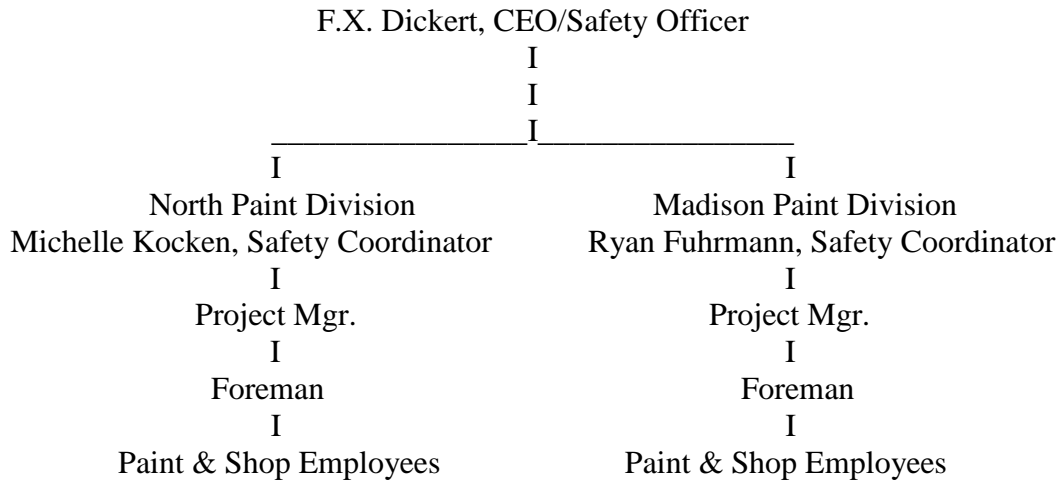


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Safety Liaison Flow Chart



Safety Manual

TO OUR EMPLOYEES:

This company considers its employees to be its most valuable asset, and will take every possible practical action to make your working conditions free from hazard. It is our intent to constantly encourage and facilitate the elimination or control of all accident, fire, health, and occupational hazards associated with our activities.

When you are acting as a foreman, you are required to conduct all operations under your jurisdiction in such a manner as to afford maximum protection for yourself, the people working under you, equipment, materials, and property. Safety is one of your primary responsibilities.

We have tried in this booklet to give a basic outline of safety rules pertaining to the painting trade. We cannot, however, cover every conceivable situation. If an unsafe situation or practice presents itself, and you are unsure of how to proceed, or if you have a question involving safety, please contact F.X. Dickert at (608) 575-6397, before proceeding with work on the job.

Take pride in and enjoy your work, and most of all, be safe.

F.X. Dickert, CEO

SAFETY PROGRAM

PURPOSE:

The purpose of this Safety Program is to provide policy and guidelines that will aid in the elimination of serious injuries and illness on all company jobsites. Prevention of injuries to our employees, customers, the public and those that visit our jobsites is the first and primary concern addressed in this Safety Program. Our secondary concern is for our property, the property of others in our care and control, and the property of those in close proximity to our operations.

We recognize safety as a team effort. Therefore, this program assigns responsibility, outlines actions to be taken, methods of reducing/eliminating losses that may result from an accident. These methods provide efficient utilization of resources for advancing the effectiveness by which the company's projects will be completed. Therefore, there is no justification for the willful performance of unsafe acts or the taking of unnecessary risks by any member of this team.

Top management will stay informed and assure that supervision is given direction to carry out the proper safe practices and procedures to bring about compliance with the provisions of the Occupational Safety and Health Act, any other federal, state, local or owner safety codes that may supersede company policy.

Klein-Dickert Co., Inc. is committed to safety. All officers, management, supervisory personnel, and employees of Klein-Dickert Co., Inc. will actively participate in meeting and exceeding this commitment.

RESPONSIBILITIES

The corporate office will be responsible for the technical guidance, coordination and monitoring of this program. Management is responsible and available for assistance in the entire loss prevention and occupational health control effort.

SAFETY COORDINATOR:

The safety coordinator is responsible for the direction of this program. They will recommend safety policy changes to management and implement those approved policies. They will also coordinate the efforts of others and continuously evaluate the effectiveness of this program.

Reports of overall effectiveness will be made to the jobsite foreman, project manager and F.X. Dickert.

Duties of the Coordinator:

1. Advise supervision on pertinent safety matters.
2. Conduct periodic safety evaluations at the jobsite.
3. Advise supervision on PPE needs and ensure its use.
4. Investigate all accidents and near misses and notify proper authorities when needed.
5. Review injury data for frequency to identify trends and take action for recurrence.
6. Ensure compliance with federal, state, local and owner's safety regulations. (i.e. OSHA, EPA, DNR, insurance carriers and fire departments)
7. Stop any operation or action judged to be an imminent hazard until that condition can be corrected.

PROJECT MANAGERS AND /OR JOB FOREMEN:

Have full responsibility for execution of this program within their area of responsibility (i.e. jobsites) in any case, in the planning or execution of the Safety Program, where an interface of responsibility exists or arises. Each person involved has a responsibility to see that proper and effective action is taken. Any safety matter of this type which cannot be resolved by the project manager and/or job foreman shall be referred to the Safety Coordinator without delay.

Project managers/job foremen shall be responsible for the safety of the employees assigned to their projects. They are also responsible for any damages or loss to public or company property, including tools and equipment.

Duties Include:

1. Assuring corrective actions are accomplished on safety recommendations resulting from deficiencies detected by your own or the safety coordinator's inspection.
2. Participate in pre-job safety survey prior to the commencement of the job, or when requested by management.
3. Communicate safety information to jobsite employees. (i.e. Tool Box Talks).
4. Assure that all required signs, posters, and bulletins are accessible and legible for all

- employees. (i.e. Employment Law, Unemployment Benefits, Right to Know Law, Minimum Wage Rates, Equal Opportunity Poster, OSHA Safety and Health Poster, Hazard Communications Poster)
5. Klein-Dickert does not accept any responsibility for monitoring another contractor's safety practices. If the company's representative observes a serious safety hazard under the jurisdiction of another, the observer should document and notify the contractor of the hazard. Failure to notify the contractor and/or the employee shall impose no liability on the observing contractor. However, these observations promote and provide for a safer work environment for all.

FOREMEN:

Foremen have daily contact with their workers. They are the supervisors from whom employees receive their orders on what to do and how to do it. Therefore, the influence of foremen with employees will be utilized to the fullest extent to promote safety. Foremen of all trades are responsible for enforcement of all safety precautions applicable to the work under their supervision.

Duties Include:

1. Understanding the OSHA requirements and all together pertinent safety regulations.
2. Enforce all safety rules and regulations within the scope of their work.
3. Expedite corrective actions for unsafe acts or conditions.
4. Explain to employees all safety rules and aid in training effort.
5. Educate new employees on all safety rules.
6. Determine that each employee is qualified to perform the work safely.
7. Obtain, maintain, and distribute personal protective equipment necessary for the job accomplishment (i.e. hard hats, eye protection, fall protection, respirators, gloves, etc.)
8. Investigate and complete a record of all injuries or damages of any nature that result from work performed by the crew.
9. Instilling in all personnel by action, example and training a sincere attitude toward safety and developing a better understanding of accident prevention methods.

PAINT DIVISION EMPLOYEES/SHOP EMPLOYEES:

The employee has a responsibility to him/herself for their own safety, but also has a responsibility to their family, fellow workers, community, and to the employer by whom he/she is paid.

Duties Include:

1. Comply with all company rules including company safety policy and all federal, state, local and owner safety regulations.
2. Follow instructions from their supervisors.
3. Use personal protective equipment and devices provided for machinery, equipment, tools and processes.
4. Report all accidents and injuries immediately.
5. Report all unsafe conditions to their supervisor.

General Safety Rules

Klein-Dickert is committed to providing safe working conditions for all employees and safe products/services for all customers. Fulfilling this commitment and achieving our goal of an “Accident-Free Workplace” requires 100% effort from every employee. All employees are required to work safely and be aware at all times of potential safety hazards.

We sincerely believe that:

All Accidents, Injuries, and Occupational Illnesses Can Be Prevented.

Every employee can contribute to achieving the goal of an accident-free work environment by continually asking themselves:

“What must I do to keep from being injured and from injuring others?”

SAFE WORK HABITS

Common sense is the best approach to safe work habits. Always be sure to:

- Think ahead about task and any potential safety issues;
- Follow instructions;
- Don’t take chances – if you don’t know, ask;
- Don’t operate, adjust, or repair machinery or equipment unless you are trained;
- Use the right tool for the job, and use it correctly;
- Be alert for hazards;
- Report any unsafe conditions, equipment, or individuals to your supervisor.

If for any reason you feel that you are unable to perform assigned work, or you cannot perform the work safely, immediately advise your supervisor of the reason(s) for your concern.

Failure to abide by safety rules and regulations is considered to be a serious violation, subject to disciplinary action up to and including discharge.

1. Hardhats must be worn by all personnel at all times on the jobsite. (New construction and remodel projects)
2. Safety glasses will be worn by all employees and visitors at all times.
3. Do not wear clothing which could get caught in machinery or otherwise cause an accident, such as dragging pant cuffs, torn or loose long sleeves, neckties, etc. Shirts and full length pants must be worn at all times (No Shorts). Leather boots are required; no deck shoes or tennis shoes are allowed. Steel toed boots are recommended, and where there is a hazard of the feet, they are required.
4. It is every individual’s responsibility to report to his/her supervisor any unsafe working conditions that may exist.

