# Plummer Concrete & Associates, Inc.

## SAFETY POLICY

Plummer Concrete & Associates, Inc.'s policy is to provide a safe place to work for its employees, customers and visitors. In order to maintain a successful safety program, it must embody cooperation and the proper attitudes toward accident prevention on the part of all employees.

All work activities will comply with regulations, protect against personal injury and property damage, and limit the company's risk of unnecessary financial burdens or reduced efficiency due to accidents. A cooperative effort is required for success.

### *Policy Objectives*

In keeping with Plummer Concrete & Associates, Inc.'s commitment to safety, we have implemented this policy to meet the following objectives:

1. To provide for development and implementation of safety and health polices, programs and implementing procedures designed to provide a safe and healthful working environment for all employees, our customers, visitors, vendors, suppliers, subcontractors and members of the general public.

2. To reduce the potential of accidental injuries to persons and to protect the property of Plummer Concrete's employees, customers, and general public, minimizing the occurrence of incidents, the consequences of which may drastically affect the safety and future of Plummer Concrete's projects and facility operations.

3. To cooperate with subcontractors and other clients in their efforts to contribute to safe and efficient operations, and to comply with applicable federal, state and local statutes, standards and regulations.

4. Exercise good judgment in the application of Plummer Concrete & Associates, Inc. Safety Policy.

### *Policy Applicability*

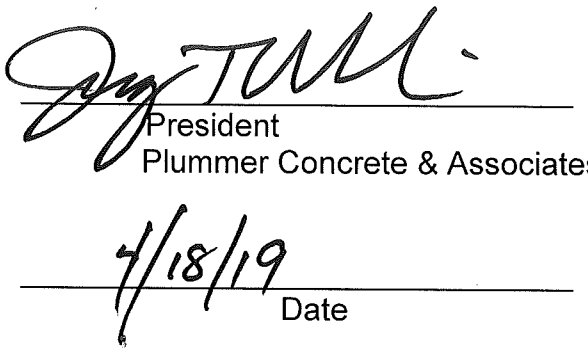
This policy will apply to all employees of Plummer Concrete & Associates, Inc. Compliance with the policy will be required as a condition of employment with the Plummer Concrete. This policy also applies to all Plummer Concrete operations including but not limited to: suppliers, owners' representatives, agents of the architect or engineer, regulative authorities, visitors, vendors, and invitees.

All Plummer Concrete's subcontractors are required to follow applicable Local, State, and Federal Codes. Failure to comply is a breach of contract terms.

***Program Responsibilities***

The Plummer Concrete Safety and Health Program contains detailed procedures and guidelines, along with specific management, supervisor and employee responsibilities that have been designed to implement the Company Safety and Health Policy. Every employee of Plummer Concrete & Associates, Inc. has access to the Program on our website: www.PlummerConcrete.com. A printed copy of the Program is available upon request.

Objectives, policy, guidelines, accountability, follow-up, training, education and a way to measure effectiveness are all elements of working safety and health programs that comply with applicable local, state and federal safety and health standards. It is our philosophy that our efforts towards production, quality, safety and health must be inseparable. Through the implementation of this program, every attempt will be made to reduce the possibility of an accident or illness occurring.



President
Plummer Concrete & Associates, Inc.

4/18/19
Date

## PURPOSE

To update the holders of this manual with changes and/or revisions of any material in this manual as a result of Governmental changes in Safety Standards/Procedures or any changes in Plummer Concrete & Associates, Inc. Safety Policies.

## SCOPE

This Procedure applies to all Plummer Concrete & Associates, Inc. projects and to all manual holders.

## RESPONSIBILITY

The Safety Manager will be responsible for reviewing the manual at least annually and issuing any revisions.

## POLICY

Upon review of this manual the Safety Manager shall publish updates and/or changes to the Program on our website and notify all employees that updates and/or changes have been published. It is the responsibility of each employee to review said revisions.

## PURPOSE

An effective safety program includes a complete and clear description of safety responsibilities for all employees. It is important for all employees to understand not only their responsibilities but also the responsibilities of fellow employees.

## POLICY

All levels of management and supervisors are charged with the responsibility of preventing conditions that could lead to occupational injuries or illness. While the ultimate success of our safety and health program depends upon the full cooperation of each employee, it is management's responsibility to see that effective training and education programs are employed to the best advantage.

## RESPONSIBILITY

### *Safety Manager*

- Monitor all safety and workers compensation statistics.
- Manage special safety programs.
- Promote safety.
- Distribute safety-related publications and reports.
- Assist Foremen with safely activities and reporting issues.
- Assure timely and accurate accident reporting.
- Recommend improvements in the Safety Program.
- Review all accident and investigation reports.
- Classify all occupational injuries and illnesses per OSHA Recordkeeping Practices (includes factual, alleged and/or exaggerated injuries or illnesses).
- Initiate, implement, and administer safety training, including weekly Safety Talk meetings.

### *Supervisors*

- Set an example of safe working habits and follow all safety regulations.
- Be responsible for the safety of their employees as well as the safely of others who may enter their work area.
- Communicate and enforce all safety policies and procedures within their operations.
- See that essential safety devices and personal protective equipment are provided and used.
- Inspect daily all work areas to ensure that work practices and equipment are meeting established safety standards.
- Take immediate corrective action whenever unsafe conditions and/or unsafe acts are noted.
- Assist in training new and established employees.
- See that all injuries are promptly treated and reported.

- Investigate the cause of ail accidents and injuries and complete reports as required.
- Attend, participate, and, when requested by the Safety Manager, conduct weekly *Safety Talk* meetings.

***Foremen***

- Set an example of safe working habits and follow all safety regulations.
- See that the Safety Program is carried out at the jobsite level.
- Instruct all workers in safe procedures and job safety requirements. Follow-up, and insist on compliance. Insist that workers follow safe work practices at all times.
- Discuss safety in personal contact with workers.
- See that no unsafe conditions exist in their work area.
- Make sure that necessary protective equipment is on hand and used as required.
- Take immediate action on unsafe conditions reported by workers.
- See that all injuries are cared for properly and reported immediately.
- Investigate all accidents, file complete reports and correct the causes immediately.
- Attend, participate, and, when requested by the Safety Manager, conduct weekly *Safety Talk* meetings.

***Employees***

- Set an example of safe working habits and follow all safety regulations.
- Perform all duties in a safe manner.
- Read, understand and follow all company safety policies and procedures.
- Wear all personal protective equipment that is required and maintain all equipment in good condition.
- Report all unsafe acts and conditions.
- Report all accidents and injuries to Foreman and office **immediately**.
- Attend and participate in weekly Safety Talk meetings.

***Subcontractors and Suppliers must:***

- Abide by all applicable safety rules of Local, State and Federal Regulations.
- Ensure that their safety program is in compliance with all existing safety and health requirements of local, state and federal regulatory agencies. Where applicable, this may include, but not be limited to, hazard communication training, personal protective equipment training, and respiratory protection training.
- Be responsible for all employees working for the subcontractor/supplier and for all other persons calling on subcontractor/supplier or doing business with subcontractor/supplier while on a Plummer Concrete & Associates, Inc. jobsite.
- Prior to the commencement of work, the subcontractor shall provide the name of their safety representative to Plummer Concrete & Associates, Inc. Safety Manager. This representative must be assigned to the project and be responsible for the administration and enforcement of the safety program. The safety representative may be required to meet with the Plummer Concrete Safety Manager to review and discuss the safety regulations to be adhered to on the

jobsite.

- Notify all other contractors when actions or activities undertaken by them could affect health or safety of employees of other contractors.
- Check in with job site supervisor before entering job site.
- Inform Plummer Concrete & Associates, Inc. of all injuries to workers **immediately**.
- Report to Plummer Concrete & Associates, Inc. any unsafe conditions that come to their attention.

***Architects, Owners, and Visitors to Plummer Concrete jobsites must:***

- Abide by all safety rules.
- Check with the Plummer Concrete & Associates, Inc. Jobsite Supervisor so appropriate personal protective equipment may be provided.
- Refrain from entering site before notifying the Plummer Concrete Jobsite
- Supervisor and/or Foreman.

***Everyone must:***

- Strive to make all operations safe.
- Maintain physical and mental health necessary to work safely.
- Keep all work areas free from debris.
- Assess results of their actions on site safety.
- Repair or replace safety precautions removed or altered before leaving the area.
- **Immediately** report all accidents and injuries whether involving Plummer Concrete & Associates, Inc. personnel or others.

**Disciplinary Procedures:**
Supervisors and foremen are responsible for keeping employees informed on policies, rules and regulations, and for providing positive direction. Employees will be held accountable for acceptable on-the-job performance and for the policies, rules and regulations of Plummer Concrete & Associates, Inc.

The following are four standard disciplinary actions that may be taken in response to unsatisfactory work performance or conduct. They are: verbal warnings, written warnings, suspension without pay, and termination of employment. The type of disciplinary action that is taken is determined by the degree of the seriousness of the infraction. In certain instances the company may believe that an employee's conduct, performance or absenteeism/tardiness is so detrimental to the interest of the company or other employees of the company that immediate termination is ordered without notice or prior disciplinary action. No supervisor or foreman shall enact immediate termination without consulting Human Resources. If a supervisor or foreman feels that an employee must be immediately removed from, a jobsite, the supervisor or foreman shall send the employee home indicating "indefinite suspension".

The normal procedure for disciplinary action is as follows:
- One verbal warning
- One written warning
- Suspension with pay
- Termination of employment

Verbal warnings must be documented in writing and forwarded to Human Resources, who will monitor frequency of similar actions.

Written warnings state the nature of the infraction and should be signed by the employee, witness and supervisor. The employee should be provided with a copy of the warning. The employee's signature does not indicate that the employee believes that the disciplinary action is warranted, but simply acts as an acknowledgment that a copy of the warning was received. Furthermore, if an employee is unwilling to provide a signature, this should be noted on the form.

Suspension without pay can be used at any time during the disciplinary action process. The nature of the infraction will determine if suspension is used and the length of the suspension.

## SUBSTANCE ABUSE POLICY

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

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

Therefore, a condition of employment at Plummer Concrete & Associates, Inc. is that employees adhere to the following requirements:

# PROHIBITED CONDUCT

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

Therefore, Plummer Concrete & Associates, Inc., in accordance with our policy, prohibits an employee working on a project from using, possessing, attempting to possess, distributing, delivering or being under the influence of: 1) marijuana, cocaine, or phencyclidine (PCP) or any derivative thereof, 2) an amphetamine or any formulation thereof; 3) a narcotic drug or any derivative thereof; 4) semi-synthetic opioids including hydrocodone, hydromorphone, oxycodone and oxymorphone, or 5) any other substance to a degree which adversely affects the employee's safety and/or the safety of others. No employee shall report for duty or remain on duty while having a breath alcohol concentration of .04 or greater. No employee shall consume an intoxicating beverage, regardless of its alcoholic content, while on a project.

***Reasonable Suspicion***

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

***Post Accident***

Plummer Concrete & Associates, Inc. requires any employee to report an accident to appropriate management personnel and may require the employees involved provide a urine/breath specimen to be tested for the use of controlled substances and alcohol as soon as possible, but not later than 2 hours after an accident.

***Removal and Return to Work***

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

## COMPLIANCE WITH TESTING PROCEDURES

All employees/applicants requested to undergo a drug or alcohol test are required to promptly comply with the request. Plummer Concrete & Associates, Inc. expects all prospective and current employees to exercise good faith and cooperate in complying with any procedures required under the Policy. Refusal to submit to a drug test, or engaging in any conduct which operates to jeopardize the integrity of the specimen or the reliability of the test result will be subject to disciplinary action, up to and including termination, independent and regardless of any test results. This also includes failure to show up for a drug test specimen collection, postponing or rescheduling of drug specimen collections.

## TESTING AND NOTIFICATION OF TEST RESULTS

Testing will be performed by a SAMHSA certified laboratory utilizing clinically sound and approved testing methodologies. The laboratory will release the results of the drug test to a Certified Medical Review Officer (MRO) for chain of custody and test verification. The MRO will only release results to the contact person designated by the Company.

## DISCIPLINARY ACTIONS

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

## REHABILITATION

Plummer Concrete & Associates, Inc. offers group health insurance benefits to employees. The employee will pay for all costs of rehabilitation not covered under the Company's benefit plan. A leave of absence to participate in drug rehabilitation will not be paid by the Company. An employee may however choose to utilize vacation leave he/she has available.

## AMENDMENTS

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

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

***Person(s) available to answer questions about this Policy:***

J.T. Wekkin, President
Patricia J. Miller, Controller

# UNSAFE CONDITION ABATEMENT POLICY

It is the policy of *Plummer Concrete & Associates, Inc.* to comply with all applicable state, local, federal, and client regulations regarding safe work practices.

## PURPOSE

To provide minimum guidelines for the statement of unsafe conditions and minimum required actions to assure that individuals are not exposed to unsafe conditions during the abatement process.

## RESPONSIBILITY

It is the responsibility of the Supervisor and Forman to assure implementation and adherence to this policy on job sites. It is the responsibility of all *Plummer Concrete & Associates, Inc.* employees to monitor, support and comply with this policy. It is the responsibility of all subcontractors to comply with this policy.

## GENERAL REQUIREMENTS

Under no circumstances will employees, subcontractors or the general pubic be exposed to an unsafe condition after the unsafe condition has been recognized. For example, if it is determined that work is taking place without proper fall protection; the work will be stopped until adequate protection is provided.

All unsafe conditions will be abated as soon as possible. If it will not be possible to abate an unsafe condition within 24 hours, the Safety Manager should be contacted immediately.

Once it is determined that an unsafe condition exists and it is not possible to abate the condition immediately, the area will be vacated, closed off, barricaded, or protected by other appropriate means to protect employees, subcontractors and the public from the unsafe condition.

Failure to adhere to this policy can result in disciplinary action up to and including termination.

# ACCIDENT REPORTING, INVESTIGATION & RECORD KEEPING

**PURPOSE**
To establish an accident reporting system consistent with governmental requirements, proper claims processing procedures and loss control practices.

**POLICY**
It is the policy of *Plummer Concrete & Associates, Inc.* to voluntarily comply with all employee, worker and visitor accident, injury and illness reporting requirements established by OSHA, state workers compensation agencies and workers compensation insurance carriers.

When an accident occurs, first and foremost, prompt and appropriate assistance must be provided to the individual(s) involved. If the individual(s) involved require attention by a health care provider, the foreman shall, if circumstances allow, complete the top section of an **Accident and Treatment Reporting Form** *(Exhibit A)* to accompany the injured individual(s). In addition, a post accident drug screen of urine and/or blood and breath may also be performed, at the discretion of the supervisor. Refer to the Post Accident guidelines listed in the Alcohol and Controlled Substance Abuse section for further guidance.

**ALL ACCIDENTS AND/OR INJURIES MUST BE COMMUNICATED IMMEDIATELY OR AS SOON AS CIRCUMSTANCES ALLOW TO THE PLUMMER CONCRETE SAFETY MANAGER AT 715-273-3481.**

If the accident results in a fatality or sends an individual to the hospital or results in serious injury, the Safety Manager will then notify the following individuals:

- President of *Plummer Concrete & Associates, Inc.*
- Supervisors
- OSHA Regional Office (*For accidents resulting in a fatality, the Safety Manager is **required by law** to notify the local area OSHA office either by telephone or by fax within eight (8) hours after the occurrence of the accident. The Safety Manager must notify OSHA within 24 hours if a worker is admitted to a hospital or if there is an amputation or loss of an eye.)*

Arrangements will then be made to conduct an extensive investigation by the Corporate Safety Manager and Supervisors.

