T. W. CLARK CONSTRUCTION, LLC
SAFETY PROGRAM

SAFETY POLICY

T. W. Clark Construction, LLC is particularly concerned with the safety and well-being of all of its' employees, subcontractors, suppliers, clients, and associates. It is our intent and commitment to provide a safe working environment for our employees and to minimize the risk of injury associated with our participation in the construction industry.

T. W. Clark Construction, LLC will initiate and maintain a safety and health program that conforms to or exceeds any Federal and/or State regulations, as well as those practices of organizations of this nature and type. All individuals, supervisors, and working persons alike, are responsible for the safety and health of those persons in their charge, as well as all co-workers around them. Each person must endeavor to create the proper attitude and cooperate to make accident prevention our primary objective.

Steve Sunleaf

Dated January 5, 2019

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T. W. CLARK CONSTRUCTION, LLC
SAFETY PROGRAM

Outline and Principals

I. **SCOPE AND RESPONSIBILITY:** All supervisors, employees, subcontractors, and materialmen.

II. **OBJECTIVE:** To provide a safe and healthy workplace for all employees.

III. **RESPONSIBILITY:**

A. All employees are responsible for their safety while on the jobsite. All employees must maintain the work area and cooperate to prevent hazards to fellow employees. All employees must follow all local, State and Federal regulations such as WISHA, OSHA, and all additional safety requirements of T. W. Clark Construction, LLC

B. The superintendent and foremen are responsible for the safety of the jobsite under their supervision. These personnel will initiate, maintain, and enforce the Safety Program and Policies of T. W. Clark Construction, LLC and follow all local, State, and Federal regulations such as WISHA, OSHA, etc.

C. All subcontractors and materialmen are responsible for the safety and health of their employees while on the project site. All subcontractors and materialmen must maintain the work area and cooperate to prevent hazards to all persons on the project site. All subcontractors and materialmen must comply with the Safety program, Policies, and directives of T. W. Clark Construction, LLC, and follow all local, State, and Federal regulations such as WISHA, OSHA, etc.

D. A written fall protection work plan is required by all trades working over 4 feet (effective May 20, 2016) for walking working surfaces and 10 feet for all other non-walking working surfaces. This written fall protection plan is required before any trade starts work. The six (6) primary elements to be included in the plan described are as follows:

1. All fall hazards in the work area.
2. The method of fall arrest or fall restraint to be provided.
3. The correct procedures for the assembly, maintenance, inspection and disassembly of the fall protection system to be used.
4. The correct procedures for handling, storage and securing of tools and materials.
5. The method of providing overhead protection for workers who may be in, or pass through the area below the work site.
6. The method for prompt, safe removal of injured workers.

E. SDS (Safety Data Sheet) Right-to-know policy:

1. All contractors or subcontractors will bring their safety data sheets (SDS) and program into T. W. Clark Construction, LLC's on-site office trailer before they commence work.
2. All employees are to be instructed of the locations of all SDS books.
3. All employees are to be instructed on how to use the SDS books.

F. All subcontractors must furnish a copy of their safety policy and program to the job superintendent before starting work.

G. All subcontractors will develop a site specific safety plan which identifies all anticipated hazards likely to be encountered while performing their work.

H. Each superintendent, and/or foreman shall have a current/valid First Aid Certification. This requirement shall include supervisory personnel for all subcontractors and materialmen onsite.

IV. REPORTING:

A. Report all accidents and injuries to the superintendent immediately.
B. Report all defective and/or damaged equipment to the superintendent immediately.
C. Report all unsafe conditions or situations that are potentially hazardous to the superintendent immediately.
D. Report all "near misses or close calls" for investigation.
E. All subcontractors and materialmen must report all accidents, injuries, unsafe conditions, and "near misses" to T. W. Clark Construction, LLC's superintendents.
F. Superintendents must report all injuries to T. W. Clark Construction, LLC's Project Manager, Safety Officer, and accounting immediately.

V. PROCEDURES:

A. Orientation:

1. Prior to commencing work on any project, the Superintendent must conduct a safety orientation for all T. W. Clark Construction, LLC employees and subcontractors' foremen.
2. Each T. W. Clark Construction, LLC employee and subcontractor foreman must receive a copy of "The Safety Program and Policies of T. W. Clark Construction, LLC".
3. Each new employee and subcontractor foreman must receive and acknowledge their safety orientation and hand out prior to commencing work on the project site, as they arrive.

B. **Safety Meetings:**

1. Meetings will be held weekly.
2. All employees, subcontractor employees, and project personnel must attend.
3. **Superintendent, employee walk-around safety inspection will be done before each safety meeting.**
4. All meetings must be conducted by the Project Superintendent or Foreman for T. W. Clark Construction, LLC
5. Subject matter for each meeting shall include safety inspections and review, accidents and injuries including their cause and elimination, review of the job procedures and improvements, safety program effectiveness, employee suggestions, etc.
6. Complete minutes of the meetings must be kept by T. W. Clark Construction, LLC
7. Attendee's must acknowledge attendance by signing the Attendance Sheet and list the company they represent.

C. **Discipline:**

1. For disregard of T. W. Clark Construction, LLC's "Safety Program and Policy," local, state or federal regulations including directives given by T. W. Clark Construction, LLC's supervisory personnel, discipline shall be administered forthwith:

a. To the individual T. W. Clark Construction, LLC employee:

- **First offense:** A first time violation will be discussed orally between company supervision and the employee. This will be done as soon as possible
- **Second offense:** A second time offense will be followed up in written form and a copy of this written documentation will be entered into the employee's personnel folder.
- **Third Offence:** A third-time violation will result in time off or possible termination, depending on the seriousness of the violation

b. To the subcontractor's or materialmen's employees:

- **First offense:** Oral warning of safety violation to the individual and their immediate supervisor.
- **Second offense:** Written warning of safety violation to the individual and copies given to the onsite foreman and sent to the subcontractor's or materialmen's main office.
- **Third offense:** Written warning of safety violation to the individual and copies given to the onsite foreman and sent to the subcontractor's or materialmen's main office. Subcontractor or materialman must remove this employee from all of T. W. Clark Construction, LLC's projects (regardless of type of violation).

c. Subcontractors or materialmen who demonstrate a general disregard of good safety practices by failing to comply with T. W. Clark Construction, LLC's "Safety Program and Policy," local, state, federal regulations including directives given by T. W. Clark Construction, LLC's

supervisory personnel (contrary to contract requirements), discipline shall be administered as follows:

- First offense: Oral warning of safety violation to the individual and their immediate supervisor.
- Second offense: Written warning of safety violation to the individual and copies given to the onsite foreman and sent to the subcontractor's or materialmen's main office. Subcontractors or materialmen must submit a written plan that they intend to correct the non-compliance and implement their own safety program. A written copy of this plan and the subcontractors or materialman's safety program must be submitted for approval by T. W. Clark Construction, LLC
- Third offense: Written warning of safety violation to the individual and copies given to the onsite foreman and sent to the subcontractor's or materialmen's main office. Subcontractors or materialmen may be barred from further work on the project site and/or terminated for due cause and breech of contract. All subcontractors or materialmen are responsible for all fines or penalties assessed to T. W. Clark Construction, LLC as a result of the subcontractor's or materialmen's direct or indirect non-compliance.

  All safety violation warnings shall be issued by T. W. Clark Construction, LLC's supervisory personnel Superintendent, Foreman, Safety Officer, etc. each time an observance is made. Issuance of "verbal warnings" are not enforceable.

D. Procedure for injury or illness on the job.

1. Owner or supervisor immediately takes charge.

   - Supervise and administer first aid, if qualified.
   - Arrange for transportation (ambulance, helicopter, company vehicle, etc.) depending on seriousness.
   - Get stretcher and transport injured to nearest accessible location if necessary.
   - Notify top management (SAFETY OFFICER) if not already present.
   - Get names and numbers of witnesses
   - Have witnesses write down their statements separate from other witnesses.
   - Secure the scene. Do not move anything unless necessary, pending investigation of accident.
   - Accompany or take injured to doctor, hospital, home, etc. (depending on extent of injuries, or as directed by supervisor).
   - Take injured to family doctor if available.
   - Remain with injured until relieved.
   - When the injured person's immediate family is known by the management or supervisor, they should properly notify them, preferably in person.

2. Documentation:
   - Minor injuries (requiring doctor/out patient care): After the emergency actions following an accident, an investigation of the accident will be conducted by the immediate supervisor and any witnesses to determine the causes. The findings shall be documented on a T. W. Clark Construction, LLC accident form.
   - Major injuries (death, hospitalization of even one employee, amputation or loss of eye): Top management must see that the Department of Labor and Industries is notified as soon as possible (at least within eight hours). They will then assist the Department in the investigation.
   - Injured T. W. Clark Construction, LLC employees will be given Employee Accident Form and Doctor's Work Release Form.

3. Near-Misses:
   - All near-misses (close calls) shall be investigated.
   - Document findings on company accident form.
   - Review findings at monthly safety meetings or sooner if the situation warrants.

VI. PERSONAL PROTECTIVE EQUIPMENT:

A. **Hard hats will be worn at all times** by all persons on the jobsite. At the discretion of T. W. Clark Construction, LLC's Safety Officer only, as long as overhead hazards do not exist, hard hat requirements may be relaxed only during certain finishing stages of a project. More stringent local, state or federal regulations will take precedence.

B. **Safety glasses will be worn at all times** by all T. W. Clark Construction, LLC employees on the jobsite. The requirement for safety glasses may be relaxed, in the finishing stages of the job, at the discretion of the Safety Officer, after reviewing the jobsite.

1. The first pair of safety glasses will be given to the employee.
2. If safety glasses get broken or wear out, T. W. Clark Construction, LLC will issue another pair.
3. If safety glasses are lost or left at home, the employee will either buy another pair or go home and get them.
4. No T. W. Clark Construction, LLC employee will be allowed to work without safety glasses.
5. Employees who wear glasses and want more protection, will have safety goggles available to them.
6. Safety goggles and refill lenses will be in the office trailer.

C. **Hearing protection is required** to be worn by all persons who are exposed to 85 DBA or above for an eight hour period. Hearing protection may be necessary for shorter time periods as noise levels dictate.

D. **Respiratory protection must be worn by all persons whenever dirt, paint spray, or other respiratory hazards exist. (See Respirator Program)**

E. **Seat belts must be worn** by all persons operating or riding in motorized vehicles at all times.

F. **Seat belts are to be worn** in all company vehicles on or off site.

G. **Personnel shall not wear cut-offs, tank tops, sleeveless shirts, or tennis or canvas type shoes on the jobsite**. Where hazards to feet or other body parts exist, special footwear or clothing may be required.

H. **No one will be allowed to flag or direct traffic without a Flagger's card.**

I. **Anyone working in or next to vehicle traffic must wear a high viz vest.**

J. **All of these requirements (with the exception of Item B) apply to all subcontractors, materialmen, project personnel, and their employees.**

VII. BASIC RULES AND GUIDELINES:

SAFETY BULLETIN BOARD

A. Purpose: To increase employee's safety awareness and convey the company's safety message. If a proper place can be found for a bulletin board, this is a good tool.

B. The following items are required to be posted:

1. WISHA poster (F416-081-00) (required)
2. Industrial Insurance poster (F242-191-000) (required)
3. Wage and hour laws (F700-053-000) (required)
4. Citation and Notice (as appropriate)
   If a Citation and Notice is received, it must be posted until all violations are abated.
5. Emergency Telephone Number Posted (as appropriate)
6. OSHA 300 Summary (required February 1 thru April 30 of each year)

C. Suggested Items:

1. Safety and health posters
2. Minutes of crew/leader safety meetings
3. Date, time, and place of next safety meeting
4. Information about any recent incidents

5. Safety awards/employee recognition
6. Hazard communication information
7. Pertinent safety concerns, news clippings and other off-the-job items that may be of significant importance to employees.