5. All accidents and injuries, no matter how minor, must be reported immediately to your immediate supervisor. An accident report which is located in each job box, must be submitted to the office within 24 hours.
6. Keep all tools in safe operating condition, as well as any safety devices. Never use equipment, small tools or safety devices that are not operating correctly. All machine guards shall be kept in place while the machinery is in operation. Tampering with machine guards is prohibited.
7. Do not operate small tools, equipment etc. unless you have been properly trained on how to use the equipment.
8. Keep your jobsite as clean as possible. Refrain from leaving material in access areas that may cause a hazard to your fellow employee or the general public.
9. Flammable liquids, such as gasoline, must be kept in approved safety cans with self closing lids. All containers shall be clearly labeled. No smoking allowed on sites with flammable solvents.
10. When working with flammable material, burning, welding or cutting, a fire extinguisher of the proper type must be immediately available in the work area.
11. When climbing on or off equipment and trucks, maintain 3 points of contact with the equipment or truck. **DO NOT JUMP OFF!!**
12. Compressed air is not to be used for dusting off clothing.
13. Use only 3-wire extension cords when working with portable electric hand tools. Worn or frayed electrical cords must not be used.
14. No horseplay will be tolerated on the jobsite.
15. Being under the influence or in possession of illegal drugs or alcohol during employment hours is strictly prohibited. A violation of this rule is cause for immediate termination of employment.

HAZARD COMMUNICATIONS PROGRAM

PURPOSE:

This program has been developed to maintain compliance and give guidance with the *Hazard Communications Standard and Klein-Dickert's right to know policy*.

SCOPE:

This Hazard Communications Program applies to all hazardous chemicals used by Klein-Dickert.

LABELS AND WARNINGS:

1. All containers of hazardous chemicals must be labeled, tagged, or marked with:
 - a. The identity of the hazardous chemical therein
 - b. Appropriate hazard warnings.

No employee shall remove or deface existing labels on incoming containers of hazardous chemicals, unless the container is immediately marked with the required information.

2. The contents of all storage tanks are identified by the Tank Numbers on the storage tanks. The Tank Numbers will also be noted on the appropriate MSDS.
3. If the required information is not conveyed on the existing labeling of an incoming container, immediately notify the Supervisor onsite in order to have new labels affixed.
4. Portable containers into which hazardous chemicals are transferred from labeled containers, and which are intended only for immediate use of the employee who performs the transfer, are not required to be labeled.

MATERIAL SAFETY DATA SHEETS:

1. A copy of the Material Safety Data Sheet (MSDS) that meets the requirements of 29 CFR 1910.1200 (g)(2) for every hazardous chemical, used at all job sites, must be kept in each appropriate work area.
2. If no MSDS is on file for the hazardous chemical is use, or does not arrive with the first shipment, immediately notify the Safety Manager, so one may be obtained.
3. Should new significant health information become available for a hazardous chemical, an updated MSDS will immediately be requested from the manufacturer by the Safety Manager.

EMPLOYEE INFORMATION AND TRAINING:

1. Employees shall be informed of:
 - a. The requirements of the Hazardous Communications Standard (29 CFR 1910.1200);
 - b. Any operations in their work area where hazardous chemicals are present;

- c. The location and availability of this written program, the required list of hazardous chemicals/chemical inventory, and MSDS's.
2. Employee training shall include:
 - a. Methods and observations to be used to detect the presence or release of a hazardous chemical;
 - b. The physical and health hazards of the chemical in the work area;
 - c. Measures or procedures the employee can take to protect themselves from exposure to the hazardous chemical (*i.e. standard work practices, emergency procedures, appropriate safety equipment*).

The details of this program, including an explanation of the labeling system and MSDS's, and how employees can obtain and use the appropriate information, is available in the office.

All training will be conducted by a company safety representative or a designee.

3. Training will be presented by the project manager in the office, job specific when applicable.
 - a. Handouts supplying definitions of various physical and chemical hazards, along with lecture and videos covering classes, labels and marking of hazardous chemicals and the hazard communication requirements.
 - b. A review of site written Hazard Communications Program covering the location of the written program; the location and appropriate hazards and protective equipment to be used for each hazardous chemical at the job site, and how to read and understand an MSDS.
4. Training will be performed for new employees prior to their initial assignment. Refresher/Updated training will be performed whenever a new hazard is introduced into the workplace through regular weekly safety meetings.

“RIGHT TO KNOW” LAW:

The “Right To Know” Law maintains that workers have an inherent right to know all health hazards associated with their exposure to toxic substances for two reasons:

1. Employees have a right to make an informed decision about possible costs of employment to health and life.
2. Employees can observe symptoms of toxicity in themselves and understand the relationship between the symptoms and exposure, and can therefore evaluate the need for any corrective action.

EMPLOYEE RIGHTS:

1. Employees or their representatives may request and must receive, upon request, all information concerning the hazards of toxic substances in the workplace.
2. An employee may refuse to work with a toxic substance if he/she has requested information about it and has not received the written reply within 72 hours (3 working days, excluding weekend and public holidays) of its receipt by the employer.
3. An employee may exercise any right pursuant to, or directly related to, the “Right To Know” Law without fear of any discrimination whatsoever.

4. An employee must not be required to waive any rights under the “Right To Know” Law as a condition of employment.
5. An employee may file a complaint with the Department of Labor if he/she has been discriminated against in violation of the “Right To Know” Law.

MSDS COPY REQUEST

Name: _____

The substance to which I am routinely exposed, and for which I am requesting a copy of a Material Safety Data Sheet, is:

(Employee must use a separate request for each Material Safety Data Sheet requested)

My reason for requesting this information is:

(Signature) _____

(Date) _____

I have received a copy of the MSDS, which I requested.

(Employee Signature/Date)

A copy of the MSDS for _____ which you have requested is not available.

We are making every effort to obtain a copy from _____ supplier.

(Safety Manager)

(Date)

(Employee Signature)

(Date)

CLASSES/LABELS/MARKINGS - OF HAZARDOUS CHEMICALS:

Hazardous Chemicals - Any chemical, which is a physical, or health hazard.

Health Hazard - A chemical for which there is significant evidence that acute or chronic health effects may occur in exposed employees.

Acute Effects - Occur rapidly as a result of short-term exposures and are of short duration.

Physical Hazards - A chemical that is a combustible liquid; a compressed gas, explosive, flammable, an organic peroxide, an oxidizer, unstable (reactive), or water reactive.

HEALTH HAZARDS:

Carcinogen: Causes Cancer.

Corrosive: A chemical that causes visible destruction of, or irreversible alterations to living tissue.

Irritant: A chemical that is not corrosive, but causes a reversible inflammatory effect on living tissue.

Sensitizer: A chemical that causes a substantial proportion of exposed people or animals to develop an allergic reaction in normal tissue after repeated exposure to the chemical.

Toxic: A chemical's ability to harm the body. Toxicity is dependent on the concentration and time exposed to the material.

Systemic Poisons: Chemicals that can damage an organ system, such as the kidney, liver, or central nervous system. These materials enter the body through inhalation, absorption and/or ingestion.

PHYSICAL HAZARDS:

Combustible Liquid: Having a flash point at or above 100 degrees F, but below 200 degrees F.

Compressed Gas:

- A gas having a pressure exceeding 40 psi at 70 degrees F, or;
- A gas having a pressure exceeding 40 psi at 130 degrees F, regardless of the pressure at 70 degrees F, or;
- A liquid having a vapor pressure exceeding 40 psi at 100 degrees F.

Explosive: A chemical that causes a sudden, almost instantaneous release of pressure, gas, and heat when subjected to sudden shock, pressure, or high temperature.

Flammable:

Aerosol: Yields a flame projection exceeding 18 inches at full valve opening or a flashback at any degree of valve opening.

Gas: Forms a flammable mixture with air at a concentration of 13% by volume or less, or forms a range of flammable mixtures with air wider than 12% by volume regardless of the lower limit.

Liquid: Has a flash point below 100 degrees F.

Solid: A solid, other than blasting agent or explosive, that is liable to cause fire through friction or absorption. When ignited, it burns so vigorously and persistently as to create a serious hazard.

Oxidizers: A chemical other than a blasting agent or explosive that initiates or promotes combustion in other materials, thereby causing fire either of itself or through the release of oxygen or other gases.

Unstable (Reactive): A chemical that in the pure state, or produced or transported, will vigorously become self-reactive under conditions of shock, pressure, or temperature.

DISCIPLINARY PROCEDURES

Corrective action will be initiated when it is believed that an employee's performance deficiencies or behavior problem(s) can be resolved through counseling and/or disciplinary action. The process is intended to be "corrective" rather than "punitive."

Counseling/disciplinary action is at the discretion of the Company and does not alter the Company's right to terminate "at-will." Even if counseling or discipline is initiated, it may be discontinued at the discretion of Klein-Dickert. The Company reserves the right to terminate employees without taking any counseling/disciplinary action.

Counseling/disciplinary action, when used, will be documented, in order to protect the interests and rights of employees and Klein-Dickert.

The following forms of counseling/disciplinary action may be used, at management's discretion:

- **Verbal Counseling** — The first step in attempting to correct unacceptable performance or behavior.
- **Written Counseling** — If the required improvement is not accomplished through verbal counseling.
- **Suspension** — If the required improvement is not accomplished through written counseling.
- **Termination** — If corrective action is attempted and determined (by the Company) to be unsuccessful.

ACCIDENT REPORTING AND JOB SITE INSPECTION

Employees are required to report all accidents, injuries and illnesses to their immediate supervisor immediately. The supervisor will be responsible for making sure all accident reports are completed and submitted to the office within 8 hours of the accident. If there is a serious accident or injury, the supervisor will contact the safety director immediately.

EMPLOYEE'S ACCIDENT REPORT

TO THE EMPLOYEE: *This report must be completed by you as soon as possible after your injury/accident/vehicular accident. Read the questions carefully and make your answers complete and accurate. Use the back of this form if you need additional space.*

Name _____		
Last	First	M.
Home Address _____		
Home Phone _____		Job Title _____
Supervisor _____	Time started work day _____	
Date of Injury/Accident _____	Time of Injury/Accident _____	AM/PM

Did you immediately report your injury/accident to your supervisor/foreman? Yes No
 If yes, when (indicate date and time)? _____

If you did not immediately report your injury/accident to your supervisor/foreman, please state your reason: _____

Location, **including the county**, where the injury/accident occurred: _____

Describe what happened: _____

Did you leave the jobsite? Yes No If yes, time: _____ Did you seek treatment from a physician? Yes No
 If Yes, Name and address of physician: _____ Any Restrictions? Yes No

If you left the jobsite, did you return to work Yes No If yes, time: _____
 What can you do to prevent future injury/accident? _____

What is the nature of your injury/accident (specifically, what parts of your **body or vehicle** have been injured)?

