competent person will determine if there exists a drowning hazard (i.e. working along the shore line or rocky areas versus over water greater than one foot deep). If so, then workers will wear a harness and double lanyard, a harness and lanyard with a life jacket, or a life jacket when working less than 6 feet above the water. In addition, a ring buoy will be located at least every 180 feet along the working section of the bridge and at the actual work location and a rescue boat will be readily available

## 1.10 MEDICAL SURVEILLANCE

Medical testing including physicals and respiratory clearance will be conducted by HE-OS, Inc.. Blood lead and Zinc protoporphyrin analysis will be conducted by an approved OSHA blood lead laboratory.

Workers with a pre-project blood lead level of 30 ug/dl will be required to have a second blood lead test immediately for verification of the first sample. If the second results are above 30 ug/dl, then the worker will be required to have monthly blood lead testing until the level decreases below 30 ug/dl. See Section 12.0 part 12.16 for additional medical surveillance information.

## 1.11 WORKER EXPOSURE MONITORING

Worker exposure monitoring will be collected on all job tasks within the first twenty four hours of project start-up for paint removal operations. The samples will be analyzed for lead and the sample with the highest lead level will be analyzed for additional suspect metals listed in Section 13.0. See Section 12.0 Part 12.12 for additional information.

If other metals are found, this safety plan will be revised as necessary and workers will receive any additional training and medical testing.

## 1.12 TRAINING

Prior to starting work on this project, all workers must complete training for the following: lead, hazard communication and respiratory protection, fall protection, scaffold safety, traffic safety and the safe operation of equipment onsite. In addition, the Competent Person will have attended a Society for Protective Coatings (SSPC) C-3 Supervisor/ Competent Person for Deleading of Industrial Structures. For additional training requirements, see the appropriate sections of the Site Specific Safety Plan.

## 1.13 IMMINENT DANGER AND EMERGENCY ACTIONS

If an emergency situation arises, the foreman or the Competent Person will immediately stop work and correct the problem. If necessary, the foreman or Competent Person will contact the fire, policy or ambulance services using 911. After notifying emergency services, the Competent Person will notify the Engineer or his designated representative.

## 1.14 INCLEMENT WEATHER

If the weather becomes severe such as lighting, heavy rains or high winds, Monoko will stop work until the weather clears sufficiently or work will stop for the day.

## 1.15 WORK PLACE VIOLENCE

Work place violence will not be tolerated by Monoko. Any employee found to act in a manner that causes another employee, project Engineer or his designated representative, subcontractor or visitor to fear for his or her safety will be immediately removed from the project and will not be allowed to return.

## 1.16 SAFETY PLAN REVIEW

The Site Specific Safety Plan will be reviewed on an annual basis by MB Environmental Consulting. The plans may be reviewed and revised more frequently if new regulations affecting the company or its project are promulgated.

## 1.17 SUBCONTRACTOR HEALTH & SAFETY REQUIREMENTS

All subcontractors, visitors and suppliers will not be allowed in any lead regulated area, therefore Hazard Communication and lead training is not required. Each subcontractor, visitor and supplier at the job site will be required to follow this Worker Health and Safety Plan.

## 2.0 CORPORATE DISCIPLINE POLICY

Monoko 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 1). 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 Monoko 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.

| **Violation** | **Disciplinary Action** |
|---|---|
| 1st | Written warning |
| 2nd | Written warning, up to 3 days off |
| 3rd | Written warning with possible termination of employment |

### 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. 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 1). 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 Monoko 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.

| **Violation** | **Disciplinary Action** |
|---|---|
| 1st | Verbal warning - documented in field log book |
| 2nd | Written warning |
| 3rd | Written warning, up to 3 days off |
| 4th | Written warning with possible termination of employment |

## 3.0 ORGANIZATION AND RESPONSIBILITIES

**Safety Director** Drosso Monokandilos
Office Phone #: (727) 940-3244

**Project Foreman** Manoli Patatoukos Cell Phone #(727) 412-6000
Michael Monokandilos (727) 510-8722

**Competent Person for Fall Protection, Scaffold Erection and Dismantling and Traffic Safety**
Manoli Patatoukos and Michael Monokandilos

**Competent Person for Lead and Other Toxic Metals, Abrasive Blasting, Traffic Safety**
Gary Magriplis Cell Phone # (904) 343-3302
Michael Monokandilos (727) 510-8722

**Occupational Physician** HE-OS., Inc.
621 McCartney Road
Youngstown, OH 44505
(330) 743-9621

**Blood Testing Laboratory** To be determined

**Environmental Testing Lab** Schneider Laboratories, Inc.
2512 West Cary Street
Richmond, VA 23221
(800) 785-5227

### 3.1 CORPORATE MANAGEMENT SAFETY RESPONSIBILITIES

1. Enforce Health and Safety regulations for all employees..
2. Assign a competent person for each project who has the authority to implement the safety plan and take corrective actions as necessary.

### 3.2 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.

### 3.3 SAFETY CONSULTANT (INDUSTRIAL HYGIENIST)

1. Be available for consultation with management and the Safety Coordinator on matters pertaining to health and safety.
2. Coordinate the development of the Health and Safety Plan.
3. The industrial hygienist will be a Certified Safety Professional (CSP) with at least five years experience in the bridge painting industry.

### 3.4 OCCUPATIONAL PHYSICIAN

An Occupational Physician who is Board Certified, will be retained by Monoko. 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.

### 3.5 COMPETENT PERSON FOR TOXIC METALS

The Competent Person reports directly to the President of Monoko, 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 Monoko.
10. Implement and oversee all site specific health and safety programs as directed by the Safety Coordinator 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.

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.

### 3.6 COMPETENT PERSON - OTHER THAN TOXIC METALS

Monoko 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. Monoko will assign this responsibility to the project foreman and the lead competent person. 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 Coordinator.

### 3.7 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. The use of drugs and alcohol are forbidden at the job site.
9. 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 a tap.
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 or toxic materials.
2. The hand wash facility will have the following:
   a. Maintained in a sanitary condition.
   b. Hand soap or a similar cleansing agent.
   c. 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 INSPECTIONS AND SAFETY MEETINGS

## 5.1 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.

### 5.1.1 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. The inspection will be documented using Appendix 5.

### 5.1.2 WEEKLY SITE INSPECTIONS

Weekly site inspections on lead abatement or other toxic metal abatement projects will be documented by the Competent Person using Appendix 4.

## 5.2 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. The training will be documented using Appendix 2.

## 5.3 WEEKLY SAFETY MEETINGS

Safety meetings (Appendix 3) 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 Coordinator 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 MSDS, 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
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

## 6.0 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.

### 6.1 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.

# 7.0 WORK PLACE VIOLENCE

## 7.1 MONOKO EMPLOYEES

Work place violence will not be tolerated by Monoko. Any employee found to act in a manner that causes another employee, project Engineer or his designated representative, subcontractor or visitor to fear for his or her safety will be immediately removed from the project and will not be allowed to return.

# 8.0 PROTECTIVE WORK EQUIPMENT

## 8.1 HARD HATS

Employees will wear hard hats that meet ANSI Z89.1 for falling or flying objects

## 8.2 EYE AND FACE PROTECTION

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.

## 8.3 FOOT PROTECTION

All workers will be required to wear work boots, as a minimum level of compliance.

## 8.4 HAND PROTECTION

Hand protection will vary by job.

Abrasive blast and vaccumer - cloth or leather gloves
Equipment Operator - cloth gloves
Painters- refer to SDS/MSDS

## 8.5 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.

| Job Task | Head Protection[1] | Eye Protection[2] | Hearing Protection[3] | Foot Protection | Work Clothing[4] |
|---|---|---|---|---|---|
| Dry Abrasive Blasting | Bullard CE 88 blast helmet | blast helmet | ear plugs or canal caps | work boots | two layers of protective clothing |
| Spray Painting | hard hat | full face respirator or goggles | may not be required | work boots | 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 | work boots | one layer of protective clothing |
| Brush and roll painting | hard hat | full face respirator orgoggles | may not be required | work boots | one layer of protective clothing |
| Equipment operator during abrasive blasting | hard hat | safety glasses | ear plugs, canal caps or ear muffs | work boots | one layer of protective clothing |

1 - Bullard CE 88 blast helmets meet ANSI standards for head protection
2 - most full-face respirators do not meet ANSI standards for impact eye protection, which is not required on this project
3 - conduct a sound level survey to verify the proper level of hearing protection
4 - during abrasive blast operations, all personnel inside the blast area must wear cloth coverall or similar heavy duty clothing that does not rip easily

# 9.0 RESPIRATORY PROTECTION

## 9.1 INTRODUCTION

The Monoko Respiratory Protection Program is written to comply with the OSHA Standard 29 CFR 1910.134 Respiratory Protection.

