SURE-FIRE, INC.

SAFETY POLICIES AND PROGRAMS

617 Washington Street – Horicon, WI 53032

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www.SureFireInc.com

These policies have been designed for the health, welfare and safety of all employees and to protect property from damage or destruction. Our goal is to provide safe working conditions for you and your fellow employees. It is your fingers, limbs, eyes, ears and your life that we are concerned about. These are irreplaceable. Your livelihood is diminished, or at worst, destroyed when you are disabled. You and your family are the chief sufferers. These safety policies are to help and protect you.

The following safety policies must be adhered to while in our employ. Failure to do so will result in disciplinary action, to include dismissal, depending on the nature and the extent of the violation.

1. All accidents or injuries, no matter how minor, must be reported to your supervisor. You should seek immediate treatment to prevent infection or further complications. An accident report must be completed and returned to the office within 2 working days. No exceptions!

2. When required by OSHA, hard hats are to be worn by personnel on the job-site at all times. Hard hats should be inspected daily. Worn, damaged or outdated hard hats should be replaced immediately. Metal hard hats are not permissible.

3. Safety goggles or glasses with side shields must be worn when hammering, sawing, chipping, welding, grinding, cutting, drilling, working in dusty places or during any operation which could result in an eye injury.

4. Earplugs or earmuffs are required when working near any noise producing operation. Shop personnel are required to wear ear protection when fabricating and related machinery and equipment are in operation. Cotton or waste cannot be used as earplugs.

5. Approved respirators or dust masks are to be used when conditions warrant.

6. All shop and field personnel must wear safety shoes, preferably with steel toes. The shoes must be in serviceable condition. Canvas or street shoes are expressly prohibited.

7. ANSI Level 3 Cut-Resistant gloves shall be worn when handling rough edge or abrasive material to protect against lacerations, punctures or burns. Gloves are also recommended when performing cutting, drilling or any other operation that create flying particles.

8. When working around moving equipment or machinery, employees are cautioned about the danger of wearing loose clothing and should remove all rings, bracelets, and jewelry.

9. Tampering with, or unauthorized removal of fire extinguishers from assigned locations is prohibited

10. Gasoline is prohibited for use in cleaning equipment, tools or for starting of fires. Small quantities of gasoline may be transported, but only in approved labeled red (metal) safety containers. Gasoline engines must be shut off when refueling.

11. Smoking is prohibited in all buildings, company vehicles and on jobsites at all times.

12. Compressed air or oxygen may not to be used for dusting off clothes or cleaning equipment.

13. Only Sure-Fire employees are authorized to drive company vehicles. Seatbelts are to be worn at all times by the driver and any passengers. Personal use of Company vehicles is prohibited without prior approval by Owners.

14. No employee shall operate any machinery, equipment, or tool unless they have had appropriate instruction on its proper use.

15. All switches or drives on electrically driven machinery and equipment shall be shut down and/or locked in the open or off position before cleaning, greasing, oiling, repairing or making equipment adjustments. Locks should not be removed until the work has been completed. Never remove another person's lock. See attached **LOCKOUT/TAGOUT PROGRAM**.

16. All machine guards shall be kept in place while machinery is in operation. Tampering with machine guards is prohibited and any removal requires the prior approval of a responsible supervisor. All guards are to be promptly replaced when repair work that necessitated their removal has been completed.

17. High voltage electrical equipment and transmission lines are to be approached and handled only by persons qualified and authorized to do so and only after all precautions have been taken for the safety to themselves and others.

18. No employee will walk or work under lifted loads. No equipment operator will lift loads over a fellow employee or other person.

19. Hand tools should only be used for their intended purpose. All damaged tools or worn parts should be reported for replacement or repairs.

20. All tools and cords shall be tested and taped in accordance with our Assured Equipment Grounding Program. No employee shall use a tool or cord that is not properly tested and taped. Electric tools must be properly grounded at all times. Cords must be inspected daily before use. See attached **ASSURED EQUIPMENT GROUNDING EQUIPMENT PROGRAM**.

21. No employee will enter a trench or excavation that is not properly shored. Nor will he/she enter a trench or excavation without someone present on the surface.

22. No employee will remove a cover or guard rail for any floor opening without specific authority.

23. Employees are not permitted to use or possess any intoxicants on a jobsite or company property or to be under the influence of the same. See attached **SUBSTANCE ABUSE POLICY**.

24. Tools, equipment, machinery and work areas are to be maintained in a clean and safe manner. Defects and unsafe conditions shall be reported to your supervisor/foreman.

25. Horseplay, including reckless driving of vehicles or equipment is prohibited and will not be tolerated.

26. Common sense, personal health and sanitation practices must be observed for the welfare of yourself and in consideration of others.

27. Proper lifting procedures (back as straight as possible, knees bent) shall be practiced. If the load is too heavy, get help.

28. No employee shall work on scaffolding without proper guardrails, toe boards and flooring.

29. Barrels, boxes, loose bricks, concrete blocks or any unstable object shall not be used to support scaffolding or planks.

30. Any employee observing an unsafe condition shall report said condition to his/her immediate supervisor/foreman.

31. Sure-Fire Inc. will not tolerate the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance at the work place. You must notify Sure-Fire, Inc. of any criminal drug statute conviction no later than five days after conviction. See attached **SUBSTANCE ABUSE POLICY**.

32. All employees shall be familiar with the company Hazard Communication Program. Safety Data Sheets (SDS) are on file in the office and available to all employees. A list of SDSs on file should be kept in your vehicle and on all jobsites. See attached **HAZARD COMMUNICATIONS PROGRAM**.

33. All employees shall be familiar with the company Fall Protection Program. Employees must be trained in proper procedures prior to starting work. Annual training is required. See attached **FALL PROTECTION PROGRAM**.

34. All employees shall be familiar with the company Personal Protective Equipment Program. Personal protective equipment is intended to safeguard you and is required in certain work situations. See attached **PERSONAL PROTECTIVE EQUIPMENT PROGRAM**.

35. All employees shall be familiar with the company's Silica Exposure Control Program, which is intended to implement control measures to limit employees' exposure to respirable crystalline silica. See attached **SILICA EXPOSURE CONTROL PROGRAM.**

36. All employees shall be familiar with the company's Confined Space Entry Program, which is to ensure employee safety and prevent personal injury from work in confined spaces. See attached **CONFINED SPACE ENTRY PROGRAM.**

SURE-FIRE, INC. HAZARDOUS ENERGY CONTROL PROGRAM

1. GENERAL INFORMATION

The purpose of this program is to protect employees of Sure-Fire from injuries while servicing and maintaining equipment.

2. SCOPE

The program establishes requirements for hazardous energy control. It is to be used to ensure that machines and equipment are isolated from all potentially hazardous energy sources whenever servicing or maintenance activities are in progress.

3. RESPONSIBILITY

1. Casey Malesevich is designated as the Program Coordinator for this company. Specific responsibilities include:
    a. Provide Hazardous Energy Control training to employees.
    b. Maintain a current listing of employees who have completed lockout training.
    c. Maintain a current listing of all equipment/machines that fall under the Hazardous Energy Control program. Listing is to be updated each time a change occurs.
    d. Implement and enforce this program.
    e. Maintain an adequate supply of padlocks and DANGER tags for use each time a lockout process is performed.
    f. Conduct the annual inspection and review as required by section VII.
2. Each supervisor is responsible for the effective use of this program in the work group and to see that all required procedures are followed in every instance.
3. Each employee is responsible for learning and following the procedures and practices developed under this program. Notify the Program Coordinator prior to a lockout process.

4. BASIC LOCKOUT/TAGOUT PRINCIPLES

All equipment must be locked out to protect against accidental or inadvertent operation, when operation could cause injury to personnel. Locks are to be applied and removed only by the specific authorized employee who is performing the servicing or maintenance.

No one should attempt to operate locked-out equipment.

Disciplinary action will be applied if any employee violates these procedures, regardless of whether or not physical harm or equipment damage results.

Lockout devices (padlocks) with an appropriate DANGER warning tag shall be used for energy control. Prior to the servicing or maintenance of equipment, a padlock and DANGER warning tag will be obtained from the Program Coordinator.

Tagout is to be used ONLY if Lockout is not possible. When used, the tag shall be fastened as close as safely possible to the device, in a position that will be immediately obvious to anyone attempting to operate the device.

5. TRAINING

Each **authorized employee** will be trained in the recognition of applicable hazardous energy sources, the type and magnitude of the energy available in the workplace, and the methods and means necessary for energy isolation and control.

Each **affected employee** shall be instructed in the purpose and use of the energy control procedure.

- **Affected employee.** An employee whose job requires him/her to operate or use a machine or equipment on which servicing or maintenance is being performed under lockout or tagout, or whose job requires him/her to work in an area in which such servicing or maintenance is being performed.
- **Authorized employee.** A person who locks out or tags out machines or equipment in order to perform servicing or maintenance on that machine or equipment. An affected employee becomes an authorized employee when that employee's duties include performing servicing or maintenance covered under the standard.

All other employees who do not work in areas where lockout may be used will be provided a brief overview of the lockout program.

Training in lockout will be given to all new employees as a part of their orientation. Retraining will be conducted whenever there is a change in job assignment, a change in machinery or equipment or process change that presents a new hazard.

Training records will be kept for all employees covered under the standard.

6. LOCKOUT PROCEDURES

A. SEQUENCE OF LOCKOUT.

1. Notify the Program Coordinator, Casey Malesevich – (920) 210-8165.
2. Notify all affected employees that lockout is going to be utilized, and the reason why.
3. If the machine/equipment is in operation, shut it down by the normal shutdown procedure.
4. Operate the appropriate switch, valve, etc., so that the machine/equipment is isolated from the energy source.
5. Lock the energy isolating devices, using assigned locks and danger tags.
6. Release, restrain, or dissipate any stored energy.
7. Verify that energy isolation is complete, by attempting to start the affected machinery or equipment in the normal manner.
8. After testing, return all operation controls to the "neutral" or "off" positions.

B. RESTORATION TO NORMAL:

1. After service or maintenance is complete, check the area to ensure that no employees are exposed.

2. Remove all tools and repair equipment.
3. Ensure that all guards have been replaced and all safety interlocks reactivated (if so equipped).
4. Verify that the operating controls are in the "off" or neutral position.
5. Remove all lockout and tag devices and activate the energy isolation devices to restore energy.