***Accident and Treatment Reporting Form and Supervisor's Incident Investigation Report***

Once the appropriate assistance has been provided to the individual(s) involved, the Supervisor shall immediately secure the accident area, determine the factors that led to the accident, and take the necessary precautions to prevent its recurrence and allow for an extensive investigation by the Safety Manager, if appropriate.

The supervisor is responsible to then complete a **Supervisor's Incident Investigation Report** *(Exhibit B)* with as much information and detail as possible and should use additional paper if necessary. The supervisor should sign and date the report as well as the employee. The completed form should be forwarded to the Safety Manager.

The Safety Manager is then responsible for distributing copies of the reports to the following individuals:

- President of *Plummer Concrete & Associates, Inc.*
- All Supervisors
- Employee's accident report file

***Employer's First Report of Injury or Disease***

The **Employer's First Report of Injury or Disease** form (*Exhibit C*) shall be completed by the Safety Manager with the employee's assistance. Upon completion of the form, the Safety Manager will retain a copy with the OSHA 300 log and be responsible for distribution to the following:

- Worker's compensation insurance carrier (forwarded to Dept. of Workforce Development)
  - Within 24 hours after third day of employee disability
  - Within 24 hours of a fatality
- Employee's accident report file

***OSHA 300 Log***

Using the Guidelines for Determining OSHA Recordability, the Safety Manager will review the accident to determine recordability. The Safety Manager is then responsible for entering an injury/illness on the OSHA 300 Log.

**What is Medical Treatment?**

Medical treatment includes managing and caring for a patient for the purpose of combating disease or disorder. The following are ***not*** considered medical treatments and are **NOT recordable:**

- Visits to a doctor or health care professional solely for observation or counseling.
- Diagnostic procedures, including administering prescription medications that are used solely for diagnostic purposes.
- Any procedure that can be labeled first aid.

**Authorization for Medical Treatment Form**

When an employee goes to a health care provider for a work-related injury or illness, an Attending Physician's Return to Work Recommendations Record Form shall accompany the employee whenever possible. The employee will not be allowed to return to work without a "Return to Work Release" from the health care provider.

(EXHIBIT A)

# Accident and Treatment Reporting Form

(To be presented by injured employee when reporting for treatment)

_____ has reported that he/she was injured in our employ on _____, 20_____.

**In order to expedite payment, please send your bill and report to:**

**PLUMMER CONCRETE & ASSOCIATES, INC.**
**ATTN: P.J. MILLER,**
**P.O. BOX 132**
**ELLSWORTH, WI 54011-0132**

- **Please note: Plummer Concrete has an aggressive return-to-work program. *Alternate Duty work is almost always available.* Please respond ASAP so we can coordinate the patient's return.**

- **Plummer Concrete has a post-accident drug and alcohol test policy. We ask that a 5-panel + opioids (or comparable) drug screen be conducted (DOT drug test panel). Please forward this information to our office as well. Thank You.**

- **Please fax (715-273-1468) , email (pjm@plummerconcrete.com), or send a copy of this following two pages to our office.**

| Supervisor | |
|---|---|
| Date | Signature |

NOTE: This is not an acceptance of liability

**(page 1 of 3)**

# Accident and Treatment Reporting Form, continued

Claim # _____

## Section 1 - Accident Data

Employees Name _____ S.S.N. ____-____-____ Date of Birth ____/____/____

Job Title _____ Supervisor _____

Home Phone (____) _____ Address _____

Date of Injury ____/____/____ Time of Injury _____ AM/PM

Exact Location of Accident _____

Witness Name _____ Witness Phone (____) _____

Description of What Happened _____

_____

Incident Reported to _____ Date Reported ____/____/____

## Section 2 - Information Release

I authorize any medical provider who has treated me for this injury as outlined in Section A to complete and discuss the information provided in Section D of this form with my employer or any of its representatives. This authorization for release of information will expire thirty (30) months from the date of this authorization. I authorize drug and alcohol testing and release of such information as well.

Employee Signature _____ Date ____/____/____

## Section 3 - Medical Provider

Health Care Provider _____ Date ____/____/____ Arrival Time ____:____ AM/PM

Type of Injury _____ Body part injured _____

Treatment and Comments *(Please Print)*: _____

_____

_____

☐ No restrictions needed; return to full duty. Results of Drug and Alcohol Testing:_____

☐ Restrictions (as noted below) in effect for _____ days; may resume full duty on _____

☐ Work Shift Limited to _____ Hours

| RECOMMENDATION FOR WORK: | MAY CARRY UP TO: | MAY LIFT UP TO: | MAY PUSH-PULL UP TO: | OTHER JOB REQUIREMENTS: |
|---|---|---|---|---|
| ☐ NO REPETATIVE USE ___ R. ARM ____ L ARM<br>☐ SITTING JOB ONLY<br>☐ NOT TO DRIVE VEH.<br>☐ NOT TO OPERATE POWERED EQ.<br>☐ NO USE OF _____ | ☐ 5 lbs.<br>☐ 10 lbs.<br>☐ 20 lbs.<br>☐ 40 lbs.<br>☐ 60+ lbs.<br>☐ NONE | ☐ 5 lbs.<br>☐ 10 lbs.<br>☐ 20 lbs.<br>☐ 40 lbs.<br>☐ 60+ lbs.<br>☐ NONE | ☐ 5 lbs.<br>☐ 10 lbs.<br>☐ 20 lbs.<br>☐ 40 lbs.<br>☐ 60+ lbs.<br>☐ NONE | ☐ No Grasping/Pinching _____<br>☐ Standing Limited to _____ hours/shift<br>☐ Sitting Limited to _____ hours/shift<br>☐ Bending Limited to _____ hours/shift<br>☐ Twisting Limited to _____ hours/shift<br>☐ Walking Limited to _____ hours/shift<br>Explain /Other _____ |

Follow-up appointment on _____ at _____ AM/PM with _____

Medical Provider _____ Date ____/____/____

**Physician:** Contact Patricia Miller at Plummer Concrete @ 715-273-3481 ext. 104 at time of treatment to discuss any restrictions and our plan for modified or alternate duty.

## Section 4 - Temporary Alternate Duty-TAD Agreement

**This section must be completed by anyone coordinating a Temporary Alternate Duty Agreement with an Employee.**

TRANSITIONAL DUTY AGREEMENT

We are offering you temporary alternate duty employment with the physical limitations that have been imposed upon you by the treating physician. I understand that this temporary alternate duty position is temporary and will not be offered to me as a permanent job. I also understand that the temporary alternate duty assignment can be changed at any time.

RESPONSIBILITIES

You will report to _____ at the beginning and end of the shift. Your temporary alternate duty assignment work hours will be: _____ You agree to do the following:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

This agreement will be in effect until the treating physician feels you are physically able to resume your regular position or until your restrictions are modified. This temporary alternate duty assignment will not last more than thirty (30) days.

☐ I accept transitional duty employment. I agree to keep the company advised of my physical condition and the results of all medical examinations during the thirty (30) day period following execution of this agreement. I will immediately notify the company when the treating physician releases me to full duty.

☐ I choose not to accept the transitional alternate duty. I understand that refusing transitional alternate duty employment may prohibit me from receiving full Workers' Compensation benefits.

_____ _____ _____

Signature of Employee/Date Signature of Supervisor/Date Signature of Coordinator/Date

(EXHIBIT B)

# Supervisor's Incident Investigation Report

1. Name of injured employee: _____ Age_____

   Employee's job title: _____ Job at time of injury: _____

   Type of employment: ___ Full-time ___ Part-time ___ Temporary ___ Seasonal

   Length of time with company: _____ Time in current position: _____

   Description and severity of injury: _____

2. Date and time of incident: _____

3. Location of incident: _____

4. Detailed description of incident: Include relevant events leading up to, during and after the incident. *(It is preferred that the information is provided by the injured employee.)*

_____

_____

_____

_____

_____

5. Description of incident from eye witnesses, including relevant events leading up to, during and after the incident. Include names of persons interviewed, job titles and the date and time of interviews.

_____

_____

_____

_____

_____

_____

_____

**Accident Type** (select the most appropriate response)

| | |
|---|---|
| ☐ Slip or twist (not fall) | ☐ Muscular strain |
| ☐ Exposure to temp. extremes | ☐ Respiratory exposure |
| ☐ Skin exposure | ☐ Exposure to physical agents (noise, concrete, etc.) |
| ☐ Contact with electrical current | ☐ Other(describe)_____ |

**Hazard**

A. Identify the behavior prior to the accident/incident, describe the events such as climbing, lifting, etc.):

_____

_____

B. Identify the action that contributed to the accident, such as twist, push, lift, stand, sit, reach, etc.

_____

_____

_____

# Supervisor's Incident Investigation Report, continued

**Cause** (Use the listing below as an aid in identifying the factors that contributed to the accident. (Check ALL that apply).

**Procedures**
- ☐ None developed
- ☐ Developed but not followed
- ☐ Developed but not trained
- ☐ Developed but not understood
- ☐ Developed but unable to follow

**Communication**
- ☐ Breakdown in comm. between workers & supervisors
- ☐ Breakdown in communication between work crew
- ☐ Poor communication with general contractor or job superintendent

**Hazard**
- ☐ Created by co-worker
- ☐ Created by others on jobsite
- ☐ Created by external factors
- ☐ Documented but not repaired
- ☐ Unidentified
- ☐ Repaired but deficient repair
- ☐ Conditions changed without proper communication
- ☐ Lack of documentation

**In a Hurry**
- ☐ Supervisor/foreman implied need
- ☐ Employee perceived need
- ☐ Due to external factors
- ☐ Workload too heavy
- ☐ Lack of team work
- ☐ General contractor implied need
- ☐ Equipment failure
- ☐ Lack of help or assistance
- ☐ Illness/Short staffed

**Facilities/Equipment**
- ☐ Faulty equipment
- ☐ Poor design
- ☐ Corrosion/wear
- ☐ Ergonomic factors
- ☐ Failure to wear Personal Protective Equipment

**Training**
- ☐ Insufficient training
- ☐ Circumstances not addressed in training
- ☐ Equipment used incorrectly

**Recommended Corrective Actions to Prevent Future Incidents**

1. Explain how to eliminate the hazard or task.

_____

2. Define how to redesign the job to minimize the risk.

_____

3. What processes or policies need to be developed and/or changed?

_____

4. What type of training is needed?

_____

5. What type of personal protective equipment is needed?

_____

Signature of Person Completing This Form:_____ Date:_____

Print Name:_____

**Corrective Actions Taken or Root Causes Addressed** (List corrective steps to reduce potential recurrence)

_____

_____

_____

Date Corrective Action(s) Taken: _____ Signature:_____

# (EXHIBIT C)
# EMPLOYER'S FIRST REPORT OF INJURY OR DISEASE

## EMPLOYER'S FIRST REPORT OF INJURY OR DISEASE

**Fatal Injuries:** Employers subject to ch.102, Wis. Stats., must report injuries resulting in death to the Department and to their insurance carrier, if insured, within one day after the death of the employee.
**Non-Fatal Injuries:** If the injury or occupational illness results in disability beyond the three-day waiting period, the employer, if insured, must notify its insurance carrier within 7 days after the injury or beginning of disability. Medical-only claims are to be reported to the insurance carrier only, not the Department.
**Electronic Reporting Requirement:** All work-related injuries and illnesses resulting in compensable lost time, with the exception of fatalities, must be reported electronically to the Department via EDI or Internet by the insurance carrier or self-insured employer within 14 days of the date of injury or beginning of disability. Employer may fax claims for fatal injuries to (608) 267-0394.

**Department of Workforce Development**
**Worker's Compensation Division**
201 E. Washington Ave., Rm. C100
P.O. Box 7901
Madison, WI 53707
Imaging Server Fax: (608) 260-2503
Telephone: (608) 266-1340
http://www.dwd.wisconsin.gov/wc
e-mail: DWDDWC@dwd.wisconsin.gov

*Provision of your Social Security Number (SSN) is voluntary. Failure to provide it may result in an information processing delay. Personal information you provide may be used for secondary purposes [Privacy Law, s. 15.04 (1)(m), Wisconsin Statutes].
**(Please read the instructions on page 2 for completing this form)**

**EMPLOYEE**

| Employee Name (First, Middle, Last) | Social Security Number* - - | Sex ☐ M ☐ F | Employee Home Telephone No. ( ) - |
|---|---|---|---|

| Employee Street Address | City | State | Zip Code - | Occupation |
|---|---|---|---|---|

| Birthdate | Date of Hire | County and State Where Accident or Exposure Occurred? |
|---|---|---|

**EMPLOYER**

| Employer Name | WI Unemployment Ins. Acct No. | Self-Insured? ☐ Yes ☐ No | Nature of Business (Specific Product) |
|---|---|---|---|

| Employer Mailing Address | City | State | Zip Code - | Employer FEIN - |
|---|---|---|---|---|

| Name of Worker's Compensation Insurance Co. or Self-Insured Employer | Insurer FEIN - |
|---|---|

| Name and Address of Third Party Administrator (TPA) Used by the Insurance Company or Self-Insured Employer | TPA FEIN - |
|---|---|

**WAGE INFORMATION**

| Wage at Time of Injury $ | Specify per hr., wk., mo., yr., etc. Per: | In Addition to Wages, Check Box(es) if Employee Received: ☐ Meals ☐ Room ☐ Tips | No. of Meals/wk. No. of Days/wk Avg. Weekly Amt. $ |
|---|---|---|---|

Is Worker Paid for Overtime? ☐ Yes ☐ No If Yes, After How Many Hours of Work Per Week?

For the 52 Week Period Prior to the Week the Injury Occurred, Report Below the Number of Weeks Worked in the Same Kind of Work, and the Total Wages, Salary, Commission and Bonus or Premium Earned for Such Weeks.

| No. of Weeks: | Gross Amount Excluding Tips: $ | If Piece-Work, No. of Hrs. Excluding Overtime: |
|---|---|---|

| | Start Time | Hours Per Day | Hours Per Week | Days Per Week |
|---|---|---|---|---|
| Employee's Usual Work Schedule When Injured: | : ☐ AM ☐ PM | | | |
| Employer's Usual Full-Time Schedule for This Type of Work at Time of Employee's Injury: | | | | |

| Part-Time Employment Information: | Are there Other Part-Time Workers Doing the Same Work With the Same Schedule? ☐ Yes ☐ No If yes, how many? | Number of **Full-Time** Employees Doing The Same Type Of Work: |
|---|---|---|

**INJURY INFORMATION**

| Injury Date | Time of Injury : AM : PM | Last Day Worked | Date Employer Notified | ☐ Date Returned to Work ☐ Estimated Date of Return |
|---|---|---|---|---|

| Did Injury Cause Death? ☐ Yes ☐ No | Date of Death | Was This a Lost Time or Other Compensable Injury? ☐ Yes ☐ No | Did Injury Occur Because of: ☐ Substance Abuse ☐ Failure to Use Safety Devices ☐ Failure to Obey Rules |
|---|---|---|---|

Was Employee Treated in an Emergency Room? ☐ Yes ☐ No Was Employee Hospitalized Overnight as an In-Patient? ☐ Yes ☐ No

Name and Address of Treating Practitioner and Hospital:

Case Number from the OSHA Log:

**Injury Description** - Describe Activities of Employee When Injury or Illness Occurred and What Tools, Machinery, Objects, Chemicals, Etc. Were Involved.