What type of treatment did you receive? Be specific (First-aid, stitches, etc.): _____

Where there any witnesses to the injury/accident? Yes No If yes, what are their names: _____

Have you previously had an injury/accident similar to this? Yes No If yes, describe: _____

If vehicular accident: Did you receive a ticket? Yes No Did the other driver receive a ticket? Yes No
 If yes, describe: _____

Vehicular Accident: Use back of form to explain exactly how accident happened (draw pictures if necessary); document the other driver information (vehicle make/type, license plate number, insurance information, name, phone number, and address), and whether the accident was reported to the police/which department.

Employee's Signature _____	Date _____
Supervisor's Signature _____	Date _____
Manager's Signature _____	Date _____

SUPERVISOR'S ACCIDENT INVESTIGATION

Instructions to Complete This Form: (1) Please print or type information on this form. (2) Enter all required information which applies to a personal injury or property damage accident in the top portion of this form. Please note that vehicle accidents should be reported as property damage. (3) Be sure to check the appropriate box under the Incident Classification section. (4) When completing the Description section, you should answer the following questions: What actually was taking place? What went wrong to make the accident happen? What were the consequences of the accident? (5) In the Analysis section, identify what unsafe act or condition contributed to the accident and why these conditions were allowed to exist in the work place. (6) The Prevention section should describe what action was taken to prevent reoccurrence, who is responsible for completing the action, and projected completion date.

Content:	Component/Factory Unit /T.R.A. Lines:	Cause of Occurrence	A.M. P.M.	Date Happened:
PERSONAL INJURY		PROPERTY DAMAGE (includes vehicles)		
Name of Injured Person:		Property Damage:		
Occupation of Injured Person:	Part of Body Injured:	Estimated Cost:		
Nature of Injury:		Nature of Damage:		
Object/Equipment/Substance Inducing Injury:		Object/Equipment/Substance Inducing Damage:		
Person with Most Control of Object/Equipment/Substance:		Person With Most Control of Object/Equipment/Substance:		
INCIDENT CLASSIFICATION: <input type="checkbox"/> No Injury/Near Miss <input type="checkbox"/> First Aid <input type="checkbox"/> OSHA Recordable <input type="checkbox"/> Lost Time (Lost Workday Case)		INCIDENT CLASSIFICATION: <input type="checkbox"/> Preventable Vehicle <input type="checkbox"/> Non-Preventable Vehicle		

● **DESCRIPTION** Describe how the incident occurred. Complete diagram on reverse side on all vehicle incidents.

● **ANALYSIS (A)** What acts, failure to act and/or conditions contributed most directly to this incident?

● **ANALYSIS (B)** What action(s) has or will be taken to prevent reoccurrence?

● **PREVENTION** What are basic or fundamental reasons for the occurrence of these conditions?

Investigated By:	Date:	Interviewed By:	Date:
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**KLEIN-DICKERT CO., INC.
PAINT DIVISIONS**

TIME CARD MUST BE FILLED OUT COMPLETELY AND
TURNED IN BY 7:30 AM MONDAY

WEEKLY SAFETY LOG

PLEASE NOTE ANY UNSAFE EQUIPMENT OR JOB CONDITIONS.
IF NONE WERE OBSERVED, FILL IN THE WORD "NONE."

WERE YOU INJURED THIS WEEK?
YES _____
NO _____

(IF YES, AN ACCIDENT REPORT MUST BE
TURNED IN IMMEDIATELY)

**EMPLOYEE
SIGNATURE:** _____

DATE: _____

ACCIDENT INVESTIGATION PROCEDURES:

Incident/accident investigations can contribute greatly to preventing future accidents. The information obtained in an incident/accident investigation can identify *Why* an incident/accident occurred, and more importantly, *How* a reoccurrence can be avoided.

Investigations are conducted as soon as possible after the incident/accident, when the specifics of what happened are more likely to be remembered. Questions to be answered include:

- What happened?
- Why did it happen?
- What should be done to prevent a reoccurrence?
- What has been done following the incident?
- How will the action(s) taken improve operations?

The Project Superintendent is responsible for ensuring that thorough accident investigations are conducted.

It is important for everyone involved in an investigation to remember that the main purpose of an investigation is to determine “Why” an incident/accident occurred and “How” a reoccurrence can be prevented.

RETURN-TO-WORK PROGRAM

Despite our best efforts to maintain a safe and injury-free workplace, sometimes work-related injuries do occur. Depending on the injury and its severity, the injured employee may be restricted by his/her doctor from performing some or all functions of his/her job. Not being able to work can be stressful. However, studies indicate that employees who return to work in some capacity recuperate more quickly than those employees who are not able to work.

Instead of requiring an injured employee to recuperate completely away from work, when possible, we require employees to return to *light duty work* when it can be made available, and when it is within the restrictions specified by their health care provider. Please see the Klein- Dickert Policy #306 for a full description of the program.

LIFE-THREATENING ILLNESSES

Some employees with life-threatening illnesses may wish to continue working. As long as an employee is able to satisfactorily perform his/her job, and medical evidence indicates that the condition is not a threat to the employee or others, Klein-Dickert will be sensitive to the employee’s condition and ensure that he/she is treated consistently with other employees. In keeping with our commitment to provide a safe work environment for all employees, reasonable precautions will be taken to ensure that an employee’s condition does not present a health and/or safety threat to others.

An employee’s health condition is personal and confidential, and Klein-Dickert will take reasonable precautions to protect information regarding an employee’s health condition. Where warranted, the Company will make reasonable accommodations, consistent with business needs, for employees with life-threatening illnesses, as long as they can perform the essential functions of their job.

RECORD KEEPING:

The Occupational Safety & Health Act (OSHA) requires each employer to maintain a log of recordable occupational injuries and illnesses on each employee who is injured. This log is the OSHA 300 reporting form. Any employee who received medical treatment, loses consciousness, is restricted in his/her work or motion, or is transferred to another job, because of the restrictions, must have his/her name and details of the incident recorded on this log. Entries in the log must be current within six working days from the time the employer is notified of the injury or illness. The log need not be maintained on site, but its location must be one that allows adherence to the six-day requirements. A copy of the log, current to within 45 days of the current date, must be available for inspection on site. The log must be posted at each division for the mandated time period.

DEALING WITH OSHA:

The Occupational Safety and Health Administration was established to administer the Occupational Safety & Health Act of 1970 (OSHA). This federal law was promulgated to afford a safe and healthful workplace for all employees. The standards which govern the construction industry are contained in Section 29 Code of Federal Regulations, Part 1926. A number of things to consider when dealing with OSHA are listed below.

****CONTACT THE SAFETY COORDINATOR OR YOUR PROJECT MANAGER IMMEDIATELY ****

A. Right of Entry

It is a company's right to demand a warrant from OSHA prior to an inspection. Failure to demand a warrant means consent to the inspection. You can demand a warrant any time during the inspection. If you do not demand a warrant and receive citations, you cannot raise this as a defense.

B. Harassment

Federal compliance officers, state inspectors, or similar personnel are not to be harassed, intimidated or abused. If problems arise during the inspection, you can terminate the inspection at that time by asking for a warrant, or by calling the Compliance Officer's Area Director.

C. Responsibilities

Employers are required to:

1. Provide a place of employment free from hazards which may cause illness, injury, or death to employees.
2. Comply with standards, rules, or obligations adopted by the U.S. Department of Labor.
3. Post notices which inform employees of their rights and duties as defined by the OSHA Act.
4. Maintain records recording injuries, accidents, and site inspections.

5. Provide such personal protective equipment as needed and required.
6. Provide required employee safety training.
7. Conduct periodic jobsite safety inspections.

D. Rights and Privileges:

Employers:

Employers have the right to representation during the inspection process. The representative may question acts and comments of the inspector and may also request clarifications where actions of the inspector appear to be contrary to the rules of inspection.

Employees:

Employees have the right of representation during the inspection. Employees may answer questions regarding the inspection without fear of punitive actions by the employer. Employees **are not** obligated to answer an inspecting officer's questions. They also have the right to be represented by anyone they choose during the interview process.

E. Inspection:

The inspector may take photographs, samples of materials and measurements as they relate to the inspection. The inspector may also privately interview employees for the purpose of enforcement of law. He/she may not, however, unduly disrupt work.

The inspector will present identification and state the purpose of the visit. An opening conference will be held with representatives from all on site contractors. Absent the need for a warrant, the Compliance officer will begin the opening conference.

The function of the Compliance Officer is to identify, measure, and photograph conditions and/or acts which he/she considers unsafe and in violation of the construction safety regulations. In the pursuit of his/her duties, he/she may go wherever he wishes on the project within the scope of his inspection. He/she may take samples or measurements. He/she can request copies of literature, documents, or contracts which relate to the safety or industrial hygiene.

The Compliance Officer may not violate any known safety regulation and is responsible for providing and wearing the appropriate personal safety equipment. Failure to comply with the project safety program is cause for refusing to admit a compliance officer on your site, or stopping an inspection already underway.

The Compliance Officer may consult with employees regarding matters of safety and health to the extent necessary for the conduct of an effective and thorough inspection.

The Compliance Officer will:

1. State the nature of the inspection: General Scheduled, Complaint, Special Emphasis, Other.
2. State the approximate length of time the Compliance Officer will be on site.
3. Request copies of safety program, accident reports, and inspection surveys. The Compliance Officer may not review any contractor documents other than General Conditions and similar front-end documents.
4. Approve members of the inspection party. Each employer has the right to representation. The Compliance Officer has the right to choose the representative.
5. Generally discuss the purpose of the OSHA Act, its sanctions, and the authority vested in the Compliance Officer by the Act.
6. Advise that at the conclusion of the inspection, a closing conference will be held to advise of any alleged violations noted, to determine corrective dates and answer questions.

During the inspection:

1. Do not permit unneeded contractor employees to linger near the inspection party.
2. Do not harass, threaten, or otherwise intimidate the Compliance Officer.
3. The employer has the right to protect trade secrets.
4. Do not volunteer unnecessary information.
5. Keep a chronological record of where the Compliance Officer goes, how long he/she talks to employees, and whether he/she returns to location previously inspected. When photographic documentation is made, ask the nature of the suspected violation and record.