7. PROGRAM INSPECTION AND REVIEW

At least annually, the Program Coordinator will verify the effectiveness of the energy control procedures. These inspections shall provide for a demonstration of the procedures and may be carried out through random audits and observations.

Any deficiencies will be corrected immediately, either by modification of the procedure, retraining of employees, or a combination of both.

8. OUTSIDE CONTRACTORS

Outside personnel or contractors involved in lockout of equipment or machinery that affects our employees must submit their energy control procedures, in writing, to the Program Coordinator. All affected employees must be trained in and familiar with the contractor's submitted procedure.

In order to protect our employees, the contractor's work area will be isolated, and access by our employees will be restricted. If this is impractical or cannot be accomplished, the Program Coordinator must assure the contractor's compliance with proper work procedures, energy isolation procedures and contractor employee compliance.

Contractors failing to adhere to the provisions of the OSHA Hazardous Energy Control standard will be asked to terminate their work until their program is brought into compliance.

ASSURED EQUIPMENT GROUNDING CONDUCTOR PROGRAM (AEGCP)

1. GENERAL INFORMATION

The purpose of Sure-Fire, Inc.'s assured equipment grounding conductor program is to provide company policy and guidelines to eliminate all serious injuries resulting from possible malfunctions, improper grounding, and/or defective electrical powered tools, equipment, cord sets, receptacles, and other electrical appliances connected with above.

This program assigns responsibilities, outlines actions and methods, which will reduce and keep to a minimum accidental and serious injuries.

The Safety Director directs and has overall responsibility for the execution of this program and will coordinate with the job superintendent its implementation.

2. DAILY VISUAL INSPECTION

A daily visual inspection shall be made of the following to determine any external defects or indications of internal damage (such as deformed or missing pins, insulation damage, etc.) prior to each day's use:

> Cord sets, attachment cap, plug and receptacle of cord sets and any other equipment connected by cord and plug (with the exception of cord sets and receptacles which are fixed and not exposed to damage)

Equipment found to be damaged shall be tagged and removed from service until repaired and tested.

3. TESTS

The following tests shall be conducted at intervals not to exceed three (3) months on all cord sets, receptacles which are not a part of the permanent wiring of the building or structure and company-owned cord and plug-connected equipment required to be grounded.

(1) Grounding conductors tested for continuity and shall be electrically continuous.

(2) Each receptacle and attachment cap or plug shall be tested for correct attachment of the equipment grounding conductor. The equipment-grounding conductor shall be connected to its proper terminal. The above required tests shall be performed before first use, before equipment is returned to service following repairs, before equipment is used after any incident which can be reasonably suspected to have caused damage (example: when cord is run over or crushed). Cord sets and receptacles that are fixed and not exposed to damage shall be tested at six (6) month intervals.

(3) The above requirements set forth shall be adhered to prior to making available or permitting the use by employees of any equipment.

(4) Tests performed as required in this program shall be recorded. Test records to identify each receptacle, cord set, cord and plug connected equipment that passed the test and shall indicate the last date it was tested or the interval for which it was tested. This record shall be kept by means of logs, color coding, or other effective means, and shall be maintained until replaced by a more current record. The record shall be made available at

the jobsite for inspection by Department of Labor OSHA personnel, and any affected employee.

(5) Testing and identification is to be done during the week PRIOR to the new quarter deadline. In no case shall this extend past the date indicated on the chart shown below.

4. EMPLOYEE TRAINING

Employees charged with the testing requirements of the program shall be properly instructed regarding use of all testing equipment, nature of the hazards, and precautions to be taken.

5. COLOR CODE BY QUARTERS

Quarter Beginning	Color
January 1	White
April 1	Green
July 1	Red
October 1	Orange

Color identification to be of two-inch length affixed by colored tape which will adhere to the cord sets and cord and plug-connected equipment.

Colors should be located on cord sets and equipment as follows:

(1) Cord Sets – Next to each end of the set.

(2) Cord and plug-connected equipment – on cord adjacent to the base of equipment.

NOTE: At the beginning of a new quarter the previous quarter's color should be removed and the new color affixed. To insure uniformity, cord sets and receptacles that are fixed and not exposed to damage should be checked quarterly and also color-coded.

6. DAILY EQUIPMENT GROUNDING INSPECTION AND MAINTENANCE LIST

(1) Power, portable and/or cord plug connected equipment properly grounded or of double insulated type.

(2) Damaged tools or cord sets tagged and removed.

(3) Extension cords – three-wire type in good condition (no worn or frayed parts or missing pins)

(4) Switches circuit breakers, and disconnecting means legibly marked in circuit panel or temporary service.

(5) Temporary lights equipped with heavy duty electric cords, non-conductive guards or grounded parts.

(6) Suspended temporary lights designed for suspension, temporary lights shall not be suspended by their electric cords, fastened with staples, hung by nails, or suspended by wire.

(7) Cables or cords passing through work areas elevated or protected from damage.

(8) Outlet boxes covered.

(9) Receptacles for attachment plugs of the approved concealed type.

(10) Where different voltages, frequency, or types of current are supplied, receptacles shall be of such design that attachment plugs are not interchangeable. Cords also marked.

(11) Disconnecting means for motors and appliances and each service feeder or branch circuit at the point where it originates legible marked to indicate its purpose, unless located and arranged so that the purpose is evident.

(12) Non-current carrying metal parts of fixed, portable and plug-connected equipment grounded. (Double insulated portable tools and appliances need not be grounded.)

(13) Exposed bulbs on temporary lights guarded to prevent accidental contact except where bulbs are deeply recessed in the reflector.

(14) Employee's personal equipment and cords must be checked, tagged, and color coded quarterly.

1. GENERAL INFORMATION

Sure-Fire, Inc. (Company) has a concern for the safety, health and well-being of its employees. The Company also has an obligation to provide its customers with quality service and products. Alcohol or drug abuse can pose a serious safety and health hazard to the employee, co-workers and third parties and can interfere with our ability to meet our customer's needs.

In addition, Wisconsin law requires the Company to maintain a Substance Abuse Policy in order to perform work on prevailing wage projects.

Therefore, a condition of employment at Sure-Fire, Inc. is that employees adhere to the following requirements:

2. PROHIBITED CONDUCT

Sure-Fire, Inc. prohibits employees from using, possessing, attempting to possess, distributing, delivering or being under the influence of a drug or using or being under the influence of alcohol on Company premises, in Company vehicles or during work hours, including breaks, meals and overtime. Violation of these provisions will result in immediate removal from the work site and appropriate disciplinary action, which may include termination of employment.

Therefore, the Company, in accordance with our policy, prohibits an employee working on a project from using, possessing, attempting to possess, distributing, delivering or being under the influence of: 1) marijuana, cocaine, or phencyclidine (PCP) or any derivative thereof, 2) an amphetamine or any formulation thereof; 3) a narcotic drug or any derivative thereof; or 4) any other substance to a
degree, which adversely affects the employee's safety and/or the safety of others. No employee shall report for duty or remain on duty while having a breath alcohol concentration of .04 or greater. No employee shall consume an intoxicating beverage, regardless of its alcoholic content, while on a project.

Effective January 1, 2007, all employees/applicants (or employees/applicants performing work on prevailing wage projects) of the Company will be required to submit to a drug or alcohol test in the instances set forth as follows:

(1) Pre-Employment

Applicants will be informed that Sure-Fire, Inc. requires all individuals it intends to hire to be drug-free and that passing a pre-employment drug test is a condition of employment at the Company. All offers of employment are contingent upon satisfactory results of a drug test screen. If an applicant refuses to submit to the drug test, or tests positive on the drug test, the applicant will not be considered qualified for employment with the Company and will not be offered employment.

(2) Reasonable Suspicion

Sure-Fire, Inc. may require employees to submit to a drug or alcohol test whenever reasonable suspicion exists that an employee may be unfit for duty due to alcohol or other drug use based upon an employee's behavior, performance or conduct. The Company shall ensure that the employee is transported immediately to a collection site for the collection of a urine or breath specimen. If the Company finds the employee not fit to return to work, the Company will arrange transportation for the employee to his/her home. The Company may also suspend the employee, without pay, pending receipt of the test results. If the test results are negative the employee will

return to work and receive compensation for any wages lost while awaiting the test results.

(3) Post Accident

Sure-Fire, Inc. requires employees to report each accident to appropriate management personnel. The Company, at its discretion, may require the employee provide an urine/breath specimen to be tested for the use of controlled substances and alcohol as soon as possible, but not later than 24 hours after an accident.

(4) Random

Sure-Fire, Inc. shall use a scientifically valid random selection process to select and request an employee to be tested for the use of alcohol and controlled substances. Each employee shall have an equal chance of being tested each time selections are made. The random alcohol and controlled substances tests conducted under this part will be unannounced and spread reasonably throughout the calendar year.

The minimum annual percentage rate for random drug testing shall be 20 percent of employees in the Consortium pool. The minimum annual percentage rate for random alcohol testing shall be 5 percent of employees in the Consortium pool.

(5) Removal And Return To Work

Any employee who violates the Sure-Fire, Inc.'s Substance Abuse Policy, who is under the influence of drugs or alcohol while performing work, who tests positive for drugs or alcohol, who refuses to submit to drug or alcohol testing as required in this Policy, who engages in any conduct which operates to jeopardize the integrity of the specimen or the reliability of the test result, or if a contracting agency officer has reasonable suspicion to believe an employee is in violation of the Company's Substance Abuse Policy, that employee shall be immediately removed from work and subject to discipline up to and including discharge. Employees will only be eligible to return to work upon testing negative for drugs and alcohol and complying with any other substance abuse evaluation or treatment, if applicable.

3. DRUGS TESTED

Sure-Fire, Inc. tests employees/applicants for the following drugs ("Drug Panel 5"):

Amphetamines/Methampheta
mines Cocaine Metabolites
Marijuana Metabolites
Opiates Metabolites
Phencyclidine

Alcohol (Breath)

The Company tests employees for the drugs indicated above plus alcohol for reasonable suspicion, random and post-accident situations. The employee is required to submit a breath specimen for the alcohol test under these circumstances.

4. COMPLIANCE WITH TESTING PROCEDURES

All employees/applicants requested to undergo a drug or alcohol test are required to promptly comply with the request. Sure-Fire, Inc. expects all prospective and current employees to exercise good faith and cooperate in complying with any procedures required under the Policy.