What Happened to Cause This Injury or Illness? (Describe How The Injury Occurred)

What Was The Injury or Illness? (State the Part of Body Affected and How It Was Affected)

| Report Prepared By | Work Phone Number ( ) - | Position | Date Signed |
|---|---|---|---|

WKC-12 (R. 06/2017) **SEND REPORT IMMEDIATELY - DO NOT WAIT FOR MEDICAL REPORT**

## PURPOSE

Plummer Concrete & Associates, Inc. regards their employees as vital parts of the Company. *As* such, Plummer Concrete & Associates, Inc. accepts the responsibility of providing a work place where the worker can do his/her job without injury to him/herself or to others.

The orientation is designed to increase the safety awareness of the individual worker and the foreman on the project by getting the foreman directly involved with the training of his/her workers. It strives to impress on the employee the seriousness of the safety commitment of their supervisors and Plummer Concrete & Associates, Inc.

## POLICY

A representative of the Company will meet with each new employee and distribute a copy of Plummer Concrete & Associates, Inc.'s handbook and direct the employee to this manual on the Company website.

All new employees are required to complete acknowledgements of receipt of this information. The acknowledgements are kept on file by Human Resources.

The new employee will receive hands-on training from his/her foreman, including:

- Personal Protective Equipment
- Hand and Power Tools
- Other topics may be added as determined by the Safety Manager

The new employee will be advised of the next weekly Safety Talk meeting and directed that his/her attendance is mandatory.

## PURPOSE

To inform all employees, by means of labels, Safety Data Sheets (SDS) and training, of the physical and health hazards to which they may be exposed.

## POLICY

Plummer Concrete & Associates, Inc. as an employer engaged in a business where its workers have the potential for contact with hazardous materials in their workplace will ensure that the hazards of all materials found in the workplace will be evaluated, and that information concerning their hazard will be available to all affected employees. The following Hazardous Communication Program has been designated to ensure that:

1. Hazardous substances present in the workplace are identified and labeled.
2. Employees have ready access to information on the hazards of these substances.
3. Employees are given information on how to prevent injury or illness due to chemical exposure.

## HAZARD DETERMINATION

Plummer Concrete & Associates, Inc. relies, in good faith, on manufacturers, importers, and distributors to perform the appropriate hazard determination for the substances they produce or sell. Safety Data Sheets (SDS) will be available for all hazardous substances with which we work and shall be located in the SDS book located by the timeclock and online in the Safety section on our website: www.plummerconcrete.com.

## HAZARDOUS MATERIAL INVENTORY

An inventory of all hazardous chemicals located on the premises has been compiled. The list can be found in the SDS book located by the timeclock and online in the Safety section on our website: www.plummerconcrete.com. The Safety Manager and Shop Manager are responsible for maintaining the list of hazardous substances. The chemical inventory will include the common identity along with the trade name of the product.

## LABELING

The Shop Manager is responsible for evaluating labels on incoming containers. Each label will be checked for:

1. Identity of the substance.
2. Appropriate hazard warning or words, pictures, symbols, or combination of these that provide at least general information regarding the hazards of the chemical.
3. Name and address of the manufacturer.

Plummer Concrete relies in good faith upon the distributor or manufacture to provide the necessary information. If, however, the Shop Manager believes a label is not appropriate, the Shop Manager will notify the distributor or manufacturer. A second request for a label will be sent if there is no response within 30 days. The Shop Manager is responsible for preparing an appropriate label if one is not supplied within 30 days of the second letter. A container will not be released for use until an appropriate label is affixed.

Labels will be removed if they are not correct and when the container is empty if it will be used for other materials.

## GLOBAL HARMONIZED SYSTEM (GHS) LABELING REQUIREMENTS

GHS compliant labels must contain the following six items:

1) **Product Identifier:** This generally will be the name of the chemical or product

2) **Supplier Identification:** This will include the manufacturer name, address, and emergency contact information

3) **Signal Word:** Depending on the severity of the physical or health hazard of the chemical, either the word "Danger" or "Warning" will appear on most containers based on the relative severity of the contents. More hazardous substances will have the "Danger" signal word and less hazardous will have the "Warning" signal word. Chemicals with a low health or physical hazard may not have either signal word.

4) **Hazard Statement:** Standard hazard phrases will also appear on labels informing users of the health and physical hazards associated with chemicals. Multiple hazard statements may appear such as; "Fatal if swallowed", Flammable liquid and vapor" etc.

5) **Precautionary Statements:** Standard precautionary phrases will also appear on labels informing users of the precautions they should take against heath and physicals hazards they may encounter when using a hazardous substance. Multiple precautionary statements may appear such as; "Keep container tightly closed" "Do not breath Vapors" Wear safety goggles when dispensing", etc/

6) **Pictograms:** These nine picture symbols will also convey the physical, health, or environmental hazards associated with chemicals. The pictograms are;

Oxidizers

Corrosives

Acute Toxicity (Severe)

Gas Under Pressure

Environmentally Toxic

Self Reactive
Pyrophoric
Flammables
Self Heating
Emits Flammable Gas
Organic Peroxides

Carcinogen
Respiratory Sensitizer
Reproductive Toxicity
Target Organ Toxicity
Mutagenicity
Aspiration Toxicity

Explosives
Self Reactive
Organic Peroxides

Irritant
Dermal Sensitizer
Acute toxicity (harmful)
Narcotic Effects
Respiratory Tract Irritation

## SAFETY DATA SHEETS (SDS)

An SDS will be available on all hazardous substances to which there is potential or actual exposure. The Shop Manager is responsible for assuring that an SDS is available on all incoming products and will immediately provide the SDS to the Safety Manager for inclusion in the SDS book and online.

If an SDS is not available, the Safety Manager will notify the distributor or manufacturer that an SDS is needed. A second request will be sent out in 30 days if there is no response to the first request. No products will be released for use until an appropriate SDS is in the file.

Plummer Concrete relies, in good faith, upon the distributor or manufacturer to provide all the necessary information related to its product. If, however, in the Safety Manager's opinion, an SDS is not complete, it will be returned to the distributor or manufacturer with a request for the missing information. A second request will be sent out in 30 days if there is no response to the first request.

The person ordering any new product is responsible for requesting an SDS on the product.

Employees have access to all SDS at all times via the information on the Plummer Concrete website. The SDS book near the timeclock is available during regular working hours. Copies of individual SDS will be made for employees, job applicants and former employees upon request.

## EMPLOYEE TRAINING

Before starting work with hazardous substances, and periodically, each employee will attend a Hazardous Communication training session where they will receive information on:

- Policies and procedures related to the Hazardous Communication Standard including the location of this program, SDS, and chemical inventory list.
- How to read and interpret an SDS and labels including pictograms.
- Physical and health hazards of hazardous substances in their work area, including methods and observations that may be used to detect the presence or release of a hazardous chemical.
- Work practices that may result in exposure.
- How to prevent or reduce exposure, including measures that have been implemented which may include the use of appropriate work practice controls, emergency procedures and personal protective equipment to be used.
- Procedures to follow if exposure occurs.

The Safety Manager is responsible for conducting the training sessions which will include a lecture, handouts, and question and answer session.

### ***On-The-Job Training***

For those employees who will be working directly with a hazardous material, the supervisor in the area in which the work will take place will be responsible for specific on-the-job training regard to these materials. The supervisor will instruct these employees on the methods and observations that may be used to detect the presence or release of the hazardous chemical, the physical and health hazard of the chemical,

and the specific measures the employee can take to protect himself from these hazards.

If a new substance is introduced into the shop, the Safety Manager will review the corresponding SDS for potential new hazards. If new hazards are present (i.e., causes health effects unlike those covered in prior training sessions), the Safety Manager will conduct training on these ill health effects. This training will be completed prior to the use of the new product and will be documented.

If any non-routine tasks are to be performed, the Supervisor will identify and list these tasks. Training on the specific hazards associated with these non-routine tasks will be provided and address the preventative measures that must be taken. The training will be documented.

***Information to Non-Employees***

The Supervisor is responsible for providing outside (sub)contractors with the following information:

1. Hazardous chemicals to which they may be exposed as a result of working with us.
2. Suggestions for appropriate protective measures.

(Sub)contractors will not be allowed to begin work in an area until they have been given this information.

***Personnel Policies***

When an employee is not following safety and health rules when working with hazardous chemicals, disciplinary action may be taken according to the following procedures:

1. Verbal warning for a first offense.
2. Written warning for a second offense.
3. Suspension without pay for a third offense.
4. Termination of employment for a fourth offense.

***Recordkeeping***

All Safety Data Sheets will be kept for a period of 30 years after the use of the substance has been discontinued.

***Community Hazard Communication***

The Safety Manager is responsible for handling requests for information from members of the community on hazardous substances used by Plummer Concrete & Associates, Inc.

***Evaluation and Program Maintenance***

The Safety Manager is responsible for program evaluation and maintenance. An evaluation of the program will be conducted annually.

## Program Administration

This program was developed to help minimize, if not eliminate, employee exposure to respirable silica. Our competent person for this program is Deke Almsted, Vice President. This program will be reviewed and evaluated annually by Deke Almsted to determine its effectiveness. This review will determine if there are any additional silica producing tasks we perform that were not previously identified. This review will also determine if existing controls and equipment use are being followed per this program and manufacture specifications. This annual review and evaluation will be documented to include the date it was conducted, and if any changes are being made to the program. This will be documented on the Annual Program Review and Evaluation Form.

## Tasks/Controls for Potential Silica Exposure

Our exposure assessment has identified potential exposures listed in the table below with corresponding controls. We will implement the Specified Exposure Control Methods listed in Table 1 of OSHA 1926.1153 Respirable Crystalline Silica or use equipment with manufacturer qualitative data when practical. Where Table 1 tasks or manufacturer qualitative data is not available, respirators must be used until we can conduct our own industrial hygiene monitoring.

We will reassess our exposures when there is a change in processes or tasks that can reasonably be expected to result in new or additional exposures at or above the Action Limit.

| Tasks with Potential Silica Exposure | Implemented Controls/Work Practices per Table 1 of 1926.1153 | Respirator Use | |
|---|---|---|---|
| | | < 4 hours | >4 hours |
| Drilling into cast-in-place or precast concrete (including use of impact and rotary hammer drills) | 1) Use drill equipped with commercially available shroud or cowling with dust collection system<br>2) Operate tool in accordance with manufacturer's instructions to minimize dust emissions<br>3) Dust collection must meet the airflow rate recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism<br>4) Use a HEPA-filtered vacuum when cleaning holes<br>5) Cleaning of filter/shroud/catch basin must be done within sealed bag to eliminate exposure of | None | APF 10 |

| Tasks with Potential Silica Exposure | Implemented Controls/Work Practices per Table 1 of 1926.1153 | Respirator Use | |
|---|---|---|---|
| | | < 4 hours | >4 hours |
| | residual dust | | |
| Core drilling in cast-in-place or precast concrete | 1) Use drill equipped with integral water delivery system<br>2) Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions | None | None |
| Cutting control joints in cured concrete flatwork with power saws | 1) Use saw equipped with integral water delivery system that continuously feeds water to the blade<br>2) Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions<br>- When used outdoors<br>- When used indoors or in an enclosed area | None<br>APF 10 | APF 10<br>APF 10 |
| Grinding cured concrete flatwork with walk-behind milling machines and floor grinders | 1) Use machine equipped with integrated water delivery system that continuously feeds water to the cutting surface<br>2) Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.<br>OR<br>3) Use machine equipped with dust collection system recommended by the manufacturer<br>4) Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions<br>5) Dust collector must provide the airflow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism<br>6) When used indoors or in an enclosed area, use a HEPA-filtered vacuum to remove loose dust in between passes. | None<br><br>None | None<br><br>None |

| Tasks with Potential Silica Exposure | Implemented Controls/Work Practices per Table 1 of 1926.1153 | Respirator Use | |
|---|---|---|---|
| | | < 4 hours | >4 hours |
| Breaking up and removing cast-in-place or precast concrete with jackhammer and powered chipping tools | 1) Use tool equipped with water delivery system that supplies a continuous stream or spray of water at the point of impact<br>2) Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.<br>- When used outdoors<br>- When used indoors or in an enclosed area<br>OR<br>3) Use tool equipped with commercially available shroud and dust collection system.<br>4) Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions<br>5) Dust collector must provide the airflow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism<br>- When used outdoors<br>- When used indoors or in an enclosed area | None<br>APF 10<br><br><br><br><br><br><br><br><br><br><br><br>None<br>APF 10 | APF 10<br>APF 10<br><br><br><br><br><br><br><br><br><br><br><br>APF 10<br>APF 10 |
| Mixing small batch of concrete for patching | Use dust mask and mix outdoors. | None | APF 10 |
| Vehicle-mounted drilling rigs for rock and concrete | 1) 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.<br>2) Operate and maintain system in accordance with manufacturer's instructions to minimize dust emissions.<br>OR<br>3) Operate from within an enclosed cab and use water for dust suppression on drill bit | None<br><br><br><br><br><br><br><br><br><br>None | None<br><br><br><br><br><br><br><br><br><br>None |

## Description of Housekeeping Measures to Reduce Silica Exposure

Housekeeping to remove silica containing dust must be done using wet sweeping or HEPA filtered vacuuming.
Dry sweeping/dry brushing or use of compressed air to clean-up silica containing dust will not be allowed.

## Vacuums used for Housekeeping and Tools with Dust Collection Systems

Only vacuums with HEPA filters and filter cleaning mechanisms can be used for vacuuming as part of housekeeping requirements and for tools listed in Table 1 that require dust collection systems.
All emptying of vacuum canisters must be done in a manner that does not produce any airborne dust. Our procedure for emptying vacuum canisters will be to use plastic bags, zip tied, and carefully deposited into dumpsters.

## Protection of others

When we are drilling, cutting, grinding, or performing other dust producing activities on silica containing material that are not controlled through water delivery systems or dust collection systems, no other workers should be in the area. Work generating suspected silica dust by other trades working near us that is not properly controlled will result in our employees evacuating the work are until such time the exposure no longer exists and any residual silica dust is properly cleaned-up. That work should be done within a containment system and all silica containing dust cleaned up prior to the containment system being taken down.

## Enclosed Cabs

Where enclosed cabs are used as a control measure, the following must be implemented;

1) The cab should be maintained clean and as free as possible from settled dust
2) Has door seals, gaskets, and closing mechanism that work properly
3) Is under positive pressure maintained through continuous delivery of fresh air
4) Has intake air that is filtered through a filter that is 95% efficient
5) Has heating and cooling capabilities

## Industrial Hygiene Monitoring

Where Table 1 tasks cannot be performed or manufacturer qualitative data is not available, then we will conduct industrial hygiene monitoring to determine employee exposure for each task. If the result of monitoring is below the Action Limit (25 $\mu g/m^3$), then no further monitoring is required. If the results of monitoring is above the Action Limit (25 $\mu g/m^3$) but below the PEL (50 $\mu g/m^3$), then follow-up monitoring must be conducted within six months. If the results of monitoring is above the PEL (50 $\mu g/m^3$), the follow-up monitoring must be conducted within three months. This monitoring schedule must continue until results are below the Action Limit after controls have been implemented. If this follow-up monitoring is below the Action Limit then then one more monitoring session must be completed at least seven days apart. If that monitoring is below the Action Limit, then monitoring can discontinue for that task.