A. General Rules on site

1. Always store materials in a safe manner. Tie down or support piles if necessary to prevent falling, rolling, or shifting.
2. Shavings, dust scraps, oil or grease should not be allowed to accumulate. Good housekeeping is a part of the job.
3. Trash piles must be removed as soon as possible. Trash is a safety and fire hazard.
4. Remove or bend over the nails in lumber that has been used or removed from a structure.
5. Immediately remove all loose materials from stairs, walkways, ramps, platforms, etc.
6. Do not block aisles, traffic lanes, fire exits, gangways, or stairs.
7. Avoid shortcuts – use ramps, stairs, walkways, ladders, etc.
8. Standard guardrails must be erected around all floor openings and excavations must be barricaded. Contact your supervisor for the correct specifications.
9. Do not remove, deface or destroy any warning, danger sign, or barricade, or interfere with any form of protective device or practice provided for your use or that is being used by other workers.
10. Get help with heavy or bulky materials to avoid injury to yourself or damage to material.
11. Keep all tools away from the edges of scaffolding, platforms, shaft openings, etc.
12. Do not use tools with split, broken, or loose handles, or burred or mushroomed heads. Keep cutting tools sharp and carry all tools in a container.
13. Know the correct use of hand and power tools. Use the right tool for the job.
14. Know the location and use of fire extinguishing equipment and the procedure for sounding a fire alarm.
15. Flammable liquids shall be used only in small amounts at the job location and in approved safety cans.
16. Proper guards or shields must be installed on all power tools before use. Do not use any tools without the guards in their proper working condition. No "homemade" handles or extensions (cheaters) will be used!
17. All electrical power tools (unless double insulated), extension cords, and equipment must be properly grounded.
18. All electrical power tools and extension cords must be properly insulated. Damaged cords must be replaced.
19. Do not operate any power tool or equipment unless you are trained in its operation and authorized by your firm to do so.
20. All electrical power equipment and tools must be grounded or double insulated.

21. Use tools only for their designed purpose.

B. **Ladder Rules**

1. General

- Inspect before use for physical defects.
- Ladders are not to be painted except for numbering purposes.
- Do not use ladders for skids, braces, workbenches, or any purpose other than climbing.
- When you are ascending or descending a ladder, do not carry objects that will prevent you from grasping the ladder with both hands.
- Always face the ladder when ascending and descending.
- If you must place a ladder over a doorway, barricade the door to prevent its use and post a warning sign.
- Only one person is allowed on a ladder at a time.
- Do not jump from a ladder when descending.
- All joints between steps, rungs, and side rails must be tight.
- Safety feet must be in good working order and in place.
- Rungs must be free of grease and/or oil.

2. **Stepladders**

- Do not place tools or materials on the steps or platform of a stepladder
- Do not use the top two steps of a stepladder as a step or stand.
- Always level all four feet and lock spreaders in place.
- Do not use a stepladder as a straight ladder.

3. **Straight Type or Extension Ladders.**

a. All straight or extension ladders must extend at least 3 feet beyond the supporting object when used as an access to an elevated work area.
b. After raising the extension portion of a two or more stage ladder to the desired height, check to insure that the safety dogs or latches are engaged.
c. All extensions or straight ladders must be secured or tied off at the top.

C. **Scaffold Safety Rules**

1. General - before starting work on a scaffold, inspect for the following:
   a. Are guard rails, toe boards, and planking in place and secure?
   b. Are locking pins at each joint in place?
   c. Are all wheels on movable scaffolds locked?

d. Scaffolds 4 feet to 10 feet in height, having a minimum horizontal dimension in either direction of less than 45 inches shall have standard guardrails and toe boards installed on all open sides and ends of the scaffold platform.

2. Do not attempt to gain access to a scaffold by climbing on it (unless it is specifically designed for climbing). Always use a ladder.

3. Scaffolds and their components shall be capable of supporting four times the maximum intended load.

4. Any scaffold including accessories such as braces, brackets, trusses, screw legs, ladders, etc., damaged or weakened in any way, shall be immediately repaired or replaced.

5. Scaffold planks shall extend over their end supports not less than 6 inches, nor more than 12 inches, unless otherwise specifically required or exempted.

6. Scaffold platforms shall not be less than 18 inches wide unless otherwise specifically required or exempted.

7. Where persons are required to work or pass under the scaffold, scaffolds shall be provided with a screen between the toe board and guardrail, extending along the entire opening, of #18 gauge U.S. Standard wire 1/2" mesh or equivalent protection.

8. All scaffolds must be erected level and plumb, and on a solid footing.

9. Do not change or remove scaffold members unless authorized.

10. Do not allow workers to ride on a rolling scaffold when it is being moved. Remove or secure all materials and tools on the deck before moving.

11. Do not alter any scaffold member by welding, burning, cutting, drilling, or bending.

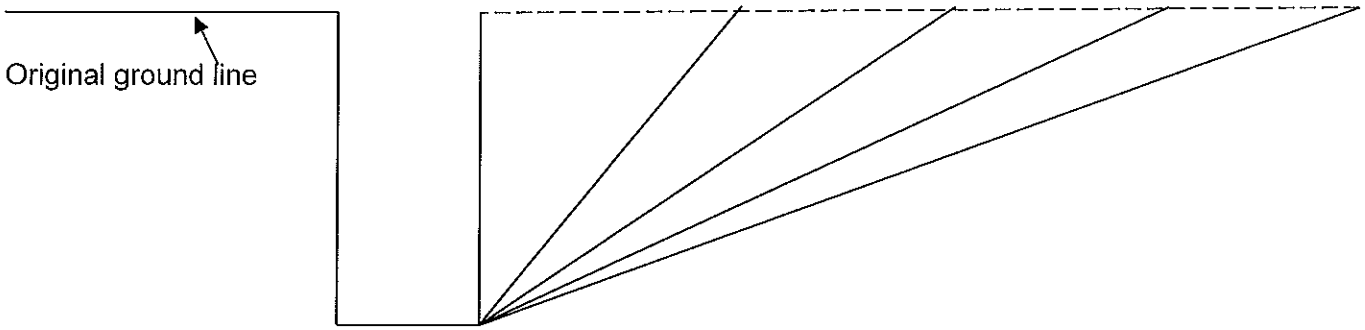
D. **Trench and Excavation**

1. The determination of the angle of repose and design of the supporting system shall be recognized after careful evaluation by the competent person, of pertinent factors such as:

a. Depth and/or cut.
b. Possible variation in water content of the material while it is open.
c. Anticipated changes in the materials from exposure to air, sun, water or freezing.
d. Loading imposed by structures, equipment, overlaying material, or stored materials.
e. Vibration from equipment, blasting, traffic, or other sources.

Approximate Angle of Slope for sloping of sides of excavations

		Type A Cohesive and cemented soils. Unconfined compressive strength of 1.5 tsf* or greater.	Type B Non-cohesive Granular soils. Unconfined compressive strength >0.5 tsf but <1.5 tsf*.	Type C Compacted sharp sand. Unconfined compressive strength of 0.5 tsf* or less.	
The presence of ground water requires special treatment	Solid rock and compact shale (90°)	¾:1 (63°26')	1:1 (45°)	1 ½:1 (33°41')	Well rounded loose sand 2:1 (26°34')



2. Walkways or bridges with standard railings shall be provided when employees or equipment are required to cross over excavations.

3. The walls and faces of all excavations in which employees are exposed to danger from moving ground shall be guarded by a shoring system, sloping of the ground, or some other equivalent means.

4. No persons shall be permitted under loads handled by power shovels, derricks, or hoists.

5. All employees shall be protected with personal protective equipment for the protection of the head, eyes, respiratory system, hands, feet, and other parts of the body.

NOTE: For other rules and regulations regarding trenching and excavation, see Part N, chapter 155, Washington State Department of Labor and Industries, Division of Safety and Health Construction Safety Standards.

E. **Fall Protection Statement**

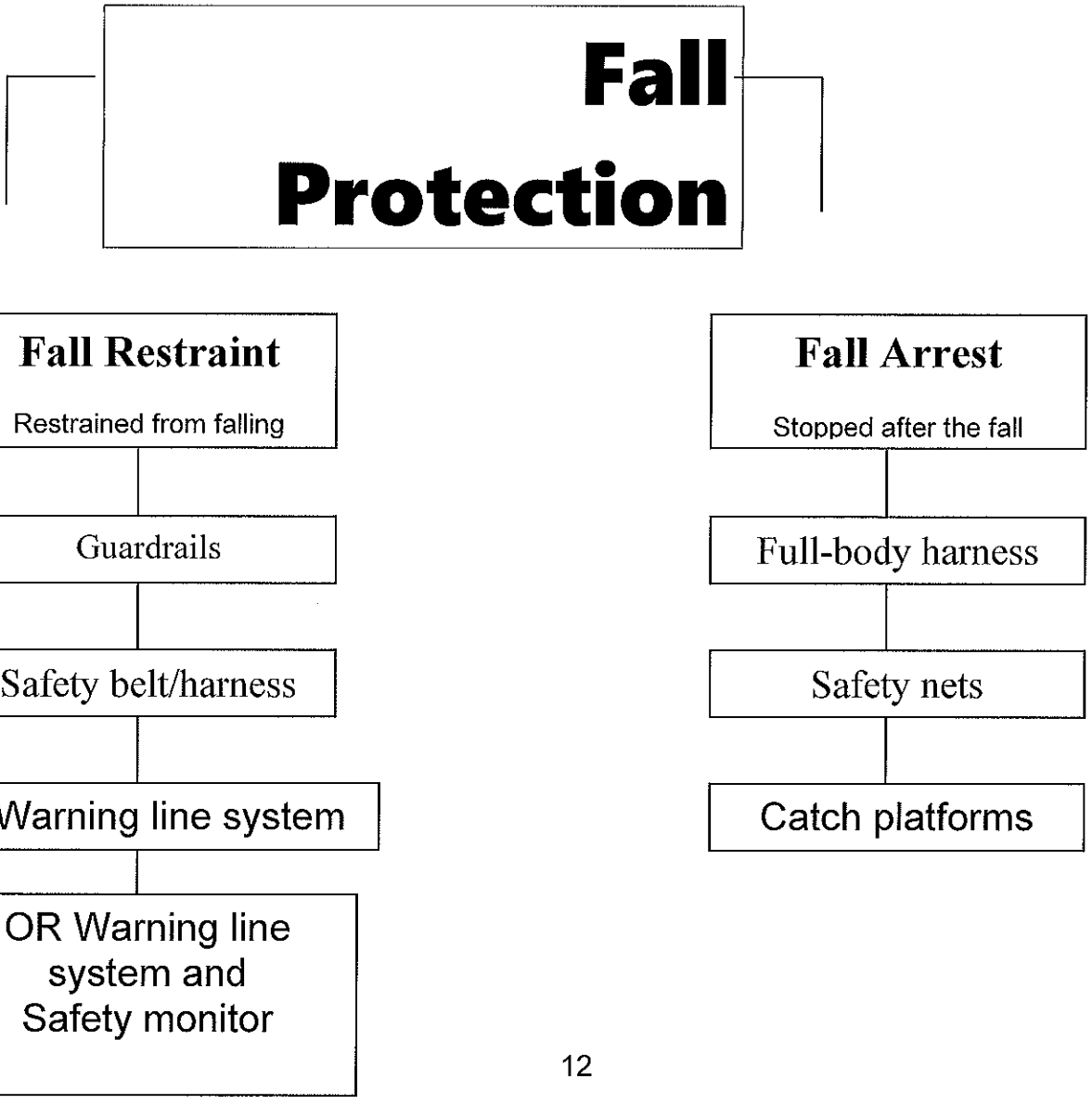
1. Falls are one of the most leading causes of occupational fatalities in the American workplace. Fall protection rates high on the list for most frequently cited violations by Washington State Safety and Health Compliance Inspectors when inspecting construction sites.

2. WAC 296-155-24609 mandates that workers shall be protected from fall hazards from buildings, bridge structures, or construction members such as trusses, beams, purlins, or plates, at elevations exceeding 4 feet (effective May 20, 2016) or more to the ground or lower level when on a walking/working surface.