At the completion of the inspection, the Compliance Officer will either hold a general meeting or meet with each individual contractor. The contractor's representative should attempt to attend all meetings if held individually for the purpose of recording each contractor's alleged violations. At no time admit responsibility for a hazard or offer to correct hazards created by others.

F. Citations:

As result of an inspection, citations and notice of monetary penalty may be issued. Should a citation/penalty notice be received, the following will be done.

1. Post copies of citations at the area cited. Postings must remain for three working days or until corrections have been made, whichever is longer.
2. The company has fifteen working days from receipt of the citation to contest the citations or to accept it. Failure to take any action within **15 days** means you have accepted the citation

and are judged guilty. You can have an informal conference with the area director in an attempt to resolve any problems. If this does not yield satisfactory results, it is your right to have a hearing before an administrative law judge.

SAFETY EDUCATION AND TRAINING PROGRAMS:

A. Safety Program:

The company will provide each work site with a copy of this safety program. Each employee will also receive an orientation covering the Company's job site rules and regulations including personal safety requirements.

As a condition of employment, each employee of the company will be required to sign and date an acknowledgment of receipt and acceptance of the employee guide. The acknowledgment will be maintained in the employee's personnel file.

B. Tool Box Talks:

The company will provide the direction and motivation to ensure regular work group safety meetings, which are known as tool box talks. These talks will support the company's safety and loss control program, and are a great way to help prevent accidents. These meetings will be conducted periodically by the site supervisor, foremen or other designated person.

JOB SITE INSPECTIONS:

It is a requirement of this program that inspections be conducted on a regular basis to detect and correct unsafe practices and conditions. These inspections will focus on the identification and correction of potential safety, health and fire hazards. As part of an effective safety and loss control program, the jobsite Supervisor must record safety and health violations in an inspection report. These reports will be used as a tool for corrective actions on the current project as well as future projects.

The company will also utilize the services of outside personnel to perform additional safety audits. These audits will be scheduled by the company president or safety coordinator, who will in turn notify all affected parties. All employees are expected to cooperate fully with any and all of the company's representatives.

ALCOHOL & SUBSTANCE ABUSE

Klein-Dickert is committed to providing a workplace that is free of alcohol and illegal drugs/substances.

It is the policy of Klein-Dickert that all employees are prohibited from possessing, distributing, selling, or using illegal drugs/substances at any time; **including when on-duty, as well as, when off-duty**. All employees are prohibited from being under the influence of alcohol when on-duty, on Company premises or a jobsite, or when operating a motor vehicle for work-related purposes.

All employees may be subject to drug and/or alcohol testing, as a condition of employment. Offers of employment with Klein-Dickert are contingent upon the successful completion of a (post-offer) pre-employment drug test. Testing may also occur if an employee is suspected of being under the influence of drugs or alcohol when on Company premises or a jobsite, when operating a motor vehicle for work-related purposes, or if involved in a work-related accident/injury.

Any employee who is suspected of being under the influence of alcohol or an illegal substance will be immediately removed from the job, and subject to testing. An employee who is removed from a job because of suspicion of being under the influence of alcohol or an illegal substance, who agrees to undergo a medical test, will suffer no loss of pay provided the test results are negative. No medical test will be administered without the consent of the employee. However, if an employee withholds consent, the Company may discipline the employee up to and including termination.

If a medical test shows the presence of alcohol or an illegal substance, the employee will be subject to discipline up to and including discharge. However, the level of discipline will be determined by taking into account the employee's overall work record, the circumstances surrounding the test, and the actual test results. A one-time opportunity may be offered, at the Company's discretion, to enroll in and successfully complete a drug abuse or alcohol rehabilitation program (paid for by the employee), as a condition of continued employment. Continued employment will be conditioned on following the prescribed treatment of the rehabilitation program.

As a condition of returning to work following completion of a rehabilitation program, an employee will be required to submit to periodic unannounced drug testing for the remainder of his/her employment with Klein-Dickert, or 2 years, whichever occurs first. A positive test or failure to submit to a test will result in immediate termination and disqualification from future employment with Klein-Dickert.

Employees who are under a doctor's care and/or taking prescription medication(s) that may affect their ability to work, must advise their supervisor before beginning work.

Random drug testing per District Council 7 Painter's Local 802 contract is in effect.

CONFINED SPACE PROGRAM

PURPOSE:

The purpose of this program is to increase worker awareness, reduce and/or eliminate the potential for confined space accidents.

SCOPE:

This policy applies to all confined spaces that are created during the course of work or encountered while working in an existing facility where the owner does not have a policy or procedure that at least meets or exceeds this policy.

IDENTIFICATION: Confined Space is identified as a space that:

1. Is large enough that an employee's body can enter and perform work.
2. Has limited or restricted means of entry or exit.
3. Is not designed for continuous employee occupancy.
4. Has or has the potential for atmospheric hazards.
5. Has or has the potential for physical hazards.
6. Has or has the potential for electrical hazards.
7. Could restrict possible rescue/retrieval procedures.
8. Could have entrapment, engulfment, flooding or chemical hazards.
9. Is not secure from recognized hazards.

Or is classified by a customer or owner as a confined space, or permit required confined space.

All job site personnel required to enter permit required confined spaces will be trained in "**CONFINED SPACE AWARENESS**".

All equipment necessary for testing and performing work safely in permit required confined spaces will be furnished by the company, at no charge to the employee.

Confined space personnel will be identified as "AUTHORIZED ENTRANTS, ATTENDANTS, ENTRY SUPERVISOR AND/OR PERMIT ORIGINATOR".

DEFINITIONS:

AUTHORIZED ENTRANT - An employee trained in confined space entry procedures, whom is authorized by the employer to enter a "PERMIT REQUIRED - CONFINED SPACE".

ATTENDANT - A person trained in confined space attendant responsibilities who is stationed outside one or more permit required confined space. The attendant monitors the entrants and performs all the attendant's duties assigned by the entry permit and the employer's confined space program. The attendant has the authority to order entrants from the confined space and restrict entry to authorized entrants only. An attendant will always be stationed outside

a permit required confined space during entry operations.

ENTRY SUPERVISOR - The person responsible for determining if acceptable entry conditions are present at a "permit required confined space" where entry is planned, for authorizing entry, overseeing entry operation, and for terminating entry, as required by this program.

PERMIT ORIGINATOR - The person assigned by the employer who is capable (through experience and training) of identifying existing and potential hazards in the workplace surroundings or working conditions which are hazardous or dangerous to employees. This individual is responsible for the preparation of a permit, which addresses the following:

1. Instructions
2. Location of confined space
3. Time constraints of permit - beginning & expected finish times/dates
4. Reason for entry
5. Authorized entrant name
6. Attendants name(s)
7. Entry supervisors name
8. Method of communication
9. Equipment requirements
10. Isolation/lockout/tagout requirements
11. Respiratory equipment & training
12. Acceptable entry conditions
13. Air quality testing & monitoring requirements
14. Emergency procedures (Including rescue procedures)
15. Pre-entry checklist
16. Hot work permit requirements
17. Signatures of entrants
18. Signatures of attendants
19. Signature of entry supervisor
20. Signatures of permit originators
21. Cancellation of permit procedure
22. Post-entry evaluation of permit

HOT WORK PERMIT:

Permit Originator will also issue a "Hot Work Permit" as required by work to be performed in the confined space (i.e. welding, cutting, grinding, etc.). The "Hot work Permit" will be a company form and address the following:

1. Instructions
2. Location
3. Purpose of work
4. Type of work - cutting, grinding, welding, etc.
5. Equipment needed
6. Precautions to be adhered to (ventilation, electrical, combustibles, etc.)
7. Training
8. Fire watch persons

9. Person(s) performing hot work
10. Entry supervisor
11. Permit originator
12. Cancellation of permit procedure
13. Post-entry evaluation

AIR MONITORING:

The attendant is responsible for overseeing air monitoring and recording readings as required by this permit program and applicable regulations. **No person may enter a confined space, unless the atmosphere has been tested and meets acceptable entry conditions or proper respiratory protection is in place. Testing will be in the following sequence, oxygen, flammable atmosphere, and toxic atmospheres. Monitoring will be continued during entry.**

If initial tests show a lack of oxygen, presence of flammable gas, or a toxic atmosphere, entry will not be made until the source of the problem is located and rectified through ventilation, flushing, purging or similar techniques. If a problem exists after these measures, entry will not be made until officers of the company, safety consultants, and owner or customer representatives have met and mapped out a safe way for the work to be performed.

EMERGENCY PROCEDURES:

Minor First Aid injuries will be handled on the jobsite by personnel trained in First Aid. Serious injuries beyond First Aid will require initiating emergency medical procedures - call emergency medical services and make patient comfortable without moving. Explosions, cave-ins, bodily injuries, unknown illness, rescues or retrievals will be handled through a 911 call or if 911 is not in the construction site vicinity, provisions will be made with local authorities for handling 911 situations. When working in a space classified as permit required by the facility owner, rescue efforts will be coordinated with the facility's team.

UNAUTHORIZED ENTRY:

No person may enter a permit required confined space unless authorized to do so. "Permit required confined spaces" will be posted and restricted to prevent accidental entry.

RESCUE/RETRIEVAL:

No rescue attempts should be attempted without proper training or analyzing the situation properly.

EQUIPMENT:

All equipment required by confined space permits will be checked and maintained in a safe and ready condition.

All sources of energy or hazardous materials will be effectively, locked out, disabled, or blocked as appropriate to prevent equipment startup or contamination of the space.

CONFINED SPACE ENTRY PERMIT

INSTRUCTIONS

This permit is to be completed before entry begins and posted at the entrance to the confined space until work in the space is complete.