We will inform each affected employee in writing within five days of receiving an industrial hygiene report or post the results in an appropriate location accessible to all employees. When the results are above the PEL, we will describe in writing notification the corrective actions to be taken to reduce employee exposure to below the PEL.

## Respiratory Protection

Where engineering controls or work practice controls (worker position relative to the wind, working outside, job rotation) does not adequately control the exposure below 50 $\mu g/m^3$ over an 8 hour time-weighted average (TWA) or Table 1 requires respirators, then employees must be included into our respiratory protection program. Those employees who perform tasks where the exposure is below 50 $\mu g/m^3$ over an 8 hour time-weighted average (TWA) can voluntarily wear respirators without being included into our respiratory protection control program. However, they must sign off on Appendix D.

When employees under this program must wear respirators for 30 days or more a year, we will make a baseline medical exam available at no cost by a physician or other licensed health care professional. This baseline exam must be made within 30 days upon initial assignment or determination workers will wear a respirator 30 or more days a year. This medical exam shall consist of;

1) 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. Also, any history or respiratory system dysfunction or respiratory disease
2) A physical exam with special emphasis on the respiratory system
3) A chest x-ray
4) A pulmonary function test to include forced vital capacity and forced expiratory volume
5) Test for latent tuberculosis infection and any other tests deemed appropriate

These exams must be offered every three years, or more frequently if recommended by the physician or licensed health care provider.

The employer must provide the physician or licensed health care provider with;

1) A copy of OSHA's Crystalline Silica Standard
2) A description of the employee's former, current and anticipated duties related to their potential occupation exposure to respirable crystalline silica
3) The employee's former, current, and anticipated levels of occupational exposure to crystalline silica
4) A description of any personal protective equipment used or to be used by the employee, including when and for how long the employee has used or will use that equipment
5) Information from records of employment related medical examinations previously provided to the employee and currently within the control of the employer

We will ensure the physician or licensed health care provider explains the results of the exam and provide a written report within 30 days. The report must include the results, any conditions that would place the employee at increased risk, recommended limitations on

respirator use, recommended limitations on the employee's exposure to crystalline silica, and a statement that the employee should be seen as a specialist if the x-ray reveals it is deemed appropriate and within 30 days of receiving the doctor's report.
The employer should also receive a written medical opinion form the physician or licensed health care provider within 30 days that includes the date, statement that the exam has met the requirements above, and any recommended limitations on use of respirators.
The same reporting requirements of the physician or licensed health care provider apply if the employee sees a specialist.
All employees with more than 30 days of respirator use in a year, should sign the Medical Surveillance Acceptance/Declination Form.

## Subcontractor Controls

Each subcontractor who may perform tasks that generate respirable silica dust, must provide us with a copy of their exposure control plan.

Each subcontractor is responsible for the control, containment, and cleanup of any dust they generation which may contain levels of respirable silica at or above the OSHA permissible exposure limit (PEL).

1) Containment should be managed at the point of generation through the use of tools/equipment equipped with integral water delivery systems or integral HEPA vacuum systems
2) Where the use of such tools is infeasible/impractical; temporary enclosures must be installed to adequately contain and prevent secondary exposures
3) Housekeeping measures used to clean up silica containing dust must be completed using HEPA vacuuming or other effective controls. Cleanup should be done immediately following completion of the task

Should a contractor have air-sampling documentation showing a particular task will not generate levels of respirable silica above OSHA PEL's or that control methods other than those previously described will adequately control the exposure; a copy of that documentation must be presented to the Plummer Concrete & Associates, Inc., project manager, site supervisor, or safety department prior to commencement of that work and the copy kept on the jobsite for the duration of that work.

## Hazard Communication

A copy of a respirable crystalline silica SDS will be contained in our SDS book which is located in the shop by the timeclock and online at PlummerConcrete.com.

## Job Site Inspections

Our designated competent person, Deke Almsted, Vice President, will conduct regular job site inspections to evaluate work practices, changes in materials in use, and equipment to make sure the controls in this program are being met. These job site inspections will be documented on the Job Site Inspection Form.

## Training

All employees with potential silica exposure will be required to review this program. Training will be provided to cover the following topics;

1) The health hazards of respirable crystalline silica exposure
2) Tasks in the workplace that could result in crystalline silica exposure
3) How to properly use, maintain, and safely clean the equipment we have chosen to protect our workers
4) Control measures we have implemented to help protect employees from exposure to respirable crystalline silica, including engineering controls, work practices, housekeeping, personal hygiene, and respirators to be used
5) What they are to be trained on
6) The identity of the competent person
7) The purpose of the medical surveillance program

This training will be documented on the Employee Training Log.

## Job Specific Program

This program will generally suffice as our job specific program. However, if unusual tasks will be performed or performed in unique situations, then a job specific exposure control plan must be produced and implemented. **If you notice a task that produces silica dust that is not addressed in this plan, bring it to the attention of Deke Almsted immediately so that a plan can be designed and implemented.**

## Program Availability

This program and a copy of it will be made available to all employees and designated representatives upon request.

## Recordkeeping

All industrial hygiene monitoring that we conduct, objective data we obtain, and medical surveillance reports shall comply with 1910.1020 with records maintained for duration of employment plus 30 years.

The purpose of safety rules is to acquaint each employee with a set of safe working rules and procedures that will help you to provide a safe workplace. No safety and health program can cover all conditions that might arise; therefore, it is necessary for employees to use their best judgment along with the observance of established job safety practices.

It is necessary to have the cooperation of employees in order to promote workplace safety and health. If employees do not completely understand all of the job procedures and safety rules, they should ask their supervisor for an explanation prior to starting work. It is management's responsibility to provide employees with equipment and methods that result in safe work performance. However, it is the employee's responsibility to work according to established procedures.

### *General Construction Rules*

Compliance with the following safety rules and guidelines are required of all employees as a condition of continued employment with Plummer Concrete & Associates, Inc. These rules are minimum requirements and are only intended to cover average conditions. Employees shall use good judgment in dealing with conditions not covered in these rules and when in doubt should consult their foreman or supervisor.

1) Employees working in areas where there is a possible danger of head injury from impact, or from falling or flying objects or from electrical shock and burns, shall be protected by protective helmets...in other words, always wear your hardhat!
2) Employees shall use care in the performance of their duties and act in a manner that will assure maximum safety to themselves, fellow employees, other contractors and the general public.
3) Report all injuries and illnesses, no matter how minor, to their supervisor and the office immediately.
4) On-the-job illness, excessive fatigue and any other impairment shall be reported to the supervisor, so possible accident situations can be avoided.
5) Work areas, vehicles and the inside and outside access ways of buildings shall be kept clean. Waste materials shall be disposed of properly and not be allowed to accumulate in work areas.
6) If employees see something unsafe, they should immediately report this to their supervisor and if they can safely do so, correct it.
7) Use the right tool for the right job. Keep tools in good, clean condition. If replacement parts are needed, employees shall ask their supervisor for the necessary parts
8) Use, adjust and repair only tools and equipment for which they have been trained and authorized to use.
9) Employees shall follow any and all company written and oral instructions to safely perform their jobs.
10) Authorized employees shall give special instructions and assistance to new employees who are not familiar with the work.

***General Construction Rules: (cont.)***

**11)** No jewelry should be worn during work to avoid snags on objects. Loose or ragged clothing shall not be worn while working around machinery, moving parts or belts.

**12)** Observe and obey all posted "No Smoking" areas, offices, and buildings.

**13)** Learn the location of emergency phone numbers, first aid kits, fire extinguishers, emergency equipment, fire alarms, and emergency evacuation routes.

**14)** Use good manners and common sense. Avoid distracting others.

**15)** Use the sanitation facilities, keep them clean and do not abuse them.

**16)** Lift correctly - with the legs, not the back. If the load is heavy, GET HELP.

**17)** Running on the job is prohibited, except in obvious emergencies.

**18)** Employees shall observe and obey all caution and danger signs, barricades, and safety permit tags that are placed on the jobsite or in the shop.

**19)** Employees shall not use compressed air or other compressed gasses, especially oxygen, for dusting or cleaning off their body or clothes.

**20)** Gasoline, kerosene or diesel shall not be used for cleaning purposes. Contact your supervisor for an approved safety solvent.

**21)** Unauthorized tampering with any machinery or equipment is not allowed.

**22)** Carrying firearms, explosives or unlawful weapons on company property or in company vehicles is prohibited and grounds for dismissal.

**23)** Sabotage, theft or willful destruction of company property is grounds for immediate dismissal and prosecution.

**24)** Horseplay or practical jokes are not permitted in company vehicles, on the jobsite, or on company property before, during or after work hours. Fighting on the job is grounds for dismissal.

**25)** The use, abuse, transportation, concealment, sale or dispensation of illegal, unauthorized drugs (including detectable amounts in employees' system while working) on company property, jobsites or work areas shall be grounds for dismissal. The use of alcoholic beverages during work on company property, jobsites or work areas is prohibited and can be grounds for dismissal.

**26)** All workers are required to follow specific safety rules and regulations which are prescribed for employee safety in the Occupational Safety and Health Act of 1970 and other applicable federal, state and local statutes, standards and regulations.

**27)** Employees shall also be responsible for any specific subsidiary, construction owner, project, office or department safety rules that have been distributed to them in writing by their supervisor as a condition of employment.

**Specific Job Site Rules**

1) Wear the proper personal protective equipment for the job and conditions. This includes approved hard hats, eye and face protection, hearing protection, gloves, long pants, High-visibility shirt or vest, hard-soled steel-toed work boots or safety shoes and comfortable clothes in good repair.
2) Use a safety harness and fall arrest system when there is exposure to a fall of six (6) feet or more.
3) Gasoline shall be stored and transported in labeled, self-closing; safety cans fitted with spark arrestor screens in the spout. Engines must be shut off when refueling. No smoking, near flammable liquids.
4) Tools shall only be used for the purposes for which they are designed. The employee is responsible for checking the tool's general condition prior to use. All employee-owned tools and extension cords must be inspected and approved by the supervisor prior to use.
5) The employee prior to use shall inspect all ladders. No defective ladders shall be used. Straight ladders shall be placed on secure footing at a 4 to 1 pitch (75-degree angle) with at least 3 feet extending above the work surface. The ladder shall also be tied off at the top. Folding ladders shall be used only in the open and locked position and the last step prior to the top shall never be used. Only non-conductive ladders should be used when working on or near electrical equipment.
6) Unless double insulated, all electric power tools and equipment shall be grounded and connected to ground power cords and receptacles. Power extension cords shall be protected from crushing, cuts and other damage. Ground fault circuit interrupters should be used.
7) Employees shall not operate any machine unless they are trained and authorized to use the equipment. All guards and safety devices must be in place and in operating condition.
8) All compressed gas cylinders shall be chained in an upright position to the wall or other stationary object.
9) Riding on loads, fenders, running boards, sideboards and gates with legs dangling over the sides of trucks will not be tolerated.
10) Do not use power tools and equipment until employees have been properly instructed in safe work methods and become authorized to use them.
11) Be sure that all guards are in place. Do not remove, displace damage or destroy any safety device or safeguard furnished or provided for use on the job, nor interfere with the use thereof.
12) Do not enter an area which has been roped off or barricaded.

Plummer Concrete & Associates, Inc. safety rules, regulations and procedures are illustrative and should not be viewed as an exclusive listing to encompass situations not specifically mentioned. Management reserves the right at all times, when circumstances warrant it, to promulgate new rules or modify existing ones in order to insure a safe, healthy and productive work environment for all employees, contractors or visitors. In addition, any similar guidelines provided and required by the general contractors, owner or by specifications are to be observed. Any conflict between these guidelines and those of any applicable state regulations will mean that the applicable state regulation will supersede.

## PURPOSE

To provide guidelines in the event of an emergency.

## EMERGENCY PROCEDURES:

### *CALL*

Call 911 or appropriate number listed on the emergency number sheet that should be posted in the job trailer. Clearly and concisely report your name, location, address and a description of the situation.

### *ACCOUNT*

Account for all people known on the jobsite. Have a designated assembly area. Supervisors, foremen, and subcontractors should determine if anybody is missing.

### *ACTION*

- **Building Collapse**
  1. Rope off area.
  2. Block off street and sidewalk and re-route pedestrians and vehicle traffic.
  3. Check for fires, gas leaks, water leaks, and electrical power conditions.
  4. Assist injured personnel.

- **Explosion**
  1. Secure area and keep people away from area.
  2. Assist injured personnel.

- **Fire**
  1. Attempt to extinguish fire with maximum of two fire extinguishers. If the fire is not extinguished, evacuate the building or area and wait for the fire dept.
  2. Alert people to evacuate the building or area.
  3. Keep people out of burning building.
  4. Keep people and equipment away from building or area so that there is adequate access for emergency personnel and equipment.
  5. Assist injured personnel.

- **Gas Line Hit**
  1. Clear and secure the area.
  2. Evacuate the building.
  3. Discontinue any operation that produces sparks or heat.

**EMERGENCY PROCEDURES** *continued . . .*

- **Hazardous Material Spills or Leaks**
  1. Secure the area.
  2. Contain the spill using appropriate materials to stop it from spreading.
  3. Determine what the material is.
  4. Obtain SDS from *Plummer Concrete & Associates, Inc.* to review information regarding emergency procedures, medical treatment, and clean up.

- **Power Line Down**
  1. Block off and stay away from area until Power Company or electrical contractor shuts off power.
  2. Secure the area.
  3. Keep unauthorized personnel away from the area.

- **Sewer Line**
  1. Take steps to prevent flow from entering streams and waterways.
  2. Secure area with barricades.

- **Trench Entrapment**
  1. Re-shore trench before entering.
  2. Begin hand digging only, no mechanical equipment.
  3. Assist injured personnel.

- **Water Line**
  1. Shut off water flow.
  2. Secure area with barricades.

- **<u>TORNADO</u>:**

  If you hear the outdoor warning sirens sound and the weather is threatening, go to the closest building and follow the owner's instructions or go to the nearest inside restroom. If there is no building or you are not close enough to make it, lie down in a depression or low area and cover your head. **Never try to outrun a tornado!**

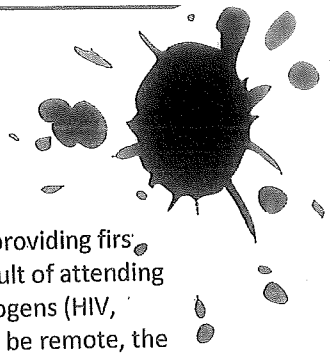
- **LIGHTNING:**

  Lightning presents an extreme hazard to all who may be exposed to it. The method for calculating how far away lightning strikes are is to listen for the thunder and count or observe a watch or clock. The distance to the lightning is equal to approximately one mile for every five seconds of time between the flash and the thunder. The following information is provided by the United States Weather Service.

**If lightning threatens:**
Move indoors but stay away from windows.
Avoid using electrical appliances and use the telephone only in an emergency.

**If caught outdoors during a thunderstorm:**
Stay away from isolated objects such as single trees or towers. If your hair stands on end or your skin tingles, lightning may be about to strike.
Crouch down quickly and make yourself as small a target as possible.
Minimize contact with the ground.