Refusal to submit to a drug test, or engaging in any conduct which operates to jeopardize the integrity of the specimen or the reliability of the test result will be subject to disciplinary action, up to and including termination, independent and regardless of any test results. This also includes failure to show up for a drug test specimen collection and postponing or rescheduling of drug specimen collections.

5. TESTING AND NOTIFICATION OF TEST RESULTS

Testing will be performed by a SAMHSA certified laboratory utilizing clinically sound and approved testing methodologies. The name of the individual providing the specimen will remain confidential and will not be provided to the laboratory performing the test (unless requested by the Company). The testing laboratory is only able to identify the specimen by the "specimen identification number" assigned at the time of collection.

The laboratory will release the results of the drug test to a Certified Medical Review Officer (MRO) for chain of custody and test verification. The MRO will only release results to the contact person designated by Sure-Fire, Inc.

6. DISCIPLINARY ACTIONS

Employees who violate the above rules are subject to immediate termination. Sure-Fire, Inc. in its sole discretion may take other disciplinary action, as it deems appropriate and/or may offer an employee the opportunity to undergo substance abuse evaluation and successfully complete treatment, if recommended, in lieu of termination.

7. REHABILITATION

Sure-Fire, Inc. does provide group health insurance benefits to employees. The employee will pay for all costs of rehabilitation not covered under the Company's benefit plan. A leave of absence to participate in drug rehabilitation will not be paid by the Company. An employee may however choose to utilize vacation time he/she has available to pay for the lost time from work.

8. AMENDMENTS

This policy is subject to amendment from time to time as determined appropriate by Sure-Fire, Inc. The Company reserves the right to add to, delete from or change this policy at any time with or without notice to employees.

This Policy is not intended, and should not be construed, as an employment contract. None of the statements or policies outlined in the Substance Abuse Policy are meant to imply that Sure-Fire, Inc is guaranteeing employment for anyone. Employment with the Company is considered "at-will" and can be terminated by either the Company or the employee at any time, and for any reason unless prohibited by statute or public policy. Final interpretation and implementation of any of the provisions of this Policy are vested solely with the Company.

Name* of *person available to answer questions about this Policy:

Casey Malesevich, President

SURE-FIRE, INC. HAZARD COMMUNICATION PROGRAM

1. GENERAL INFORMATION

The Company has developed this program to safeguard employees from the effects of hazardous chemicals in their work environment. Employees have a need and a right to know and understand the hazards and identities of chemicals that they work with. Employees must be trained and provided with work procedures and equipment to prevent injury and illness. Employees must be able to read labels, follow safety rules, and know what to do if something goes wrong.

2. CONTAINER LABELING

The Shop Supervisor will verify that all containers received for use will:

- Be clearly labeled as to the contents,
- Note the appropriate hazard warning,
- List the name and address of the manufacturer.

The Shop Supervisor in each section will ensure that all secondary containers are labeled either with an extra copy of the original manufacturer's label or with suitable generic labels which have a block for identity and blocks for the hazard warning. For help with labeling, please see our Safety Officer.

The Safety Officer will review the company labeling system every six months and update as necessary.

3. SAFETY DATA SHEETS (SDS)

The Safety Officer will be responsible for obtaining and maintaining the data sheet system for the company.

The Safety Officer will review incoming data sheets for new and significant helath/safety information. He will see that any new information is passed on to the affected employees.

Copies of SDSs for all hazardous chemicals to which employees of this company may be exposed will be kept in the Safety Officer's File.

SDSs will be available to all employees in their work area for review during each work shift. If SDSs are not available or new chemicals in use do not have SDSs, immediately contact the Safety Officer.

4. EMPLOYEE TRAINING AND INFORMATION

The Safety Officer is responsible for the employee training program. He will ensure that all elements specified below are carried out.

Prior to starting work each new employee of Sure-Fire, Inc. will attend a health and safety orientation and will receive information and training on the following:

- An overview of the requirements contained in the Hazard Communication Standard,
- Chemicals present in their workplace operations,
- Location and availability of our written hazard program,
- Physical and health effects of the hazardous chemicals,

- Methods and observation techniques used to determine the presence or release of hazardous chemicals in the work area,
- How to lessen or prevent exposure to these hazards chemicals through usage o control/work practices and personal protective equipment,
- Steps the company has taken to lessen or prevent exposure to these chemicals,
- Emergency procedures to follow if they are exposed to these chemicals,
- How to read labels and review SDSs to obtain appropriate hazard information, and
- Location of SDS file and location of hazardous chemical list.

5. LIST OF HAZARDOUS MATERIALS

The following is a list of all known Hazardous Material used by employees of Sure-Fire, Inc. (in parentheses is the most recent update of SDSs on file). Complete information on hazardous materials contained is available for review in the Safety Officer's SDS file, or by contacting:

Sure-Fire, Inc.
P.O. Box 191
Horicon, WI 53032
Phone: (920) 485-4883
Fax: (920) 485-4075

LIST OF HAZARDOUS MATERIALS

1. Acetylene (5/98)
2. Acid Away (6/14/96)
3. Acid Test Kit – 5W198 (7/23/08)
4. Anti-Freeze – Auto (3/03)
5. Anti-Freeze – Dowtherm (7/16/07)
6. Anti-Freeze – No Burst/Cryotek (6/23/03)
7. Anti-Oxidant (12/03/02)
8. Anti-Seize (4/11/06)
9. Argon/CO2 (5/99)
10. Big Blu – Leak Detector (11/1/05)
11. Boiler Sealer – F1-95 (10/28/98)
12. Brazing Rods – Copper (10/04)
13. Caulk – 3M FireBarrier
14. Caulk – Firestop FYRE-SHIELD (10/24/97)
15. Caulk – Firestop FS-ONE
16. Caulk – Neoprene Cement (11/25/05)
17. Caulk – RTV High Temp (11/20/02)
18. Caulk – Silicone Rubber (9/17/07)
19. Caulk – Silicone Sealant (6/12/06)
20. Cleaner – Hand (Gojo) (11/15/04)
21. Cleaner – Lens 2AR69 (8/9/07)
22. Cleaner – Lens LCT1 (5/6/09)
23. Coil Cleaner – Green 19P44 (2/7/91)
24. Coil Cleaner – Pro-Blue (3/27/09)
25. Coil Cleaner – Pro-Green (11/29/10)
26. Coil Cleaner – Yellow (5/11/90)
27. Cork Tape (1/1/05)

LIST OF HAZARDOUS MATERIALS (cont.)

28. Crayon Lumber (4/12/06)
29. Cut-off – Carbide Tipped (2/1/06)
30. Cut-off – Wheel-Concrete (2/1/06)
31. Cut-off – Wheel-Metal (7/14/06)
32. Deep Creep Lubricant (5/1/05)
33. Duct Liner – Adhesive-Protack (11/28/06)
34. Duct Liner – Wrap/Board (9/12/97)
35. Duct Sealer – Foremost #8 (7/2/04)
36. Duct Sealer – Pro Seal (1/5/04)
37. Fire Extinguisher (9/1/03)
38. Flame Cutting/Weld Shield (11/22/06)
39. Floor Dry (5/7/90)
40. Fluid – Brake DOT3 (6/20/95)
41. Fluid – Transmission Type A (10/14/04)
42. Fluid – Windshield Washer
43. Flux – Ruby Red (4/25/88)
44. Flux – Silv White (9/3/04)
45. Flux – Stay Clean (7/2/04)
46. Flux – Stay Clean Liquid (7/1/04)
47. Furnace Cement (1/99)
48. Galv OFF Solvent Spray (1/3/95)
49. Galvanized Steel (9/10/99)
50. Gasket Tape – Ductmate (3/3/05)
51. GC22 – Aerosol Propellant GX120 (1/3/08)
52. Ice Melt (1/3/06)
53. Insulated Flex – All Sizes (11/30/04)
54. Lead – Wool, Sheet, Acusti-, Came) (8/07)
55. Leak Lock (4/3/03)
56. Megaloc – Slic-Tite (6/29/04)
57. Muriatic/Hydrochloric Acid (1/05)
58. Nitrogen (1/95)
59. Nu-Calgon (2/8/07)
60. Odor Out (10/21/98)
61. Oil – Hydraulic NAPA (4/3/01)
62. Oil – Motor 5w-30 (9/13/02)
63. Oil – Refrigeration (3/10/87)
64. Oil – Thread Cutting (4/20/94)
65. Oil – Vacuum Pump (8/6/02)
66. Oil – Zoom Spout Oiler (4/3/00)
67. Okemcoat (2/25/09)
68. Oxygen (1/95)
69. Paint Thinner – Xylene-SW (4/3/07)
70. Paint Thinner – DEL (11/12/01)
71. Pan Sealer (6/21/06)
72. Pipe Dope – Megaloc Slic-Tite (7/20/99)
73. Propane Tank (6/79)
74. PVC Cement (5/20/05)
75. PVC Cleaner (5/20/05)
76. PVC Coated Steel Weld Cut (7/25/02)
77. Refrigerant – R22 (4/28/04)

LIST OF HAZARDOUS MATERIALS (cont.)

78. Refrigerant – R410A (8/29/01)
79. Rust Buster (12/1/03)
80. Sealant Tape (12/1/01)
81. Silicone Sealant High Temp (12/1/07)
82. Soap – Hand (7/25/06)
83. Solder (4/7/10)
84. Soot Sticks (9/10/02)
85. Spray – Adhesive DuroDyne (6/05)
86. Spray – Paint (10/23/97)
87. Spray – White Duct Touchup (10/28/03)
88. Staybrite (11/1/04)
89. Sweeping Compound (1/2/07)
90. T.D.C. Gasket (7/13/05)
91. Thermostat Remove Bulb (10/8/99)
92. Thum Gum (10/27/06)
93. Titanium Tetrachloride (9/15/06)
94. Urinal Cake (1/1/10)
95. WD-40 Spray (12/04)
96. Welding Wire (3/1/07)
97. Wheel Grinding GA076 (1/22/07)
98. Wheel Grinding 6A108 (2/1/06)
99. Wire Pulling Lubricant (12/21/05)
100. Wrought Iron Black Paint (6/10/03)

6. HAZARDOUS NON-ROUTINE TASKS

It is Sure-Fire, Inc.'s policy that no employee will begin work on a non-routine task without first receiving a safety briefing from their supervisor.

7. INFORMING CONTRACTORS (MULTIPLE ON-SITE EMPLOYERS)

It is the responsibility of the Safety Officer to provide contractors (with employees) the following information:

- Hazardous chemicals to which they may be exposed while on the job,
- Precautions the employees may take to lessen the possibility of exposure by usage of appropriate protective measures.