## 9.2 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.

## 9.3 RESPONSIBILITIES

### 9.3.1 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, maintain store your respirator after each work shift, when the respirator is used.

### 9.3.2 SUPERVISORS AND/OR COMPETENT PERSONS

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

## 9.4 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 performed before the employee is fit tested or allowed to wear the respirator. 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. A follow-up medical examination will be provided when the physician believes that it is necessary .

Monoko 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.

## 9.5 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. Monoko 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.

Respirators will be selected using the following guidelines:

1. For protection against gases and vapors, Monoko will provide either an atmosphere-supplying 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, Monoko 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 ($ug/m^3$) | Respirator | APF | MUC ($ug/m^3$) |
|---|---|---|---|---|---|
| Abrasive Blast | Lead (Pb)<br>Cadmium (Cd)<br>Chromium (Cr)<br>Arsenic (Ar)<br>CR(VI) | 50<br>5<br>500<br>10<br>5 | Bullard CE 88 blast helmet | 1000 | 50,000<br>5,000<br>500,000<br>10,000<br>5,000 |
| Painting | Lead<br>VOCs | 50 | Air supplied respirator or or APR type respirator or if VOC level is known | 10 | 500<br>To be determined |

## 9.6 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. P100- oil proof

* Monoko 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 vapors
3. End of service life indicator (ESLI)
    a. 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.
    b. 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.

## 9.7 TRAINING AND INFORMATION

Monoko 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.

## 9.8 FIT TESTING

All employees that are required to use a respirator must be fit tested prior to being issued a respirator. Monoko 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. Monoko 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 or 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.

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.

## 9.9 USE OF RESPIRATORS

It is the responsibility of Monoko 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.

### 9.9.1 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 tests during the respirator training.

### 9.9.2 POSITIVE PRESSURE USER SEAL 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.

### 9.9.3 NEGATIVE PRESSURE USER SEAL 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.

## 9.10 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.
2. 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.

### 9.10.1 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 determine 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.

## 9.11 BREATHING AIR QUALITY AND USE

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 will be used when supplied air respirators are in use.

### 9.11.1 CARBON MONOXIDE ALARM

1. 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.
2. The carbon monoxide alarm will be calibrated in accordance with manufacturer's recommendations and tested weekly if it has a test switch.

# 10.0 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.

## 10.1 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:

| Noise Level | Time Limit |
|---|---|
| 90 dBA | 8-hours |
| 95 dBA | 4-hours |
| 100 dBA | 2-hours |
| 105 dBA | 1- hour |
| 110 dBA | ½-hour |
| 115 dBA | ¼-hour |

## 10.2 ENGINEERING AND ADMINISTRATIVE CONTROLS

### 10.2.1 ENGINEERING CONTROLS

Engineering controls are not feasible on this project.

### 10.2.2 ADMINISTRATIVE CONTROLS

Administrative Control are not feasible on this project.

## 10.3 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. The following rules will be enforced:

1. Personal stereos, such as Ipods and MP3s 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.

## 10.4 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

## 10.5 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:

a. Potential health effects of exposure to excessive levels of noise, including impact and long term exposures.
b. Sources of excessive noise exposure.
c. Monitoring strategies for noise, including sound level meter surveys and noise dosimetry, and 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.
e. Personal protective equipment available for protection against excessive noise, and the proper selection, fit and care of such equipment.

# 11.0 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 Monoko's Hazard Communication (HazCom) program. Hazard Communication is often referred to as the "Right to Know" Law.

OSHA has update the Hazard Communication Standard and has changed from a material safety data sheet (MSDS) to a safety data sheet (SDS). If products are shipped to this project with SDS, then workers will be trained on the SDS.

## 11.1 RESPONSIBILITIES

### 11.1.1 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 MSDS/ SDS are onsite and all workers know where they are located.

### 11.1.2 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.

## 11.2 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.

## 11.3 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 MSDS/ SDS will be available from the Competent Person.
2. Hazardous chemicals brought onto the work site by Monoko will be included on the hazardous chemical inventory list.
3. Employees who work with hazardous chemicals may request a copy of the MSDS/ SDS. Requests for MSDS/ SDS should be made to the site Competent Person.

## 11.4 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. Monoko 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.

## 11.5 EMPLOYEE TRAINING

Employees will be trained annually 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 Monoko.
5. How to read and interpret information on labels and the MSDS/ SDS.
6. Location of the MSDS/ SDS and hazard communication program.
7. Explanation of the chemical labeling system.

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.

## 11.6 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.

## 11.7 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.

# 12.0 LEAD EXPOSURE CONTROL PLAN

## 12.1 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. Vacccumer 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.

## 12.2 SELECTION OF RESPIRATORY PROTECTION

| Job Category | Assumed Exposure Level | Respirator |
|---|---|---|
| Dry Abrasive Blast<br>Vacuum during Abrasive Blast Operation | >2,500 ug/$m^3$ | Bullard CE 88 Blast helmet |
| Set-up and Tear down of containment<br>Prime coating<br>Power tool with vacuum shroud | >50 and <500 ug/$m^3$ | 3M 6000 series ½ face APR with P100 filters |
| Support Workers working outside of the regulated work areas<br>Equipment Operator of a steel grit recycler | <50 ug/$m^3$ | Respiratory protection is not required |

The above assumed exposures are based upon over five years of worker exposure monitoring of Atlas Painting employees on DOT and other similar projects.

## 12.3 ACTION LEVEL

An Action Level (AL) of 30 ug/$m^3$ 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

## 12.4 PERMISSIBLE EXPOSURE LIMIT

The Permissible Exposure Limit (PEL) is 50 ug/$m^3$ 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:

Adjusted PEL = (400/hours worked in a day)

e.g. Lead for an 8 hr shift: PEL = 50 ug/$m^3$
Lead for a 10 hr shift: PEL = 40 ug/$m^3$

## 12.5 DELINEATED AREAS

Work areas will be delineated using signs 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, 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.

Initially the work area will be a minimum of ten feet from the containment. This area may be moved closer or further from the work area if initial or periodic monitoring indicates the need for a change.

## 12.6 SIGNS

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

The below lead warning sign can be used till 2016

WARNING
LEAD WORK AREA
POISON
NO EATING OR SMOKING

The revised lead warning sign

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

## 12.7 DECONTAMINATION FACILITIES

### 12.7.1 SHOWERS

The Support Area will consist of a decontamination trailer equipped with a shower separating clean and contaminated sides of the trailer. The support area may be located under the bridge or in the area as submitted by Monoko in a separate submittal. 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 toxic metals 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 workers are only required to use a handwash station to clean up at the end of the day.

The decontamination trailer will be located near the bridge. 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.

### 12.7.2 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.

## 12.8 LUNCH AREA

A lunch area will be designated in a clean area near the work area, away from all sources of contamination. 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.

## 12.9 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 Monoko 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.

## 12.10 LAUNDERING OF WORK CLOTHING

Work clothing on this project will be disposed in accordance with federal, state and local regulations.

## 12.11 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.

## 12.12 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.

### 12.12.1 PERSONNEL AIR SAMPLING

Initial air sampling will be conducted by MB Environmental Consulting 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 by Schneider Laboratories.

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.

### 12.12.2 AREA MONITORING

Area monitoring will be conducted from one to five feet from the regulated area to establish and verify the extent of the regulated area.

### 12.12.3 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.

### 12.12.4 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 Monoko 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.
4. Name 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.

## 12.13 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 | Dust collector with natural ventilation |
| Power tool cleaning (if used) | HEPA vacuums |

Engineering controls selected above are the industry standards ( reference Industrial Lead Paint Removal Handbook Volumes I and II and Federal Highway Administration publications), when new technology is produced that would reduce worker exposures and costs, Monoko will evaluate that method or will seek others in the industry for their evaluation. In addition, this specification requires the use of steel grit 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.