**If driving in a motor vehicle:**
Stay in your vehicle. An enclosed vehicle offers reasonably good protection from lightning as long as you don't touch metal.



# BLOODBORNE PATHOGENS POLICY

Our employees are not considered first responders, but may act as a good Samaritan in providing first aid to fellow employees, or individuals we may encounter in our everyday lives. As a result of attending to someone who is injured, we may be exposing ourselves to potential Bloodborne Pathogens (HIV, Hepatitis B, etc.). Even though the potential for exposure to Bloodborne Pathogens may be remote, the transmission of these pathogens from one individual to another could be deadly. Therefore, there are several things that should be consider to help control the potential exposure, should a situation arise where we may render first aid. These include;

- Treat all exposures to blood or other body fluids as being potentially infectious.
- Exposure involves reasonably anticipated contact with skin, eye, or mucous membranes such as the nose and mouth.
- Primary routes of transmission of Bloodborne Pathogens are from blood and saliva through contact with non-intact skin, eyes, mouth, or other mucous membranes.
- Personal protective equipment such as safety glasses with side shields, disposable masks, and disposable gloves should be worn whenever you provide first aid.
- If an employee has an exposure incident, antiseptic hand cleaner in conjunction with clean cloth/paper towels or antiseptic towelettes is available for the cleaning of affected areas when soap and water are not available.
- Any equipment. materials, or work areas that are potentially contaminated should be properly decontaminated* before materials or equipment is put back into use or work begins in an area.
- If an exposure incident occurs where the employee feels that there is a reasonable likelihood of infection to Hepatitis B, then the employee should contact the nearest Hospital within 24 hours for a post exposure evaluation and administration of a Hepatitis B vaccine if deemed appropriate.
- If an exposure incident occurs on the job, the office should be informed so that the appropriate recordkeeping requirements can be met.
- Note that the Hepatitis B virus can be active up to 10 days and the HIV virus active up to 3 days outside of the body cavity in ideal conditions. Therefore, when dealing with the clean-up of materials, equipment, or a potentially affected area, the same precautions should be taken.
- * Decontamination should be done with household bleach diluted between 1:10 to 1:100 with water

A copy of the OSHA Standard on Bloodborne Pathogens is available in the office for any employee that may want to refer to it.

It is located in the Safety Data Sheet 3-ring binder near the timeclock and is also available online at www.PlummerConcrete.com on the Employee Safety page.

**Definitions** applicable to this section:

"Bull float" means a tool used to spread out and smooth concrete.

"Formwork" means the total system of support for freshly placed or partially cured concrete, including the mold or sheeting (form) that is in contact with the concrete as well as all supporting members including hardware and braces.

"Limited access zone" means an area alongside a masonry wall which is under construction and which is clearly demarcated to limit access by employees.

"Precast concrete" means concrete members (such as walls, panels, slabs, columns, and beams) which have been formed, cast, and cured prior to final placement in a structure.

***Construction loads.***

No construction loads shall be placed on a concrete structure or portion of a concrete structure unless the employer determines, based on information received from a person who is qualified in structural design, that the structure or portion of the structure is capable of supporting the loads.

***Reinforcing steel.***

All protruding reinforcing steel, onto and into which employees could fall, shall be guarded to eliminate the hazard of impalement.

***Personal protective equipment.***

No employee shall be permitted to apply a cement, sand, and water mixture through a pneumatic hose unless the employee is wearing protective head and face equipment.

***Power concrete trowels.***

Powered and rotating type concrete troweling machines that are manually guided shall be equipped with a control switch that will automatically shut off the power whenever the hands of the operator are removed from the equipment handles.

***Concrete pumping systems.***

Concrete pumping systems using discharge pipes shall be provided with pipe supports designed for 100 percent overload.

Compressed air hoses used on concrete pumping system shall be provided with positive fail-safe joint connectors to prevent separation of sections when pressurized.

***Bull floats.***

Bull float handles used where they might contact energized electrical conductors, shall be constructed of nonconductive material or insulated with a nonconductive sheath whose electrical and mechanical characteristics provide the equivalent protection of a handle constructed of nonconductive material.

***Masonry saws.***

Masonry saw shall be guarded with a semicircular enclosure over the blade. A method for retaining blade fragments shall be incorporated in the design of the semicircular *enclosure.*

***Lockout/Tagout procedures.***

No employee shall be permitted to perform maintenance or repair activity on equipment (such as compressors, mixers, screens or pumps used for concrete and masonry construction activities) where the inadvertent operation of the equipment could occur and cause injury, unless all potentially hazardous energy sources have been locked out and tagged. Tags shall read Do Not Start or similar language to indicate that the equipment is not to be operated.

## GENERAL REQUIREMENTS FOR FORMWORK

Formwork shall be designed, fabricated, erected, supported, braced and maintained so that it will be capable of supporting without failure all vertical and lateral loads that may reasonably be anticipated to be applied to the formwork.

Drawings or plans, including all revisions, for the formwork shall be available at the jobsite.

Precast concrete wall units, structural framing, and tilt-up wall panels shall be adequately supported to prevent overturning and to prevent collapse until permanent connections are completed.

Lifting inserts which are embedded or otherwise attached to tilt-up precast concrete members shall be capable of supporting at least two times the maximum intended load applied or transmitted to them.

Lifting inserts which are embedded or otherwise attached to precast concrete members, other than the tilt-up members, shall be capable of supporting at least four times the maximum intended load applied or transmitted to them.

Lifting hardware shall be capable of supporting at least five times the maximum intended load applied transmitted to the lifting hardware.

No employee shall be permitted under precast concrete members being lifted or tilted into position except those employees required for the erection of those members.

**Limited access zone**

A limited access zone shall be established whenever a masonry wall is being constructed. The limited access zone shall conform to the following:

- The limited access zone shall be established prior to the start of construction of the wall.
- The limited access zone shall be equal to the height of the wall to be constructed plus four feet, and shall run the entire length of the wall.
- The limited access zone shall be established on the side of the wall which will be unscaffolded.
- The limited access zone shall be restricted to entry by employees actively engaged in constructing the wall. No other employees shall be permitted to enter the zone.
- The limited access zone shall remain in place until the wall is adequately supported to prevent overturning and to prevent collapse unless the height of wall is over eight feet, in which case, the limited access zone shall remain in place until the requirements of paragraph (b) of this section have been met.

All masonry walls over eight feet in height shall be adequately braced to prevent overturning and to prevent collapse unless the wall is adequately supported so that it will not overturn or collapse. The bracing shall remain in place until permanent supporting elements of the structure are in place.

**Confined Space Entry**

A confined space is an area that has limited means of entry and exit and is not designed for continuous employee occupancy. Examples include pits, sewers, trenches, and crawl spaces. **Under no circumstances are employees to enter a confined space**. Contractors will be responsible for the permit space entry of their own personnel. Plummer Concrete & Associates, Inc.'s employees will not be permitted to enter confined space(s) until a supervisor has determined that they have a permit space entry program and that the contractor's program does not endanger *Plummer Concrete & Associates, Inc.* employees.

## PURPOSE

To eliminate unsafe conditions involving electrical equipment and tools, including faulty insulation, improper grounding, loose electrical connections, defective parts, ground faults in equipment and unguarded live electrical parts.

## POLICY

### General Requirements

- Each project must provide a safe place to work for every employee, which includes protecting the employee from electrical hazards such as fault currents to ground.
- When an electrical ground fault occurs, the current flows through the path with minimum impedance to ground. It is imperative that an employee does not inadvertently become the conductor of the current.
- There are two approved methods of protecting the worker from a ground fault. These methods are in addition to other requirements for equipment grounding conductors. They are:
    - Use of ground fault circuit interrupters (GFCI).
    - An assured equipment-grounding conductor program.

## GROUND FAULT CIRCUIT INTERRUPTER (GFCI)

The two major aspects in the effective use of GFCI's are:

- Attention shall be given to the proper installation and maintenance of GFCI's within the requirements of the National Electric Code (NEC). The system shall be tested prior to being activated into service and the test results documented and kept on file.
- If fault trip-out occurs after the circuit has been tested and activated into service, a thorough investigation must be made to determine the cause. The necessary repairs or corrections shall be made before re-using. Application of a silicone solution may be helpful if the fault trip-out is due to excessive moisture.

In purchasing GFCI's, the specifications shall state that GFCI's shall conform to Underwriters Laboratories Standard 943, "Ground Fault Circuit Interrupters." Each circuit protected by a circuit breaker GFCI requires its own neutral conductor.

Receptacle type GFCI's may be used on common neutral systems and where receptacles are more than 250 feet from the breaker.

## ASSURED EQUIPMENT GROUNDING POLICY

The major aspects in the establishment of an effective program are:

- To establish and implement a program to reduce the potential of injuries caused by electric shock from cord sets, receptacles, and equipment connected by cord and plug.
- To meet the requirements of local, state, and federal rules and regulations.

It is recognized that in order to prevent injury from a ground fault, the integrity of the grounding system must be maintained at all times. To achieve this, a program of inspection and testing shall be implemented.

The project supervisor shall be responsible for the inspection and testing of each cord set, electric tool, and piece of electrical equipment and receptacle:

- Before first use.
- Before equipment is returned to service following repairs.
- Before equipment is used after any incident which can be reasonably suspected to have caused damage.
- Every three months.

The quarterly inspections shall be the responsibility of the project supervisor. Each cord set, electric tool, receptacle, and piece of electrical equipment shall be tested to ensure a continuous ground circuit, and that equipment grounding conductor is connected to its proper terminal. The testing equipment shall be capable of testing for ground conductor continuity and resistance line fault, and proper connection of conductors to terminals.

Receptacles which are a permanent part of the wiring of permanent buildings are excluded from the quarterly testing and inspection requirements of this procedure.

Before use, each cord set, electric tool or piece of electrical equipment shall be visually inspected daily for signs of damage. They shall be inspected for signs of frayed or damaged insulation, crushed cable, loose or missing covers or screws, missing ground prongs on plugs, and other similar substandard conditions. Equipment found to be damaged or defective shall not be used until repaired and equipment suspected of being damaged or defective shall be inspected and tested prior to using.

To verify inspection and testing, a piece of color-coded tape will be affixed to each item inspected by the inspector. Four colors of tape shall be used. The expiration date of each inspection period may be pre-printed on the tape to avoid conflicts with other similar color-coded tapes on the project. The color code system is as follows:

**Color Coding Scheme (Quarterly)**

| | |
|---|---|
| January 1 through March 31 ..... | White |
| April 1 through June 30 ..... | Green |
| July 1 through September 30 ..... | Red |
| October 1 through December 31 ..... | Orange |

The inspection tape shall not be used for any other purpose. The project supervisor shall strictly control use of tape. Color scheme may vary according to region.

Any electrical tool, cord set, or piece of electrical equipment which bears an expired inspection sticker or no inspection sticker shall be considered defective and is not to be used until it is inspected.

Only the electrical inspectors are authorized to remove inspection tape. Unauthorized removal or defacing of inspection tape shall be cause for disciplinary action.

It shall be the responsibility of each foreman to ensure that his electric tools and electrical equipment are tested and documented.

## LIGHTING

- All fluorescent light fixtures in job trailers should have either a full cover or individual plastic sleeves over the tubes.
- Temporary lighting shall have lamps that are protected from accidental contact or breakage.

## DAMAGED EXTENSION CORDS

If the outer insulation is cut or torn open one-half inch or less ***and*** the insulation of the conductors are not damaged (bare copper showing), electrical tape (at least two layers) may be used to protect the damaged area. Electrical shrink-wrap may be used in place of or in addition to the tape.

If the cut or torn area is more than one-half inch in length and/or the conductor insulation is cut, cracked, mashed or has any bare copper showing, the cord is to be cut at the damaged area, tagged "out of service" (noting the problem), and sent back to the shop for repair.

If the insulation is pulled back away from either end connector (allowing the conductors to show - insulation may be good), the cord must be tagged "out of service" (noting the problem), and sent back to the shop for repair. Or, if you are qualified, you may field repair this situation so that the outer insulation is under the strain relief section of the connector.

## PURPOSE

To provide guidelines to ensure the safety of all workers who are required to work in and around excavations.

**Scope and application.**

This section applies to all open excavations made in the earth's surface. Excavations are defined to include trenches.

**Definitions**

"Accepted engineering practices" means those requirements which are compatible with standards of practice required by a registered professional engineer.

"Benching (Benching system)" means a method of protecting employees from cave-ins by excavating the sides of an excavation to form one or a series of horizontal levels or steps, usually with vertical or near-vertical surfaces between levels.

"Cave-in" means the separation of a mass of soil or rock material from the side of an excavation, or the loss of soil from under a trench shield or support system, and its sudden movement into the excavation, either by falling or sliding, in sufficient quantity so that it could entrap, bury, or otherwise injure and immobilize a person.

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

"Cross braces" mean the horizontal members of a shoring system installed perpendicular to the sides of the excavation, the ends of which bear against either uprights or wales.

"Excavation" means any man-made cut, cavity, trench, or depression in an earth surface, formed by earth removal.

"Faces" or "sides" means the vertical or inclined earth surfaces formed as a result of excavation work.

"Failure" means the breakage, displacement, or permanent deformation of a structural member or connection so as to reduce its structural integrity and its supportive capabilities.

"Kickout" means the accidental release or failure of a cross brace.

"Protective system" means a method of protecting employees from cave-ins, from material that could fall or roll from an excavation face or into an excavation, or from the

collapse of adjacent structures. Protective systems include support systems, sloping and benching systems, shield systems, and other systems that provide the necessary protection.

""Sloping (Sloping system)" means a method of protecting employees from cave-ins by excavating to form sides of an excavation that are inclined away from the excavation so as to prevent cave-ins. The angle of incline required to prevent a cave-in varies with differences in such factors as the soil type, environmental conditions of exposure, and application of surcharge loads.

"Stable rock" means natural solid mineral material that can be excavated with vertical sides and will remain intact while exposed. Unstable rock is considered to be stable when the rock material on the side or sides of the excavation is secured against caving-in or movement by rock bolts or by another protective system that has been designed by a registered professional engineer.

"Support system" means a structure such as underpinning, bracing, or shoring, which provides support to an adjacent structure, underground installation, or the sides of an excavation.

"Trench (Trench excavation)" means a narrow excavation (in relation to its length) made below the surface of the ground. In general, the depth is greater than the width, but the width of a trench (measured at the bottom) is not greater than 15 feet (4.6 m). If forms or other structures are installed or constructed in an excavation so as to reduce the dimension measured from the forms or structure to the side of the excavation to 15 feet (4.6 m) or less (measured at the bottom of the excavation), the excavation is also considered to be a trench.

**Means of egress from trench excavations.**

A stairway, ladder, ramp or other safe means of egress shall be located in trench excavations that are 4 feet (1.22 m) or more in depth so as to require no more than 25 feet (7.62 m) of lateral travel for employees.

**Warning system for mobile equipment.**

When mobile equipment is operated adjacent to an excavation, or when such equipment is required to approach the edge of an excavation, and the operator does not have a clear and direct view of the edge of the excavation, a warning system shall be utilized such as barricades, hand or mechanical signals, or stop logs. If possible, the grade should be away from the excavation.

**Protection of employees in excavations.**

Each employee in an excavation shall be protected from cave-ins by an adequate protective system designed in accordance with this section except when:

- Excavations are made entirely in stable rock; or
- Excavations are less than 5 feet (1.52 m) in depth and examination of the ground by a competent person provides no indication of a potential cave-in.