The Safety Officer will be responsible for contacting each contractor before work is started in the company to gather and disseminate any information concerning chemical hazards that the contractor is bringing to our workplace.

1. GENERAL INFORMATION

Sure-Fire has developed this Fall Protection Program to safeguard employees from the dangers of a fall when working on floors, platforms, decks, walkways, ramps, equipment or other structures more than 6-feet above a lower surface. Employees must be properly trained in the hazards of a fall on the jobsite and how to use proper fall protection systems. Employees are subject to disciplinary actions if they violate these rules.

2. WHEN MUST FALL PROTECTION BE PROVIDED

Fall protection must be provided at any work area where a worker is exposed to a 6-foot fall or more. OSHA has provided the following list of conditions where fall protection must be provided and the fall protection options available. Only those options listed can be used:

1. Working over dangerous equipment
    - Guardrail system
    - Personal fall arrest system
    - Safety net system
2. Excavations
    - Guardrail system
    - Fence
    - Barricades
3. Hoist/material handling areas
    - Guardrail system
    - Personal fall arrest system
    - Fall restraining system
    - Safety net system
4. Holes: (floor and roof)
    - Covers
    - Guardrail system
    - Personal fall arrest system
    - Fall restraining system
    - Safety net system
5. Leading edges
    - Guardrail system
    - Personal fall arrest system
    - Fall restraining system
    - Safety net system
    - Controlled access zone
6. Unprotected sides and edges
    - Guardrail system
    - Personal fall arrest system
    - Fall restraining system
    - Safety net system

7. Ramps, runways and other walkways
    - Guardrail system
    - Personal fall arrest system
    - Fall restraining system
8. The following areas, though uncommon in our normal work, must also be protected from falls. See the Company safety director for the appropriate fall protection options to be used when working on the following
    - Formwork and rebar
    - Overhand bricklaying
    - Precast concrete erection
    - Roofing (low slope)
    - Roofing (steep slope)

3. CONVENTIONAL FALL PROTECTION OPTIONS AND REQUIREMENTS

The following conventional fall protection systems are required when engineering or alternative controls cannot eliminate fall hazards.

1. Guardrails

    Guardrails used on projects will be made of wood, wire rope, pipe, and angle iron or be manufactured and used as a guardrail system. Guardrails designed to be removable must be replaced immediately after material handling operations are completed.

    Guardrails will be placed when possible on the following:
    - Stair systems
    - Open sided floors
    - Around floor and roof openings too large for covers
    - Elevator shaft openings
    - Lookouts or other material handling systems
    - Interior lifting shafts

    Guardrails must be designed to the following criteria:
    - Top rail at 42 inches above the surface, plus or minus 3 inches
    - Mid-rails must be installed between top rail and surface
    - Toe boards, if required, should be flush with surface
    - When a 200-pound force is applied to top rail, it cannot deflect more than 39 inches above working surface
    - Midrails, screens, mesh or vertical members must be able to withstand 150-pound force
    - Guardrails must be smooth surfaced
    - Steel or plastic banding is prohibited as guardrail material
    - Wire rope must be ¼" diameter and flagged every 6-feet
    - Guardrails must be inspected and deficiencies corrected immediately

Guardrail material specifications:

- Top rails must be at least 2"x 4" construction grade wood
- Support posts must be placed 8-feet on center
- Midrails must be at least 1" x 6" material
- Pipe railings must be at least ½"-schedule 40 pipe
- Angle iron must be 2" x 2" x 3/8"

2. Hole Covers

All holes in walking/working surfaces, including skylights that are greater than 2" in least dimension must be fitted with a cover according to the following specifications:

- Designed to withstand twice the weight of any employee, equipment or material imposed on the cover at one time
- Designed to withstand twice the axle load of heaviest vehicle expected to cross
- Must be secured to prevent movement
- Must be marked with "hole" or "cover" if possible
- Plywood must be at least ¾" material
- Must not create a tripping hazard

3. Personal Fall Arrest Equipment

When fall hazards cannot be eliminated or controlled by guardrails, covers or engineering design changes, employees must use personal fall arrest equipment. Only fall arrest equipment purchased from an authorized manufacturer or supplier should be used.

Full Body Harness:

- Inspect before each use
- Straps fitted snugly on employees body
- Impact force limited to 1800 pounds

Lanyards:

- No steel lanyards allowed without shock absorbing device
- Inspect before each use
- Cannot be tied around sharp objects
- Shock absorbing lanyards must be removed from use following manufacturers guidelines
- Lanyards cannot be used as tie-downs or material straps
- Two lanyards cannot be attached to create a longer lanyard

Retractable Lifelines:

- Inspect before each use
- Must be removed from use after each fall and inspected for possible recertification
- Located to avoid swing fall hazards as practical
- Shock absorbing lanyards must not be used with retractable lifelines
- Employees must be trained to use

Use of Personal Fall Arrest Equipment:

- D-ring centered in middle of back when positioning
- Never used for lifting/supporting any materials
- Remove if impact loaded even if damage is not indicated
- Inspect before each use

Restraining Systems:

- Length of rope or cable must not allow employee to fall over edge
- Anchorage must withstand 200-pounds force

4. Safety Nets

   Safety nets will not be used unless the manufacturer or a qualified person designs them

5. Lifelines

   Horizontal and Vertical lifelines will not be used unless they are designed by the manufacturer or a qualified person.

6. Anchorage Points

   Anchorage points are used to attach lanyards and lifelines for fall arrest systems and must comply with the following:

   - Must support 5,000-pounds
   - Must be designed by a qualified person and be able to support at least twice the maximum impact load
   - When used with positioning systems, must support 3,000-pounds
   - Where practical, be color coded for identification purposes
   - Located at eye level or higher and at no time will it allow an employee to free fall more than 6-feet
   - Located to minimize the possibility of swing fall hazard

7. Prohibited Anchorage Points

   At no time shall an employee attach any fall arresting equipment to the following material:

   - Guardrails
   - Ladders/rungs
   - Conduit/plumbing
   - Scaffolding
   - Roof stacks/vents or fans
   - C-clamps
   - Ductwork or pipe vents
   - Any point that does not meet the structural requirements

8. Specialized Fall Protection Systems

   Warning Line Systems

   - Allowed for roofing operations only
   - Require the use of an employee designated as a Safety Monitor trained as

follows:
- Warning line will be erected around all sides of the roof area
- Not less than 6-feet from roof edge with special rules if mechanical equipment is used
- Points of access to the roof, material handling areas, storage areas and ground to roof hoisting areas must be connected to work area by a path created by two warning lines
- Use guardrail or personal fall arrest system to protect employees working near the edge of the roof
- When path is not in use a rope, wire, chain or other barricade will be used to prevent employees walking in the path

- Warning lines shall consist of ropes, wire or chains and supporting stanchions erected as follows:
  - Line must be flagged every 6-feet with high visibility material
  - Line supported so that no point will be below 34" or above 39" from surface
  - Stanchions must be able to support 16 lbs force applied 30" above the surface and horizontally towards the surface
  - Line must have minimum tensile strength of 500 lbs
  - Line must be attached to stanchions in a positive way
- No employee will be allowed in the area between the roof edge and the warning line
- Mechanical equipment on roofs will be used and stored only in areas where employees are protected by a warning line, guardrails or personal fall arrest system

Controlled Access Zones

- Controlled access zones are only used during overhand bricklaying, leading edge work, pre-cast concrete construction or residential construction and do not apply to our normal operations.

4. INSPECTION, STORAGE & MAINTENANCE OF FALL EQUIPMENT & SYSTEMS

1. Guardrails/Hole Covers
   - Daily, visual inspection
   - Weekly, safety nets inspected by a qualified person using manufacturer guidelines
2. Personal Fall Arrest Equipment
   - Daily, visual inspection
   - Twice daily, visual inspection by employee in areas where hot work is being performed or caustics/acids are used
3. Fall Arrest Systems
   - Daily, visual inspection
   - Weekly, by a qualified person of any system engineered for use as a fall protection system

4. Specialized Systems
    - Daily, visual inspection
    - Daily observation of components and how employees are using the system

5. HAZARD IDENTIFICATION & ELIMINATION

Purpose is to identify and eliminate fall hazards that employees may encounter on job site.

1. Pre-Planning
    - Install stairways with stair rails attached
    - Architect specify proper anchor points for systems
    - Floors openings for ductwork, plumbing, piping systems, etc. will not be cut until material is ready to go through the floor
    - Open sided floors have guardrails attached before work by employees begin on that surface/level
    - Coordination of work activities around other contractor personnel
2. Work Area Analysis
    - Any area or activity which exposes an employee to a fall hazard
    - Identify fall hazards associated with:
        - Scaffolds
        - Ladders
        - Steel erection
        - Roofing
        - Floor holes
        - Open sided floors
        - Personnel lifts and elevating equipment

6. FALL PREVENTION METHODS

1. Engineering Controls

    When practical, engineering controls should be used to eliminate fall hazards during the erection of building components. These controls are used to eliminate the need for guardrails, hole covers and personal fall arrest equipment. The project team should, to the extent possible erect permanent fall protection, i.e., guardrails, stair rails and flooring prior to final placement in a building or like structure

2. Alternative Work Methods

    Where practical, the following alternative work methods should be incorporated to minimize exposure of company employees to fall related hazards:
    - Scissor lifts and articulating boom platform
    - Ladders
    - Scaffolds

3. Training

    Each employee must be trained in the hazards of falls on the jobsite, how to use personal fall arrest equipment and conventional systems. Training must be documented in the following manner:

- Date of training
- Employee's printed name
- Employee's signature
- Name of trainer
- Specific subjects covered

1. GENERAL INFORMATION

The Company has developed this program to safeguard employees in their daily work environment. The following are required precautions and protective measures to be taken by the employee:

2. EYE PROTECTION

Safety goggles or glasses with side shields must be worn when hammering, sawing, chipping, welding, grinding, cutting, drilling, working in dusty places or during any operation which could result in an eye injury. Employees are encouraged to wear eye protection during their entire shift to avoid exposure to injury from other workplace operations by fellow employees or contractors.

Goggles are required when working with or near potential irritants such as fiberglass insulation or its adhesive agents. Goggles are also required while performing chemical treatment work.

Welding helmets with proper face shield lenses are required for all welding operations.