## 12.14 ADMINISTRATIVE CONTROLS

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

## 12.15 RESPIRATORY PROTECTION

Prior to wearing a respirator, employees must comply with Section 9.0 of this Health and safety Plan and the OSHA Respirator Standard 29 CFR 1910.134.

## 12.16 MEDICAL SURVEILLANCE PROGRAM

As a condition of employment with Monoko, 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.

### 12.16.1 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. Workers with a pre-project blood lead level fo 30 ug/dl will be required to have a second blood lead test immediately for verification of the first sample. If the second results are above 30 ug/dl, then the worker will be required to have monthly blood lead testing until the level decreases below 30 ug/dl.
3. Workers with a pre-employment blood lead level of 50 ug/dl or greater will be prohibited from working on tasks that may expose the worker to lead particles or vapors.
4. After initial testing, bi-monthly testing will be conducted for the first six months and semi-annual thereafter. However, the typical work season is less than ten months, therefore, Atlas Painting may continue bi-monthly testing for the duration of the work season.
5. Blood lead testing will be performed by an OSHA approved laboratory.
6. When blood testing reveals 50 micrograms of lead per deciliter of whole blood or more, the worker will immediately be removed from work activity having an exposure to lead , until the worker has two consecutive blood tests result in levels below 40 ug/dl.
7. 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.
8. 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 Atlas Painting in the employee's file.
9. 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.
10. 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.

11. 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.

### 12.16.2 EXIT MEDICAL EXAMINATION

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.

### 12.16.3 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 Monoko 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.

### 12.16.4 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 Monoko. Access will be provided within 15 days after the employee's request, unless Monoko 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 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.

## 12.17 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 and on an annual basis thereafter on the hazards of lead. Signed and dated training certificates 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**
b. **THE HEALTH AND SAFETY PLAN**
c. **HAZARDOUS WASTE PROCEDURES (40 CFR 265.16 and NYCRR 373.3.(g))**
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**

## 13.0 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 ($ug/m^3$) |
|---|---|
| Arsenic | 10 |
| Cadmium | 5 |
| Chromium | 500 |
| Hexavalent Chromium | 5 |

One sample from an abrasive blaster will be analyzed for all the above metals using NIOSH Method 7300 except hexavalent chromium which will be a separate sample and analyzed using NIOSH method 7600.

# 14.0 HISTOPLASMOSIS

## 14.1 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.

## 14.2 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.

# 15.0 HEAT STRESS

## 15.1 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.

## 15.2 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.

## 15.3 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

## 15.4 HEAT CRAMPS

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

## 15.5 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

## 15.6 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

## 16.0 FALL PROTECTION

When working at heights, Monoko 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 and Ladders are discussed in other sections.

### 16.1 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 hook type, and be no longer than six feet in length. When moving from one anchorage point to another or when working over water, two lanyards must be worn and used to provide 100% tie off at all times. Safety cable(s) 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. Workers violating this policy will be subject to the Company's disciplinary program.

### 16.1.1 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. All fall protection equipment purchased and the selected points of attachment must meet the equipment specifications required by OSHA and this program.
11. The attachment point of the body harness is the center of the employee's back near shoulder level.
12. Ropes and straps used in lanyards and strength components of body harnesses are to be made of synthetic fibers.
13. 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. Defective equipment will be removed from service immediately.

## 16.2 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, safety monitoring 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.

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.

## 16.3 General Rescue Procedure for Worker Suspended in Harness

### 16.3.1 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.

### 16.3.2. Elevating Work Platform Not Available

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 vitim 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 hosptial.

## 17.0 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.

### 17.1 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.

#### 17.1.1 CATENARY SCAFFOLDS

1. No more than one platform will be placed between consecutive vertical pickups, and no more than two platforms will be set 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.

#### 17.1.2 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. Project specifications require the platform will be designed by a licensed Professional Engineer (P.E.).
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.

# 18.0 CONTINGENCY PLAN

## 18.1 GENERAL

1. Directions to the hospital will be posted on site and a copy will be placed in a central location when the Health and Safety Program is in effect.
2. Employees will be trained on the Contingency Plan.

## 18.2 LINES OF AUTHORITY

1. The foreman 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 foreman will be relieved of his responsibility only by the appropriate police or fire chief.

The following is a list of potential situations that will require Monoko to react to prevent the spread of contamination or to assist an injured person. Each of the situations and the actions to be taken by Monoko is explained within this Plan.

1. Break in containment barriers - Section 18.3
2. Visible emissions in excess of the specification tolerances - Section 18.4
3. Loss of negative pressure during abrasive blast operations- Section 18.5
4. Serious injury - Section 18.6
5. Fire or safety emergency- Section 18.7
6. Respiratory system failure- Section 18.8
7. Power failure- Section 18.9
8. Chemical spills- Section 18.10
9. Lead contaminated material release- Section 18.11
10. Emergency requiring an evacuation- Section 18.12

## 18.3 BREAK IN CONTAINMENT BARRIER

1. The foreman and competent person will watch the containment during abrasive blast operations to verify the containment system is working effectively.
2. If a breach is observed in the containment;
    a. The entire blast will be shut down or;
    b. An individual blast nozzle will be shut down (if the blast nozzle is causing the breach)
3. Corrective actions may include, spray foam the area, adding extra wood to seal the area, adding or moving tarpaulins, or whatever action is deemed necessary by the foreman.

## 18.4 VISIBLE EMISSIONS IN EXCESS OF PROJECT SPECIFICATIONS

1. The foreman and competent person will watch the containment during abrasive blast operations to verify the emissions are meeting the project specification..
2. If an emission is observed in the containment;
    a. The entire blast will be shut down or;
    b. An individual blast nozzle will be shut down (if the blast nozzle is causing the breach)
3. Corrective actions may include, spray foam the area, adding extra wood to seal the area, adding or moving tarpaulins, or whatever action is deemed necessary by the foreman.

## 18.5 LOSS OF NEGATIVE PRESSURE DURING ABRASIVE BLAST OPERATIONS

1. The foreman and competent person will watch the containment during abrasive blast operations to verify the containment is under negative pressure.
2. If negative pressure is lost ( having one tarp blow inward does not indicate loss of pressure, it may be caused by a strong breeze), the equipment operator will immediately stop all blasters.
3. The foreman or the equipment operator will check the dust collector to see if it is still working. If the dust collector is not working, then the equipment operator or foreman will determine the cause. Abrasive blasting operations will not resume until the dust collector is working properly.
4. If the cause of the loss of negative pressure is not the dust collector, the abrasive blast will be stopped by the equipment operator and the cause will be determined by the foreman or competent person.

## 18.6 SERIOUS INJURY

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 being transported to a clinic or hospital for treatment should take with them information on the chemical(s) (MSDS/ SDS) they have been exposed to at the site. If the person cannot take the MSDS/ SDS with them, a copy will be provided to the ambulance staff or directly to the hospital.
4. OSHA requires the reporting of all work related fatalities within 8 hours and all work related in-patient hospitalizations, amputations and loss of an eye within 24 hours.

## 18.7 FIRE

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.

## 18.8 RESPIRATORY SYSTEM FAILURE

1. The loss of the supplied air respiratory system to the abrasive blasters and vacuumers would be noticed immediately by the equipment operator as the blast would be affected as well. The compressor for the blast is the same compressor used for supplied air.
2. All persons wearing supplied air respirators will be removed from the containment until the supplied air is resumed.

## 18.9 POWER FAILURE

1. If there is a power failure, it would affect the abrasive blast (blast lights, recycler) and the equipment operator would stop the compressed air system to stop the blast.
2. The equipment operator or the foreman will determine the cause of the loss of power and make corrective actions to repair the affected part or system.

## 18.10 CHEMICAL SPILLS

1. In the event of a spill or leak, site personnel will:
   A. Inform their supervisor immediately;
2. 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. Standard spill control procedure:
   A. Get away - until the source of the spill is determined
   B. Evacuate the area until the fire hazard and breathing hazards have been identified and are determined to not be a hazard.
   C. Identify the source of the spill and extent of the spill

D. Plan how to clean up the spill, what equipment and personal protective equipment will be required for the clean-up.
E. Stop the source of the leak
F. Stop the spill from spreading by using spill control pillows, building dykes or other effective measures.
G. Clean up the spill
H. Dispose of clean-up materials in an approved container
I. Determine if the waste will be considered as hazardous waste, or how to properly dispose of the waste.