Protective systems shall have the capacity to resist without failure all loads that are intended or could reasonably be expected to be applied or transmitted to the system.

**Design of sloping and benching systems.**
The slopes and configurations of sloping and benching systems shall be selected and constructed by the employer or his designee and shall be in accordance with the requirements of paragraph (b)(1); or, in the alternative, paragraph (b)(2); or, in the alternative, paragraph (b)(3); or, in the alternative, paragraph (b)(4), as follows:

(b)(1)

***Option (1) - Allowable configurations and slopes.***
Excavations shall be sloped at an angle not steeper than one and one-half horizontal to one vertical (34 degrees measured from the horizontal), unless the employer uses one of the other options listed below.

Slopes specified in paragraph (b)(1)(i) of this section, shall be excavated to form configurations that are in accordance with the slopes shown for Type C soil in Appendix B to this subpart.

(b)(2)

Option (2) - **Determination of slopes and configurations using Appendices A and B**. Maximum allowable slopes, and allowable configurations for sloping and benching systems, shall be determined in accordance with the conditions and requirements set forth in appendices A and B to this subpart.

(b)(3)

Option (3) - **Designs using other tabulated data**.
Designs of sloping or benching systems shall be selected from and in accordance with tabulated data, such as tables and charts. The tabulated data shall be in written form and shall include all of the following:

- Identification of the parameters that affect the selection of a sloping or benching system drawn from such data;
- Identification of the limits of use of the data, to include the magnitude and configuration of slopes determined to be safe;
- Explanatory information as may be necessary to aid the user in making a correct selection of a protective system from the data.

At least one copy of the tabulated data which identifies the registered professional engineer, who approved the data, shall be maintained at the jobsite during construction of the protective system. After that time the data may be stored off the jobsite, but a copy of the data shall be made available to the Secretary upon request.

(b)(4)

Option (4) - **Design by a registered professional engineer.**
Sloping and benching systems not utilizing Option (1) or Option (2) or Option (3) under paragraph (b) of this section shall be approved by a registered professional engineer.

Designs shall be in written form and shall include at least the following:

- The magnitude of the slopes that were determined to be safe for the particular project;
- The identity of the registered professional engineer approving the design.

At least one copy of the design shall be maintained at the jobsite while the slope is being constructed. After that time the design need not be at the jobsite, but a copy shall be made available to the Secretary upon request.

**Sloping and benching systems.**

Employees shall not be permitted to work on the faces of sloped or benched excavations at levels above other employees except when employees at the lower levels are adequately protected from the hazard of falling, rolling, or sliding material or equipment.

**Soil Classification:**

(a) *Scope and application* - (1) Scope. This appendix describes a method of classifying soil and rock deposits based on site and environmental conditions, and on the structure and composition of the earth deposits. The appendix contains definitions, sets forth requirements, and describes acceptable visual and manual tests for use in classifying soils.

(2) *Application.* This appendix applies when a sloping or benching system is designed in accordance with the requirements set forth in 1926.652(b)(2) as a method of protection for employees from cave-ins. This appendix also applies when timber shoring for excavations is designed as a method of protection from cave-ins in accordance with appendix C to subpart P of part 1926, and when aluminum hydraulic shoring is designed in accordance with appendix D. This Appendix also applies if other protective systems are designed and selected for use from data prepared in accordance with the requirements set forth in 1926.652(c), and the use of the data is predicated on the use of the soil classification system set forth in this appendix.

(b) *Definitions.* The definitions and examples given below are based on, in whole or in part, the following; American Society for Testing Materials (ASTM) Standards D653-85 and D2488; The Unified Soils Classification System; The U.S. Department of Agriculture (USDA) Textural Classification Scheme; and The National Bureau of Standards Report BSS-121.

"Cemented soil" means a soil in which the particles are held together by a chemical agent, such as calcium carbonate, such that a hand-size sample cannot be crushed into powder or individual soil particles by finger pressure.

"Cohesive soil" means clay (fine grained soil), or soil with a high clay content, which has cohesive strength. Cohesive soil does not crumble, can be excavated with vertical sideslopes, and is plastic when moist. Cohesive soil is hard to break up when dry, and exhibits significant cohesion when submerged. Cohesive soils include clayey silt, sandy clay, silty clay, clay and organic clay.

"Dry soil" means soil that does not exhibit visible signs of moisture content.

"Fissured" means a soil material that has a tendency to break along definite planes of fracture with little resistance, or a material that exhibits open cracks, such as tension cracks, in an exposed surface.

"Granular soil" means gravel, sand, or silt (coarse grained soil) with little or no clay content. Granular soil has no cohesive strength. Some moist granular soils exhibit apparent cohesion. Granular soil cannot be molded when moist and crumbles easily when dry.

"Layered system" means two or more distinctly different soil or rock types arranged in layers. Micaceous seams or weakened planes in rock or shale are considered layered.

"Moist soil" means a condition in which a soil looks and feels damp. Moist cohesive soil can easily be shaped into a ball and rolled into small diameter threads before crumbling. Moist granular soil that contains some cohesive material will exhibit signs of cohesion between particles.

"Plastic" means a property of a soil which allows the soil to be deformed or molded without cracking, or appreciable volume change.

"Saturated soil" means a soil in which the voids are filled with water. Saturation does not require flow. Saturation, or near saturation, is necessary for the proper use of instruments such as a pocket penetrometer or sheer vane.

"Soil classification system" means, for the purpose of this subpart, a method of categorizing soil and rock deposits in a hierarchy of Stable Rock, Type A, Type B, and Type C, in decreasing order of stability. The categories are determined based on an analysis of the properties and performance characteristics of the deposits and the characteristics of the deposits and the environmental conditions of exposure.

"Stable rock" means natural solid mineral matter that can be excavated with vertical sides and remain intact while exposed.

"Submerged soil" means soil which is underwater or is free seeping.

"Type A" means cohesive soils with an unconfined, compressive strength of 1.5 ton per square foot (tsf) (144 kPa) or greater. Examples of cohesive soils are: clay, silty clay, sandy clay, clay loam and, in some cases, silty clay loam and sandy clay loam. Cemented soils such as caliche and hardpan are also considered Type A. However, no soil is Type A if:

(i) The soil is fissured; or

(ii) The soil is subject to vibration from heavy traffic, pile driving, or similar effects; or

(iii) The soil has been previously disturbed; or

(iv) The soil is part of a sloped, I ayered system where the layers dip into the excavation on a slope of four horizontal to one vertical (4H:1V) or greater; or

(v) The material is subject to other factors that would require it to be classified as a less stable material.

"Type B" means:
(i) Cohesive soil with an unconfined compressive strength greater than 0.5 tsf (48 kPa) but less than 1.5 tsf (144 kPa); or
(ii) Granular cohesionless soils including: angular gravel (similar to crushed rock), silt, silt loam, sandy loam and, in some cases, silty clay loam and sandy clay loam.
(iii) Previously disturbed soils except those which would otherwise be classed as Type C soil.
(iv) Soil that meets the unconfined compressive strength or cementation requirements for Type A, but is fissured or subject to vibration; or
(v) Dry rock that is not stable; or
(vi) Material that is part of a sloped, layered system where the layers dip into the excavation on a slope less steep than four horizontal to one vertical (4H:1V), but only if the material would otherwise be classified as Type B.
"Type C" means:
(i) Cohesive soil with an unconfined compressive strength of 0.5 tsf (48 kPa) or less; or
(ii) Granular soils including gravel, sand, and loamy sand; or
(iii) Submerged soil or soil from which water is freely seeping; or
(iv) Submerged rock that is not stable, or
(v) Material in a sloped, layered system where the layers dip into the excavation or a slope of four horizontal to one vertical (4H:1V) or steeper.
"Unconfined compressive strength" means the load per unit area at which a soil will fail in compression. It can be determined by laboratory testing, or estimated in the field using a pocket penetrometer, by thumb penetration tests, and other methods.
"Wet soil" means soil that contains significantly more moisture than moist soil, but in such a range of values that cohesive material will slump or begin to flow when vibrated. Granular material that would exhibit cohesive properties when moist will lose those cohesive properties when wet.

(c) Requirements - (1) Classification of soil and rock deposits. Each soil and rock deposit shall be classified by a competent person as Stable Rock, Type A, Type B, or Type C in accordance with the definitions set forth in paragraph (b) of this appendix.

(2) Basis of classification. The classification of the deposits shall be made based on the results of at least one visual and at least one manual analysis. Such analyses shall be conducted by a competent person using tests described in paragraph (d) below, or in other recognized methods of soil classification and testing such as those adopted by the American Society for Testing Materials, or the U.S. Department of Agriculture textural classification system.

(3) Visual and manual analyses. The visual and manual analyses, such as those noted as being acceptable in paragraph (d) of this appendix, shall be designed and conducted to provide sufficient quantitative and qualitative information as may be necessary to identify properly the properties, factors, and conditions affecting the classification of the deposits.

(4) Layered systems. In a layered system, the system shall be classified in accordance with its weakest layer. However, each layer may be classified individually where a more stable layer lies under a less stable layer.

(5) Reclassification. If, after classifying a deposit, the properties, factors, or conditions affecting its classification change in any way, the changes shall be evaluated by a competent person. The deposit shall be reclassified as necessary to reflect the changed circumstances.(d) Acceptable visual and manual tests. - (1) Visual tests. Visual analysis is conducted to determine qualitative information regarding the excavation site in general, the soil adjacent to the excavation, the soil forming the sides of the open excavation, and the soil taken as samples from excavated material.

(i) Observe samples of soil that are excavated and soil in the sides of the excavation. Estimate the range of particle sizes and the relative amounts of the particle sizes. Soil that is primarily composed of fine-grained material is cohesive material. Soil composed primarily of coarse-grained sand or gravel is granular material.

(ii) Observe soil as it is excavated. Soil that remains in clumps when excavated is cohesive. Soil that breaks up easily and does not stay in clumps is granular.

(iii) Observe the side of the opened excavation and the surface area adjacent to the excavation. Crack-like openings such as tension cracks could indicate fissured material. If chunks of soil spall off a vertical side, the soil could be fissured. Small spalls are evidence of moving ground and are indications of potentially hazardous situations.

(iv) Observe the area adjacent to the excavation and the excavation itself for evidence of existing utility and other underground structures, and to identify previously disturbed soil.

(v) Observed the opened side of the excavation to identify layered systems. Examine layered systems to identify if the layers slope toward the excavation. Estimate the degree of slope of the layers.

(vi) Observe the area adjacent to the excavation and the sides of the opened excavation for evidence of surface water, water seeping from the sides of the excavation, or the location of the level of the water table.

(vii) Observe the area adjacent to the excavation and the area within the excavation for sources of vibration that may affect the stability of the excavation face.

(2) Manual tests. Manual analysis of soil samples is conducted to determine quantitative as well as qualitative properties of soil and to provide more information in order to classify soil properly.

(i) Plasticity. Mold a moist or wet sample of soil into a ball and attempt to roll it into threads as thin as 1/8-inch in diameter. Cohesive material can be successfully rolled into threads without crumbling. For example, if at least a two inch (50 mm) length of 1/8-inch thread can be held on one end without tearing, the soil is cohesive.

(ii) Dry strength. If the soil is dry and crumbles on its own or with moderate pressure into individual grains or fine powder, it is granular (any combination of gravel, sand, or silt). If the soil is dry and falls into clumps which break up into smaller clumps, but the smaller clumps can only be broken up with difficulty, it may be clay in any combination with gravel, sand or silt. If the dry soil breaks into clumps which do not break up into

small clumps and which can only be broken with difficulty, and there is no visual indication the soil is fissured, the soil may be considered unfissured.

(iii) Thumb penetration. The thumb penetration test can be used to estimate the unconfined compressive strength of cohesive soils. (This test is based on the thumb penetration test described in American Society for Testing and Materials (ASTM) Standard designation D2488 - "Standard Recommended Practice for Description of Soils (Visual - Manual Procedure).") Type A soils with an unconfined compressive strength of 1.5 tsf can be readily indented by the thumb; however, they can be penetrated by the thumb only with very great effort. Type C soils with an unconfined compressive strength of 0.5 tsf can be easily penetrated several inches by the thumb, and can be molded by light finger pressure. This test should be conducted on an undisturbed soil sample, such as a large clump of spoil, as soon as practicable after excavation to keep to a minimum the effects of exposure to drying influences. If the excavation is later exposed to wetting influences (rain, flooding), the classification of the soil must be changed accordingly.

(iv) Other strength tests. Estimates of unconfined compressive strength of soils can also be obtained by use of a pocket penetrometer or by using a hand-operated shearvane.

(v) Drying test. The basic purpose of the drying test is to differentiate between cohesive material with fissures, un-fissured cohesive material, and granular material. The procedure for the drying test involves drying a sample of soil that is approximately one inch thick (2.54 cm) and six inches (15.24 cm) in diameter until it is thoroughly dry:

(A) If the sample develops cracks as it dries, significant fissures are indicated.

(B) Samples that dry without cracking are to be broken by hand. If considerable force is necessary to break a sample, the soil has significant cohesive material content. The soil can be classified as an un-fissured cohesive material and the unconfined compressive strength should be determined.

(C) If a sample breaks easily by hand, it is either a fissured cohesive material or a granular material. To distinguish between the two, pulverize the dried clumps of the sample by hand or by stepping on them. If the clumps do not pulverize easily, the material is cohesive with fissures. If they pulverize easily into very small fragments, the material is granular.

The following figures are a graphic summary of the requirements contained in subpart P for excavations 20 feet or less in depth. Protective systems for use in excavations more than 20 feet in depth must be designed by a registered professional engineer in accordance with 1926.652(b) and (c).