3. A workplace fall is an accidental loss of balance that allows an uncontrolled drop from one level to another; whereas a slip generally involves a fall on the same level. In some cases, a slip can lead to a serious fall.

4. Fall protection means no exposure to a fall hazard without protection. Protection may consist of:

a. Removing the hazard.
b. Installing guardrails.
c. Restricting the travel.
d. Using safety nets or personal fall protection equipment to arrest an accidental fall.



F. **Fall Protection Plan**

1. A written fall protection work plan is required by all trades working over 10 feet (effective May 20, 2016) or more to the ground or lower lever when on a non-walking working surface. This fall protection plan is required before any trade starts work. The six primary elements to be included in the plan describe:

a. All fall hazards in the work area.
b. The method of fall arrest or fall restraint to be provided.
c. The correct procedures for the assembly, maintenance, inspection and disassembly of the fall protection system to be used.
d. The correct procedures for handling, storage and securing of tools and materials.
e. The method of providing overhead protection for workers who may be in, or pass through, the area below the workers.
f. The method for prompt, safe, removal of injured workers.

There may be other special requirements or procedures that may become necessary as a project progresses. Additional rules, regulations, policies, etc. Will be so informed and compliance expected.

VIII. SAFE DRIVING POLICY:

A. All company personnel must comply with all local, state, and federal traffic regulations or laws while driving a company vehicle or on company business. Good safety practices are of the utmost importance.

B. Violation(s) may result in vehicle use restriction, compensation adjustment, and/or employment termination.

IX. HAZARDOUS SUBSTANCE POLICY:

A. Container Labeling

1. The jobsite Superintendent or Foreman will verify that all containers delivered to the jobsite will:

a. Be clearly labeled - details on contents.
b. Have appropriate hazard warning.
c. Include name and address of manufacturer.

B. SDS (Hazardous Substance Policy)

1. Each jobsite Superintendent and right-to-know manager will be responsible for monitoring the SDS company system, making sure that when products are purchased, SDS sheets are received with delivery, and the specific procedures are followed when materials are received without SDS sheets to procure same.

2. SDS sheets will be kept in a 3-ring binder in the job office trailer.

3. Copies of SDS sheets will be available for review by employees upon request to their supervisor or foreman.

C. Employee Training

1. Steve Sunleaf, right-to-know manager, will be responsible for seeing that the following employee training program is implemented:

υ **Before starting the work, each new employee will attend a safety class and be given the opportunity to review the hazardous materials handbook, which will have information regarding:**

a. Chemicals and their hazards in their work area.
b. Steps an employee can take to lesson or prevent his/her exposure to these hazardous chemicals.
c. What T. W. Clark Construction, LLC does to lesson or prevent workers' exposure to these chemicals.
d. Procedures to follow if they are exposed to these chemicals.

2. After attending the class, each employee will **sign a form** stating that they have reviewed the material outlined above, received the safety training, and are knowledgeable as to where the SDS and hazardous substance handbook will be kept at the jobsite.

3. Before any chemical hazard is introduced into the work environment, each employee will be given information in the same manner during a safety class. The jobsite Superintendent will be responsible for seeing the SDS sheets on the new chemical are available to the employee.

4. **Monthly safety meetings will be held and hazardous materials used on the jobsite will be discussed. Attendance is mandatory for all employees.**

5. These meetings are to be part of the Superintendent/crew safety meetings required by the company accident prevention program. Notices will be posted on the jobsite bulletin boards to provide an explanation of our container labeling system and the location of the written hazardous communication program.

D. List of Hazardous Chemicals

1. The list of hazardous chemicals commonly used on the jobsite is kept in index form at the front of the hazardous communication program 3-ring binder. When any new unique hazardous chemical is introduced to the work place, employees exposed to the product will be instructed as outlined in the employee training section.

E. Non-Routine Tasks

1. It is the policy of T. W. Clark Construction, LLC that no employee will begin work in a confined space or on any non-routine task without first receiving a safety briefing from the jobsite Superintendent.

AMENDMENT TO HAZARDOUS SUBSTANCE POLICY

Amendment #1: This Amendment dated February 15, 1991, is hereby made an integral part of the Hazardous Substance Policy established for T. W. Clark Construction, LLC The Amendment shall be as follows:

Each subcontractor associated with a project in which T. W. Clark Construction, LLC is the General Contractor, shall have on the jobsite, a copy of their written hazardous communication program available for review by T. W. Clark Construction, LLC's project Superintendent. This written policy must be in compliance with OSHA, SDS requirements, and provide for the required communications associated with SDS for not only the specific subcontractor's employees, but all workmen on the jobsite.

T. W. Clark Construction, LLC's project Superintendent will be responsible for notifying all workmen on the jobsite of the location of SDS information and make sure that SDS information is readily accessible to all employees on the jobsite; and further, be responsible for making sure that all employees on the site are familiar with utilization of SDS information.

X. DRUG/SUBSTANCE ABUSE PROGRAM:

A. The Need and Intent

T. W. Clark Construction, LLC has a strong commitment to provide a safe work environment for its employees and to establish programs promoting high standards of employee health and safety. Consistent with that commitment, this Substance Abuse and Testing policy has been established.

1. T. W. Clark Construction, LLC is required to comply with all aspects of the Drug Free Work Place Act of 1988. Additionally, Sections 391 and 394 of the Federal Motor Carrier Safety Regulations require that companies test commercial drivers for controlled substances.

2. T.W. Clark Construction, LLC will not tolerate drug or alcohol use which may affect the safety and health of its employees or business. We recognize that employees who have abused controlled substances or alcohol or used illegal drugs, tend to be less productive, prone to increased absenteeism, and otherwise risk our competitive position. We cannot and will not allow this.

3. All trades in the construction field are seriously jeopardized when any person tries to perform while under the influence of alcohol or controlled substances. An employee under the influence of alcohol or drugs is a danger to himself, his co-workers and the public.

4. The safety of our employees and their co-workers is our overriding concern.

5. As professionals, our employees desire the right to work for a company which makes every effort to provide a safe work place, equipment and coworkers, in order for them to safely perform their duties.

B. Scope

1. This policy applies to all current and future employees of T. W. Clark Construction, LLC

C. Policy

1. The use of, possession of, sale of, being under the influence of, or the presence in a person's system of prohibited drugs or unauthorized alcoholic beverages (except possession or use of prescribed medication verifiable by a current, properly issued prescription) is prohibited on any company work location or property, including project sites, company vehicles, shops and offices. Violation of this section of the policy will result in disciplinary action which may include immediate termination of employment.

2. Alcoholic beverages may be served at approved company functions or entertainment facilities when authorized by a company officer or project manager.

3. If the management representative provides an alcoholic beverage on the job, it is each employee's responsibility and obligation to control their consumption. You as an employee are responsible for your actions and will be held accountable for your safety and that of others as T. W. Clark Construction, LLC's goal is to provide a safe work place and have employees function in the most effective manner.

4. To arrive for work, or be on duty, under the influence of alcohol or controlled substances, is forbidden. Violation of this section of the policy will result in disciplinary action which may include termination of employment.

5. With reasonable suspicion, T. W. Clark Construction, LLC specifically reserves the right to carry out searches of individuals, their persons, effects and vehicles when entering, while

on, and when leaving company premises or jobsites. Company or leased vehicles may be searched at any time or at any location. The searches will be initiated by the company without prior announcement other than this policy. Submission to such searches of individuals, their persons, effects, and vehicles are strictly voluntary; however, refusal will be cause for disciplinary action which can include dismissal from employment. Officers and supervisors are empowered to authorize a search.

6. Any prohibited drugs and/or paraphernalia or unauthorized property discovered through a company search or otherwise, may be taken into custody by the Company and turned over to the proper law enforcement authorities. Prohibited drugs include, among others, marijuana, hashish, heroin, cocaine, opium and its derivatives, hallucinogens, barbiturates, depressants, and stimulants.

7. Persons considered for employment at any company facility will be required to sign a form authorizing the company to perform a drug screen and be tested for presence of prohibited drugs and other controlled substances. Persons laid off for a year or more will be required to be re-tested before starting work. Persons with confirmed positive test results for any substance prohibited by this policy and persons who refuse to sign the consent form or cooperate in the testing will not be hired.

8. Random Drug Testing:

A. T. W. Clark Construction, LLC will perform random drug testing on all T. W. Clark Construction, LLC employees. Name selection for random testing will be conducted by an independent company.
B. Employees selected for random testing will be notified and taken to the testing site by the Project Superintendent. In some cases, testing may be done on site.
C. Refusing a random drug test could result in termination.
D. Positive results for any illegal drug usage on a random test will result in that individual being suspended from work. Reinstatement will be contingent on both T. W. Clark Construction, LLC's and the individual's desire to proceed with counseling and/or rehabilitation efforts through an approved program.

E. Any employee that has tested positive for controlled substance or alcohol abuse on previous random testing will automatically be selected for testing during subsequent random tests for a period of at least two (2) years.
F. A verified and confirmed positive test will result in disciplinary action which could result in termination.
9. Employees who are under the influence of alcohol or who have prohibited drugs or other controlled substances in their person, as identified through the analysis of the employee's breath, blood, urine, or other specimens, are in violation of company policy and are prohibited from working on T. W. Clark Construction, LLC's property, jobsites, or business, and may be subject to discipline; including termination of employment as hereinafter provided

unless the identified substance was prescribed for current personal treatment by a licensed physician.

10. T. W. Clark Construction, LLC may test existing employees for the presence of alcohol or prohibited drugs in their person by using the person's breath, blood, urine, tissue, or other specimens for testing when the employer has reason to believe that the employee's faculties are impaired on the job as a result of alcohol consumption or prohibited drug use. T. W. Clark Construction, LLC will also test all employees at any company office, warehouse, or jobsite upon the implementation of this Alcohol and Drug Abuse Policy.

11. Participation in the Company's Drug and Alcohol Abuse and testing policy and adherence to this policy is a condition of employment with T. W. Clark Construction, LLC Persons refusing to participate in or adhere to the drug and alcohol abuse and testing are subject to discipline under this policy as hereinafter provided.

12. Medication prescribed by a licensed physician is exempt from this policy when properly used and reported. Notification of any medication prescribed shall be given to the project Superintendent. Such notification should be in the form of a written statement from the employee's physician identifying the medication prescribed, dosage level and expected duration of treatment.

13. Persons who are aware of any violation of this policy by any person including supervisors or any unauthorized use or possession of alcohol or prohibited drugs are encouraged to notify their immediate supervisor or other supervisory personnel.

14. The alcohol and drug abuse policies contained herein do not in any way constitute, and should not be construed as a contract of employment between the employer and the employee or a promise of employment.

D. Procedure for Testing

1. The procedure for testing or screening of employees or job applicants for alcohol or prohibited drugs shall be as follows:

a. Collection of the specimen (blood, urine, breath, tissue, or other substance) shall be accomplished in a manner that minimizes invasion of personal privacy.

b. A sufficient quantity of specimen shall be collected to ensure the administration of several tests.

c. An appropriate specimen collection site for each project or office will be established. The site will possess all necessary personnel, materials, equipment, security, temporary

storage, and transportation of the specimen to a drug testing laboratory or the person to be tested may be transported to a professional medical testing facility for testing.

d. Actions taken to dilute, adulterate, tamper with, or substitute breath, blood, urine, or tissue specimens taken or requested under this policy or any attempt to induce another person to undertake such action is prohibited.

e. Before any test is judged to be positive, the test results must be verified by at least two testing procedures. A copy of the drug or alcohol test result shall be provided to the person tested, and if the test is positive, the person tested, if he or she requests, shall be provided with sufficient specimen with which to obtain a confirmatory test by an independent laboratory selected by the person tested. This confirmatory test shall be at the expense of the person tested. The person tested will be given the opportunity to rebut or explain the results of either or both tests.