4. 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.
5. 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.
6. 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.
7. 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.

## 18.11 LEAD CONTAMINATED MATERIAL 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 Engineer will be informed of all spills or releases by the submittal of the daily inspection report, or if the spill is off the Owner's property or involves the release of ten pounds or more of lead as soon as possible by the competent person.
5. If the spill or release involves 10 pounds or more of lead, the competent person will notify the proper authority.

## 18.12 EMERGENCY REQUIRING AN EVACUATION

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 foreman.
2. The foreman 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 foreman 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.
8. The foreman or competent person will inform the employees of the evacuation point daily.

# 19.0 FIRE PREVENTION

## 19.1 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.

### 19.1.1 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.
11. Incompatible materials will be stored separately.

### 19.1.2 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 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.
   d. Know the locations of the various extinguishers within your work area and operation of each type.

e. Multi purpose ABC fire extinguishers will be located outside the paint truck or paint storage area and other areas where flammable and/or combustible materials are used or stored. Portable fire extinguishers will be inspected weekly. Monthly inspections will consist of recording the location, pressure, any damage, last service and where it has been tested for each and every extinguisher.

### 19.1.3 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.

## 19.2 FIRE EXTINGUISHERS

### 19.2.1 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.

### 19.2.2 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.

### 19.2.3 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.

## 20.0 ELECTRICAL

1. Ground Fault Circuit Interrupters (GFCI) will be used on this project.
    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.
2. 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.
3. 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.
4. Work areas and walkways are to be kept clear of electrical cords so they do not become a trip hazard.

### 20.1 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.

## 21.0 FIRST AID

1. First aid will comply with OSHA regulations 29 CFR 1926.50.
   a. Monoko 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.
   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 onsite.
   a. This 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 kits will meet OSHA requirements.

# 22.0 ACCIDENT INVESTIGATION

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. OSHA requires the reporting of all work related fatalities within 8 hours and all work related in-patient hospitalizations, amputations and loss of an eye within 24 hours.

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.

## 22.1 RESPONSIBILITIES.

### 22.1.1 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.

### 22.1.2 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.

## 22.2 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. Step in making an investigation.

1. Define the scope of the investigation.
2. Select the investigators. Assign specific tasks to each.
3. 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.
4. Visit the accident site and get updated information for personnel at the site.
5. Inspect the accident area, take pictures and secure the area if possible.
6. 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.
7. 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.
8. Conduct a post-investigation briefing.

9. Prepare a summary report which includes recommendations to prevent a recurrence if the accident.

## 22.3 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.

## 22.4 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.

# 23.0 WASTE MANAGEMENT PLAN

## 23.1 GENERAL

1. EPA regulations 40 CFR 262 and 265 which stipulate how hazardous waste such as petroleum, organic and lead-bearing debris is to be stored, transported and disposed.
2. All paint removal waste will be considered as hazardous waste, regardless of the TCLP test results.
3. The Engineer will be notified when waste samples will be collected.
4. Waste samples will be collected within the first week of the project and the results will be submitted to the Engineer within 10 days of receipt.

## 23.2 WASTE SAMPLING

1. Waste sampling will be conducted in general accordance with SW 846 "Test Methods for Evaluating Solid Waste - Physical/Chemical Method".
2. Samples will be collected in a container approved by the laboratory.
3. Each sample is logged and labeled with a unique identification number.

## 23.3 QUANTITY GENERATED AND REQUIREMENTS

Hazardous waste may be stored onsite for up to 90 days from the start date of accumulation and the final pickup will be arranged by the time blast cleaning operations are completed.

## 23.4 SITE REQUIREMENTS

### 23.4.1 LABELING

1. Hazardous waste drums will be labeled in accordance with 40 CFR 262.32 with hazardous waste labels, including but not limited to the following information:

    A. Generator information
    B. EPA identification number
    C. EPA waste number (see section 3.3)
    D. Accumulation start date

2. For compliance with 49 CFR 172.304

    A. DOT shipping name "Hazardous Waste Solid, n.o.s" if solid
    B. Hazard class, ex Lead is D008, found in 40 CFR 172.101

### 23.4.2 STORAGE

**Drums**

1. All waste drums will have tight fitting lids and will be a DOT-approved containers.
2. Keep the containers in good condition; handle them carefully to prevent leaks, mixing and ruptures, and replace any leaking drums.
3. Drums will be stored on wooden pallets or wood skids (such as 2" x 4" wood)
4. Drums will be located in a fenced area with a lock, or in a connex (seacan) container.
5. Drums will be protected in an area away from traffic or other activity which could disturb them.
6. Drums will be covered to prevent effects of weather.
7. Inspect containers weekly for corrosion/leaks.
8. Other hazardous waste that are ignitable or reactive are stored separately as far as possible away from the site perimeter.
9. Non-hazardous waste will be kept in a separate area and segregated from the hazardous waste to minimize the quantity of hazardous waste to be disposed.

### 23.4.3 INSPECTIONS

1. The hazardous waste storage area will be inspected weekly by the competent person or project foreman.
2. The inspection will be conducted at each area where there is hazardous waste.
3. The results of the inspection will be recorded using Appendix 4.

### 23.4.4 HAZARDOUS WASTE TRANSPORTATION AND DISPOSAL

The hazardous waste transporter and disposer will be submitted separately.

### 23.5 DISPOSAL OF WASTE WATER

1. Monoko provides containers for the collection and retention of waste water. Waste water includes gray water from hand wash facilities, clean-up activities or laundering.
2. The waste water is filtered through a multi-stage filtration systems ending in a 5 micron or better filter prior to being placed into containers.
3. Waste water is filter until test results come back below state and local waste water regulations.
4. Monoko will make arrangements with the local publicly owned treatment works (POTW), sanitation company or other permitted facility.
5. Monoko will provide the Engineer with a letter from the POTW indicating they will accept the waste water.

# ENVIRONMENTAL CONTROLS AND MONITORING

The Environmental Controls and Monitoring is comprised of Sections 24 thru 26.

## 24.0 MONITORING OF VISIBLE EMISSIONS

### 24.1 GENERAL

1. Monoko assesses fugitive emissions periodically though out the project around any work activities that might generate airborne hazardous material emission .This includes but is not limited to paint removal activities, dust collection systems and abrasive reclamation.
2. If visible emissions or releases are observed, Monoko will shut down the emission-producing operation (which may be shutting down one blast nozzle). The result of the emission may require cleaning up the debris, changing work practices, modify the containment or take other actions to prevent future occurrences.
3. Results of visible emission monitoring will be recorded on Appendix 5.

### 24.2 OBSERVATIONS

1. Observations for Method 22 is performed using the following procedures:

   A. The sun is oriented within 140 degree sector to the observer's back.
   B. The observer views the emission approximately perpendicular to the angle of the emissions.
   C. The observer views the emission against a background of contrasting color.
   D. The observer establishes a viewing distance somewhere between the height of the emission and no more than two times the height of the point of emission.
   E. At least **two fifteen minute** observation periods will randomly selected.

### 24.3 CORRECTIVE ACTIONS

1. When visible emissions are observed, Monoko will immediately make corrective actions by making repairs if only a small puff is observed.
2. If continuous emissions are observed Monoko will shut down operations and make repairs.

## 25.0 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.

### 25.1 DAILY SITE CLEAN-UP

At the end of each workday, the work area inside and outside of the containment, including ground tarpaulins will be inspected by the competent person or foreman to verify that paint debris is not present. If debris is present and is not properly contained, the debris will be cleaned by HEPA vacuum and/or industrial vacuum.

### 25.2 PROJECT COMPLETION

A visual inspection of the ground and waterway in and around the project site will be considered to have been cleaned if paint chips, abrasive media, fuel, materials of construction, litter, or other project debris have been removed.