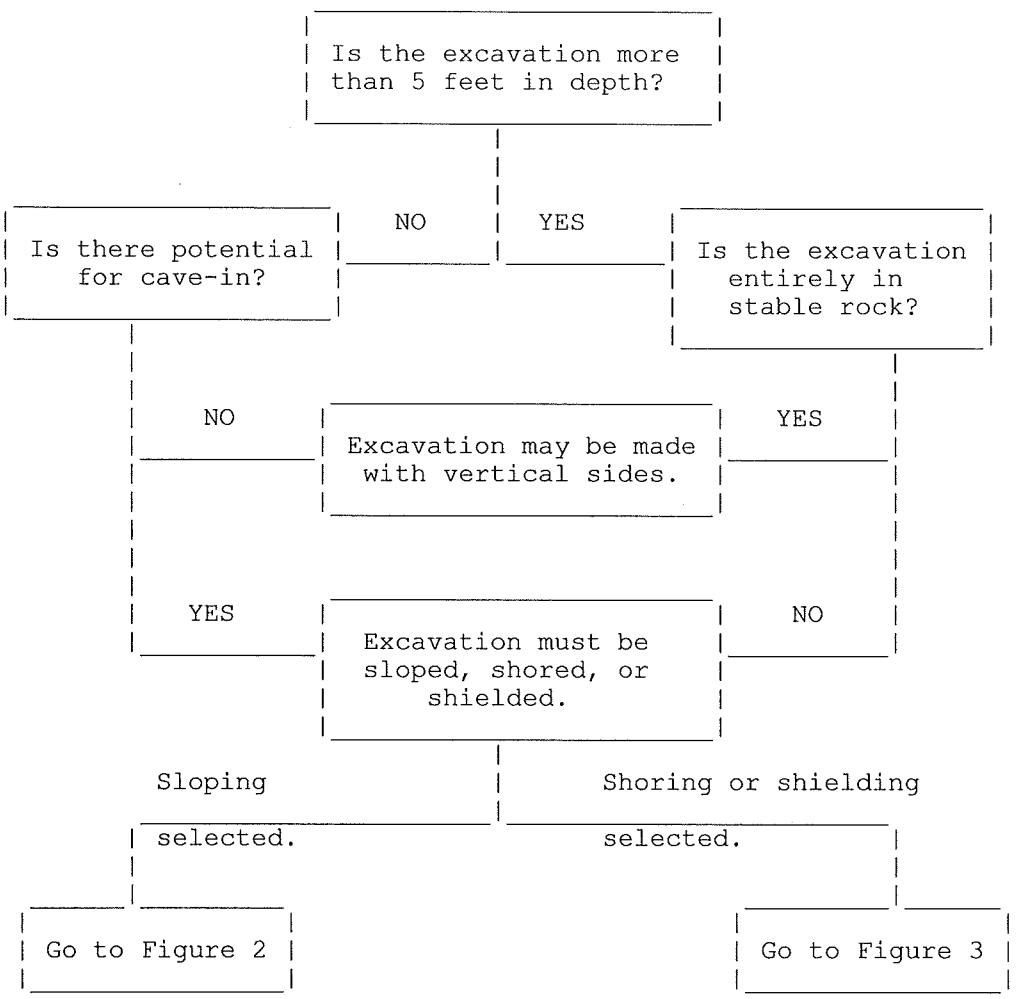


FIGURE 1 - PRELIMINARY DECISIONS

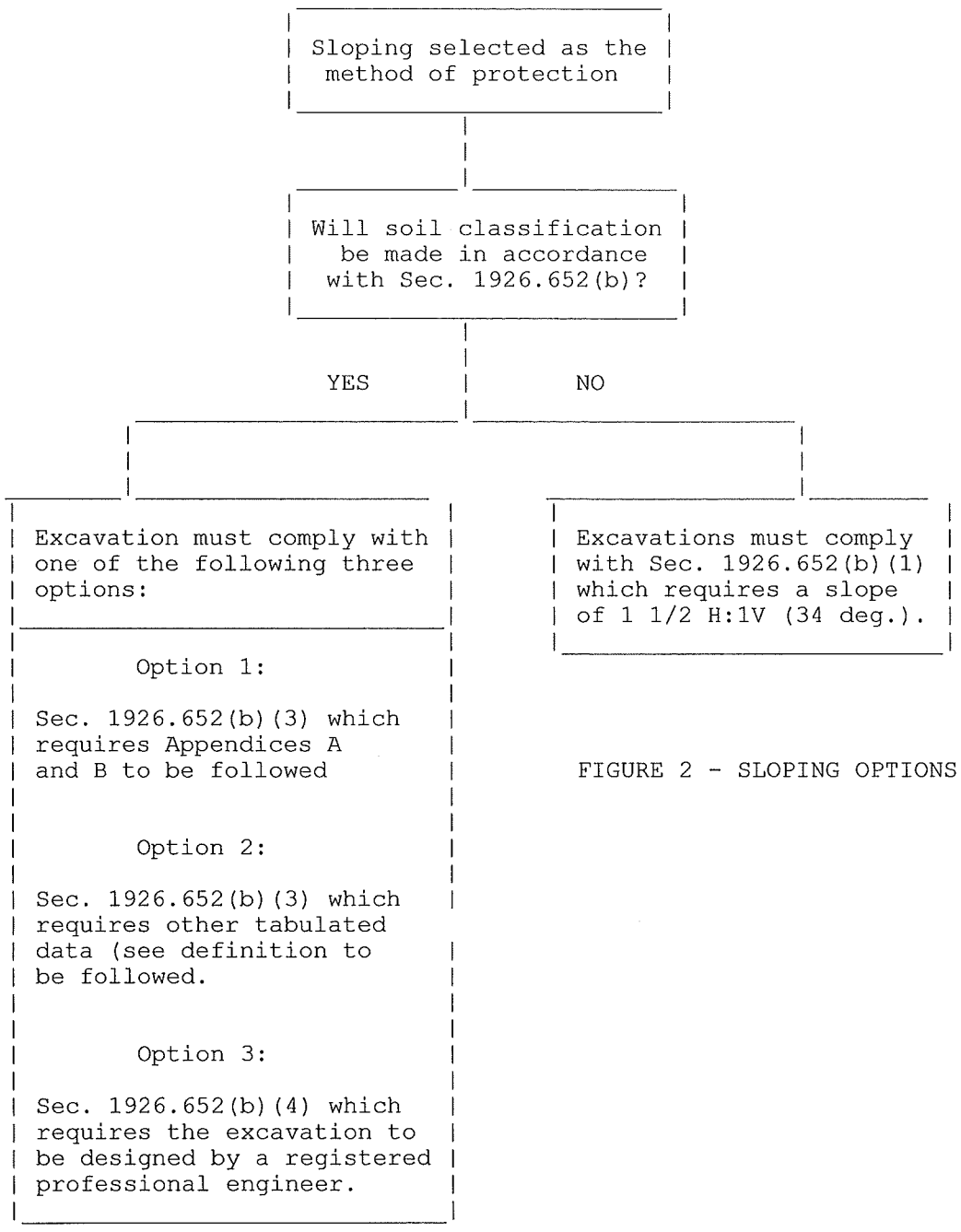
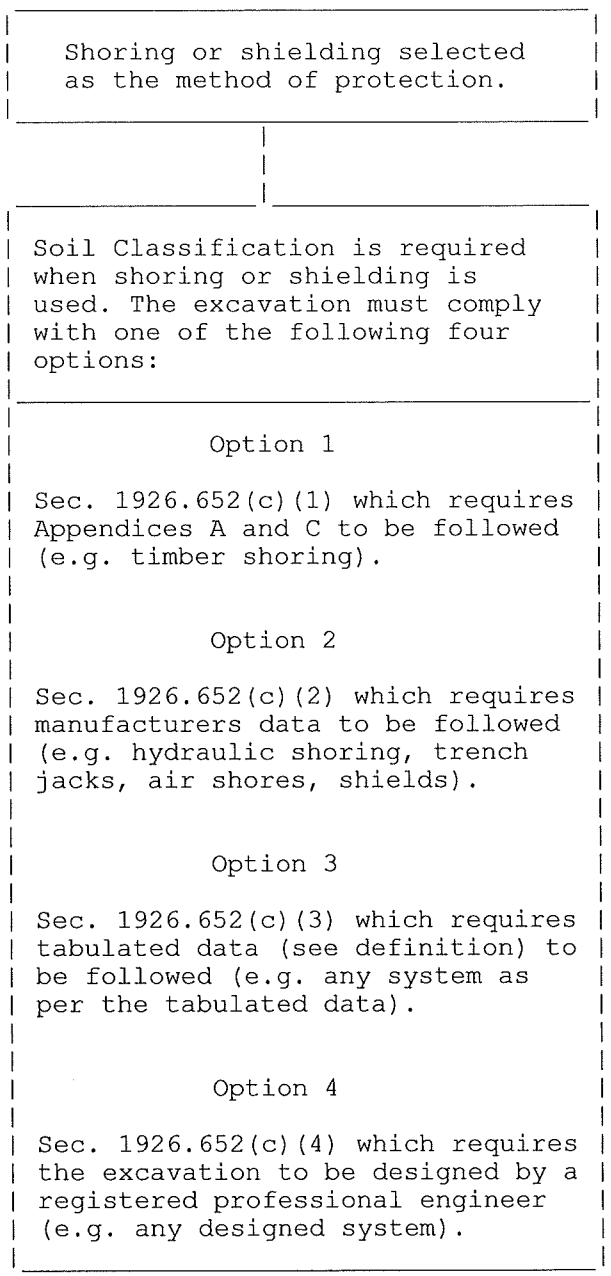



FIGURE 2 - SLOPING OPTIONS

FIGURE 3 - SHORING AND SHIELDING OPTIONS



## Sloping and Benching

(a) ***Scope and application***. This appendix contains specifications for sloping and benching when used as methods of protecting employees working in excavations from cave-ins. The requirements of this appendix apply when the design of sloping and benching protective systems is to be performed in accordance with the requirements set forth in § 1926.652(b)(2).

(b) ***Definitions***.

***Actual slope*** means the slope to which an excavation face is excavated.

***Distress*** means that the soil is in a condition where a cave-in is imminent or is likely to occur. Distress is evidenced by such phenomena as the development of fissures in the face of or adjacent to an open excavation; the subsidence of the edge of an excavation; the slumping of material from the face or the bulging or heaving of material from the bottom of an excavation; the spalling of material from the face of an excavation; and ravelling, i.e., small amounts of material such as pebbles or little clumps of material suddenly separating from the face of an excavation and trickling or rolling down into the excavation.

***Maximum allowable slope*** means the steepest incline of an excavation face that is acceptable for the most favorable site conditions as protection against cave-ins, and is expressed as the ratio of horizontal distance to vertical rise (H:V).

***Short term exposure*** means a period of time less than or equal to 24 hours that an excavation is open.

(c) ***Requirements*** –

(1) ***Soil classification***. Soil and rock deposits shall be classified in accordance with appendix A to subpart P of part 1926.

(2) ***Maximum allowable slope***. The maximum allowable slope for a soil or rock deposit shall be determined from Table B-1 of this appendix.

(3) ***Actual slope***. (i) The actual slope shall not be steeper than the maximum allowable slope.

(ii) The actual slope shall be less steep than the maximum allowable slope, when there are signs of distress. If that situation occurs, the slope shall be cut back to an actual slope which is at least ½ horizontal to one vertical (½H:1V) less steep than the maximum allowable slope.

(iii) When surcharge loads from stored material or equipment, operating equipment, or traffic are present, a competent person shall determine the degree to which the actual slope must be reduced below the maximum allowable slope, and shall assure that such reduction is achieved. Surcharge loads from adjacent structures shall be evaluated in accordance with § 1926.651(i).

(4) ***Configurations***. Configurations of sloping and benching systems shall be in accordance with Figure B-1.

**Sloping and Benching** continued...

**TABLE B-1**
**MAXIMUM ALLOWABLE SLOPES**

| SOIL OR ROCK TYPE | MAXIMUM ALLOWABLE SLOPES (H:V)(1) FOR EXCAVATIONS LESS THAN 20 FEET DEEP(3) |
|---|---|
| STABLE ROCK | VERTICAL (90°) |
| TYPE A (2) | 3/4:1 (53°) |
| TYPE B | 1:1 (45°) |
| TYPE C | 1 ½:1 (34°) |

Footnote(1) Numbers shown in parentheses next to maximum allowable slopes are angles expressed in degrees from the horizontal. Angles have been rounded off.

Footnote(2) A short-term maximum allowable slope of 1/2H:1V (63°) is allowed in excavations in Type A soil that are 12 feed (3.67 m) or less in depth. Short-term maximum allowable slopes for excavations greater than 12 feet (3.67 m) in depth shall be 3/4H:1V (53°).

Footnote(3) Sloping or benching for excavations greater than 20 feet deep shall be designed by a registered professional engineer.

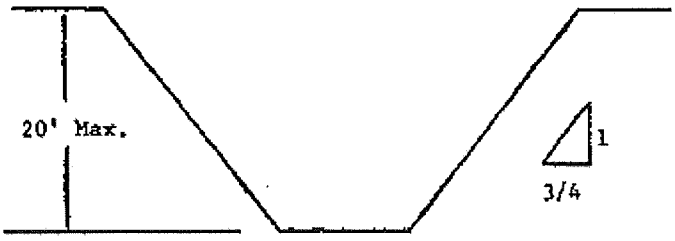
***Figure B-1***

**Slope Configurations**

(All slopes stated below are in the horizontal to vertical ratio)

***B-1.1 Excavations made in Type A soil.***

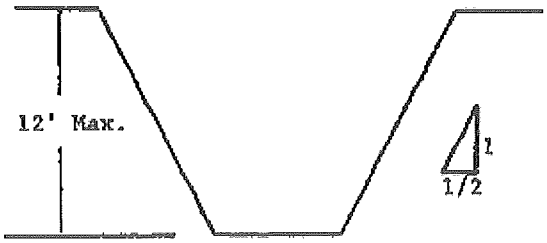
1. All simple slope excavation 20 feet or less in depth shall have a maximum allowable slope of ¾:1.




SIMPLE SLOPE -- GENERAL

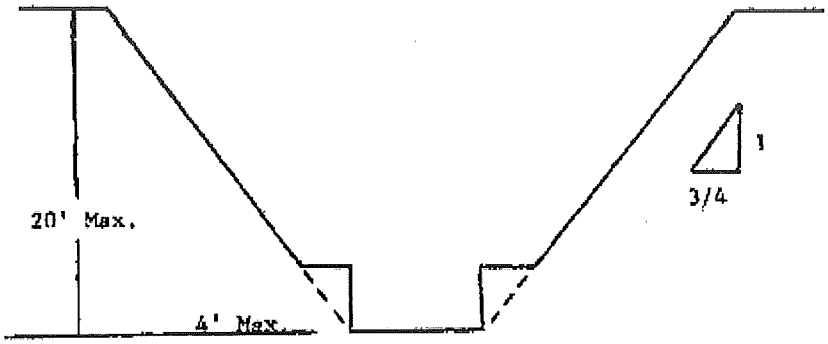
Exception: Simple slope excavations which are open 24 hours or less (short term) and which are 12 feet or less in depth shall have a maximum allowable slope of ½:1.

**Sloping and Benching** continued...

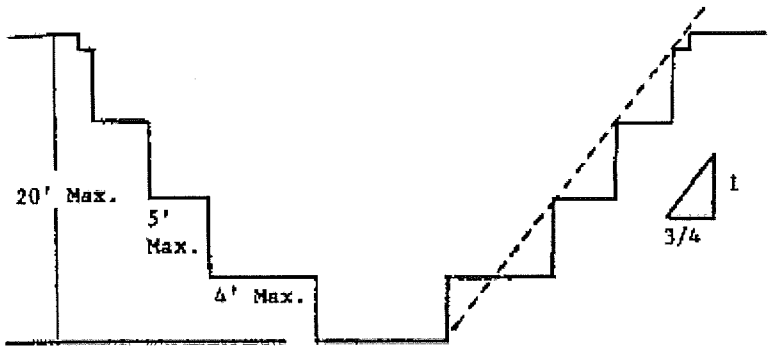



SIMPLE SLOPE -- SHORT TERM

2. All benched excavations 20 feet or less in depth shall have a maximum allowable slope of 3/4 to 1 and maximum bench dimensions as follows:



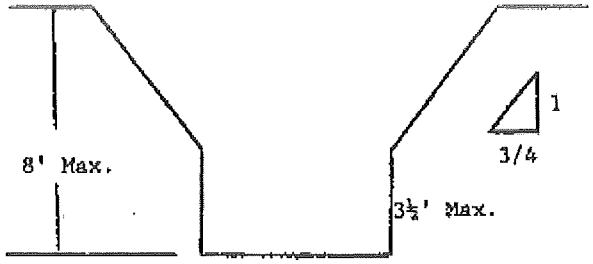

SIMPLE BENCH




MULTIPLE BENCH

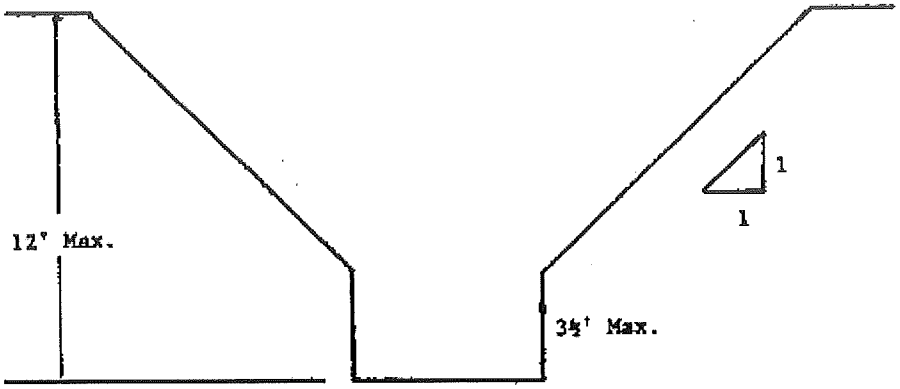
3. All excavations 8 feet or less in depth which have unsupported vertically sided lower portions shall have a maximum vertical side of 3½ feet.