3. FACE PROTECTION

In addition to eye protection listed above, face shields shall be worn while performing chemical treatment work or any other operation that exposes the employee to hazardous chemicals or irritants.

4. HEAD PROTECTION

When required by OSHA, hard hats are to be worn by personnel on the job-site at all times. Hard hats should be inspected daily. Worn, damaged or outdated hard hats should be replaced immediately. Metal hard hats are not permissible.

5. FOOT PROTECTION

All shop and field personnel must wear safety shoes, preferably with steel toes. The shoes must be in serviceable condition. Canvas or street shoes are expressly prohibited.

6. HAND PROTECTION

ANSI Level 3 Cut-Resistant gloves shall be worn when handling rough edge or abrasive material to protect against lacerations, punctures or burns. Gloves are also recommended when performing cutting, drilling or any other operation that create flying particles.

Welding gloves are required for all welding operations.

Rubber gloves are required for chemical treatment operations, or other tasks that may expose hands to hazardous materials.

7. BODY PROTECTION

Long pants and long sleeved shirts are recommended when handling irritants such as fiberglass and adhesives and when performing cutting, drilling or any other operation that create flying particles.

Leather welding jackets are required for welding operations.

Rubber aprons may be required for certain chemical treatment procedures. Consult MSDS sheets for recommended protective clothing for each specific application.

8. HEARING PROTECTION

Earplugs or earmuffs are required when working near noise producing operations such as cutting, drilling or grinding. Shop personnel are required to wear ear protection when fabricating and related machinery and equipment are in operation.

9. BACK PROTECTION

A company supplied back support is available for all continuous lifting operations. The back support does not reduce the importance of using proper lifting techniques. Always inspect the load for the amount of weight involved. Bend knees and keep back as straight as possible. Get down close to the object and grasp the load so that it is balanced. Lift gradually using leg muscles. Never twist or turn, pivot feet to change directions. Put the load down the way it was lifted. Always ask for help when needed.

10. RESPIRATORY PROTECTION

Refer to the Company's separate **RESPIRATOR PROGRAM** for instructions on the use of respirators and dust masks.

FALL PROTECTION

Refer to the Company's separate **FALL PROTECTION PROGRAM** for specific instructions.

Material Handling Guidelines

The following are outlines of safety precautions and personal protective devices recommended for working with materials commonly encountered in our trade. If you encounter a substance that has not been specifically dealt with in training procedures, contact the Safety Officer before proceeding with work.

Duct Liner Adhesive

- Proper ventilation required reducing concentration levels
- Use disposable mask to prevent inhalation
- Safety goggles and rubber gloves recommended minimizing exposure

Fiberglass

- Proper ventilation required reducing concentration levels
- Use disposable mask for nuisance dust
- Safety goggles suggested preventing irritation
- Wear long sleeved shirts and pants, gloves to reduce skin irritation

Duct Sealant/Caulk/PVC Cement/PVC Cleaner

- Proper ventilation required reducing concentration levels
- Use organic type respirator when ventilation is inadequate
- Safety goggles and rubber gloves recommended to minimize exposure

Soldering

- Proper ventilation required, keep head out of fumes
- Use fume type respirator when ventilation is inadequate
- Safety goggles recommended, safety glasses at a minimum
- Long sleeved shirts and pants, leather gloves

Welding

- Proper ventilation required, keep head out of fumes
- Use fume type respirator when ventilation is inadequate
- Wear welding helmet with proper lens
- Long sleeved shirts and pants, welding jacket and gloves

Refrigerant/Coil Cleaner

- Proper ventilation required reducing concentration levels
- Use organic type respirator when ventilation is inadequate
- Safety goggles and rubber gloves recommended to minimize exposure

The information listed above should serve as basic guidelines for precautions to be taken. Employees are encouraged to review SDS booklets and familiarize themselves with the information contained in them.

SUMMARY OF PPE AVAILABLE

- Safety glasses, safety goggles, and face shields
- Welding helmets and lenses
- Hard hats
- Cut-resistant gloves
- Welding gloves and jackets
- Ear plugs and ear muffs
- Disposable dust/mist respirators
- Cartridge-type respirators
- Filter assemblies for both fume and organic vapor/gases

Personal protective equipment is available to employees by contacting the Safety Officer. The Safety Officer will obtain additional PPE required for non-routine tasks. No work should commence until the employee and the Safety Officer are satisfied that appropriate measures have been taken to safeguard the employee against possible injury.

Our goal is to provide the proper PPE that is comfortable enough to be worn during your entire shift. We are committed to working with our employees to evaluate PPE needs as they may develop. We welcome any suggestions that may improve the effectiveness of our program and promote safe work habits.

1. GENERAL INFORMATION

Exposure to respirable crystalline silica has been shown to cause silicosis, lung cancer, pulmonary tuberculosis, and other airway diseases. The purpose of the silica exposure control program is to protect workers from harmful exposure to respirable crystalline silica.

2. SCOPE

A combination of control measures will be required to achieve this objective. Sure-Fire commits to being diligent in our efforts to select the most effective control technologies available, and to ensure that the best practices, as described in this Exposure Control Plan (ECP), are followed at our worksites.

The work procedures we establish will protect not only our workers, but all workers on our worksites.

References

OSHA 29 CFR 1926.1153; 29 CFR 1910.1200; 29 CFR 1910.134

3. GENERAL REQUIREMENTS

Due to the significant risk posed by respirable crystalline silica, it is critical that all personnel involved in operations that could potentially create silica dust take specific action to ensure that, as much as possible, a hazard is not created. Special attention should be given to tasks performed in situations causing an increase in exposure, such as tasks done indoors, in enclosed areas, etc.

Examples of common tasks likely to expose employees to respirable crystalline silica:

- Sawing
- Drilling
- Grinding
- Abrasive blasting (e.g., of concrete structures)
- Jackhammering, chipping, or drilling rock or concrete
- Cutting brick or tiles
- Sawing or grinding concrete
- Tuck point grinding
- Road construction
- Loading, hauling, and dumping gravel
- Demolition of structures containing concrete
- Sweeping concrete dust

4. SURE-FIRE IS RESPONSIBLE TO:

- Have a written Silica Exposure Control Program. In addition, develop and implement a Written Exposure Control Plan that contains the required site-specific information.
- Oversee the plan. The competent person designated to implement the written exposure control plan is Casey Malesevich.
- Restrict housekeeping practices that increase silica exposure. For example, allow dry sweeping only with compound in situations where it will not increase exposure and

where wet sweeping, HEPA-filtered vacuuming and other methods that minimize the likelihood of exposure are not feasible.

- Offer medical surveillance. Sure-Fire will ensure that all medical examinations and procedures required by the silica standard are performed by a physician or other licensed health care professional at no cost to the employee, and at a reasonable time and place, for any employee who *will need to wear a respirator for 30 or more days per year for silica protection*.
- Communicate hazards and conduct employee training. Employers must include respirable crystalline silica as part of their existing hazard communication program, as required by OSHA. This means providing adequate employee access to labels on products containing crystalline silica and their corresponding safety data sheets.
- Maintain proper recordkeeping. Employers must keep three separate sets of records: air monitoring data, objective data (air monitoring data from elsewhere, but closely resembling the employer's current operations) and medical surveillance records.

5. ASSESSMENTS

a. Annual Assessment

The written program's effectiveness must be reviewed at least annually. The written exposure control plan must be evaluated at least once per year and as necessary. Situations where reevaluation may be necessary include regulatory updates, changes in equipment and exposure incidents.

b. Exposure Assessments

Exposure assessments must be conducted for each employee who is or is expected to be exposed to respirable crystalline silica at or above the action level (8-hour TWA of 25µg/m³). This assessment can be accomplished through the use of objective data or by following Table 1.

The key step in determining a silica exposure assessment is to identify the work activities that would put workers at risk of exposure.

- Work activities — that may generate airborne silica dust—for silica, the route of exposure is through the inhalation of airborne dust. The employer should have a qualified person review the planned work activities to identify those that may generate airborne silica.
- Identify workers at risk of exposure—For example, workers who finish concrete would be at greater risk of exposure than plumbers or electrical workers.
- Amount of exposure—some work activities generate more dust than others, and the amount of exposure should be estimated. Published resources are available that provide air sampling data and compare silica dust levels from various construction activities.
- Duration of exposure—Workers who grind concrete for a full shift may be at greater risk than workers jackhammering for an hour.

6. OBJECTIVE DATA

a. General

Both personal silica monitoring and historical data constitutes objective data. Personal silica monitoring is performed by monitoring employees individually or taking a representative sample from employees. It must be conducted by a qualified person and can either be self-performed or hired out to a professional entity such as an Industrial Hygiene professional. Historical data is silica monitoring information previously collected by a Qualified person, and must reflect conditions closely resembling the specific task or one with higher exposure potential.

b. Results of Objective Data

If objective data results the exposure to silica is below the 8-hour TWA Action Level of 25µg/m³:

- No further sampling is necessary
- No further controls are required to be implemented
- Continue to monitor the work site and take prompt corrective action to ensure the safe work conditions are maintained

If objective data results the exposure to silica is above the 8-hour TWA Action Level of 25µg/m³ and below the 8-hour TWA PEL of 50µg/m³:

- Implement engineering and administrative controls to reduce the silica exposure
- Continue to monitor every six months or until two separate measurements at least seven days apart are below the Action Level.
- Respirators are voluntary but not required

If objective data results the exposure to silica is above the 8-hour TWA PEL of 50µg/m³:

- Implement engineering and administrative controls to reduce the silica exposure
- Respiratory Protection is required. See Sure Fire's Respiratory Protection Program for specific details on respiratory use.
- Continue to monitor every three months or until two separate measurements at least seven days are below the PEL.

c. Table 1

Table 1 lists 18 silica-generating tasks along with specific engineering controls and respirator requirements. When following Table 1 you must follow these requirements fully and completely. Table 1 will be made available to all employees upon request and a link is available below:

https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=1270#1926.1153(c).