# APPENDIX 4

# WEEKLY SITE INSPECTION

LOCATION: _____
DATE_____

| 4.Site Records | Yes | No | N/A |
|---|---|---|---|
| Medical records or spreadsheet onsite with updated information for all employees? Check for current medical exams and tests, respiratory clearance, other necessary tests | | | |
| Fit test records or spreadsheet onsite for each type of tight fitting respirator worn per worker | | | |
| Training records onsite or spreadsheet with all training required for the job task | | | |
| Site specific safety plan onsite | | | |
| Material Safety Data Sheets (MSDS)/ Safety Data Sheets (SDS) onsite, workers have access | | | |
| OSHA 300 log (If between February 1 and April 30 post 300A from previous year) | | | |
| Emergency phone numbers and hospital directions posted | | | |
| Federal and state required posters posted | | | |
| Weekly safety meeting was conducted in the past week | | | |

| 5. Worker Exposure Monitoring | Yes | No | N/A |
|---|---|---|---|
| Has initial worker exposure monitoring been conducted on all job tasks | | | |
| Did the worker exposure monitoring include metals other than lead | | | |
| Was an area sample collected | | | |
| Will follow-up worker exposure monitoring be required? If so when_____ | | | |

| 6. Waste Management and Container Labeling | Yes | No | N/A |
|---|---|---|---|
| Are all non-hazardous waste containers properly labeled as to their contents | | | |
| Are there any paint containers with thinners for cleaning brushes and/or roller, are the cans properly labeled as to its contents | | | |
| Is non-hazardous waste removed from the job site in a timely manner | | | |
| Is the hazardous waste stored in a secured area (i.e. fence and padlock) | | | |
| Is the hazardous waste stored off the ground, covered and secured in the container | | | |
| Does each hazardous waste container have an EPA ID label and is the labeled completed | | | |
| If there is more than one type of hazardous waste, is each waste stream segregated | | | |
| Is the hazardous waste removed within 90 days of accumulation or per project specifications | | | |

# 26.0 SOIL PROTECTION

## 26.1 GENERAL

1. Soil at or nearby job-sites will be protected to the fullest extent possible by feasible control measures.

## 26.2 SOIL PROTECTION

1. All exposed ground under and near active work areas and containment enclosures will be covered with at least one layer of impervious material, capable of withstanding anticipated use and travel over the layer without damage which would expose the ground.
2. Clean-up of debris contained on the ground cover will be performed carefully as to prevent accidental spillage. Vacuum equipment will be employed to recover debris from ground covers.
3. Once cleared of debris, ground covers will be carefully folded and stored for future use.

## 26.3 CONTAMINATION SOIL CLEAN-UP

1. Any spillage from the ground covers, or accidental contamination of the soil not covered by the ground covers, will be cleaned up immediately by using a HEPA vacuum or shovels, upon recognition of the ground contamination.
2. Excess soil will be cleared to insure that all ground contamination has been remediated.

# APPENDIX 1

## WRITTEN WARNING

Date:_____

Project Location:_____

Safety Officer:_____

Warning: Minor 1st 2nd 3rd 4th
Major 1st 2nd 3rd 4th

Warning issued to:_____

Reason for warning: _____
_____
_____
_____

Corrective action required: _____
_____
_____
_____

Disciplinary action taken: _____
_____
_____
_____

Does any equipment require repair or replacement:_____
_____
_____
_____

Should the crew be informed of violation: _____

Will a safety meeting be required to inform the crew:_____

_____ _____
Safety Officer's Signature Employee's Signature

# APPENDIX 2
# PRE-JOB SAFETY MEETING

Employee Name _____ Date _____

- ❑ Discuss the Site Specific Health and Safety Plan for the Vermont Agency of Transportation for the cleaning and painting . Allow employee to review the Plan.
- ❑ Discuss as a requirement for working on this project, employees are required to allow Monoko, the Industrial Hygienist and the Owner or its representative access to the employee medical records required for this project.
- ❑ Discuss medical requirements including: lead physical and blood testing and respiratory clearance testing
- ❑ Discuss site specific lead operations
- ❑ Discuss fall protection requirements. Discuss harness and lanyards to be used on this project and discuss anchorage points.
- ❑ Discuss scaffolds to be used on this project including: scaffold platform. Discuss fall protection requirements while on the scaffolds.
- ❑ Explain that the employee is not to operate any equipment unless proper training has been completed.
- ❑ Discuss the Safe Operating Procedures (SOP) for the equipment that the employee may use on this project. Equipment includes: Recycler, dust collector, compressor, platform truck, airless sprayer, pressure washer
- ❑ Discuss the location of the Material Safety Data Sheets/ Safety Data Sheets and what chemical are located onsite/. Discuss SDS sections and pictograms
- ❑ Discuss the location of the emergency phone numbers and hospital directions
- ❑ Discuss the employee's role at the job site.
- ❑ Discuss the foreman and competent person's role on each project.
- ❑ Discuss that all work clothing worn in lead regulated work areas is to remain onsite and shall not be allowed offsite.
- ❑ Review accident reporting system. Emphasize to the employee the importance of reporting all accidents, incidents and near misses.
- ❑ Ensure the employee understands to report all unsafe acts to the foreman or competent person.
- ❑ Ensure the employee understands he is a part of a team and as such he should ensure his co-workers are working safely.
- ❑ Discuss the company's discipline policy.

_____ Competent Person/ Foreman

_____ Employee Signature

## APPENDIX 2
## PRE-JOB SAFETY MEETING

Employee Name_____ Date_____

- Discuss the Site Specific Health and Safety Plan for the Vermont Agency of Transportation for the cleaning and painting of Five Bridges. Allow employee to review the plan.
- Discuss as a requirement for working on this project, employees are required to allow Monoko, the Industrial Hygienist and the Owner or its representative access to the employee medical records required for this project.
- Discuss medical requirements including: lead physical and blood testing and respiratory clearance testing.
- Discuss site specific lead operations.
- Discuss fall protection requirements. Discuss harness and lanyards to be used on this project and discuss anchorage points.
- Discuss scaffolds to be used on this project including: scaffold platform. Discuss fall protection requirements while on the scaffolds.
- Explain that the employee is not to operate any equipment unless proper training has been completed.
- Discuss the Safe Operating Procedures (SOP) for the equipment that the employee may use on this project. Equipment includes: Recycler, dust collector, compressor, platform truck, airless sprayer, pressure washer.
- Discuss the location of the Material Safety Data Sheets/Safety Data Sheets and what chemical are located onsite. Discuss SDS sections and pictograms.
- Discuss the location of the emergency phone numbers and hospital directions.
- Discuss the employee's role at the job site.
- Discuss the foreman and competent person's role on each project.
- Discuss that all work clothing worn in lead regulated work areas is to remain onsite and shall not be allowed offsite.
- Review accident reporting system Emphasize to the employee the importance of reporting all accidents, incidents and near misses.
- Ensure the employee understands to report all unsafe acts to the foreman or competent person.
- Ensure the employee understands he is a part of a team and as such he should ensure his co-workers are working safely.
- Discuss the company's discipline policy.

_____ _____

Competent Person/Foreman Employee Signature

## APPENDIX 3
## WEEKLY SAFETY MEETING

DATE_____ LOCATION_____

SAFETY OFFICER _____

ATTENDANCE

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

TOPICS COVERED

1. _____
_____

2. _____
_____

3. _____
_____

4. _____
_____

5. _____
_____

_____
SAFETY OFFICER SIGNATURE

## APPENDIX 4

## WEEKLY SITE INSPECTION

LOCATION:_____
DATE_____

| 1. Hygiene Facilities | Yes | No | N/A |
|---|---|---|---|
| Decontamination facility onsite or at a nearby location | | | |
| Does the decontamination facility have power and water | | | |
| Handwash 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 |
|---|---|---|---|
| Are the lunch and break areas outside of regulated areas | | | |
| Are personal vehicles parked away from the work area | | | |
| Is the restricted and/ or regulated area clearly identified (tape, signs, rope, barriers, etc) | | | |
| If workers are traveling from the decontamination facility to the work area, is it done in a safe manner | | | |

| 3. Personal Protective Equipment (PPE) | Yes | No | N/A |
|---|---|---|---|
| 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 and being worn properly | | | |
| Fall protection worn when exposed to falls, and worn properly | | | |
| Gloves worn are the proper type per job task | | | |
| ANSI type safety vests worn by personnel exposed to traffic or other hazards | | | |