E. Reasonable Cause/Accident Involvement.

1. Reasonable cause means suspicion based on specific personal observations that the employer can describe concerning the appearance, behavior, speech and breath odor of the employee. Reasonable cause must be documented at or near the time of the observation. Observation must be witnessed by at least two (2) individuals; one of whom must be a supervisor, that have actually observed the employee's behavior. Being in an accident, or causing an accident, may be sufficient to establish reasonable cause.

2. An employee consenting to the testing will be transported to the hospital or laboratory by management. After testing is completed, the employee will be transported back to his or her residence.

3. If the test results are negative, the employee will immediately be reinstated in his or her previous position, with full back pay based on a project's regular work schedule and no further action will be taken.

4. Should the results be positive, T. W. Clark Construction, LLC may terminate the employee without pay, except for actual time worked on the day that the test was conducted. Employees' have the right to obtain test results from the testing facility.

F. Confidentiality of Results

1. The results of a drug screen analysis will be sent to the company marked "confidential". They will be opened only by the Director of Human Resources. All testing results will be kept in a separate, locked file in the Human Resource Director's office.. The results of a positive test will only be made known to these people, the employee or person applying for work, and the Project Superintendent of the jobsite who accepted the application. The results of any positive

test will not be released to any third party or outside agency unless required by law, or with written request/permission of the employee or job applicant.

XI. BLOODBORNE PATHOGEN POLICY STATEMENT:

In accordance with WAC 296-155-120(1)(b), all supervisors, foremen and persons in charge of a crew employed by T. W. Clark Construction, LLC **will carry a current and valid First Aid Card.**

The primary duty of these employees will not be first aid care and they will not be designated as First Aid Providers. If they so choose, the aforesaid employees will only provide first aid services as a collateral duty. Their primary function is to plan, direct, control, and complete the construction contract.

T. W. Clark Construction, LLC will provide the necessary personal protective equipment at each work site. This equipment will include, but not be limited to, protective gloves, mouth barriers and eye protection. In addition, each employee will be informed of the risks involved with an exposure to human blood, or other potentially infectious materials (OPIM), and the proper use of the personal protective equipment. This information will be made available through new employee orientation training and weekly job site safety meetings.

In the event of an actual or suspected exposure to human blood or OPIM, the employee will be required to immediately or as soon as possible, report the incident to his supervisor. Each exposure or suspected exposure will be evaluated on a case-by-case basis. Post-exposure reporting forms will be made available and completed as required. A supply of the necessary forms will be maintained at each job site.

XII. RESPIRATORY PROTECTIVE PROGRAM: (T. W. Clark Construction, LLC Employees)

GENERAL: The intent of this written program is to define the Company rules now in effect regarding the use of respirator masks for personal protection against the following airborne contaminants:

a. Lead and Silica Dusts
b. Various Nuisance Dusts
c. Organic Vapors

The regulations contained herein are **NOT OPTIONAL** for the employee. To comply, the Company must consider this policy **MANDATORY** and a condition of employment for each individual.

AVAILABILITY OF RESPIRATORS: Each employee that requires a respirator will be issued one at the Company's expense with replacement parts, cartridges, and filters upon request. The following type of respirator is available: (All respirators are to be checked out from the warehouse, there are to be NO respirators purchased from the field):

Wilson 6100 Chemical Cartridge Respirator (MSHA-NIOSH Approval TC-23-C-737)

USE OF RESPIRATORS: Each employee that requires a respirator shall wear an approved respirator, properly fitted at all times while performing an operation defined as **HAZARDOUS;** or in the immediate area (within ten (10) feet) for an extended period of time (more than five (5) minutes) where another employee is performing a HAZARDOUS operation.

SELECTION OF RESPIRATORS: Only NIOSH/MSHA approved respirators have been chosen for use in this program. The choice between these respirators is dependent upon the airborne contaminant present, the **HAZARDOUS** operation performed, and on the basis of comfort and ease of obtaining a proper individual fit. The useful life of each respirator will depend mainly on the employee's job duties and the actual time the unit is in use. Generally, useful life would be expected to vary from two (2) months to six (6) months.

These respirators are also noted to have the following limitations:

a. Respirators do not supply oxygen.
b. Use only in ventilated areas containing at least 19.5% oxygen.
c. Do not use when concentrations of contaminants are unknown.

TRAINING OF EMPLOYEES: Each respirator user will be shown and trained how to use and maintain the respirator based on this respirator use and maintenance program. This training will be given by Inland Northwest AGC, Director of Safety, Curt Nead.

Employee's proof of the training and instructions received shall consist of the following: In addition to the training and instruction received, the respirator user must have read, understood and be able to apply the contents of the respirator program in the daily use, care and safekeeping of the said respirator.

To ensure the availability of this respirator program at all times, copies of the same shall be distributed as follows:

a. 1 copy - to be kept in the jobsite office trailer.
b. 1 copy - to be given to respirator user.
c. Master copy to be kept in main office of T. W. Clark Construction, LLC

FITTING OF RESPIRATORS: Proper fitting of respirators is essential if employees are to receive the protection for which this program is designed. Air which passes around the edges of the respirator, rather than through it, is not filtered air. In order to ensure a good face seal, the following rules must be observed:

a. The respirator and straps must be in place and worn in the appropriate position. To adjust head bands, pull the free ends tight until a comfortable fit is obtained. All straps shall be secure.

b. To adjust the face piece properly, simply position chin firmly in the chin cup and manually shift rubber mask until the most comfortable position is found. Make final adjustments in the head band and do not break the nasal seal. Modifications to the respirator or straps shall not be made.

c. Proper fit must be checked each time the respirator is worn according to the manufacturer's instructions. Respirators shall not be worn when projections under the face piece prevent a good face seal.

NOTE: Such conditions are a growth of beard, sideburns, temple pieces on glasses or skull caps that project under the face piece.

d. The fitted respirator MUST be tested using the appropriate qualitative fit tests. For example, isoamyl acetate should be used to check respirator fit when using organic vapor respirators by determining if the wearer can detect the "banana oil" odor.

In the event an employee is unable to obtain a satisfactory fit with the type of respirator furnished, the employer will make efforts to correct the problem.

MAINTENANCE OF RESPIRATORS: Respirators should be cleaned after each day's use and placed in a plastic bag or stored in a container for this purpose.

At the end of each week (or more often, if needed) respirators should be completely cleaned and disinfected by carrying out the following procedures:

a. Remove the air-purifying elements from the respirator. Air-purifying elements must never be washed and disinfected.

b. Immerse the respirator in a warm (140-160øF) aqueous solution of a germicidal detergent. The respirator face piece and parts may be scrubbed gently with a cloth or soft brush. Make sure that all foreign matter is removed from all surfaces of the rubber exhalation valve flap and plastic exhalation valve seats.

c. After washing and disinfecting the respirator, rinse same with clean, warm (140-160øF) water and then allow the respirator to dry.

d. After the respirator is dry, attach the air-purifying elements.

e. Store the respirator in the container provided for that purpose.

Any malfunction on the respirator shall be reported to the T. W. Clark Construction, LLC warehouse personnel, with replacement parts available in the warehouse.

After normal use, respirators shall not be hung on nails on the wall, but must be stored in its plastic bag and in the provided container.

After inspection, cleaning and necessary repair, or after each day's use, the respirator shall be stored in the plastic bag and in the container provided for the purpose. In storing the respirator, the face piece and exhalation valve must be in a normal position to prevent the abnormal set of elastomer parts during storage.

Each worker assigned to use a respirator shall maintain and routinely inspect it before and after each use. Respirators will be inspected by T. W. Clark Construction, LLC personnel to assure that they are kept clean and in satisfactory working condition. Respirator inspection shall include:

1. Tightness of connections.
2. Condition of the face piece.
3. Condition of the head bands.
4. Condition of the cartridges.
5. Condition of the valves.
6. Rubber or elastomer for pliability.
7. Rubber or elastomer for deterioration.

NOTE: Stretching and manipulating rubber or elastomer parts with a massaging action will keep them pliable and flexible and prevent them from taking a set during storage.

Worn out parts should be replaced immediately.

XIII. HAZARDOUS MATERIAL POLICY:

T. W. Clark Construction, LLC recognizes the fact that workers throughout the construction industry are faced with the potential exposure to hazardous materials such as asbestos and lead or other various compounds which might contain these materials.

Because of both the acute and chronic health problems associated with these types of hazardous materials, T. W. Clark Construction, LLC and its employees will not be permitted to work directly with or in the vicinity of known hazardous materials when they are in a potentially hazardous physical state such as the fumes produced during the burning of materials coated with paint containing lead.

The hazardous materials policy of T. W. Clark Construction, LLC is that all known hazardous or potentially hazardous materials will be removed from the work site prior to any work being initiated by T. W. Clark Construction, LLC employees. If hazardous materials are discovered

subsequent to project initiation, all affected work will be terminated until an acceptable handling procedure or solution is established.

This policy will be strictly adhered to by all employees of T. W. Clark Construction, LLC Deviation will not be tolerated unless specific authorization is obtained from the company Safety Officer.

XIV. LOCKOUT/TAGOUT PROGRAM:

1-1 Introduction: To comply with WAC-296-24-110 "The Control of Hazardous Energy (LOCKOUT/TAGOUT)", to save lives and to reduce the risk to life and health on T. W. Clark Construction, LLC jobsites, the requirements set forth in this policy shall be followed prior to the operation, servicing and maintenance of all machines, equipment and systems in which the start up, or release of stored energy could cause injury.

This policy applies to the control of energy during servicing and/or maintenance of machines and equipment and systems.

This policy applies to any person 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 be in an area potentially influenced by the servicing or maintenance being performed.

1-2 Training: General training shall be provided by the jobsite superintendent and Safety Department. This training shall include the purpose and function of the energy control program, how to recognize 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.

On the job training shall meet the requirements established in WAC 296-24-11013.

1-3 Specific Procedures: Specific established procedures shall be developed by the Safety Department concerning the steps for the application of energy control. These procedures shall include preparation for shutdown, shutting down the machine or equipment and the isolation of the machine or equipment to control the energy to the machine or equipment from the energy source (s).

Procedures shall be developed to include group lockout or tagout. One employee shall be designated as having responsibility for all employees working under the protection of a group Lockout or Tagout and shall coordinate affected work forces and ensure continuity of protection.

Lockout/Tagout procedures, group Lockout/Tagout procedures and removal procedures shall meet the requirements established in WAC 296-24-11007 and 11015.

1-4 Protective Materials and Hardware: Locks, tags, chains, wedges, key blocks, adapter pins, self-locking fasteners, or other hardware shall be provided by the jobsite superintendent for isolating, securing, or blocking of machines or equipment from energy sources.

Lockout devices and tagout devices shall be singularly identified; shall be the only device (s) used for controlling energy; shall not be used for other purposes; and shall meet the requirements of WAC 296-24-11009 and WAC 296-24-140.

(Contractors, etc.): Whenever outside servicing personnel are to be engaged in activities covered by the scope and application of WAC 296-24-110, T. W. Clark Construction, LLC and the outside employer shall inform each other of their respective Lockout or Tagout procedures.

The outside employer shall assure that all outside personnel shall comply with all requirements of the T. W. Clark Construction, LLC Lockout/Tagout control program.

XV. CONFINED SPACE ENTRY PROGRAM

(To be complete, this program must be accompanied by WAC 296-63-Part M)

Purpose of the Program: The purpose of this written program is to define the T. W. Clark Construction, LLC rules and regulations for entry into and work in confined spaces.

Confined space hazards pose a more serious threat to the safety of T. W. Clark Construction, LLC Construction employees than any other workplace hazard.

This confined space entry program must be read and understood by all employees who enter confined spaces, as well as the supervisors of those employees.

DEFINITIONS:

A. CONFINED SPACE: A confined space means any space having a limited means of egress which is subject to the accumulation of toxic or flammable contaminants or has an oxygen deficient atmosphere. Confined spaces include, but are not limited to, storage tanks, process vessels, bins, boilers, ventilation or exhaust ducts, sewers, underground utility vaults, tunnels, pipelines, and open top spaces more than four feet in depth, such as pits, tubes, vaults and vessels.