7. WRITTEN EXPOSURE CONTROL PLAN

A written exposure control plan is required for *each task* where the exposure is above the 8-hour TWA Action Level of 25µg/m³. Sure-Fire will make the written exposure control plans available to each employee upon request and will review each written exposure control plan annually at a

minimum for effectiveness and update as necessary. Each written exposure control plan must contain the following elements:

- Description of task(s)
- Description of engineering controls, work practices, and respirator requirements
- Procedures for restricting access to limit adjacent employee exposures
- Description of housekeeping measures used to limit employee exposures

8. COMPETENT PERSON

A competent person (as required per OSHA) is one who is capable of recognizing and evaluating situations where overexposure may be occurring and has been authorized by the employer to make corrective actions. The competent person must intervene anytime there is a breakdown in the exposure control plan or an un-evaluated exposure exists. They must control jobsite exposures to employees and adjacent workers. Other responsibilities of the competent person include:

- Capable of knowing how to evaluate the exposure potential;
- Can make an initial recommendation on how to control that exposure. (table 1 or objective data)
- Can select, implement, and manage the appropriate control strategy in simple situations or recommend involving a silica qualified person for more complex situations
- Monitor the work site and take prompt corrective action to ensure that safe work conditions are maintained.

9. MEDICAL SURVEILLANCE

Sure-Fire will make available at no cost to the employee a medical surveillance program for all employees whose task requires them to wear a respirator for 30 or more days per year. A baseline medical assessment must be available to employees within 30 days of initial assignment.

During a medical evaluation, Sure-Fire employees will go to a qualified health care professional, have an exam, and obtain a written medical opinion which is shared with Sure-Fire. This written opinion needs to contain:

- The date of the exam
- A statement that the exam has specifically checked for silica exposure per the requirements of the standard.
- Any recommended limitations on the employee's exposure to respirable crystalline silica as a result of the exam’s findings

The employee may learn other medical information from his or her physician during the visit, but this is private and not required to be shared with Sure-Fire.

The exam conducted by the qualified healthcare provider must include the following:

- A review of the patient’s medical and work history.
- A physical examination with special emphasis on the respiratory system.
- A chest x-ray.
- A pulmonary function test administered by a certified spirometry.

- Testing for latent tuberculosis.
- Any other tests deemed appropriate by the healthcare provider.

Information required to be given to the heathcare provider:

- A copy of the OSHA respirable crystalline silica rule.
- Construction Standard - https://www.osha.gov/silica/SilicaConstructionRegText.pdf
- Construction Medical - https://www.osha.gov/silica/AppendixBtosect1926.1153.pdf
- A description of the employee's former, current, and anticipated duties as they relate to the employee's occupational exposure to respirable crystalline silica.
- The employee's former, current, and anticipated levels of occupational exposure to respirable crystalline silica.
- A description of any personal protective equipment used or to be used by the employee, including when and for how long the employee has used or will use that equipment.
- Information from records of employment-related medical examinations previously provided to the employee and currently within the control of Sure-Fire.

10. TRAINING

Employees must be provided with training. A training program for respirable crystalline silica shall be provided for all employees who are exposed to the action level or above. The training shall ensure that employees covered by the written exposure control plan can demonstrate knowledge and understanding of the health hazards associated with respirable crystalline silica, the specific tasks in the workplace that could result in exposure to respirable crystalline silica, the specific measures taken to protect employees from exposure to crystalline silica, the contents of the respirable crystalline silica rule, and the purpose of the medical surveillance program.

11. RECORDS

Applicable records must be kept. Accurate records of all air monitoring data, objective data, and medical surveillance shall be maintained as required by the regulation. Records must be kept of the following:

- All workers who are exposed to respirable silica dust while on the job
- Worker education and training sessions
- Respirator fit-testing
- Equipment maintenance and repair
- Worksite inspections
- Medical surveillance when required

1. GENERAL INFORMATION

Workplaces can contain spaces that are considered to be confined because their configurations hinder the activities of employees who must enter into, work in or exit from them. Employees who work in confined spaces may also face increased risk of exposure to serious physical injury from hazards such as entrapment, engulfment and hazardous atmospheric conditions. For example, confinement, limited access and restricted airflow can result in hazardous conditions that would not normally arise in an open workplace.

The purpose of the confined space entry program is to ensure employee/entrant safety and prevent personal injury from work in confined spaces.

Confined Space is defined as a space meeting all of the following conditions:

- Is large enough and so configured that an employee can bodily enter it (any part of the body breaks the plane of the opening).
- Has limited or restricted means for entry and exit.
- Is not designed for continuous occupancy.

Examples of the types of confined spaces that may be found on construction sites include, but are not necessarily limited to:

- bins
- pits (such as elevator, escalator, pump, valve or other equipment)
- tanks (such as fuel, chemical, water or other liquid, solid or gas)
- scrubbers
- sewers
- heating, ventilation & air conditioning (HVAC) ducts
- precast concrete and other pre-formed manhole units
- digesters
- lift stations
- air receivers
- sludge gates
- step up transformers
- bag houses
- mixers/reactors
- open top spaces more than 4 feet in depths such as: pits, tubs, vaults and vessels
- attics, crawl spaces, & mezzanines
- manholes (such as sewer, storm drain, electrical, communication or other utility)
- incinerators
- concrete pier columns
- transformer vaults
- storm drains
- water mains
- drilled shafts
- enclosed beams
- vessels
- cesspools
- silos
- air preheaters
- turbines
- chillers
- boilers

2. ROLES AND RESPONSIBILITIES

Typically, while performing work on a construction site, Sure-Fire may serve in the role of an Entry Employer (any employer who decides that an employee it directs will enter a permit space), as defined herein. In some cases, where Sure-Fire's scope of work is much broader, they may serve as the role of the Controlling Contractor (employer that has overall responsibility for construction at the worksite). The following outlines the roles and responsibilities as well as guidance and recommendations pertaining to each of these roles.

Before work begins at a construction site, each employer must ensure that a competent person identifies all confined spaces in which one or more of the employees it directs may work and identifies each space that is a permit space, through consideration and evaluation of the elements of that space, including testing as necessary.

If any employer conducting work on a construction site decides that employees it directs will enter a permit space, that employer (Entry Employer) must have a written permit space program implemented at the construction site. A written program, as outlined here, must be made available prior to and during entry operations for inspection by employees and their authorized representatives.

This program is dependent upon the Controlling Contractor, rather than the Host Employer or Entry Employer, be the primary point of contact for information about permit spaces at the work site. The Host Employer (employer that owns or manages the property where the construction work is taking place) must provide information it has about permit spaces at the work site to the Controlling Contractor, who then passes it on to the employers whose employees will enter the spaces.

Likewise, Entry Employers must give the Controlling Contractor information about their entry program and hazards they encounter in the space and the Controlling Contractor passes that information on to other Entry Employers and back to the Host Employer.

The Controlling Contractor is also responsible for making sure employers outside a space know not to create hazards in the space and that Entry Employers working in a space at the same time do not create hazards for one another's workers.

Before entry operations begin, the Controlling Contractor must:

- Obtain the Host Employer's information about the permit space hazards and previous entry operations; and
- Provide the following information to each entity entering a permit space and any other entity at the worksite whose activities could foreseeably result in a hazard in the permit space:
    - The information received from the Host Employer;
    - Any additional information the Controlling Contractor has about the subjects the Host Employer is responsible for listed above.
    - The precautions that the Host Employer, Controlling Contractor, or other Entry Employers implemented for the protection of employees in the permit spaces.

If the workplace contains one or more permit spaces, the Host Employer responsibilities include:

- Before entry operations begin, the Host Employer must provide the following information, if it has it, to the Controlling Contractor:
  - The location of each known permit space and inform exposed employees by posting signs reading "DANGER – PERMIT REQUIRED CONFINED SPACE, DO NOT ENTER" providing sufficient notification of the existence and location of, and danger posed by each permit space.
  - Inform, in a timely manner and in a manner other than posting, its employees' authorized representatives and Controlling Contractor of the existence and location of, and the danger posed by, each permit space.
  - The hazards or potential hazards in each space or the reason it is a permit space.
  - Any precautions that the Host Employer or any previous Controlling Contractor or Entry Employer implemented for the protection of employees in the permit space.

The Company Safety Manager is responsible for:

- Providing oversight and technical support.
- Securing the resources necessary to implement this program.
- Ensuring that routine safety checks of work operations are performed.
- Conducting an annual review of this program.
- Updates (as needed) to ensure the effectiveness of the program.
- Ensuring that proper reporting and record keeping is executed.

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

Specifically, the Entry Supervisor is responsible for:

- Assessing the space prior to entry to determine if the space meets the characteristics of a permit-required confined space.
- Knowing space hazards including information on the mode of exposure, signs, or symptoms and consequences of exposure.
- Verifying emergency plans and specified entry conditions such as permits, tests, procedures, equipment, and availability of rescue services before allowing entry.
- Terminating entry and canceling permits when entry operations are complete or if a new condition exists.
- Taking appropriate measures to remove unauthorized entrants.
- Ensuring that entry operations remain consistent with the entry permit and acceptable entry conditions are maintained.

The Authorized Entrant is the properly trained employee who has been authorized by the Entry Supervisor to enter a permit space. Specifically, the Authorized Entrant is responsible for:

- Knowing the hazards that may be faced during entry, including information on the mode, signs, or symptoms, and consequences of the exposure.
- Properly using equipment as required.

- Communicating with the Attendant during the entry so that the Attendant can monitor the status of the entry.
- Exiting from the permit space as soon as possible when ordered by the Attendant, when the entrant recognizes the warning signs or symptoms of exposure exists, when a prohibited condition exists, or when an automatic alarm is activated.
- Alert the Attendant immediately when a prohibited condition exists or when warning signs or symptoms of exposure exist.

The Attendant is an individual stationed outside one or more permit spaces who assesses the status of authorized entrants and who must perform the following duties:

- Is familiar with and understands the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.
- Is aware of possible behavioral effects of hazard exposure in authorized entrants.
- Continuously maintains and ensures an accurate count of Authorized Entrants in the permit space.
- Remains outside the permit space during entry operations until relieved by another attendant; Note: Once an Attendant has been relieved by another Attendant, the relieved attendant may enter a permit space to attempt a rescue when the employer's permit space program allows attendant entry for rescue and the Attendant has been trained and equipped for rescue operations.
- Communicates with authorized entrants as necessary to assess entrant status and to alert entrants of the need to evacuate the space.
- Assesses activities and conditions inside and outside the space to determine if it is safe for entrants to remain in the space and orders the Authorized Entrants to evacuate the permit space immediately under any of the following conditions:
  - If there is a prohibited condition.
  - If the behavioral effects of hazard exposure are apparent in an authorized entrant.
  - If there is a situation outside the space that could endanger the authorized entrants.
  - If the Attendant cannot effectively and safely perform all the duties as required under this standard.
- Summons rescue and other emergency services as soon as the Attendant determines that authorized entrants may need assistance to escape from permit space hazards.
- Takes the following actions when unauthorized persons approach or enter a permit space while entry is underway:
  - Warns the unauthorized persons that they must stay away from the permit space.
  - Advises the unauthorized persons that they must exit immediately if they have entered the permit space.
  - Informs the Authorized Entrants and the entry supervisor if unauthorized persons have entered the permit space.
- Performs non-entry rescues as specified by the employer's rescue procedure.
- Performs no duties that might interfere with the Attendant's primary duty to assess and protect the Authorized Entrants.