# APPENDIX 4

## WEEKLY SITE INSPECTION

LOCATION: _____
DATE_____

| 7. Access to Work Area | Yes | No | N/A |
|---|---|---|---|
| Is safe access used for workers to go from the ground to the work location | | | |
| Area ladders secured, and extend three feet above working surface | | | |
| Are stairs, ramps or ladders provided for changes in elevation >19" | | | |
| Are ramps in use, if so are guardrails in place on both sides | | | |

| 8. First Aid | Yes | No | N/A |
|---|---|---|---|
| Are first aid kits onsite, check the contents to ensure each kit is complete | | | |
| Is an emergency eye wash station onsite (15 minute continuous wash) | | | |
| Are eye wash bottles available for immediate | | | |
| Are the eye wash bottles and eye wash station water within their expiration date | | | |
| Is a first aid/ CPR person onsite for each shift | | | |

| 9. Aerial Lifts | Yes | No | N/A |
|---|---|---|---|
| Does the operator test the upper and lower controls prior to use each shift | | | |
| Operators are trained and authorized to use the aerial lift | | | |
| Fall protection is worn and secured to the manufacturer's tie-off points | | | |
| Capacity of the aerial lift not being exceeded | | | |
| Operator and passengers standing on basket floor | | | |

| 10. Fire Extinguishers | Yes | No | N/A |
|---|---|---|---|
| Are fire extinguishers within 50 feet of travel of liquids, combustibles and flammables | | | |
| Are fire extinguishers at each paint storage area | | | |
| Are the fire extinguishers the proper size and type based upon the hazard | | | |
| Inspect each fire extinguisher to ensure it is in good working condition | | | |
| Has a monthly fire extinguisher inspection been conducted and results recorded | | | |

# APPENDIX 4
# WEEKLY SITE INSPECTION

LOCATION: _____
DATE_____

| 11. Other Site Issues | Yes | No | N/A |
|---|---|---|---|
| During paint removal, painting and other exposure producing job tasks, are cigarettes left at a designated area | | | |
| Other than the foreman and competent person, are cell phones left at a designated area | | | |
| Are all tools properly grounded by GFCI | | | |
| Are gasoline cans the type that meet the OSHA requirements | | | |
| Are whip checks or safety devices on all high pressure hoses at the coupling | | | |
| Is drinking water readily available | | | |
| Is the drinking water container clearly marked as to its contents | | | |
| Are toilet facilities available and in a sanitary condition | | | |

12. Randomly inspect personal protective equipment and record results ( inspections may include respirators, harness, lanyard, hard hat, safety glasses, life jackets)

| Name of Worker | Equipment Inspected | Pass/ Fail |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

13. Safety issues or concerns documented and the corrective actions required to correct_____
_____
_____
_____

_____ _____
Competent Person's Printed Name Competent Person's Signature

# APPENDIX 5
# DAILY PAINT REMOVAL SITE INSPECTION (Abrasive Blast Operations)

BRIDGE:_____ DATE:_____

WORK LOCATION:_____

| Containment | Yes | No | N/A | Comments |
|---|---|---|---|---|
| During abrasive blast operations, is the ventilation system operating continuously | | | | |
| Adequate duct layout | | | | |
| Containment tarps in good working condition | | | | |
| Containment tarps have proper overlap | | | | |
| Make-up air inlets operational | | | | |
| Containment cleaned in a timely manner | | | | |
| Entryway meets project specification | | | | |
| Airflow measurements recorded Reading _____ Reading _____ Reading _____ Reading _____ Reading _____ | | | | |
| Dust collector magnehelic gage am_____ pm_____ | | | | |

Method 22 Visible Emission Monitoring (15 minute time periods)

| Time | Result | Time | Result | Time | Result | Time | Result | Time | Result |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

Observations of Negative Pressure

| Time | Result | Time | Result | Time | Result | Time | Result | Time | Result |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

| Abrasive Blaster | Yes | No | N/A | Comments |
|---|---|---|---|---|
| Wearing approved blast helmet | | | | |
| Using inner and outer shields | | | | |
| Breathing airlines approved by blast helmet manufacturer | | | | |
| Supplied air checked for carbon monoxide | | | | |
| Air purifying system dated and signed as to last filter change out | | | | |
| Wearing hearing protection | | | | |
| Deadman control in use and not blocked | | | | |
| Blast hoses and breathing airline have safety devices at all couplings | | | | |
| Containment and surrounding area cleaned at end of shift | | | | |

## APPENDIX 5 (Cont'd)

## DAILY PAINT REMOVAL SITE INSPECTION (Abrasive Blast Operations)

BRIDGE:_____ DATE:_____

WORK LOCATION:_____

| Regulated Area | Yes | No | N/A | Comments |
|---|---|---|---|---|
| Clearly defined | | | | |
| Warning signs and/or tape in use | | | | |
| Handwash station/ decontamination trailer outside of regulated area | | | | |

| Handwash Station/ Decontamination Trailer | 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 Equipments | 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 | | | | |

_____ _____

Printed Name Signature

APPENDIX 6

EMERGENCY CONTACTS

The following list provides names and telephone numbers of emergency contact personnel.

## General Contacts

| Organization | Emergency Telephone | Local Phone |
|---|---|---|
| Monoko Office | - | 727-940-3244 |
| Monoko Forman- Manoli Patatoukos | - | 727-412-6000 |
| Monoko Forman- Michael Monokandilos | - | 727-510-8722 |
| Monoko Competent Person- Gary Magriplis | - | 904-343-3302 |
| State Engineer- Tim Pockette | - | 802-786-3811 |
| Poison Control Center | 800-962-1253 | - |
| CHEMTREC | 800-424-9300 | - |
| Vermont DEC Hazardous Waste Emergency | - | 800-241-3888 |
| National Response Center | 800-424-8802 | - |

## Mt. Tabor Bridge 56C US Rt. 7 over Mill Brook (MM3.00)

| Organization | Emergency Telephone | Local Phone |
|---|---|---|
| Ambulance- Vermont State Police | 911 | 802-773-9101 |
| Police- Vermont State Police | 911 | 802-773-9101 |
| Fire- Vermont State Police | 911 | 802-773-9101 |
| Rutland Regional Medical Center Hospital | 1-800-649-2187 | 802-775-7111 |

## Bennington Bridges 11, D15 & D16 N & S

| Organization | Emergency Telephone | Local Phone |
|---|---|---|
| Ambulance- Bennington Police Department | 911 | 502-442-1030 |
| Police- Bennington Police Department | 911 | 502-442-1030 |
| Fire- Bennington Police Department | 911 | 502-442-1030 |
| Southwestern Vermont Medical Center Hospital | 800-543-1624 | 802-442-6361 |

# APPENDIX 7

# HOSPITAL LOCATION & DIRECTIONS

**Mt. Tabor Bridge 56C US Rt. 7, Over Mill Brook (MM3.00)**

**Rutland Regional Medical Center Hospital (18 miles from the bridge)**
**160 Allen St.**
**Rutland, VT 05701**

**802-775-7111**
**800-649-2187**
**18 miles 25 minutes**

# YOUR TRIP TO:

**160 Allen St, Rutland, VT 05701-4560**

**29 MIN | 18.5 MI**

Trip time based on traffic conditions as of 11:28 AM on November 9, 2015. Current Traffic:

Start out going **north** on **Staples Rd** toward **Raymond Rd**.

**Then 1.11 miles**

Turn **slight left** onto **Raymond Rd**.

**Then 1.04 miles**

Turn **slight right** onto **Scottsville Rd**.

**Then 0.10 miles**

Turn **right** to stay on **Scottsville Rd**.

**Then 0.13 miles**

Turn **left** onto **US Route 7 S/US-7 N**. Continue to follow **US-7 N**.

**Then 15.36 miles**

Turn **right** onto **Allen St**.

*Allen St is 0.1 miles past Chaplin Ave.*

*If you are on US-7 N and reach Park St you've gone a little too far.*

**Then 0.71 miles**

Turn **right**.