B. TOXIC ATMOSPHERES: Toxic atmospheres are atmospheres having concentrations of airborne chemicals in excess of permissible exposure limits as defined in WAC 296-62-075 through 296-62-07515.

C. CHEMICAL CONTACT AGENTS: Chemical Contact Agents are the following:

1. Corrosives: Substances which cause destruction of living tissue by chemical action, when in contact with the tissue.

2. Irritants: Substances which on immediate, prolonged, or repeated contact with normal living tissue will induce an inflammatory reaction.

3. Toxicants: Substances which have the inherent capacity to produce personal injury or illness by absorption through any body surface.

D. OXYGEN DEFICIENT ATMOSPHERES: Oxygen deficient atmospheres are deemed to exist if the atmosphere at sea level has less than 19.5% oxygen by volume or has a partial pressure of 135 millimeters of mercury or less. These values will change when working at higher altitudes and should be determined for an individual location.

E. OXYGEN ENRICHED ATMOSPHERES: Oxygen enriched atmosphere means an atmosphere containing more than 23.5% oxygen by volume.

F. FLAMMABLE ATMOSPHERES: Flammable atmospheres in excess of 10% of the lower flammable limit. These are usually toxic as well as flammable.

GENERAL GUIDELINES FOR ENTRY INTO CONFINED SPACES:

A. ENTRY SUPERVISOR: All entry supervisors (ES) for T. W. Clark Construction, LLC 1-5 Outside Personnel Construction, Inc. will be trained and designated as a competent person in regards to confined spaces. The ES will be responsible for insuring that all of the on-site requirements of this plan are effectively accomplished. The ES must be aware of any existing or potential hazards and understand both the long and short term effects. The ES will also be responsible for accomplishing the entry permit requirements to include to include the permit cancellation. All ES's will know and understand their duties as they are stated in WAC 296-62-14517.

B. ATTENDANTS: All confined space attendants of T. W. Clark Construction, LLC will be specifically designated as an attendant by the entry supervisor. If the duties of both positions can be adequately fulfilled, the entry supervisor may also serve as the attendant. The duties of the attendant are critical to the safety of a confined space. Therefore, each attendant must be carefully selected and must possess the abilities to effectively accomplish the assigned duties. The required duties of the attendant will be I.A.W. WAC 296-62-14515. All attendants will be responsible for knowing and understanding their duties as they are stated in the applicable directives.

C. AUTHORIZED ENTRANTS: All entrants into a confined space under the control of T. W. Clark Construction, LLC will be authorized entrants. Unauthorized personnel of T. W. Clark Construction, LLC or employees of other businesses or contractors will be prohibited from entry into the confined space unless previously coordinated, agreed upon, or part of a

contractual agreement. All authorized entrants shall be thoroughly trained in order to insure that each entrant possesses the understanding, knowledge and skills necessary for the safe performance of the assigned duties. Entrants will be carefully selected, and must be physically suited to perform the required tasks within the confined space. The duties of the authorized entrant will be I.A.W. WAC 296-62-14513. Each entrant will be knowledgeable of these duties as they are written. Under no circumstances will the entry supervisor perform the duties of an authorized entrant while simultaneously performing the duties of an entry supervisor.

D. TOXIC OR FLAMMABLE ATMOSPHERES: Employees shall not be permitted to enter atmospheres in a confined space which have contained toxic, flammable or corrosive materials or which may have had such materials accidentally introduced or generated until such space has been evaluated and/or tested by a competent person who shall declare the space safe for entry. Additional considerations should be given to those areas that also have exposures to noise, temperature extremes, and ionizing radiation.

E. TOXIC ATMOSPHERES:

1. Toxic atmospheres are atmospheres where contamination is below the permissible exposure limits as defined by WAC 296-62. These atmospheres may be entered without respiratory protection.
2. Atmospheres immediately dangerous to life and health may be entered only in the event of emergency and then only when employees are protected by equipment approved for such exposure.
3. Atmospheres where the toxicity is not known shall require full protection.
4. Entry into spaces which contain or could contain corrosive chemicals which are toxic through skin absorption shall require equipment to prevent skin and/or eye contact.

F. FLAMMABLE ATMOSPHERES: Atmospheres which contain or could contain flammable gasses or vapors shall not be entered if the concentration of gasses or vapors in any part of the area is more than 10% of the lower explosive limit, except in the event of an emergency and then only when employees are protected be equipment approved for such exposures, i.e., non-explosive/conductive tools, boots, etc.

G. OXYGEN DEFICIENCY OR EXCESS:

1. All employees required to enter confined spaces shall be instructed as to the nature of the hazards involved, the necessary precautions to be taken and in the use of protective and emergency equipment required.
2. Atmospheres having an oxygen content less that 19.5% oxygen at sea level (this may deviate at higher elevations) shall not be entered without approved respiratory protective equipment which will provide an adequate supply of breathing air.
3. In the event air may be diluted by an unknown gas, the atmosphere shall be considered highly toxic and/or flammable.

H. MECHANICAL HAZARDS: Confined areas containing parts which may move or which contain agitators, fans or other power driven moving parts of potential hazard to employees

shall not be entered until it is assured that such parts cannot move to injure the employee. This normally can be accomplished by establishing lock out/tag out programs.

I. ELECTRICAL HAZARDS:

1. Electrical circuits in the confined area which may present a hazard shall be disconnected, locked out and tagged. All temporary lights shall be protected against damage, and cords shall be heavy duty and kept clear of working spaces and walkways. Only low voltage, battery operated, or ground fault protected equipment shall be used on water-sides of boilers or when electrically conductive liquids are involved.

2. Electrical supply circuits, lighting, portable tools, and other equipment used where potentially hazardous concentrations of flammable vapors, gasses or dusts are present or may develop shall conform to the current National Electrical Code Requirements.

3. Portable electrical tools shall be grounded or isolation transformers, ground fault interrupters or double insulated tools shall be required.

J. PROCEDURES FOR ENTRY INTO TOXIC OF FLAMMABLE ATMOSPHERES: Every reasonable effort shall be made to reduce the hazard to safe levels prior to permitting entry into the confined space.

1. Preliminary preparations:

a. Determine type and extent of contamination, including gasses, liquids, sludge, residue or absorbed and/or unabsorbed material.
b. Survey area to determine the effect of escaped gasses or vapors in surrounding areas.
c. Post or barricade area to prevent unauthorized entry.
d. Ensure control of all sources of ignition when a potential fire hazard exists.
e. Collect and inspect the condition of all equipment needed, including pumps ventilating equipment, personal protective equipment, atmospheric testing equipment, and mechanical equipment. Ensure that all equipment is in good condition and is compatible with the work involved.
f. Ensure that all required personnel are available and familiar with the hazards.
g. Confined spaces having the potential for exposures to workers by chemical contact shall be flushed or cleaned to minimize exposure to all workers. In additions, personal protective equipment hall be provided when required. Material safety data sheets shall be provided to workers exposed to the hazards.

2. Removal of Flammable or Toxic Material:

a. Remove all possible liquid products, sludge, or residue if present by draining, pumping or washing as applicable. Dispose of solid, liquid or gaseous materials in a manner which will not cause air or water pollution, a fire hazard or endanger workers or equipment.
b. Vent any pressure as required.
c. Isolate the tank or confined space from all potential sources of hazardous material by one of the following:

(1) Remove a valve, spool piece, or expansion joint and cap open ends. Tag line.
(2) Insert a blank in the line and tag it.

3. Vapor Freeing: Vapor Freeing is usually accomplished by ventilation. The effectiveness is dependent upon the number of air changes and the efficiency of mixing of the air with the gas in the tank. Ventilation by supplying air provides more efficient mixing that exhaust air, by cannot be used if it creates a hazard near the discharge point. Exhaust air ducts must be placed at locations remote from air inlets and may require moving to various locations.

a. Prior to entry, a minimum of five air changes are recommended where oxygen deficiency may exist and ten air changes are recommended where toxic and/or flammable materials are involved.

b. Concentrations of vapors or gases in the flammable or above the flammable range may require replacement by an inert gas, such as nitrogen or carbon dioxide to prevent explosions.

(1) When inert gasses are used, they must subsequently be replaced by uncontaminated air prior to entry, except when the inerting provides safer working conditions.

c. All fans and other equipment used for removing flammable gases or vapors shall conform to NFPA requirements and shall not create an ignition hazard.

d. Oxygen shall never be used for ventilation.

K. EVALUATION OF POTENTIALLY HAZARDOUS ATMOSPHERES: Evaluation of the atmospheres shall be made by competent personnel.

1. Atmospheric tests shall be made using accepted procedures and/or instruments to determine the kind and extent of any hazard present. However, atmospheric tests should be supplemented by other types of evaluation.

2. Evaluation shall consider such factors as degree of toxicity, flammability, oxygen deficiency, noise, temperature, vapor pressure, absorption of surface sludges and residue and ventilation rates.

3. Evaluation shall be made immediately prior to entry and during occupation at intervals dependent on the possibility of changing conditions.

4. Testing or other evaluation shall be made in al locations where employees may be exposed.

5. If there is any doubt as to the validity of evaluation, the hazard shall be assumed to be high, and personal protective equipment and measures will be used accordingly.

6. A confined space permit shall be completed prior to entry into confined spaces. (See attached Confirmed Space Entry Permit Form).

L. ENTRY INTO CONFINED SPACE: After initial cleaning, vapor freeing, and evaluation of atmosphere, the confined space may be entered to complete cleaning, repair or other work.

1. Respiratory protective equipment shall be used when indicated.

2. An observer capable of maintaining communications at all times shall be located outside the confined space. The observer shall have respiratory protection available when indicated.

3. If the possibility of a highly toxic or flammable atmosphere, or oxygen deficiency exists or can develop, workers shall wear a safety harness with lifeline attached and a means of

rescue shall be provided. A mechanical retrieval or lifting system shall be utilized by both the observer and the worker.

4. Fire extinguishing equipment shall be immediately available when indicated.

5. Ventilation shall be maintained at all times when employees are in confined spaces except when the atmosphere has been purposely inerted to provide safer working conditions. All work shall stop and the area shall be evacuated if ventilation fails.

6. All tools and lighting shall be available as required.

7. Emergency lighting shall be available as required.

8. The area shall be evacuated if any indication of ill effect, such as dizziness, irritation or excessive odors are noted.

M. RECLASSIFICATION OF A PERMIT SPACE: If a permit spaces poses no actual or potential atmospheric hazards and all hazards within the space have been eliminated without entry into the space, the permit space may be reclassified as a non-permit confined space for as long as the non-atmospheric hazards remain eliminated. All spaces shall be considered to be permit required confined spaces until proven otherwise by a competent person and the use of established procedures. Appropriate documentation substantiating the basis for the reclassification shall be available on site. The documentation shall also contain the date, locations of the space and the signature of the competent person.

N. HOT WORK:

1. Any hot work involving sources of ignition and including welding and burning shall require positive assurance that fire hazards and flammable atmospheres have been controlled. Combustible material shall be protected.

2. Usually, the atmosphere should be tested by a combustible gas indicator and/or other device as indicated. Tests should be made frequently enough to assure that safe conditions prevail.

3. Where hot work involves the generation of toxic gasses, vapors, or fumes, local exhaust and/or respiratory protection shall be required.

4. Compressed gas cylinders or electric generator should be attended at all times. Sources of compressed gases or arc welding power shall be turned off immediately when an emergency arises or when work is interrupted or completed.

O. USE OF TOXIC AND/OR FLAMMABLE MATERIAL IN CONFINED SPACES: Work in confined spaces frequently requires the use of toxic or flammable materials. These include but are not limited to, coatings, linings, paints, cements and solvents.

1. Quantities of toxic or flammable materials brought into or used in confined spaces shall be limited to the smallest amount consistent with efficient use.