**Sloping and Benching** continued...



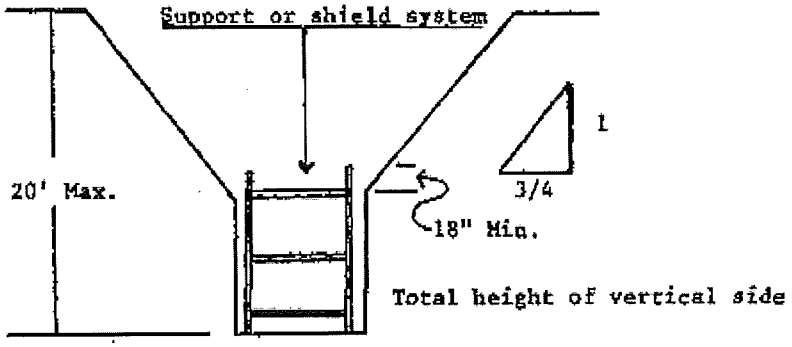

UNSUPPORTED VERTICALLY SIDED LOWER PORTION -- MAXIMUM 8 FEET IN DEPTH)

All excavations more than 8 feet but not more than 12 feet in depth with unsupported vertically sided lower portions shall have a maximum allowable slope of 1:1 and a maximum vertical side of 3½ feet.




UNSUPPORTED VERTICALLY SIDED LOWER PORTION -- MAXIMUM 12 FEET IN DEPTH)

All excavations 20 feet or less in depth which have vertically sided lower portions that are supported or shielded shall have a maximum allowable slope of ¾:1. The support or shield system must extend at least 18 inches above the top of the vertical side.



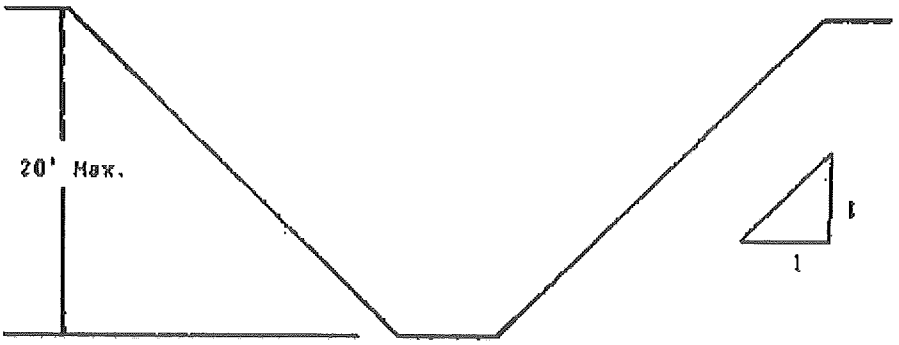

SUPPORTED OR SHIELDED VERTICALLY SIDED LOWER PORTIO

**Sloping and Benching** continued...

4. All other simple slope, compound slope, and vertically sided lower portion excavations shall be in accordance with the other options permitted under § 1926.652(b).

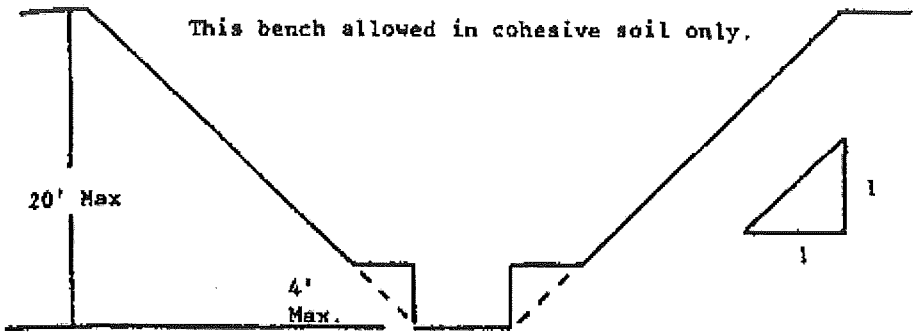
**B-1.2 Excavations Made in Type B Soil**

1. All simple slope excavations 20 feet or less in depth shall have a maximum allowable slope of 1:1.

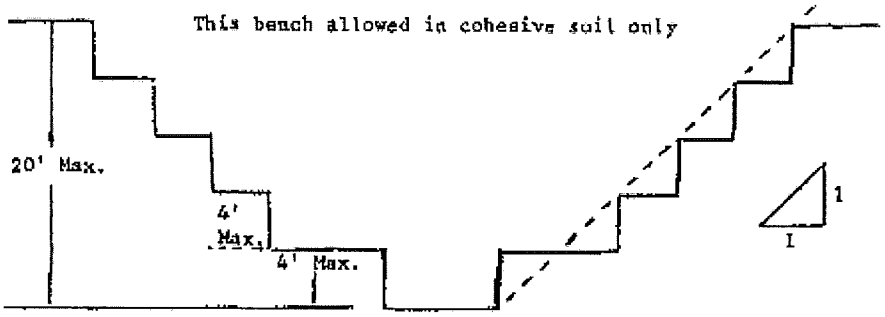



SIMPLE SLOPE

2. All benched excavations 20 feet or less in depth shall have a maximum allowable slope of 1:1 and maximum bench dimensions as follows:



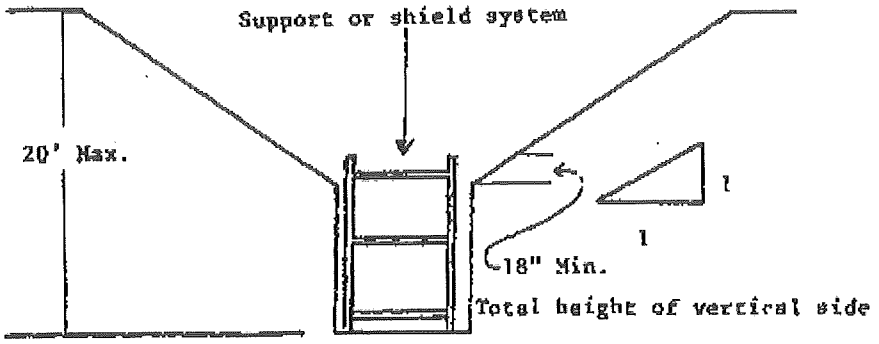

SINGLE BENCH




MULTIPLE BENCH

**Sloping and Benching** continued...

3. All excavations 20 feet or less in depth which have vertically sided lower portions shall be shielded or supported to a height at least 18 inches above the top of the vertical side. All such excavations shall have a maximum allowable slope of 1:1.

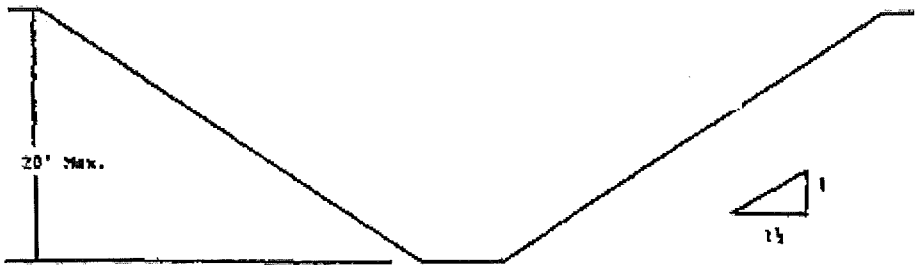



VERTICALLY SIDED LOWER PORTION

4. All other sloped excavations shall be in accordance with the other options permitted in § 1926.652(b).

### B-1.3 Excavations Made in Type C Soil

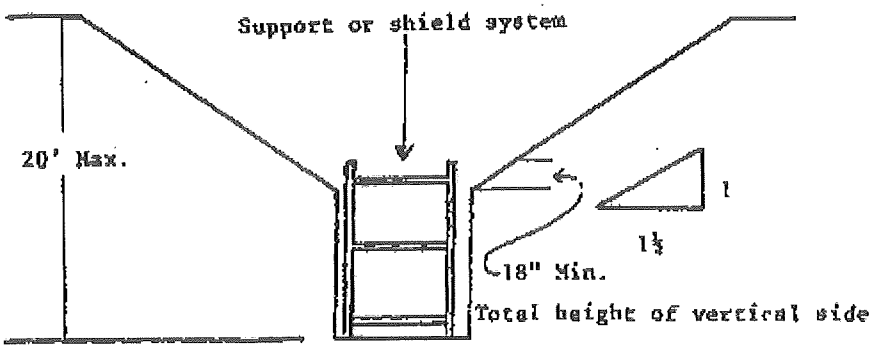
1. All simple slope excavations 20 feet or less in depth shall have a maximum allowable slope of 1½:1.




SIMPLE SLOPE

2. All excavations 20 feet or less in depth which have vertically sided lower portions shall be shielded or supported to a height at least 18 inches above the top of the vertical side. All such excavations shall have a maximum allowable slope of 1½:1.

**Sloping and Benching** continued...

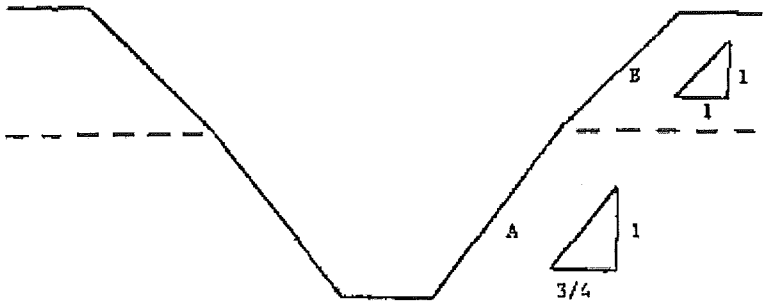



VERTICAL SIDED LOWER PORTION

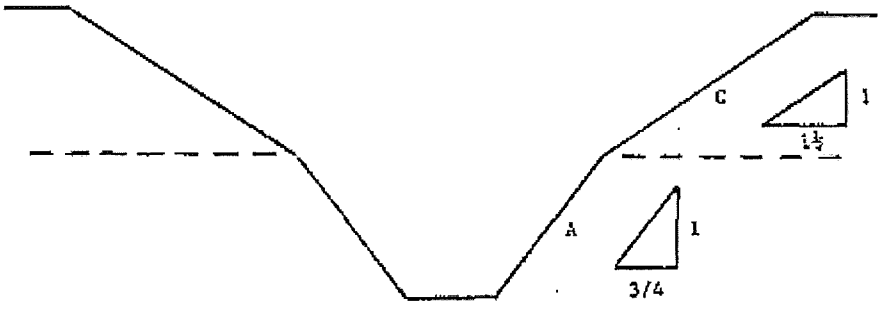
3. All other sloped excavations shall be in accordance with the other options permitted in § 1926.652(b).

### B-1.4 Excavations Made in Layered Soils

1. All excavations 20 feet or less in depth made in layered soils shall have a maximum allowable slope for each layer as set forth below.

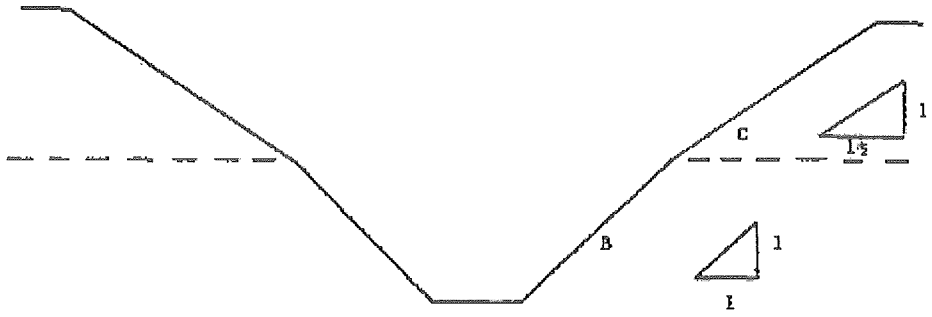



B OVER A

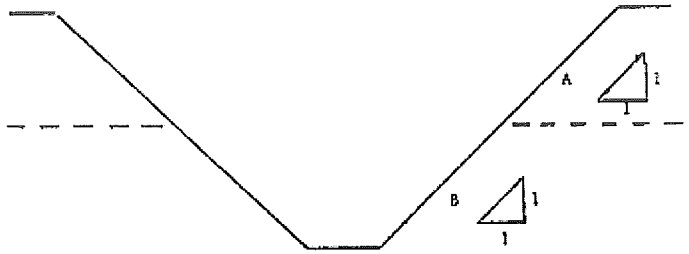



C OVER A

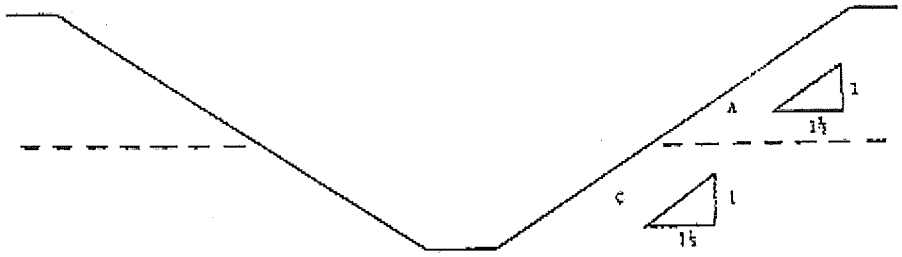
**Sloping and Benching** continued…



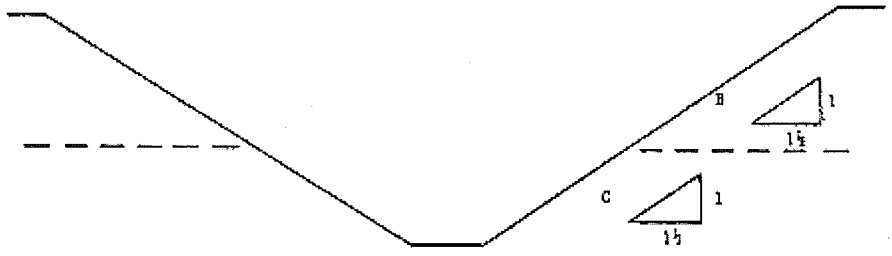

C OVER B




A OVER B




A OVER C




B OVER C

2. All other sloped excavations shall be in accordance with the other options permitted in § 1926.652(b).