3. GENERAL PROCEDURES

Planning Confined Space Entries in Construction

No confined space entry shall be performed unless at least one person who has been trained and certified in basic first-aid and cardiopulmonary resuscitation (CPR) is present on-site and immediately available for the duration of the entry.

Entry Supervisors must coordinate escape equipment and procedures, as well as rescue and emergency services, with the Responsible Person prior to executing any entry. No entry shall be conducted until appropriate rescue and/or retrieval procedures have been coordinated with the Responsible Person.

Any confined space must be properly secured and protected from hazards outside of the space prior to any entry.

All entries, regardless of the type of space, must have a qualified Attendant stationed at the opening of the space who can maintain constant communication with Entrants for the duration of the entry.

The Confined Space Entry Decision Tree (Appendix A) can be used as a guide to determine the necessary actions prior to executing any confined space entry.

The Confined Space Entry Permit (Appendix B) should be completed for every confined space entry. The level of detail required on the Confined Space Permit depends on the size and configuration of the confined space, the work conducted inside the confined space, and the types of hazards present (or potentially present).

No space shall be entered while gasoline or diesel powered engines or equipment are operating within 50 feet of the entrance to the space.

Respiratory protection is not an acceptable solution for areas where levels of O2, LEL, CO or H2S levels are not within acceptable entry criteria.

Atmospheric Testing in Construction

Prior to any entry, atmospheric testing shall be conducted at various levels within the space, including the lowest level within the space. Atmospheric testing should be conducted using a calibrated multi-gas meter capable of measuring the following parameters:

Atmospheric Test Parameter	Acceptable Entry Criteria/Alarm Level
Oxygen (O_2)	19.5% to 23.5%
Lower Explosive Limit (LEL)	Less than (<) 10%
Carbon Monoxide (CO)	Less than (<) 25 parts per million (ppm)
Hydrogen Sulfide (H_2S)	Less than (<) 10 parts per million (ppm)

The meter should be equipped with an audible alarm set to activate when measured levels are outside the range of acceptable atmospheric criteria shown above.

The atmosphere within the space must be continuously monitored unless the Entry Employer can demonstrate that equipment for continuous monitoring is not commercially available or periodic monitoring is sufficient. If continuous monitoring is used, the employer must ensure that the monitoring equipment has an alarm that will notify all entrants if a specified atmospheric threshold is achieved, or that an employee will check the monitor with sufficient frequency to ensure that entrants have adequate time to escape. If continuous monitoring is not used, periodic monitoring is required. All monitoring must ensure that the continuous forced air ventilation is preventing the accumulation of a hazardous atmosphere. Any employee who enters the space, or that employee's authorized representative, must be provided with an opportunity to observe the testing required by this paragraph.

If the Confined Space Entry Permit is used to document the entry, the intervals at which atmospheric tests are required must be determined prior to entry. The table below provides guidelines for determining the intervals of atmospheric testing; however, the Entry Supervisor and/or Entrant(s) must make the determination based on space, worksite characterizations, and the work to be performed within the space.

Test Interval	Guideline
Initial	Required for all entries, regardless of the type of space. Must be conducted prior to entry.
Prior to Each Entry	Required if multiple entries into the same space are required during a single shift, and no indication that more frequent testing is required. Testing must be conducted prior to each entry into the space.
Continuous	Required in all cases. Required if initial monitoring indicates any atmospheric testing parameter measured is outside the acceptable entry criteria and ventilation is required. Continuous monitoring can be conducted from outside the space or by equipping entrants with personal monitors capable of measuring all of the parameters required.

If an extension hose or tubing is required to sample the lowest level of the space, the tester must allow sufficient time for the air sample to travel through the tubing to the instrument detector, as specified in the equipment manufacturer's instruction manual.

If the Confined Space Entry Permit is used to document the entry, the frequency that tests are required, the tester's name, and the model, manufacturer, serial number and date of last calibration should be entered on the permit.

Space Ventilation in Construction

If atmospheric testing measures levels outside of the acceptable criteria range:

- Ventilation of the space shall be provided using a positive pressure ventilator or blower equipped with a duct long enough to reach the lowest level of the space.
- Ventilate the space for at least 15 minutes prior to retesting the atmosphere.
- Do not enter the space until atmospheric testing results are within acceptable criteria limits.

Procedures for Entering Confined Spaces in Construction

A Confined Space Entry Permit (Appendix B) should be completed for every confined space entry.

No entry permit shall extend beyond the period of one work shift. If entries are required for multiple days, complete a separate permit for each day an entry will occur.

Prior to any entry, the Entry Supervisor and Entrant(s) determine if any of the following hazards are or could be present:

- Continuous or potential hazardous atmosphere (also consider the type of work to be performed).
- Engulfment hazard.
- Entrapment hazard.
- Other hazardous energy or residual energy.

Check the appropriate box on the Confined Space Entry Permit for all hazards that are or may be present

Procedures for Confined Spaces with No Hazards:

If no hazards are present, check the appropriate box on the Confined Space Entry Permit. It is not permissible to check the "no hazards" box if any work activities that can create hazards, such as hot work, painting, solvent use, or running gasoline or diesel powered engines, will be performed in the space.

Conduct initial atmospheric testing and record the results on the Confined Space Entry Permit:

- If initial atmospheric testing indicates unacceptable entry conditions, the entry becomes Permit Entry and the controls referenced below must be implemented. Enter the test results on the Confined Space Entry Permit.

- If initial atmospheric testing indicates acceptable entry conditions, enter the test results on the Confined Space Entry Permit and all Entrants, Attendants and the Entry Supervisor sign the permit and proceed with the entry.
- An Attendant is required for all entries into No Hazard spaces. The Attendant remains in constant communication with the Entrant(s).
- At the completion of the entry or at the end of the shift, whichever is first, close the permit by entering the date and time at the bottom of the permit. Either an Entrant or the Entry Supervisor must sign the permit closure.

Procedures for Permit Entry of a Space with any Identified Hazard

Before entry operations begin, the Host Employer must provide the following information, if it has it, to the Controlling Contractor:

- The location of each known permit space.
- The hazards or potential hazards in each space or the reason it is a permit space.
- Any precautions that the Host Employer or any previous Controlling Contractor or Entry Employer implemented for the protection of employees in the permit space.

Before entry operations begin, the Controlling Contractor must:

- Obtain the Host Employer's information about the permit space hazards and previous entry operations.
- Provide the following information to each entity entering a permit space and any other entity at the worksite whose activities could foreseeably result in a hazard in the permit space:
  - The information received from the Host Employer.
  - The precautions that the Host Employer, Controlling Contractor, or other Entry Employers implemented for the protection of employees in the permit spaces.

Before entry operations begin, each Entry Employer must:

- Obtain all of the Controlling Contractor's information regarding permit space hazards and entry operations;
- Inform the Controlling Contractor of the permit space program that the entry employer will follow, including any hazards likely to be confronted or created in each permit space.

The Controlling Contractor and Entry Employer(s) must coordinate entry operations when:

- More than one entity performs permit space entry at the same time; or
- Permit space entry is performed while any activities that could foreseeably result in a hazard in the permit space are performed.
- If any hazards listed on the Confined Space Entry Permit are or may be present at any time during the entry, check the appropriate information on the permit.
- If any activities that would change the characterization of the space, such as hot work, painting, solvent use, or running gasoline or diesel powered engines, check the appropriate information on the permit.
- Select and check the appropriate Controls, Personal Protective Equipment, and Rescue/Retrieval Equipment required for the hazards identified on the Confined Space

Entry Permit. The Entry Supervisor or Entrant verifies that all of the appropriate controls for ensuring a safe entry are available prior to entry.

- Conduct initial atmospheric testing and record the results documented on the Confined Space Entry Permit.
  - If initial atmospheric testing indicates unacceptable entry conditions, implement space ventilation (described above). Record the test results on the permit.
  - If initial atmospheric testing indicates acceptable entry conditions, record the test results on the permit and all Entrants, Attendants and the Entry Supervisor sign the permit and proceed with the entry.
- An Attendant is required for all entries into Permit Entry spaces.
- The Attendant remains in constant communication with the Entrant(s).
- At the completion of the entry or at the end of the shift, whichever is first, close the permit by entering the date and time at the bottom of the permit. Either an Entrant or the Entry Supervisor must sign the permit closure.

Procedures for Evacuating Spaces

Entrants must leave the space or be hoisted from the space immediately if, at any time during the entry:

- Any of the parameters monitored are found to be outside of the acceptable criteria ranges.
- The Entrant(s) or Attendant(s) determine that conditions present pose a risk to the Entrants.
- The Attendant orders an evacuation of the space because:
  - An Entrant shows signs of physiological effects of hazard exposure.
  - An emergency outside the confined space exists.
  - The Attendant cannot effectively and safely perform his or her required duties.

At no time shall an Attendant or other person enter a confined space to affect a rescue or assist with an evacuation by entering the space unless they are appropriately qualified and have the appropriate equipment, including an atmosphere supplying respirator suitable for rescue in an atmosphere considered immediately dangerous to life and health.

If evacuation of a space is necessary, record the reason and time the evacuation occurred on the Confined Space Entry Permit.

Do not re-enter the space until the Entry Supervisor and/or the Entrant(s) verify that appropriate controls have been implemented and that all conditions are safe for re-entry. Re-establish all procedures for entry before re-entering the space, including repeating atmospheric monitoring. Record the re-entry time on the permit.

After entry operations:

- The Controlling Contractor must debrief each entity that entered a permit space regarding the permit space program followed and any hazards confronted or created in the permit space(s) during entry operations.

- The Entry Employer must inform the Controlling Contractor in a timely manner of the permit space program followed and of any hazards confronted or created in the permit space(s) during entry operations.
- The Controlling Contractor must apprise the Host Employer of the information exchanged with the entry entities.
- If there is no Controlling Contractor present at the worksite, the requirements for, and role of, Controlling Contactors in must be fulfilled by the Host Employer or other employer who arranges to have employees of another employer perform work that involves permit space entry.