2. Containers shall be designated to minimize evaporation and spillage. Safety cans or small squeeze bottles are preferable when applicable.

3. Continuous ventilation shall be provided in sufficient quantity and designed to control fire and health hazards.

4. Atmospheres shall be tested/evaluated to provide positive assurance that hazards do not exist. In no instance, shall flammable vapor concentration exceed 10% of the lower

flammable limit. Evaluation shall be repeated at intervals to ensure no hazardous build up of concentrations.

5. Spraying of toxic or flammable substances, such as paint, is not recommended.
6. Respiratory equipment shall be used when required.
7. Sources of ignition shall be eliminated when flammable liquids are used.
8. Materials, equipment and training shall be provided to lean up spills.
9. All applicable instructions or recommendations from the manufacturer shall be enforced.

P. RESCUE:

1. Depending upon job location, the classification of the confined space and the availability of professional or para rescue services, a suitable rescue procedure will be established for each confined space entry.
2. If trained employees of T. W. Clark Construction, LLC are used, they will be trained I.A.W. WAC 296-62-14519(1)(a-d).
3. If other rescue services such as a fire department or paramedic unit are used, the notification and coordination with these units will be I.A.W. WAC 296-62-14519(2)(a,b).
4. If non-entry rescue procedures are to be employed, retrieval systems or methods shall be used. For non-entry rescue, the rescue personnel shall not enter the permit space. There will be no exceptions. The procedure for non-entry rescue will be I.A.W. WAC 296-62-14519(3)(a,b).

XV. ASSURED GROUNDING/GFCI POLICY

Ground-fault circuit interrupters. All 120-volt, single-phase, 15-ampere and 20-ampere receptacle outlets on construction sites, which are not a part of the permanent wiring of the building or structure and which are in use by employees, must have approved ground-fault circuit interrupters for personnel protection. Receptacles on a two-wire, single-phase portable or vehicle-mounted generator rated not more than 5kW, where the circuit conductors of the generator are insulated from the generator frame and all other grounded surfaces, need not be protected with ground-fault circuit interrupters.

T.W. Clark Construction, LLC will test all 120-volt, single-phase, 15- and 20-ampere receptacles which are not a part of the permanent wiring of the building or structure, 120-volt flexible cord sets, and 120-volt cord- and plug-connected equipment required to be grounded shall be tested as follows:

Testing Schedule - All required tests shall be performed by a competent person:

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

Use of Electric Circuit Testing Devices

A suggested testing procedure is as follows:

- **Receptacle** - Use receptacle tester to determine correct connections to terminals.
- **Cord Sets** - First, plug the cord into a properly wired receptacle which has been tested as above. Then plug receptacle tester into the cord connector (female device) or cord set to determine both continuity of grounding conductor and correct connections to terminals.
- **Cord and Plug** - Connected Equipment - Use continuity tester. Connect or touch one terminal of continuity tester to the metal frame of the equipment or tool and the other terminal to the grounding prong of the attachment cap plug at the end of the cord. An audible (bell) or visual (light) signal of the tester indicates that there is continuity of the grounding conductor. Although not required by OSHA, it is suggested that this test also be made between the metal frame and each of the other two prongs of the attachment cap plug. If there is a signal from this test, it indicates a possible ground fault and the tool should be checked further.

A GFCI is a fast-acting circuit breaker that senses small imbalances in the circuit caused by current leakage to ground and, in a fraction of a second, shuts off the electricity. The GFCI continually matches the amount of current going to an electrical device against the amount of current returning from the device along the electrical path. Whenever the amount "going" differs from the amount "returning" by approximately 5 milliamps, the GFCI interrupts the electric power within as little as 1/40 of a second.

The GFCI, however, does not protect from line-to-line contact hazards—such as a worker holding two "hot" wires or a hot and a neutral wire in each hand. It protects against the most common form of electrical shock hazard—the ground fault, and protects against fires, overheating, and destruction of insulation on wiring.

GFCIs can be used successfully to reduce electrical hazards on construction sites. Tripping of GFCIs—interrupting current flow—is sometimes caused by wet connectors and tools. It is good practice to limit exposure of connectors and tools to excessive moisture by using watertight or sealable connectors.

Providing more GFCIs or shorter circuits can prevent tripping caused by the cumulative leakage from several tools or by leakages from extremely long circuits.

1926.404 (b)(l)(iii)(B): The employer shall designate one or more competent persons (as designed in 1926.32(f)) to implement the program.

1926.404 (b)(l)(iii)(C): Each cord set, attachment cap, plug and receptacle of cord sets, and any equipment connected by cord and plug, except cord sets and receptacles which are fixed and not exposed to damage, shall be visually inspected before each day's use for external defects such as: deformed or missing pins, insulation damage, or indications of possible internal damage. Equipment found damaged or defective shall not be used until repaired.

XVI. Respirable Crystalline Silica Program

PURPOSE

This Respirable Crystalline Silica Program was developed to prevent employee exposure to hazardous levels of Respirable Crystalline Silica that could result through construction activities or nearby construction activities occurring on worksites. Respirable Crystalline Silica exposure at hazardous levels can lead to lung cancer, silicosis, chronic obstructive pulmonary disease, and kidney disease. It is intended to meet the requirements of the Respirable Crystalline Silica Construction Standard (29 CFR 1926.1153) established by the Occupational Safety and Health Administration (OSHA).

All work involving chipping, cutting, drilling, grinding, or similar activities on materials containing Crystalline Silica can lead to the release of respirable-sized particles of Crystalline Silica (i.e. Respirable Crystalline Silica). Crystalline Silica is a basic component of soil, sand, granite and many other minerals. Quartz is the most common form of Crystalline Silica. Many materials found on constructions sites include Crystalline Silica; including but not limited to – cement, concrete, asphalt, pre-formed structures (inlets, pipe, etc.) and others. Consequently, this program has been developed to address and control these potential exposures to prevent our employees from experiencing the effects of occupational illnesses related to Respirable Crystalline Silica exposure.

SCOPE

This Respirable Crystalline Silica Program applies to all employees who have the potential to be exposed to Respirable Crystalline Silica when covered by the OSHA Standard. The OSHA Respirable Crystalline Silica Construction Standard applies to all occupational exposures to Respirable Crystalline Silica in construction work, except where employee exposure will remain below 25 micrograms of Respirable Crystalline Silica per cubic meter of air (25 $\mu g/m^3$) as an 8-hour time-weighted average (TWA) under any foreseeable conditions.

RESPONSIBILITIES

T.W.Clark Construction firmly believes protecting the health and safety of our employees is everyone's responsibility. This responsibility begins with upper management providing the necessary support to properly implement this program. However, all levels of the organization assume some level of responsibility for this program including the following positions.

Upper Management:

- Conduct job site assessments for Silica containing materials and perform employee Respirable Crystalline Silica hazard assessments in order to determine if an employee's exposure will be above 25 $\mu g/m^3$ as an 8-hour TWA under any foreseeable conditions

- Select and implement into the project's ECP the appropriate control measures in accordance with the Construction Tasks identified in OSHA's Construction Standard Table 1; and potentially including (but not limited to) - a written Exposure Control Plan (ECP), exposure monitoring, Hazard Communication training, medical surveillance, housekeeping and others.

  NOTE: OSHA's Construction Standard Table 1 is a list of 18 common construction tasks along with acceptable exposure control methods and work practices that limit exposure for those tasks.

- Ensure that the materials, tools, equipment, personal protective equipment (PPE), and other resources (such as worker training) required to fully implement and maintain this Respirable Crystalline Silica Program are in place and readily available if needed.

- Ensure that Site Managers, Competent Persons, and employees are educated in the hazards of Silica exposure and trained to work safely with Silica in accordance with OSHA's Respirable Crystalline Silica Construction Standard and OSHA's Hazard Communication Standard. Managers and Competent Persons may receive more advanced training than other employees.

- Maintain written records of training (for example, proper use of respirators), ECPs, inspections (for equipment, PPE, and work methods/practices), medical surveillance (under lock and key), respirator medical clearances (under lock and key) and fit-test results.

- Conduct an annual review (or more often if conditions change) of the effectiveness of this program and any active project ECP's that extend beyond a year. This includes a review of available dust control technologies to ensure these are selected and used when practical.

- Coordinate work with other employers and contractors to ensure a safe work environment relative to Silica exposure.

Site Manager:

- Ensure all applicable elements of this Respirable Crystalline Silica Program are implemented on the project including the selection of a Competent Person.

- Assist the Safety Department in conduct job site assessments for Silica containing materials and perform employee Respirable Crystalline Silica hazard assessments in order to determine if an ECP, exposure monitoring, and medical surveillance is necessary.

- Assist in the selection and implementation of the appropriate control measures in accordance with the Construction Tasks identified in OSHA's Construction Standard Table 1; and potentially including (but not limited to) - a written Exposure Control Plan (ECP), exposure monitoring, Hazard Communication training, medical surveillance, housekeeping and others.

- Ensure that employees using respirators have been properly trained, medically cleared, and fit-tested in accordance with the company's Respiratory Protection Program. This process will be documented.

- Ensure that work is conducted in a manner that minimizes and adequately controls the risk to workers and others. This includes ensuring that workers use appropriate engineering controls, work practices, and wear the necessary PPE.

- Where there is risk of exposure to Silica dust, verify employees are properly trained on the applicable contents of this program, the project-specific ECP, and the applicable OSHA Standards (such as Hazard Communication). Ensure employees are provided appropriate PPE when conducting such work.

Competent Person and/or Site Manager (Superintendent, Foreman, etc.)

- Make frequent and regular inspections of job sites, materials, and equipment to implement the written ECP.

- Identify existing and foreseeable Respirable Crystalline Silica hazards in the workplace and take prompt corrective measures to eliminate or minimize them.

- Notify the Project Manager and/or Safety Department of any deficiencies identified during inspections in order to coordinate and facilitate prompt corrective action.

- Assist the Project Manager and Safety Department in conducting job site assessments for Silica containing materials and perform employee Respirable Crystalline Silica hazard assessments in order to determine if an ECP, exposure monitoring, and medical surveillance is necessary.

Employees:

- Follow recognized work procedures (such as the Construction Tasks identified in OSHA's Construction Standard Table 1) as established in the project's ECP and this program.
- Use the assigned PPE in an effective and safe manner.
- Participate in Respirable Crystalline Silica exposure monitoring and the medical surveillance program.
- Report any unsafe conditions or acts to the Site Manager and/or Competent Person.
- Report any exposure incidents or any signs or symptoms of Silica illness.

DEFINITIONS

If a definition is not listed in this section, please contact your supervisor. If your supervisor is unaware of what the term means, please contact the Competent Person or your Safety Department.

- Action Level means a concentration of airborne Respirable Crystalline Silica of 25 $\mu g/m^3$, calculated as an 8-hour TWA.
- Competent Person means an individual who is capable of identifying existing and foreseeable Respirable Crystalline Silica hazards in the workplace and who has authorization to take prompt corrective measures to eliminate or minimize them.
- Employee Exposure means the exposure to airborne Respirable Crystalline Silica that would occur if the employee were not using a respirator.
- High-Efficiency Particulate Air (HEPA) Filter means a filter that is at least 99.97 percent efficient in removing monodispersed particles of 0.3 micrometers in diameter.
- Objective Data means information, such as air monitoring data from industry-wide surveys or calculations based on the composition of a substance, demonstrating employee exposure to Respirable Crystalline Silica associated with a particular product or material or a specific process, task, or activity. The data must reflect workplace conditions closely resembling or with a higher exposure potential than the processes,

types of material, control methods, work practices, and environmental conditions in the employer's current operations.

- Permissible Exposure Limit (PEL) means the employer shall ensure that no employee is exposed to an airborne concentration of Respirable Crystalline Silica in excess of 50 $\mu g/m^3$, calculated as an 8-hour TWA.

- Physician or Other Licensed Health Care Professional (PLHCP) means an individual whose legally permitted scope of practice (i.e., license, registration, or certification) allows him or her to independently provide or be delegated the responsibility to provide some or all of the particular health care services required by the Medical Surveillance Section of the OSHA Respirable Crystalline Silica Standard.