*Just past Commons St.*

*If you reach Stratton Rd you've gone a little too far.*

**Then 0.05 miles**

160 Allen St, Rutland, VT 05701-4560, **160 ALLEN ST**.

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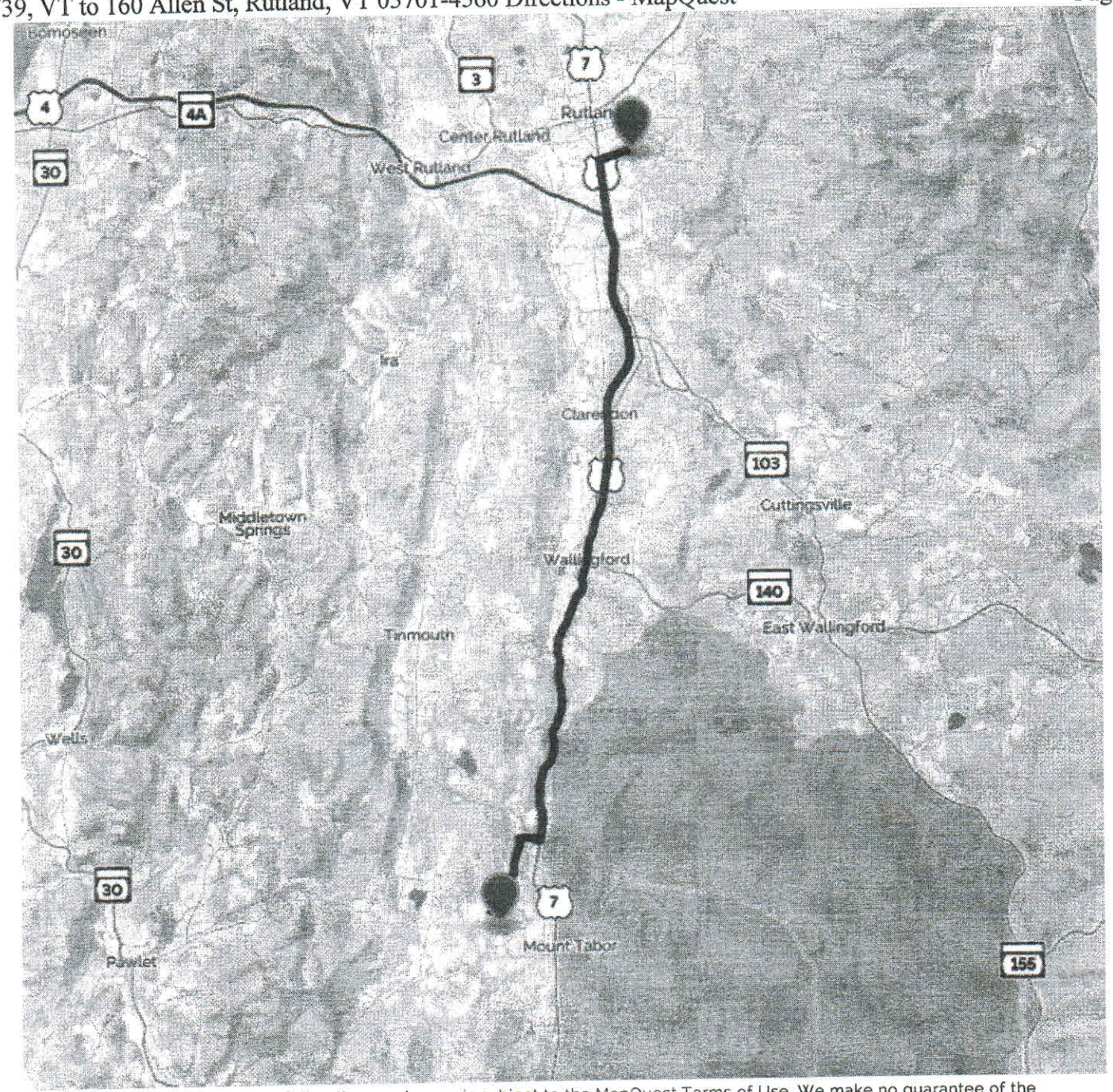


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**Bennington Bridges 11, D15 & 16 N & S**

**Southwestern Vermont Medical Center Hospital**
**100 Hospital Dr.**
**Bennington, VT 05201**

**Phone: 802-442-6361**
**800-543-1624**

# YOUR TRIP TO:

**100 Hospital Dr, Bennington, VT 05201**

**5 MIN | 1.9 MI**

Trip time based on traffic conditions as of 2:52 PM on November 9, 2015. Current Traffic:

Start out going **west** on **County St** toward **Lyons St**.

**Then 0.51 miles**

Turn **left** onto **North St/US-7 S**.
*North St is 0.1 miles past School St.*

*Earl's Service Station is on the left.*

*If you reach Depot St you've gone a little too far.*

**Then 0.42 miles**

Take the 2nd **right** onto **Main St/VT-9**.
*Main St is just past Pleasant St.*

*Jim Thibodeau - State Farm Insurance Agent is on the right.*

*If you are on South St and reach Franklin Ln you've gone a little too far.*

**Then 0.30 miles**

Take the 3rd **left** onto **Dewey St**.
*Dewey St is 0.1 miles past Grant St.*

*SUNOCO SERVICE STATION is on the corner.*

*If you reach Harrison Ave you've gone a little too far.*

**Then 0.47 miles**

Take the 3rd **right** onto **Hospital Dr**.
*Hospital Dr is just past Weeks St.*

*If you reach Ledge Hill Dr you've gone a little too far.*

**Then 0.15 miles**

**100 HOSPITAL DR** is on the **right**.

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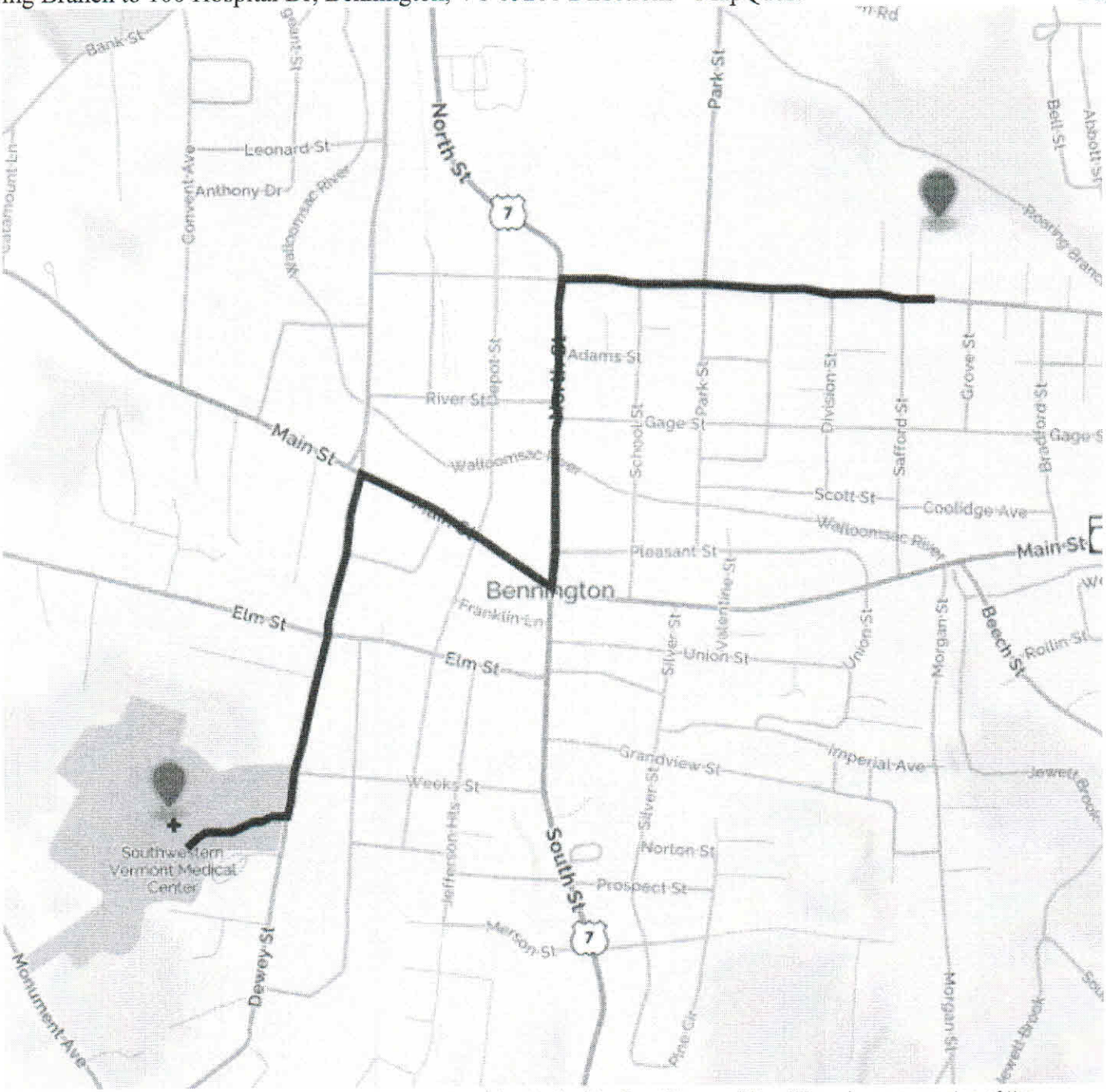


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## APPENDIX 8

## RESUME AND CERTIFICATES

## LEAD SAFETY SUPERIVOR

**LEAD SUPERVISOR/SUPERSTRUCTURES**

DROSSO MONOKANDILOS
1027 HAMILTON AVE
TARPON SPRINGS, FL 34689

Vermont Department of Health
Environmental Health
P.O. Box 70 - Drawer 30
Burlington, VT 05402-0070

LICENSE: SS452078

EXPIRES: Monday, January 11, 2016

CERTIFICATE OF LICENSE
VERMONT LEAD REGULATORY PROGRAM

THIS CERTIFICATE SHALL REMAIN IN FORCE UNTIL THE EXPIRATION DATE UNLESS REVOKED OR VOIDED BEFORE THAT TIME. THIS CERTIFICATE IS NOT TRANSFERABLE AND IS VALID ONLY FOR THE ABOVE PARTY.