GENERAL INFORMATION

START DATE: _____
Date: _____

Time: _____ AM/PM PERMIT EXPIRES:
Time: _____ AM/PM

Location of Confined Space: _____

Description of Confined Space _____

Reasons for Entry: _____

NAMES OF AUTHORIZED INDIVIDUALS

Authorized Entry Supervisor _____ Will supervise entry? Yes No

Authorized Attendants

1) _____ 2) _____

Authorized Entrants

1) _____
2) _____

Authorized Entrants

1) _____
2) _____
3) _____
4) _____

METHOD OF COMMUNICATION _____

EQUIPMENT REQUIRED FOR ENTRY

(Circle appropriate)

- Special Clothing None Specify
- Eye Protection None Specify
- Hearing Protection None Specify
- Fire Extinguisher None Specify
- Signs None Specify
- Lighting None Specify
- Ventilation None Specify
- Lockout Devices None Specify

Lockout/Tagout procedures _____

Hard Hats Yes___No___

Non-Spark Tools Yes___No___

Safety Lights Yes___No___

Other: _____

RESPIRATORS REQUIRED FOR ENTRY

Are Respirators Required? Yes___No___

If Yes, what type:

SPECIAL RESPIRATOR INSTRUCTIONS

RESCUE EQUIPMENT REQUIRED FOR ENTRY

SCBA Yes___No___

Harness/Lifeline Yes___No___

Tripod/Manlift Yes___No___

Winch Yes___No___

EMERGENCY SERVICES

Identify _____

Phone Number _____

ISOLATION REQUIREMENTS (Please circle appropriate method, check Yes or No, and initial.)

Electrical:	DISCONNECT-LOCKOUT-TAGGED-Other_____	YES	NO
Mechanical	Moving Parts: -CHAIN-CHOCK-BLOCK-Other:_____	YES	NO
Hydraulics:	BLANKED-BLEED-DISCONNECT-Other:_____	YES	NO
Pipelines:	BLANKED-BLEED-DISCONNECT-Other:_____	YES	NO
Valves:	LOCKOUT-DISCONNECT-TAG-Other:_____	YES	NO
Space Purged:	INERT GAS-WATER-Other:_____	YES	NO
Other:	_____	YES	NO
Other:	_____	YES	NO

COMPLETED BY: _____

ACCEPTABLE ENTRY CONDITIONS

Oxygen: _____ %
Hydrogen Sulfide: _____ PPM
Flammable/Combustibles: _____ %LEL

Carbon Monoxide: _____ PPM

Other: _____

HAZARDS ASSOCIATED WITH CONFINED SPACES:

Portions of work under construction may pose some hazards associated with work in confined spaces. In order to protect employee health, the following rules must be adhered to before entry into areas where confined space hazards may be present. Confined space hazards may exist in any space having a limited means of entry or exit which may have an oxygen deficient atmosphere, or accumulations of toxic, explosive or flammable gases. These spaces include, but are not limited to, storage tanks, sewers, manholes, utility vaults, tunnels, pipelines and some open top spaces more than 4' in depth, such as pits, tubs, vaults and vessels. Monitoring for trenches and excavations will be according to 1926.651 (g).

1. No person may enter any area which may contain confined space hazards until the supervisor has tested the air and filled out a confined space hazard checklist.
2. Continuous monitoring will be performed by any employee or group of employees working in an area where confined space hazards could exist. The area will be evacuated immediately at any sign of oxygen deficiency, explosive or toxic gases.
3. Fresh air ventilation will be used when necessary to maintain safe working conditions. Sources of contamination, such as vehicle exhaust, will be kept away from air intakes.
4. At least one worker will remain topside of any area that may contain confined space hazards to observe workers at all times.
5. Keep vehicles, equipment and other sources of ignition, upwind of potentially explosive air being exhausted from confined spaces.
6. Keep work area well illuminated. If the atmosphere is potentially explosive, use only explosion-proof flashlights, lighting, and other equipment.
7. In the event an emergency rescue is necessary, do not enter the confined space unless you have the proper equipment to affect the rescue, or the space has been declared safe by your supervisor.
8. Wherever possible, rescues should be affected without the rescuer entering the space.
9. Potential sources of contamination or other hazards will be blocked or locked out before any entry into a space which may contain confined space hazards.

FILLING OUT CONFINED SPACE HAZARD CHECKLIST:

1. Before any employee will be allowed to enter any space that could contain confined space hazards, their supervisor will monitor the air in the space and fill out a confined space hazard checklist.
2. The space will be tested for:
 - a. Oxygen deficiency
 - b. Flammable gases
 - c. Carbon Monoxide

3. If the air test prior to entry indicates no problem with the atmosphere, employees may enter on the following conditions:
 - a. The checklist is completed properly and signed by supervisor.
 - b. Continuous monitoring is performed in the space.
 - c. Employees are instructed to vacate the space at any indication of the occurrence of a hazardous substance or oxygen deficiency.
 - d. An individual is posted topside to aid in rescue.
 - e. Any potential sources of contamination or hazards are locked out or blocked.

4. If the air test prior to entry indicates an oxygen deficiency or the presence of a hazardous substance, entry may be made only after ventilation of the area and retesting indicates the hazard is no longer present, and the checklist is properly completed and signed. Employees may enter on the following conditions:
 - a. Continuous monitoring is performed by employees in the space.
 - b. Employees are instructed to vacate the space at any indication of the occurrence of a hazardous substance or oxygen deficiency.
 - c. The ventilation remains on while the space is occupied.
 - d. All employees in the space are wearing rescue harnesses and leads running to the surface.
 - e. There is sufficient personnel and equipment stationed topside to effect a rescue without entering the space.
 - f. Explosion proof equipment and lights are used if the initial monitoring indicated the presence of a flammable gas.

5. If ventilation does not clear up the problem, entry will not be made without consultation with and the permission of the Safety Manager.

CONFINED SPACE HAZARD CHECKLIST

Project _____

Location _____

Structure being entered _____

Reason for entry _____

Date of entry _____

Test Results: % Oxygen _____
 Flammable Gas _____
 Hydrogen Sulfide _____

Name of Entrants _____

Topside attendant _____

Continuous monitoring _____

Employees instructed to vacate at any sign of trouble _____

Potential sources of contamination or hazards are blocked or locked out _____

If the initial test indicates a problem

Ventilation of space - # of minutes _____

* Retest results: % Oxygen _____
 Flammable Gas _____
 Hydrogen Sulfide _____

* If a problem still exists contact _____ at _____

Continuous monitoring during entry _____

Ventilation during entry _____

Rescue harness and leads for all entrants _____

Sufficient personnel and equipment topside for rescue _____

Employees instructed to vacate at any sign of trouble _____

Explosion proof lights and equipment if necessary _____

Signed _____

Title _____

LOCKOUT/TAGOUT POLICY FOR INCIDENTAL CONSTRUCTION EXPOSURE

The following simple lockout procedure is provided to assist in controlling the hazards associated with accidental and unintended startup of machines and equipment, or the release of stored energy in a way that would expose employees to harm.

When energy isolating devices are not lockable, tagout may be used, provided all employees receive additional training and a more rigorous periodic inspection schedule is set up. When energy isolating devices are lockable, locks must be used.

PURPOSE:

This procedure establishes the minimum requirements for the lockout of energy isolating devices whenever maintenance or servicing is done on machines or equipment. It shall be used to ensure that the machine or equipment is stopped, isolated from all potentially hazardous energy sources, and locked out before employees perform any servicing or maintenance where the unexpected energizing or start-up of any machine or equipment, or release of stored energy, could cause employee injury.

COMPLIANCE WITH THIS PROGRAM:

All employees are required to comply with the restrictions and limitations imposed upon them during the use of lockout. The authorized employees are required to perform the lockout in accordance with this procedure. All employees, upon observing a machine or piece of equipment which is locked out to perform servicing or maintenance shall not attempt to start, energize, or use that machine or equipment.

SEQUENCE OF LOCKOUT:

1. Notify all affected employees that servicing or maintenance is required on a machine or equipment, and that the machine or equipment must be shut down and locked out to perform the servicing or maintenance.
2. The authorized employee shall refer to the company procedure to identify the type and magnitude of the energy that the machine or equipment utilizes, shall understand the hazards of the energy, and shall know the methods to control the type(s) and magnitude(s) of energy, its hazards and the methods to control the energy.
3. If the machine or equipment is operating, shut it down by the normal stopping procedure (depress the stop button, open switch, close valve, etc.).
4. De-activate the energy isolating device(s) so that the machine or equipment is isolated from the energy source(s).
5. Lock out the energy isolating device(s) with assigned individual lock(s).
6. Stored or residual energy (such as that in capacitors, springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure, etc.) must be dissipated or restrained by methods such as grounding, repositioning, blocking, bleeding down, etc.
7. Ensure that the equipment is disconnected from the energy source(s) by first checking that no personnel are exposed, then verify the isolation of the equipment by operating the push button or other normal operating control(s) or by testing to make certain the equipment will not operate. Caution: Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment.
8. The machine or equipment is now locked out.

RESTORING EQUIPMENT TO SERVICE:

When the servicing or maintenance is completed and the machine or equipment is ready to return to normal operating condition, the following steps shall be taken.

1. Check the machine or equipment and the immediate area around the machine to ensure that nonessential items have been removed, and that the machine or equipment components are operationally intact.
2. Check the work area to ensure that all employees have been safely positioned or removed from the area.
3. Verify that the controls are in neutral.
4. Remove the lockout devices and re-energize the machine or equipment. Note: The removal of some forms of blocking may require re-energization of the machine before safe removal.
5. Notify affected employees that the servicing or maintenance is completed and the machine or equipment is ready for use.

EXCEPTIONS:

When the employee who applied the lockout or tagout device is not available to remove it, it may be removed if the following procedure is followed.

1. Verify that the authorized employee who applied the lock is not at the facility.
2. Make all reasonable efforts to contact the employee (home phone, cell phone, etc.)
3. Remove the lockout or tagout device in accordance with the above procedure.
4. Continue to attempt to contact the authorized employee; ensure that he/she knows what occurred before returning to work.

SHIFT OR PERSONNEL CHANGES:

1. The off-going and on-coming authorized employees will meet at the locked out energy source. All locked out sources will have the locks transferred.
2. The off-going employee(s) will remove his/her lock(s) WITHOUT energizing the source.
3. The on-coming employee(s) will place his/her lock(s) on the energy source.
4. The on-coming employee(s) will notify all on-coming affected employees and others in the area of the existing lockout.
5. The on-coming employee(s) will verify the lockout, using the start button or other start up control(s), in accordance with step 7 in sequence of lockout procedure. Lockout transfer is now complete.