- Respirable Crystalline Silica means Quartz, Cristobalite, and/or Tridymite contained in airborne particles that are determined to be respirable by a sampling device designed to meet the characteristics for respirable-particle size- selective samplers specified in the International Organization for Standardization (ISO) 7708:1995: Air Quality-Particle Size Fraction Definitions for Health-Related Sampling.

- Specialist means an American Board Certified Specialist in Pulmonary Disease or an American Board Certified Specialist in Occupational Medicine.

REQUIREMENTS

Specified Exposure Control Methods

When possible and applicable, T.W.Clark Construction will conduct activities with potential Silica exposure to be consistent with OSHA's Construction Standard Table 1. Supervisors will ensure each employee under their supervision and engaged in a task identified on OSHA's Construction Standard Table 1 have fully and properly implemented the engineering controls, work practices, and respiratory protection specified for the task on Table 1 (unless T.W.Clark Construction has assessed and limited the exposure of the employee to Respirable Crystalline Silica in accordance with the Alternative Exposure Control Methods Section of this program).

The task(s) being performed by T.W.Clark Construction identified on OSHA's Construction Standard Table 1 is/are: Select any/all of the following that apply:

Table 1: Specified Exposure Control Methods When Working With Materials Containing Crystalline Silica

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
1	Stationary masonry saws	• Use saw equipped with integrated water delivery system that continuously feeds water to the blade. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	None	None
2a	Handheld power saws (any blade diameter) when used outdoors	• Use saw equipped with integrated water delivery system that continuously feeds water to the blade. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	None	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
2b	Handheld power saws (any blade diameter) when used indoors or in an enclosed area	• Use saw equipped with integrated water delivery system that continuously feeds water to the blade. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
3	Handheld power saws for cutting fiber-cement board (with blade diameter of 8 inches or less) for tasks performed outdoors only	• Use saw equipped with commercially available dust collection system. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency.	None	None
4a	Walk-behind saws when used outdoors	• Use saw equipped with integrated water delivery system that continuously feeds water to the blade. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	None	None
4b	Walk-behind saws when used indoors or in an enclosed area	• Use saw equipped with integrated water delivery system that continuously feeds water to the blade. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
5	Drivable saws for tasks performed outdoors only	• Use saw equipped with integrated water delivery system that continuously feeds water to the blade. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	None	None
6	Rig-mounted core saws or drills	• Use tool equipped with integrated water delivery system that supplies water to cutting	None	None

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
		surface. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.		
7	Handheld and stand-mounted drills (including impact and rotary hammer drills)	• Use drill equipped with commercially available shroud or cowling with dust collection system. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism. • Use a HEPA-filtered vacuum when cleaning holes.	None	None
8	Dowel drilling rigs for concrete for tasks performed outdoors only	• Use shroud around drill bit with a dust collection system. • Dust collector must have a filter with 99% or greater efficiency and a filter cleaning mechanism. • Use a HEPA-filtered vacuum when cleaning holes.	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
9a	Vehicle-mounted drilling rigs for rock and concrete	• Use dust collection system with close capture hood or shroud around drill bit with a low-flow water spray to wet the dust at the discharge point from the dust collector.	None	None
9b	Vehicle-mounted drilling rigs for rock and concrete	• Operate from within an enclosed cab and use water for dust suppression on drill bit.	None	None
10a	Jackhammers and handheld powered chipping tools when used outdoors	• Use tool with water delivery system that supplies a continuous stream or spray of water at the point of impact.	None	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
10b	Jackhammers and handheld powered chipping tools when used indoors or in an enclosed area	• Use tool with water delivery system that supplies a continuous stream or spray of water at the point of impact.	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
10c	Jackhammers and handheld powered chipping tools when used outdoors	• Use tool equipped with commercially available shroud and dust collection system. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide the air flow recommended by the tool manufacturer, or	None	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
		greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism.		
10d	Jackhammers and handheld powered chipping tools when used indoors or in an enclosed area	• Use tool equipped with commercially available shroud and dust collection system. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism.	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
11	Handheld grinders for mortar removal (i.e., tuckpointing)	• Use grinder equipped with commercially available shroud and dust collection system. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism.	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask	Powered Air-Purifying Respirator (PAPR) with P100 Filters
12a	Handheld grinders for uses other than mortar removal for tasks performed outdoors only	• Use grinder equipped with integrated water delivery system that continuously feeds water to the grinding surface. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	None	None
12b	Handheld grinders for uses other than mortar removal when used outdoors	• Use grinder equipped with commercially available shroud and dust collection system. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism.	None	None
12c	Handheld grinders for uses other than mortar removal when used indoors or in an enclosed area	• Use grinder equipped with commercially available shroud and dust collection system. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism.	None	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
13a	Walk-behind milling	• Use machine equipped with integrated water	None	None

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
	machines and floor grinders	delivery system that continuously feeds water to the cutting surface. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.		
13b	Walk-behind milling machines and floor grinders	• Use machine equipped with dust collection system recommended by the manufacturer. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide the air flow recommended by the manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism. • When used indoors or in an enclosed area, use a HEPA-filtered vacuum to remove loose dust in between passes.	None	None
14	Small drivable milling machines (less than half-lane)	• Use a machine equipped with supplemental water sprays designed to suppress dust. • Water must be combined with a surfactant. • Operate and maintain machine to minimize dust emissions.	None	None
15a	Large drivable milling machines (half-lane and larger) for cuts of any depth on asphalt only	• Use machine equipped with exhaust ventilation on drum enclosure and supplemental water sprays designed to suppress dust. • Operate and maintain machine to minimize dust emissions.	None	None
15b	Large drivable milling machines (half-lane and larger) for cuts of four inches in depth or less on any substrate	• Use machine equipped with exhaust ventilation on drum enclosure and supplemental water sprays designed to suppress dust. • Operate and maintain machine to minimize dust emissions.	None	None
15c	Large drivable milling machines (half-lane and larger) for cuts of four inches in depth or less on any substrate	• Use a machine equipped with supplemental water spray designed to suppress dust. • Water must be combined with a surfactant. • Operate and maintain machine to minimize dust emissions.	None	None
16	Crushing machines	• Use equipment designed to deliver water spray or mist for dust suppression at crusher and other points where dust is generated (e.g., hoppers, conveyers, sieves/sizing or vibrating components, and discharge points). • Operate and maintain machine in accordance with manufacturer's instructions to minimize dust emissions. • Use a ventilated booth that provides fresh, climate-controlled air to the operator, or a remote control station.	None	None
17a	Heavy equipment and utility vehicles used to abrade or fracture	• Operate equipment from within an enclosed cab.	None	None

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
	silica-containing materials (e.g., hoe-ramming, rock ripping) or used during demolition activities involving silica-containing materials			
17b	Heavy equipment and utility vehicles used to abrade or fracture silica-containing materials (e.g., hoe-ramming, rock ripping) or used during demolition activities involving silica-containing materials	• When employees outside of the cab are engaged in the task, apply water and/or dust suppressants as necessary to minimize dust emissions.	None	None
18a	Heavy equipment and utility vehicles for tasks such as grading and excavating but not including demolishing, abrading, or fracturing silica-containing materials	• Apply water and/or dust suppressants as necessary to minimize dust emissions.	None	None
18b	Heavy equipment and utility vehicles for tasks such as grading and excavating but not including demolishing, abrading, or fracturing silica-containing materials	• When the equipment operator is the only employee engaged in the task, operate equipment from within an enclosed cab.	None	None

When implementing the control measures specified in Table 1, T.W.Clark Construction shall:

- For tasks performed indoors or in enclosed areas, provide a means of exhaust as needed to minimize the accumulation of visible airborne dust;
- For tasks performed using wet methods, apply water at flow rates sufficient to minimize release of visible dust;
- For measures implemented that include an enclosed cab or booth, ensure that the enclosed cab or booth:

- Is maintained as free as practicable from settled dust;
- Has door seals and closing mechanisms that work properly;
- Has gaskets and seals that are in good condition and working properly;
- Is under positive pressure maintained through continuous delivery of fresh air;
- Has intake air that is filtered through a filter that is 95% efficient in the 0.3-10.0 μm range (e.g., MERV-16 or better); and
- Has heating and cooling capabilities.

- Where an employee performs more than one task included on OSHA's Construction Standard Table 1 during the course of a shift, and the total duration of all tasks combined is more than four hours, the required respiratory protection for each task is the respiratory protection specified for more than four hours per shift. If the total duration of all tasks on Table 1 combined is less than four hours, the required respiratory protection for each task is the respiratory protection specified for less than four hours per shift.

Alternative Exposure Control Methods

Alternative Exposure Control Methods apply for tasks not listed in OSHA's Construction Standard Table 1, or where T.W.Clark Construction cannot not fully and properly implement the engineering controls, work practices, and respiratory protection described in Table 1.

First, T.W.Clark Construction will assess the exposure of each employee who is or may reasonably be expected to be exposed to Respirable Crystalline Silica at or above the Action Level in accordance with either the Performance Option or the Scheduled Monitoring Option.

- **Performance Option** – T.W.Clark Construction will assess the 8-hour TWA exposure for each employee on the basis of any combination of air monitoring data or objective data sufficient to accurately characterize employee exposures to Respirable Crystalline Silica.

- **Scheduled Monitoring Option:**
  - T.W.Clark Construction will perform initial monitoring to assess the 8-hour TWA exposure for each employee on the basis of one or more personal breathing zone air samples that reflect the exposures of employees on each shift, for each job classification, and in each work area. Where several employees perform the same tasks on the same shift and in the same work area, T.W.Clark Construction will plan to monitor a representative fraction of these employees. When using

representative monitoring, T.W.Clark Construction will sample the employee(s) who are expected to have the highest exposure to Respirable Crystalline Silica.

- If initial monitoring indicates that employee exposures are below the Action Level, T.W.Clark Construction will probably discontinue monitoring for those employees whose exposures are represented by such monitoring.

- Where the most recent exposure monitoring indicates that employee exposures are at or above the Action Level but at or below the PEL, T.W.Clark Construction will repeat such monitoring within six months of the most recent monitoring.

- Where the most recent exposure monitoring indicates that employee exposures are above the PEL, T.W.Clark Construction will repeat such monitoring within three months of the most recent monitoring.

- Where the most recent (non-initial) exposure monitoring indicates that employee exposures are below the Action Level, T.W.Clark Construction will repeat such monitoring within six months of the most recent monitoring until two consecutive measurements, taken seven or more days apart, are below the Action Level, at which time T.W.Clark Construction will probably discontinue monitoring for those employees whose exposures are represented by such monitoring, except when a reassessment is required. T.W.Clark Construction will reassess exposures whenever a change in the production, process, control equipment, personnel, or work practices may reasonably be expected to result in new or additional exposures at or above the Action Level, or when T.W.Clark Construction has any reason to believe that new or additional exposures at or above the Action Level have occurred.

T.W.Clark Construction will ensure that all Respirable Crystalline Silica samples taken to satisfy the monitoring requirements of this program and OSHA are collected by a qualified individual (i.e. a Certified Industrial Hygienist) and the samples are evaluated by a qualified laboratory (i.e. accredited to ANS/ISO/IEC Standard 17025:2005 with respect to Crystalline Silica analyses by a body that is compliant with ISO/IEC Standard 17011:2004 for implementation of quality assessment programs).

Within five working days after completing an exposure assessment, T.W.Clark Construction will individually notify each affected employee in writing of the results of that assessment or post the results in an appropriate location accessible to all affected employees.

Whenever an exposure assessment indicates that employee exposure is above the PEL, T.W.Clark Construction will describe in the written notification the corrective action being taken to reduce employee exposure to or below the PEL.