COPY OF THIS CERTIFICATE AND PHOTO ID CARD MUST BE ON SITE AT ALL TIMES.

**VERMONT DEPARTMENT OF HEALTH**
***Asbestos & Lead Regulatory Program***

Lead Supervisor/Superstructures
*Not a Legal Form of ID*

**DROSSO MONOKANDILOS**

**Eff. Date** **01/12/15**
**Exp. Date** **01/11/16**

CONEST
SS452078
VT

New

**LEAD SUPERVISOR/SUPERSTRUCTURES**

MICHAEL MONOKANDILOS
4871 BLUE JAY CIRCLE
TARPON SPRINGS, FL 34683

Vermont Department of Health
Environmental Health
P.O. Box 70 - Drawer 30
Burlington, VT 05402-0070

LICENSE: SS321065 EXPIRES: Friday, April 01, 2016

CERTIFICATE OF LICENSE
VERMONT LEAD REGULATORY PROGRAM

THIS CERTIFICATE SHALL REMAIN IN FORCE UNTIL THE EXPIRATION DATE UNLESS REVOKED OR VOIDED BEFORE THAT TIME. THIS CERTIFICATE IS NOT TRANSFERABLE AND IS VALID ONLY FOR THE ABOVE PARTY.

COPY OF THIS CERTIFICATE AND PHOTO ID CARD MUST BE ON SITE AT ALL TIMES.

**VERMONT DEPARTMENT OF HEALTH**
***Asbestos & Lead Regulatory Program***
Lead Supervisor/Superstructures
*Not a Legal Form of ID*
**MICHAEL MONOKANDILOS**

**Eff. Date 04/03/15**
**Exp. Date 04/01/16**

CONEST
SS321065
VT

New

**VERMONT DEPARTMENT OF HEALTH**

***Asbestos & Lead Regulatory Program***

Lead Supervisor/Superstructures

*Not a Legal Form of ID*

**EMMANUEL PATATOUKOS**

**Eff. Date 04/20/15**
**Exp. Date 04/18/16**

New

CONEST
**SS981452**
VT

**LEAD SUPERVISOR/SUPERSTRUCTURES**

EMMANUEL PATATOUKOS
1632 COCKLESHELL DRIVE
HOLIDAY, FL 34690

Vermont Department of Health
Environmental Health
P.O. Box 70 - Drawer 30
Burlington, VT 05402-0070

LICENSE: SS981452

EXPIRES: Monday, April 18, 2016

CERTIFICATE OF LICENSE
VERMONT LEAD REGULATORY PROGRAM

THIS CERTIFICATE SHALL REMAIN IN FORCE UNTIL THE EXPIRATION DATE UNLESS REVOKED OR VOIDED BEFORE THAT TIME. THIS CERTIFICATE IS NOT TRANSFERABLE AND IS VALID ONLY FOR THE ABOVE PARTY.

COPY OF THIS CERTIFICATE AND PHOTO ID CARD MUST BE ON SITE AT ALL TIMES.

# APPENDIX 9

## COMPETENT PERSON

## SSPC TRAINING CERTIFICATE

SSPC The Society For Protective Coatings

AUTHORIZED IACET PROVIDER

IACET Provider # 1003373
Florida Board of Professional Engineers,
Provider #0004326
New York Board of Professional Engineers
American Board of Industrial Hygiene
Approved Provider #10-193

# CERTIFICATE OF COMPLETION

## Gary Magriplis

*Has fulfilled the requirements of*
*SSPC: The Society for Protective Coatings'*

**C-5 SUPERVISOR/COMPETENT PERSON REFRESHER TRAINING FOR DELEADING OF INDUSTRIAL STRUCTURES**

*And is awarded*
.8 Continuing Education Units

**Course Date(s):** 1/5/15

**Location:** Tarpon Springs, FL

**Instructor(s):** Mitch Blum

SSPC President

SSPC Executive Director

# APPENDIX 10

# LABORATORY ACCREDITATION

AIHA Laboratory Accreditation Programs, LLC

*acknowledges that*

## Schneider Laboratories Global, Inc.

2512 West Cary Street, Richmond, VA 23220-5117

Laboratory ID: 100527

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC accreditation to the ISO/IEC 17025:2005 international standard, *General Requirements for the Competence of Testing and Calibration Laboratories in t*he following:

### LABORATORY ACCREDITATION PROGRAMS

| | | |
|---|---|---|
| ✓ | **INDUSTRIAL HYGIENE** | Accreditation Expires: 05/01/2015 |
| ✓ | **ENVIRONMENTAL LEAD** | Accreditation Expires: 05/01/2015 |
| ✓ | **ENVIRONMENTAL MICROBIOLOGY** | Accreditation Expires: 05/01/2015 |
| ☐ | **FOOD** | Accreditation Expires: |
| ☐ | **UNIQUE SCOPES** | Accreditation Expires: |

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached **Scope of Accreditation**. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2005 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached **Scope of Accreditation**. Please review the AIHA-LAP, LLC website (www.aihaaccreditedlabs.org) for the most current Scope.

*Larry S. Pierce*
*Chairperson, Analytical Accreditation Board*

*Cheryl O. Morton*
*Managing Director, AIHA Laboratory Accreditation Programs, LLC*

Revision 13: 03/12/2013

Date Issued: 08/30/2013

# AIHA Laboratory Accreditation Programs, LLC
## SCOPE OF ACCREDITATION

**Schneider Laboratories Global, Inc.**
2512 West Cary Street, Richmond, VA 23220-5117

Laboratory ID: **100527**
Issue Date: 08/30/2013

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or withdrawal of accreditation.

The EPA recognizes the AIHA-LAP, LLC ELLAP program as meeting the requirements of the National Lead Laboratory Accreditation Program (NLLAP) established under Title X of the Residential Lead-Based Paint Hazard Reduction Act of 1992 and includes paint, soil and dust wipe analysis. Air analysis is not included as part of the NLLAP.

**Environmental Lead Laboratory Accreditation Program (ELLAP)**

**Initial Accreditation Date: 05/06/1994**

| Field of Testing (FoT) | Method | Method Description *(for internal methods only)* |
|---|---|---|
| **Paint** | 16 CFR Part 1303 (CPSC-CH-E1003-9.1) | |
| | ASTM E1613-04 | |
| | ASTM E1645-01 | |
| | EPA SW-846 3050B | |
| | EPA SW-846 6010C | |
| | EPA SW-846 6020A | |
| | EPA SW-846 7000B | |
| | EPA SW-846 7010 | |
| **Soil** | EPA SW-846 3050B | |
| | EPA SW-846 6010C | |
| | EPA SW-846 6020A | |
| | EPA SW-846 7000B | |
| | EPA SW-846 7010 | |
| **Settled Dust by Wipe** | EPA SW-846 3050B (Modified) | |
| | EPA SW-846 6010C | |
| | EPA SW-846 6020A | |
| | EPA SW-846 7000B | |
| | EPA SW-846 7010 | |
| **Airborne Dust** | EPA SW-846 6010C | |
| | EPA SW-846 6020A | |
| | EPA SW-846 7000B | |
| | EPA SW-846 7010 | |
| | NIOSH 7082 | |
| | NIOSH 7105 | |
| | NIOSH 7300 | |