FALL PROTECTION POLICY

PURPOSE:

This company is dedicated to the protection of its employees from on-the-job injuries. All employees of this company have the responsibility to work safely on the job. The purpose of this policy is to ensure that every employee who works for Klein-Dickert recognizes workplace fall hazards and takes the appropriate measures to address those hazards.

SCOPE:

The Fall Protection Policy addresses the use of conventional fall protection. This policy is designed to enable employers and employees to recognize the fall hazards associated with their work, and to establish the safest procedures that are to be followed in order to prevent falls to lower levels or through holes and openings in walking/working surfaces.

GUARDRAILS AND GUARDRAIL SYSTEMS:

Guardrail system means a barrier erected to prevent employees from falling to lower levels. Guardrails consist of a top edge member 42 inches (plus or minus 3 inches) above the walking/working level. When employees are using stilts, top edge height of the top rail is increased an amount equal to stilt height.

Midrails, screens, mesh, intermediate vertical members, or equivalent intermediate structural members are installed between top edge of guardrail system and walking/working surface when there is no wall or parapet wall at least 21 inches high.

Other structural members (such as additional midrails and architectural panels) must be installed such there are no openings in the guardrail system more than 19 inches wide.

Guardrail systems must be capable of withstanding, without failure, a force of at least 200 pounds applied within 2 inches of the top edge, in any outward or downward direction, at any point. When the test load is applied in a downward direction, top edge of guardrail cannot deflect to a height less than 39 inches above walking/working level.

Midrails, screens, mesh, intermediate vertical members, solid panels, and equivalent structural members must be capable of withstanding, without failure, a force of at least 150 pounds applied in any downward or outward direction at any point.

Guardrail systems must be surfaced as to prevent injury from punctures or lacerations and snagging of clothing. Ends of all top rails and midrails may not overhang terminal posts, except where such overhang does not constitute a projection hazard. Unsuitable items such as steel or plastic banding cannot be used as top rails or midrails.

Top rails and midrails shall be at least one-quarter inch nominal diameter or thickness to prevent cuts and lacerations. Wire rope top rails must be flagged at no more than 6-foot intervals with high-visibility material.

Guardrail systems used at hoisting areas require a chain, gate or removable guardrail section placed across the access opening between guardrail sections when hoisting operations are not taking place. Guardrail systems used at holes, shall be erected on all unprotected sides or edges of the hole.

When guardrail systems are used around holes used for the passage of materials, the hole shall have not more than two sides provided with removable guardrail sections to allow passage of materials. When the hole is not in use, it shall be closed over with a cover, or a guardrail system shall be provided along all unprotected sides or edges.

When guardrail systems are used around holes which are used as points of access (such as ladder ways), they are provided with a gate, or be offset so a person cannot walk directly into the hole. Guardrail systems used on ramps and runways shall be erected along each unprotected side or edge.

Manila, plastic or synthetic rope used for top rails or midrails must be inspected as frequently as necessary to ensure it continues to meet strength requirements.

Wood railings are assumed to meet the requirements if:

- Wood components are a minimum 1500 lb-ft/in(2) fiber (stress grade) construction grade lumber.
- Posts are at least 2-inch by 4-inch lumber spaced not more than 8 feet apart on centers.
- Top rails are at least 2-inch by 4-inch lumber.
- Intermediate rails are at least 1-inch by 6-inch lumber.

All lumber dimensions are nominal sizes, as provided by the American Softwood Lumber Standards, dated January 1970.

Pipe railings are assumed to meet the requirements if:

- Posts are at least one and one-half inches nominal diameter (schedule 40 pipes spaced not more than 8 feet apart on centers).
- Top rails are at least one and one-half inches nominal diameter (schedule 40 pipe).
- Intermediate railings are at least one and one-half inches nominal diameter (schedule 40 pipe).

Structural steel railings are assumed to meet the requirements if:

- Posts are at least 2-inch by 2-inch by 3/8-inch angles, with posts spaced not more than 8 feet apart on centers.
- Top rails are at least 2-inch by 2-inch by 3/8-inch angles.
- Intermediate rails are at least 2-inch by 2-inch by 3/8-inch angles.

SAFETY NET SYSTEMS:

Safety nets are installed as close as practicable under the surface on which employees are working, but in no case more than 30 feet below. When nets are used on bridges, potential fall area from walking/working surface to the net must be unobstructed.

Safety nets extend outward from outermost projection of work surface as follows:

Vertical distance from working level to horizontal plane of net	Minimum required horizontal distance of outer edge of net from the edge of the working surface.
Up to 5 feet	8 feet
More than 5 feet up to 10 feet	10 feet
More than 10 feet	13 feet

Safety nets are installed with sufficient clearance to prevent contact with surface or structures below when subjected to an impact force.

Safety nets and safety net installations are drop-tested after initial installation and before being used as a fall protection system, whenever relocated, after major repair, and at 6-month intervals if left in one place.

Test consists of a 400 pound bag of sand, 30 inches in diameter, dropped into net from highest surface at which employees are exposed to fall hazards, but not from less than 42 inches above that level.

When an employer can demonstrate it is unreasonable to perform a drop-test, the employer (or a designated competent person) must certify the net and net installation are in compliance with by preparing a certification record prior to the net being used as a fall protection system. Certification records include an identification of the net and net installation for which certification record is being prepared; date it was determined identified net and net installation were in compliance, and signature of the person making determination and certification. The most recent certification record for each net and net installation must be available at the jobsite.

Defective nets will not be used. Safety nets will be inspected at least once a week for wear, damage, and other deterioration. Defective components will be removed from service. Safety nets will also be inspected after any occurrence which could affect their integrity.

Materials, scrap pieces, equipment, and tools which have fallen into a safety net will be removed as soon as possible, and at least before the next work shift.

Maximum size of each safety net mesh opening will not exceed 36 square inches, nor be longer than 6 inches on any side. All mesh crossings shall be secured to prevent enlargement of the mesh opening.

Each safety net (or section of it) has a border rope for webbing with a minimum breaking strength of 5,000 pounds. Connections between safety net panels are as strong as integral net components and are spaced not more than 6 inches apart.

BODY BELTS AND HARNESES:

Body belt or safety belt means a strap with means both for securing it about the waist and for attaching it to a lanyard, lifeline, or deceleration device. Body harness means straps which may be secured about an employee in a manner that will distribute fall arrest forces over at least thighs, pelvis, waist, chest and shoulders with means for attaching it to other components of a personal fall arrest system. Effective January 1, 1998, body belts are not acceptable as part of a personal fall arrest system. Note: The use of a body belt in a positioning device system is acceptable if used according to regulations. D-rings and snap hooks have a minimum tensile strength of 5,000 pounds.

Snap hooks are sized to be compatible with the member to which they are connected to prevent rollout. Effective January 1, 1998, only locking type snap hooks are permissible.

Unless a snap hook is locking type and designed for the following connections, snap hooks may not be engaged:

- Directly to webbing, rope or wire rope;
- To each other;
- To a D-ring to which another snap hook or other connector is attached;
- To a horizontal lifeline; or
- To any object which is incompatibly shaped or dimensioned in relation to snap hook such that unintentional disengagement could occur by connected object being able to depress snap hook keeper and release itself.

On suspended scaffolds or similar work platforms with horizontal lifelines which may become vertical lifelines, devices used to connect to a horizontal lifeline must be capable of locking in both directions on the lifeline.

Horizontal lifelines will be designed, installed, and used, under supervision of a qualified person, as part of a complete personal fall arrest system maintaining a safety factor of at least two.

Lanyards and vertical lifelines must have a minimum breaking strength of 5,000 pounds. When vertical lifelines are used, each employee is attached to a separate lifeline.

During construction of elevator shafts, two employees may be attached to the same lifeline in the hoist way, provided both employees are working atop a false car equipped with guardrails, strength of lifeline is 10,000 pounds, and all other criteria for lifelines have been met.

Lifelines must be protected against being cut or abraded.

Self-retracting lifelines and lanyards which automatically limit free fall distance to 2 feet or less must be capable of sustaining a minimum tensile lead of 3,000 pounds. Self-retracting lifelines and lanyards which do not limit free fall distance to 2 feet or less, rip stitch lanyards, and tearing and deforming lanyards will be capable of sustaining a minimum tensile lead of 5,000 pounds.

Anchorage used for attachment of personal fall arrest equipment must be:

Independent of anchorage being used to support or suspend platforms, and

Capable of supporting at least 5,000 pounds per employee, or

Designed, installed, and used under supervision of a qualified person as part of complete personal fall arrest system which maintains a safety factor of at least two;

Personal fall arrest systems, when stopping a fall, shall:

Limit maximum arresting force on an employee to 900 pounds when used with a body belt;

Limit maximum arresting force on an employee to 1,800 pounds when used with a body harness;

Be rigged so an employee can neither free fall more than 6 feet, nor contact any lower level;

Bring an employee to a complete stop and limit maximum deceleration distance an employee travels to 3.5 feet and,

Have sufficient strength to withstand twice potential impact energy of an employee free falling a distance of 6 feet or the free fall distance permitted by the system, whichever is less.

Attachment point of a body belt is located in center of wearer's back. Attachment point of a body harness is located in center of wearer's back near shoulder level, or above wearer's head.

Body belts, harnesses, and components are used only for employee protection and not to hoist materials. Personal fall arrest systems and components subjected to impact loading will be immediately removed from service and not be used again for employee protection until inspected and determined by a competent person to be undamaged and suitable for reuse.

Employer will provide for prompt rescue of employees in event of a fall, or assure employees are able to rescue themselves.

Personal fall arrest systems must be inspected prior to each use for wear, damage and other deterioration, and defective components shall be removed from service.

Personal fall arrest systems may not be attached to guardrail systems. When a personal fall arrest system is used at hoist areas, it is rigged to allow movement of employee only as far as edge of the walking/working surface.

POSITIONING DEVICE SYSTEMS:

Positioning devices must be rigged so an employee cannot free fall more than 2 feet. Positioning devices are secured to an anchorage capable of supporting at least twice the potential impact load of an employee's fall, or 3,000 pounds, whichever is greater.