4. TRAINING

Sure-Fire will provide training to each employee whose work is affected by this program, at no cost to the employee, and ensure that the employee possesses the understanding, proficiency, knowledge, and skills necessary for the safe performance of the duties assigned under this standard.

Training will be provided upon assignment to and when there is a change of a position assignment where the employee may serve as Entry Supervisor, Entrant, or Attendant on a job site. Additional training shall be provided when there has been a change in the procedures referenced in this program, whenever there is a change in the permit spaces entry operations that presents a hazard about which an employee has not been previously trained and; whenever there is evidence of a deviation from the permit space entry procedures of this standard or there are inadequacies in the employee's knowledge of use of these procedures.

All Entry Supervisors, Entrants and Attendants receive the same training.

Training must address the following:

- What constitutes a permit (confined) space.
- Understanding of the hazards of permit space and the methods used to isolate, control or in other ways protect employees from these hazards.
- Countermeasures for controlling the hazards identified.
- Review of the OSHA standards and other guidelines referenced in this Program.
- Review of the procedures for confined space entries established in this Program.
- Dangers of attempting a rescue if not an authorized entrant.
- Procedures for evacuating spaces during entries.
- Procedures for rescue and retrieval.

Each employee who receives training should receive a certificate documenting the training. The certificate shall include the date of training and the signature of the training provider.

5. RECORDKEEPING

To comply with OSHA requirements for record retention and recordkeeping, the following records related to this Confined Space Entry Program are maintained:

- All Confined Space Entry Permits issued in an annual file.
- All employee training records in each employee's file.

6. PROGRAM REVIEW

Regular evaluation of the Confined Space Entry Program is important to its effectiveness. It is also important that the procedures and protocols accurately reflect changes in work activities and changes to current regulations and guidelines.

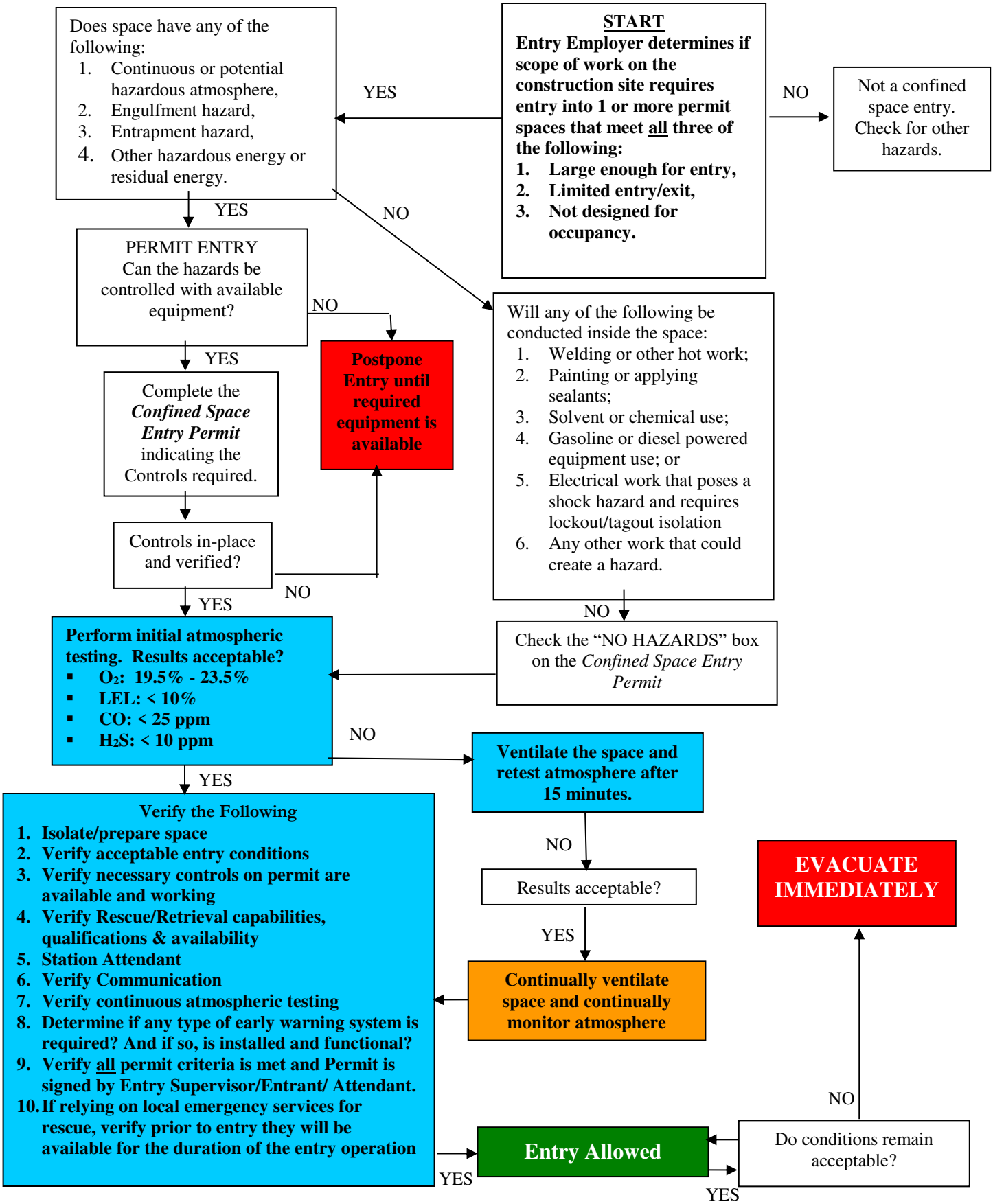
The program will be reviewed annually. The annual review should include the following:

- Review all permits to determine compliance with this program.
- Review any available documentation regarding space evacuations to identify "lessons learned."
- Review all confined space accidents or incidents, and update procedures to minimize the risk of those types of accidents or incidents from occurring.
- Evaluate the efficacy of the procedures specified in this program in the context of work activities and update as necessary.

APPENDIX A

Confined Space Entry Decision Tree

Confined Space Entry in Construction Decision Tree



APPENDIX B

Confined Space Entry Permit (sample)

Confined Space Entry Permit

This permit must remain at construction site until the entry is completed.

Project Address: _____ Project No: _____
Space Description: _____ Date: _____
Purpose of Entry: _____ Time of Entry: _____
Entry Supervisor: _____ Time Expires: _____
Hazards and Controls Check here if NO HAZARDS are Present: ☐

Atmospheric Hazards (check if present)		Controls Required (check if required)	
Oxygen levels below 19.5%		Initial testing (O_2, LEL, CO, H_2S)	
Oxygen levels above 23.5%		Continuous monitoring (O_2, LEL, CO, H_2S)	
Flammable/combustible gases, vapors or dust (specify):		Other testing* (specify type and duration):	
Toxic gases, vapors or dust (specify):		Ventilation – Blower w/ sufficient duct length	
Pressurized atmosphere		Air purifying respirator (circle)	
Other (specify):		Mask type: Half-face Full-face Cartridge: P100 Combo P100/organic vapor Other (specify):	
Configuration Hazard (specify):		Lines Broken-Capped or Blanked	
Engulfment Hazard (specify):		Purge-Flush and Vent	
Shock hazard/electrocution		Lockout De-energize-Tested and Verified	
Slips, trips, falls (specify):		If Early Warning System is required, is it installed and operational:	
Moving parts (specify):		Lighting (Explosion Proof)	
Connecting pipes, drains, ducts (specify):		Form of Communication (circle): Voice Radio Other:	
Biological hazard (specify):		Visual Contact with Attendant	
Other (specify):		Ground Fault Circuit Interrupter	
Personal Protective Equipment (check if required)		**Rescue / Retrieval (check if required)**	
Safety glasses / goggles (circle one)		Full body harness	
Hearing protection		Retrieval tripod with winch	
Hard hat		Lanyard and lifeline	
Steel-toed/steel shank shoes		Coordination with Responsible Person	
Disposable coveralls (Tyvek)		Coordination with local EMS and verify EMS is available the entire duration of the entry operation. If EMS become unavailable, require immediate notification and suspend entry operations until EMS becomes available	
Shoe covers		SCBA available for rescue	
Gloves (circle): Disposable Chemical Protective Leather		Other (specify):	
Face shield		Fire Extinguisher	
Other (specify):			

Atmospheric Testing

Test Interval (circle): Initial Prior to Each Entry Continuous

Tester's Name: _____

	Time of Test							
	Initials of Tester							
Parameter	**Acceptable Entry Criteria**	**Initial Test**	**Test 2**	**Test 3**	**Test 4**	**Test 5**	**Test 6**	**Test 7**
% Oxygen	19.5% to 23.5%							
% LEL*	Less than 5%							
Carbon Monoxide	Less than 25 ppm							
Hydrogen sulfide	Less than 10 ppm							

List other gases or parameters to be tested in blank fields.

Was evacuation of space required at any time? __ YES __ NO

If so, why? _____

_____

Time of evacuation: _____ Time of re-entry: _____

Controls or actions taken to correct reason for evacuation: _____

_____

Testing Instrument Used	**Manufacturer**	**Serial No.**	**Date of Last Calibration**

Permit Authorization

I certify that I have reviewed the permit, understand the hazards that are or may be present, and have verified that the appropriate controls have been implemented. I understand the procedures necessary to ensure safe entry. No entry can be initiated until this permit is completed and signed by all Entrants, Attendants and the Entry Supervisor.

Authorized Entrants

Name: _____ Signature: _____ Date: _____

Name: _____ Signature: _____ Date: _____

Name: _____ Signature: _____ Date: _____

Authorized Attendants

Name: _____ Signature: _____ Date: _____

Name: _____ Signature: _____ Date: _____

Name: _____ Signature: _____ Date: _____

Entry Supervisor

Name: _____ Signature: _____ Date: _____

PERMIT CLOSED AT: Date: _____ Time: _____ By: _____

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EMPLOYEE SAFETY MANUAL

(This contains important information regarding Sure-Fire, Inc.'s safety programs.)

INDEX

The undersigned acknowledges receipt of the Sure-Fire, Inc. Safety Manual.

Recipient Name	Recipient Signature	Date

Supervisor Name	Supervisor Signature	Date

Revised: May 21, 2019