Where air monitoring is performed, T.W.Clark Construction will provide affected employees or their designated representatives an opportunity to observe any monitoring of employee

exposure to Respirable Crystalline Silica. When observation of monitoring requires entry into an area where the use of protective clothing or equipment is required for any workplace hazard, T.W.Clark Construction will provide the observer with protective clothing and equipment at no cost and shall ensure that the observer uses such clothing and equipment.

Once air monitoring has been performed, T.W.Clark Construction will determine its method of compliance based on the monitoring data and the hierarchy of controls. T.W.Clark Construction will use engineering and work practice controls to reduce and maintain employee exposure to Respirable Crystalline Silica to or below the PEL, unless T.W.Clark Construction can demonstrate that such controls are not feasible. Wherever such feasible engineering and work practice controls are not sufficient to reduce employee exposure to or below the PEL, T.W.Clark Construction will nonetheless use them to reduce employee exposure to the lowest feasible level and shall supplement them with the use of respiratory protection.

In addition to the requirements of this program, T.W.Clark Construction will comply with other programs and OSHA standards (such as 29 CFR 1926.57 [Ventilation]), when applicable where abrasive blasting is conducted using Crystalline Silica-containing blasting agents, or where abrasive blasting is conducted on substrates that contain Crystalline Silica.

Control Methods

T.W.Clark Construction will provide control methods that are either consistent with Table 1 or otherwise minimize worker exposures to Silica. These exposure control methods can include engineering controls, work practices, and respiratory protection

Respiratory Protection

Where respiratory protection is required by this program, T.W.Clark Construction will provide each employee an appropriate respirator that complies with the requirements of the company's Respiratory Protection Program and the OSHA Respiratory Protection Standard (29 CFR 1910.134).

Respiratory protection is required where specified by the OSHA Construction Standard Table 1, for tasks not listed in Table 1, or where the company has not fully and properly implemented the engineering controls, work practices, and respiratory protection described in Table 1. Situations requiring respiratory protection include:

- Where exposures exceed the PEL during periods necessary to install or implement feasible engineering and work practice controls;

- Where exposures exceed the PEL during tasks, such as certain maintenance and repair tasks, for which engineering and work practice controls are not feasible; and

- During tasks for which an employer has implemented all feasible engineering and work practice controls and such controls are not sufficient to reduce exposures to or below the PEL.

Housekeeping

T.W.Clark Construction does not allow dry sweeping or dry brushing where such activity could contribute to employee exposure to Respirable Crystalline Silica unless wet sweeping, HEPA-filtered vacuuming, or other methods that minimize the likelihood of exposure are not feasible.

T.W.Clark Construction does not allow compressed air to be used to clean clothing or surfaces where such activity could contribute to employee exposure to Respirable Crystalline Silica unless:

- The compressed air is used in conjunction with a ventilation system that effectively captures the dust cloud created by the compressed air; or

- No alternative method is feasible.

Written Exposure Control Plan

When employee exposure on a construction project is expected to be at or above the Action Level, a Written Exposure Control Plan (ECP) will be established and implemented. This ECP will contain at least the following elements:

- A description of the tasks in the workplace that involve exposure to Respirable Crystalline Silica;

- A description of the engineering controls, work practices, and respiratory protection used to limit employee exposure to Respirable Crystalline Silica for each task;

- A description of the housekeeping measures used to limit employee exposure to Respirable Crystalline Silica; and

- A description of the procedures used to restrict access to work areas, when necessary, to minimize the number of employees exposed to Respirable Crystalline Silica and their level of exposure, including exposures generated by other employers or sole proprietors.

The written ECP will designate a Competent Person to make frequent and regular inspections of job sites, materials, and equipment to ensure the ECP is implemented.

The written ECP will be reviewed at least annually to evaluate the effectiveness of it and update it as necessary. Having said this, ECP's are project specific and most project durations do not exceed a year. The written ECP will be readily available for examination and copying, upon request, to each employee covered by this program and/or ECP, their designated representatives, and OSHA.

Medical Surveillance

Medical surveillance will be made available for each employee who will be required to use a respirator for 30 or more days per year due to their Respirable Crystalline Silica exposure. Medical surveillance (i.e. medical examinations and procedures) will be performed by a PLHCP and provided at no cost to the employee at a reasonable time and place.

T.W.Clark Construction will make available an initial (baseline) medical examination within 30 days after initial assignment, unless the employee has received a medical examination that meets the requirements of the OSHA Respirable Crystalline Silica Construction Standard within the last three years. The examination shall consist of:

- A medical and work history, with emphasis on past, present, and anticipated exposure to Respirable Crystalline Silica, dust, and other agents affecting the respiratory system in addition to any history of respiratory system dysfunction, including signs and symptoms of respiratory disease (e.g., shortness of breath, cough, wheezing), history of tuberculosis, and smoking status and history;

- A physical examination with special emphasis on the respiratory system;

- A chest X-ray (a single postero-anterior radiographic projection or radiograph of the chest at full inspiration recorded on either film [no less than 14 x 17 inches and no more than 16 x 17 inches] or digital radiography systems) interpreted and classified according to the International Labour Office (ILO) International Classification of Radiographs of Pneumoconiosis by a NIOSH-certified B Reader;

- A pulmonary function test to include forced vital capacity (FVC) and forced expiratory volume in one second (FEV1) and FEV1/FVC ratio, administered by a spirometry technician with a current certificate from a NIOSH-approved spirometry course;

- Testing for latent tuberculosis infection; and

- Any other tests deemed appropriate by the PLHCP.

T.W.Clark Construction will make available medical examinations that include the aforementioned procedures (except testing for latent tuberculosis infection) at least every

three years. If recommended by the PLHCP, periodic examinations can be more frequently than every three years.

T.W.Clark Construction will ensure that the examining PLHCP has a copy of the OSHA Respirable Crystalline Silica Construction Standard, this program, and the following information:

- 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 (PPE) used or to be used by the employee, including when and for how long the employee has used or will use that equipment; and

- Information from records of employment-related medical examinations previously provided to the employee and currently within the control of T.W.Clark Construction.

T.W.Clark Construction will ensure that the PLHCP explains to the employee the results of the medical examination and provides each employee with a written medical report within 30 days of each medical examination performed. The written report shall contain:

- A statement indicating the results of the medical examination, including any medical condition(s) that would place the employee at increased risk of material impairment to health from exposure to Respirable Crystalline Silica and any medical conditions that require further evaluation or treatment;

- Any recommended limitations on the employee's use of respirators;

- Any recommended limitations on the employee's exposure to Respirable Crystalline Silica; and;

- A statement that the employee should be examined by a Specialist if the chest X-ray is classified as 1/0 or higher by the B Reader, or if referral to a Specialist is otherwise deemed appropriate by the PLHCP.

T.W.Clark Construction will also obtain a written medical opinion from the PLHCP within 30 days of the medical examination. The written opinion shall contain only the following in order to protect the employee's privacy:

- The date of the examination;

- A statement that the examination has met the requirements of the OSHA Respirable Crystalline Silica Construction Standard; and

- Any recommended limitations on the employee's use of respirators.

If the employee provides written authorization, the written opinion shall also contain either or both of the following:

- Any recommended limitations on the employee's exposure to Respirable Crystalline Silica; and/or

- A statement that the employee should be examined by a Specialist if the chest X-ray is classified as 1/0 or higher by the B Reader, or if referral to a Specialist is otherwise deemed appropriate by the PLHCP.

If the PLHCP's written medical opinion indicates that an employee should be examined by a Specialist, T.W.Clark Construction will make available a medical examination by a Specialist within 30 days after receiving the PLHCP's written opinion. T.W.Clark Construction will ensure that the examining Specialist is provided with all of the information that the employer is obligated to provide to the PLHCP.

T.W.Clark Construction will ensure that the Specialist explains to the employee the results of the medical examination and provides each employee with a written medical report within 30 days of the examination. The written report will contain:

- A statement indicating the results of the medical examination, including any medical condition(s) that would place the employee at increased risk of material impairment to health from exposure to Respirable Crystalline Silica and any medical conditions that require further evaluation or treatment;

- Any recommended limitations on the employee's use of respirators; and

- Any recommended limitations on the employee's exposure to respirable crystalline Silica.

In addition, T.W.Clark Construction will obtain a written opinion from the Specialist within 30 days of the medical examination. The written opinion shall contain the following:

- The date of the examination;

- Any recommended limitations on the employee's use of respirators; and

- If the employee provides written authorization, the written opinion shall also contain any recommended limitations on the employee's exposure to Respirable Crystalline Silica.

Hazard Communication

T.W.Clark Construction will include Respirable Crystalline Silica in the company's Hazard Communication Program established to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

T.W.Clark Construction will ensure that each employee has access to labels on containers of Crystalline Silica and those containers respective Safety Data Sheets (SDS's).

All employees will be trained in accordance with the provisions of the OSHA Hazard Communication Standard and the Training Section of this program. This training will cover concerns relating to cancer, lung effects, immune system effects, and kidney effects.

T.W.Clark Construction will ensure that each employee with the potential to be exposed at or above the Action Level for Respirable Crystalline Silica can demonstrate knowledge and understanding of at least the following:

- The health hazards associated with exposure to Respirable Crystalline Silica;
- Specific tasks in the workplace that could result in exposure to Respirable Crystalline Silica;
- Specific measures T.W.Clark Construction has implemented to protect employees from exposure to Respirable Crystalline Silica, including engineering controls, work practices, and respirators to be used;
- The contents of the OSHA Respirable Crystalline Silica Construction Standard;
- The identity of the Competent Person designated by T.W.Clark Construction; and
- The purpose and a description of the company's Medical Surveillance Program.

T.W.Clark Construction will make a copy of the OSHA Respirable Crystalline Silica Construction Standard readily available without cost to any employee who requests it.

Recordkeeping

T.W.Clark Construction will make and maintain an accurate record of all exposure measurements taken to assess employee exposure to Respirable Crystalline Silica. This record will include at least the following information:

- The date of measurement for each sample taken;
- The task monitored;
- Sampling and analytical methods used;
- Number, duration, and results of samples taken;
- Identity of the laboratory that performed the analysis;
- Type of personal protective equipment (PPE), such as respirators, worn by the employees monitored; and
- Name, social security number, and job classification of all employees represented by the monitoring, indicating which employees were actually monitored.

T.W.Clark Construction will ensure that exposure records are maintained and made available in accordance with 29 CFR 1910.1020. Exposure records will be kept for at least 30 years.

The employer shall make and maintain an accurate record of all objective data relied upon to comply with the requirements of the OSHA Respirable Crystalline Silica Construction Standard. This record shall include at least the following information:

- The Crystalline Silica-containing material in question;
- The source of the objective data;
- The testing protocol and results of testing;
- A description of the process, task, or activity on which the objective data were based; and
- Other data relevant to the process, task, activity, material, or exposures on which the objective data were based.

T.W.Clark Construction will ensure that objective data are maintained and made available in accordance with 29 CFR 1910.1020. Objective data records will be kept for at least 30 years.

T.W.Clark Construction will make and maintain an accurate record for each employee enrolled in the Medical Surveillance portion of this program. The record shall include the following information about the employee:

- Name and social security number;
- A copy of the PLHCPs' and/or Specialists' written medical opinions; and
- A copy of the information provided to the PLHCPs and Specialists.

T.W.Clark Construction will ensure that medical records are maintained and made available in accordance with 29 CFR 1910.1020. Medical records will be kept under lock and key for at least the duration of employment plus 30 years. It is necessary to keep these records for extended periods because Silica-related diseases such as cancer often cannot be detected until several decades after exposure. However, if an employee works for an employer for less than one year, the employer does not have to keep the medical records after employment ends, as long as the employer gives those records to the employee.

PROGRAM EVALUATION

This program will be reviewed and evaluated on an annual basis by the Safety Department unless changes to operations, the OSHA Respirable Crystalline Silica Construction Standard (29 CFR 1926.1153), or another applicable OSHA Standard require an immediate re-validation of this program.

APPLICABLE FORMS

The following lists applicable forms relating to this program.

APPENDICES

APPENDIX A - Written Exposure Control Plan (ECP) template