Connecting assemblies have a minimum tensile strength of 5,000 pounds. D-rings and snap hooks are proof-tested to a minimum tensile load of 3,600 pounds without cracking, breaking, or taking permanent deformation.

Snap hooks are sized to be compatible with the member to which they are connected to prevent rollout, or shall be a locking type snap hook designed and used to prevent disengagement of snap hook by contact of snap hook keeper by connected member. As of January 1, 1998, only locking type snap hooks are permitted.

Unless snap hook is a locking type designed for the following connections, snap hooks shall not be engaged:

- Directly to webbing, rope or wire rope;
- To each other;
- To a D-ring to which another snap hook or other connector is attached;
- To a horizontal lifeline; or
- To any object incompatibly shaped or dimensioned in relation to snap hook such that unintentional disengagement could occur by connected object being able to depress snap hook keeper and release itself.

Positioning device systems shall be inspected prior to each use for wear, damage, and other deterioration, and defective components shall be removed from service.

WARNING LINE SYSTEMS:

Warning line system means a barrier erected on a roof to warn employees they are approaching an unprotected roof side or edge, and which designates an area in which roofing work may take place without use of guardrail, body belt, or safety net systems to protect employees.

Warning line systems will comply with the following provisions:

- Warning line will be erected around all sides of roof work area.
- When mechanical equipment is not being used, warning line will be not less than 6 feet from roof edge.
- When mechanical equipment is being used, warning line will be not less than 6 feet from roof edge which is parallel to direction of mechanical equipment operation, and not less than 10 feet from roof edge perpendicular to direction of mechanical equipment operation.
- Points of access, materials handling areas, storage areas, and hoisting areas will be connected to the work area by an access path formed by two warning lines.
- When the path to a point of access is not in use, a rope, wire, chain, or other barricade, equivalent

in strength and height to the warning line is placed across path at the point where path intersects warning line erected around work area, or path is offset so a person cannot walk directly into the work area.

Warning lines consist of ropes, wires, or chains, and supporting stanchions erected as follows:

- Rope, wire, or chain flagged at not more than 6-foot intervals with high-visibility material;
- Rigged and supported so lowest point is no less than 34 inches and highest point is no more than 39 inches from walking/working surface;
- With lines attached, stanchions must be capable of resisting, without tipping over, a force of at least 16 pounds applied horizontally against stanchion, 30 inches above walking/working surface, perpendicular to warning line, and in direction of floor, roof, or platform edge;
- Rope, wire, or chain must have a minimum tensile strength of 500 pounds
- Lines attached at each stanchion in such a way that pulling on one section of line between stanchions will not result in slack being taken up in adjacent sections before stanchion tips over.

No employee will be allowed in area between a roof edge and a warning line unless performing roofing work. Mechanical equipment on roofs will be used or stored only in areas where employees are protected by a warning line system, guardrail system, or personal fall arrest system.

CONTROLLED ACCESS ZONES:

Controlled access zone (CAZ) means an area in which certain work (e.g., overhand bricklaying) may take place without use of guardrail systems, personal fall arrest systems, or safety net systems and access to zone is controlled.

Controlled access zones and their use conform to the following provisions.

When used to control access to areas where leading edge and other operations are taking place controlled access zone is defined by a control line or other means that restricts access.

Control lines when used, are erected not less than 6 feet nor more than 25 feet from unprotected or leading edge, except when erecting pre-cast concrete members.

When erecting pre-cast concrete members, control lines are erected not less than 6 feet nor more than 60 feet or half the length of member being erected, whichever is less, from leading edge. Control lines extend along entire length of unprotected or leading edge, approximately parallel to unprotected or leading edge. Control lines are connected on each side to a guardrail system or wall.

When used to control access to areas where overhand bricklaying and related work are taking place:

Controlled access zone is defined by a control line erected not less than 10 feet nor more than 15 feet from working edge.

Control lines extend to enclose all employees performing overhand bricklaying and related work at working edge and are approximately parallel to working edge.

Additional control lines are erected at each end to enclose the controlled access zone.

Only employees engaged in overhand bricklaying or related work are permitted in the controlled access zone.

Control lines consist of ropes, wires, tapes, or equivalent materials, and supporting stanchions as follows:

Lines are flagged or otherwise clearly marked at not more than 6-foot intervals with high-visibility material.

Each line is rigged and supported in so its lowest point is not less than 39 inches and its highest point not more than 45 inches [50 inches when overhand bricklaying operations are being performed] from walking/working surface.

Each line shall have a minimum breaking strength of 200 pounds.

On floors and roofs where guardrail systems are not in place prior to beginning of overhand bricklaying operations, controlled access zones will be enlarged, as necessary, to enclose all points of access, material handling areas, and storage areas.

On floors and roofs where guardrail systems are in place, but need to be removed to allow for overhand bricklaying work or leading edge work, only the portion of the guardrail necessary to accomplish that day's work may be removed.

SAFETY MONITORING SYSTEMS:

Safety-monitoring system means a safety system in which a competent person is responsible for recognizing and warning employees of fall hazards. When used, safety monitoring systems comply with the following provisions:

A competent person is designated to monitor safety of other employees complying with the following requirements:

Safety monitor must be competent to recognize fall hazards;

Safety monitor will warn employee when it appears employee is unaware of a fall hazard or is acting unsafely.

Safety monitor will be on same surface within visual sighting distance of employee being monitored;

Safety monitor will be close enough to communicate orally with employee; and

Safety monitor will not have other responsibilities which could take monitor's attention from monitoring function.

Mechanical equipment shall not be used or stored in areas where safety monitoring systems are being used to monitor employees engaged in roofing operations on low-slope roofs. No employee, other than an employee engaged in roofing work [on low-sloped roofs] or an employee covered by a fall protection plan, will be

allowed in an area where an employee is being protected by a safety monitoring system.

Employees working in a controlled access zone are required to comply promptly with fall hazard warnings from safety monitors.

COVERS:

Hole means a gap or void 2 inches or more in its least dimension, in a floor, roof, or other walking/working surface. Covers for holes in floors, roofs, and other walking/working surfaces will meet the following requirements:

Covers located in roadways and vehicular aisles must be capable of supporting, without failure, at least twice maximum axle load of largest vehicle expected to cross over the cover.

All other covers must be capable of supporting, without failure, at least twice weight of employees, equipment, and materials that may be imposed.

All covers will be secured when installed to prevent accidental displacement by wind, equipment, or employees. All covers will be color coded or marked with the word "HOLE" or "COVER" to provide warning of the hazard.

PROTECTION FROM FALLING OBJECTS:

Falling object protection complies with the following provisions:

Hardhats be worn.

Toeboards, when used, are erected along edge of the overhead walking/working surface for a distance sufficient to protect employees below.

Toeboards will be capable of withstanding, without failure, a force of at least 50 pounds applied in any downward or outward direction, at any point.

Toeboards will be a minimum of 3 ½ inches in vertical height with not more than 1/4 inch clearance above the walking/working surface.

They will be solid or have openings not over 1 inch in greatest dimension.

Where tools, equipment, or materials are piled higher than top edge of a toeboard, paneling or screening will be erected to top of a guardrail system's top rail or midrail, for a distance sufficient to protect employees below.

Guardrail systems, used as falling object protection, will have openings small enough to prevent passage of potential falling objects.

During the performance of overhand bricklaying and related work:

No materials or equipment, except masonry and mortar, will be stored within 4 feet of working edge.

Excess mortar, broken or scattered masonry units, and other materials and debris will be kept from work area by removal at regular intervals.

During performance of roofing work:

Materials and equipment will not be stored within 6 feet of a roof edge, unless guardrails are erected at the edge.

Materials which are piled, grouped, or stacked near a roof edge will be stable and self-supporting.

Canopies, when used as falling object protection, must be strong enough to prevent collapse and prevent penetration by any objects which may fall onto the canopy.

FALL PROTECTION PLAN:

This option is available only to employers engaged in leading edge work, pre-cast concrete erection work, or residential construction work who can demonstrate it is infeasible or creates a greater hazard to use conventional fall protection equipment. The fall protection plan must conform to the following provisions.

Fall protection plans are prepared and developed by a qualified person specifically for the site where leading edge work, pre-cast concrete work, or residential construction work is being performed. The plan must be kept up to date.

Changes to the fall protection plan are approved by a qualified person.

Copy of the fall protection plan with approved changes is maintained at the job site.

Implementation of the fall protection plan is under supervision of a competent person.

Must document reasons why use of conventional fall protection systems (guardrail systems, personal fall arrest systems, or safety nets systems) are infeasible, or why their use would create a greater hazard.

Include a written discussion of other measures to be taken to reduce or eliminate fall hazards for workers who cannot be provided with protection from conventional fall protection systems.

Identify each location where conventional fall protection methods cannot be used. These locations are classified as controlled access zones.

Include a statement which provides name or other method of identification for each employee designated to work in controlled access zones. No other employees may enter controlled access zones.

Where no other alternative measure has been implemented, employer shall implement a safety monitoring system.

In the event an employee falls, or some other related serious incident occurs, an investigation into the circumstances of the fall or other incident must be conducted to determine if the fall protection plan needs to be changed (e.g. new practices, procedures, or training), and shall be implemented.

PERSONAL PROTECTIVE EQUIPMENT

PURPOSE:

The purpose of this procedure is to define the safety requirements as they pertain to personal protective equipment (PPE).

SCOPE:

Appropriate personal protective equipment (PPE) shall be worn by personnel working where the potential for injuries and/or hazards may exist. PPE is designed to protect the employee from health and safety hazards that cannot practically be removed from the work environment. PPE is designed to protect many parts of the body including eyes, face, head, hands, feet and ears.

The wearing of suitable PPE is a condition of employment. Individuals and employees that disregard this condition will be subject to disciplinary action. The company will not take disciplinary action against employees who refuse to perform work when the company has not provided suitable PPE.

A hazard assessment must be conducted and documented. From this assessment the proper PPE will be selected and properly fitted to the affected employees.

HEAD PROTECTION:

Hardhats must be worn by all personnel at all times at the jobsite.

Hard hats are designed to protect the employee from impact and penetration caused by objects hitting their head, and from limited electrical shock or burns.

The shell of the hard hat is designed to absorb some of the impact.

The suspension, which consists of the headband and strapping, is even more critical for absorbing impact. It must be adjusted to fit the wearer and keep the shell a minimum distance of one-and-one-fourth inches above the wearer's head. Material should not be stored in the suspension of the hard hat.

Hard hats shall meet the specifications contained in American National Standards Institute (ANSI), Z89.1, Safety Requirements for Industrial Head Protection.

Hard hats for head protection of employees exposed to high voltage electrical shock or burns shall meet the specifications contained in ANSI Z89.2.

Hard Hats may not be altered in any way that will down grade their effectiveness. Typically prohibited alterations include: painting, drilling holes in shells, application of metal jewelry, etc.

HEARING PROTECTION:

Whenever it is not possible to reduce the noise by engineering methods, or duration of exposure to acceptable limits, hearing protection devices shall be provided and used. Hearing protection should be worn in areas where noise levels exceed 90 decibels. Do not use cotton, paper or cloth as a substitute for proper hearing protection. (SEE HEARING CONSERAVTION PROGRAM)

EYE AND FACE PROTECTION:

Safety glasses will be worn by all employees and visitors at all times when on a jobsite or at the shop.

HAND PROTECTION:

Fingers, hands and arms are injured more often than any other parts of the body. Hand protection must be provided and worn when employees are exposed to hazards such as, but not limited to, those from skin absorption or harmful substances, severe cuts or lacerations, severe abrasions, punctures, chemical burns, thermal burns and harmful temperature extremes.

FOOT PROTECTION:

Employees not required to wear protective footwear (steel toed boots, meta-tarsal protection, rubber boots, insulated boots, etc.) shall wear substantial, leather, high sided, suitable work-type boots. Shoes like (leather or other type materials) sandals, high-heeled shoes, etc. are not allowed on field project sites. The weather may dictate that leather boots do not provide the necessary protection from the elements. In this case the proper foot wear will be worn and supplied by the employee.

FLAMMABLE AND COMBUSTIBLE LIQUIDS

PURPOSE:

The purpose of this policy is to reduce the potentials for injuries related to storage, handling and misuse of flammable and combustible materials in the workplace.

SCOPE:

These rules and regulations apply to all storage areas where flammable and combustible materials are present.

GENERAL STORAGE:

Only approved containers, tanks, and pumping equipment shall be used for storage and handling of flammable and combustible liquids. Approved metal safety cans shall be used for the handling and use of flammable liquids in 1 to 5 gallon quantities.

All rag, waste, etc., soiled by combustible or flammable materials shall be placed in tightly closed metal containers for daily disposal. Adequate signs prohibiting smoking and open flames shall be posted near areas of storage and use of flammable liquids.

Proper ventilation measures shall be taken to prevent the ignition of flammable vapors. Sources of ignition include, but are not limited to: open flames; lighting; smoking; cutting and welding; hot surfaces; frictional heat; static; electrical and mechanical sparks; spontaneous ignition; chemical reaction; and radiant heat.

INDOOR STORAGE:

Indoor storage of flammable liquids should be kept to a minimum. No more than 25 gallons of flammable or combustible liquids shall be stored outside of an approved storage cabinet.

Flammable or combustible liquids shall not be stored in areas used for exits, stairways, or normally used for the safe passage of people.

A single flammable storage cabinet shall not hold more than 120 gallons of flammable and combustible liquids, of which not more than 60 gallons shall be Class I and II flammable liquids.

Cabinets shall be conspicuously labeled “***FLAMMABLE--KEEP FIRE AWAY.***”

STORAGE OF LPG WITHIN BUILDINGS AS PERMITTED BY LOCAL FIRE CODE.

OUTSIDE STORAGE:

A minimum of 20 feet shall be maintained between flammable and combustible storage areas and any building.

Storage of containers (not more than 60 gallons each) shall not exceed 1,100 gallons in any one pile or area.

The storage area shall be graded in a manner to divert possible spills away from buildings and should be curbed or diked so as to contain the entire volume of liquids. These areas shall be kept free from accumulation of unnecessary combustible materials. Weeds and grass shall be cut and a regularly scheduled cleanup procedure should be established for the whole area.

DISPENSING AND REFUELING AREAS:

Equipment being refueled shall have the engine shut off prior to refueling.

Smoking is prohibited when vehicles or equipment are being refueled.

Adequate protection shall be provided to safeguard dispensing pumps from physical damage from vehicles and other equipment.

PORTABLE FIRE PROTECTION:

Listed portable fire extinguishers shall be furnished in such quantities, sizes and types as needed for the special hazards of operation and storage.

At least one portable fire extinguisher rated not less than 20B:C shall be located in the following areas containing flammable and combustible liquids:

1. Between 10-25 feet of an inside storage area.
2. Between 25-75 feet of an outside storage area.
3. On fuel dispensing vehicles.

RESPIRATORY PROTECTION PROGRAM

PURPOSE:

The purpose of this program is to protect the health of all employees by preventing their exposure to harmful levels of airborne contaminants by the proper use of respiratory protection. Where feasible, exposure to airborne contaminants will be eliminated through the application of engineering controls, such as enclosure of the operation, ventilation, or substitution of less toxic materials. In situations where engineering controls are not feasible, protection will be accomplished by the use of personal respiratory protection equipment where OSHA Permissible Exposure Limits (PEL's), or in their absence, ACGIH Threshold Limit Values (TLV's) are or could potentially be exceeded.

SCOPE:

This program applies to the use of respiratory protection in areas where employees could be potentially exposed to harmful levels of airborne contaminants, or when employees are required to wear respiratory protection during their job task due to exposure to air contaminants at or above the Permissible Exposure Limits (PEL) established by OSHA. The Threshold Limit Values (TLV's) established by the American Conference of Governmental Industrial Hygienists (ACGIH) will be used to determine the need for respiratory protection due to exposure to air contaminants not covered by OSHA standards.

RESPONSIBILITY FOR COMPLIANCE:

The development and administration of this respiratory protection program will be the responsibility of management and will provide the designated position/person the necessary training and technical support to properly carry out his/her responsibilities.

Managers, supervisors and group leaders are responsible for ensuring that all personnel under their control are knowledgeable of the respiratory requirements for the areas in which they work, and comply with all facets of this respiratory program.

Employees are responsible for maintaining an awareness of the respiratory protection requirements for their work area. In addition, employees are responsible for wearing the appropriate respiratory equipment in accordance with the instructions and training they received. Employees are also responsible for maintaining respiratory equipment in a clean and usable condition, and reporting any malfunction of the respirator to their supervisor.

AIRBORNE RESPIRATOR HAZARDS:

There are five major types of airborne hazards.

1. Gases are substances that are airborne at room temperature and are often invisible, such as carbon monoxide and methane.
2. Dusts are tiny suspended particles resulting from a mechanical process, such as grinding, cutting or can be generated from sweeping of various materials.

3. Mists are aerosols composed of liquid particles created by spraying, machining, or mixing operations.
4. Fumes are small particles formed by a condensing gas or vapor, such as in welding operations.
5. Vapors are gaseous forms of a liquid or solid material that evaporate at room temperature, such as solvents, paint thinner, and gasoline.

ENVIRONMENTAL MONITORING:

The purpose of environmental monitoring is to determine whether a respirator is required in a work area because of the presence of air contaminants and/or there is a potential for oxygen deficiency. All monitoring will be conducted in accordance with accepted industrial hygiene standards using personal and ambient air sampling devices. The results of this sampling will be documented and used to determine the respiratory protection that must be worn when performing each job task.

SELECTION AND USE OF RESPIRATORY PROTECTION EQUIPMENT:

The selection of the proper respirator for any given situation will be based upon consideration of the following factors.

1. Nature, extent and potentially harmful effects of the hazard(s).
2. The activity of the worker in the hazardous area.
3. The period of time for which the respirator may be worn.
4. The location of the hazardous area with respect to a safe area having respirable air.
5. Characteristics, limitations and the protection factor of available respirators.

All respiratory protection provided to employees will be of a type approved jointly by the National Institute for Occupational Safety and Health (NIOSH) for the known hazards.

During certain activities, employees may voluntarily request the use of their own respirator. If supervision has deemed that the respirator will not create a greater hazard, its use may be authorized. Employees will be provided with information pertaining to the voluntary use of respirators.

All respirators will be assigned to employees on an individual basis.

EMPLOYEE FIT TESTING:

All employees who are required to wear a negative pressure respirator must be fit tested prior to use of the respirator, in an approved test atmosphere using an accepted qualitative fit testing method.

All employees required to use a respirator must be clean shaven to insure a tight seal. A mustache or goatee is permitted, as long as it does not interfere with the seal. Sideburns may also have to be shaved, if an adequate seal cannot be obtained.

Respirators are not to be worn when the temples for eye glasses, or the use of dentures, prevent a good face seal.

TYPES OF RESPIRATORS:

Air-Purifying Respirators

1. Single or Multiple use Disposable Respirators may be used in situations requiring protection against low (below the OSHA Permissible Exposure Limit) concentrations of dust, mists, vapors, or fumes.
2. Half Mask Reusable Respirators, equipped with the proper disposable cartridges, may be used for protection against fumes, mists, vapors or gases. A filter can be attached to the cartridge to provide added protection from atmospheres that contain particulate dust, mists, fumes and/or fibers.
3. Full face reusable respirators provide the same level of protection as half mask reusable respirators, but also provide eye and skin protection and can be held in place more securely.

LIMITATIONS OF AIR-PURIFYING RESPIRATORS (APR's):

There are specific limitations for the use of APR's. Conditions that exclude the use of APR's include the following.

1. APR's must never be worn in atmospheres containing less than 19.5% oxygen by volume.
2. APR's must not be used for sandblasting, or if the chemical lacks adequate warning properties (i.e. odor, taste, or irritation), unless use of a specific respirator is permitted by applicable NIOSH standards. These warning properties are necessary to alert the user that the sorbent is saturated and that the contaminant is passing through the cartridge or canister into the respiratory tract.
3. APR's must not be used in atmosphere immediately dangerous to life or health (IDLH).
4. APR's are intended for use only for specific gases or vapors for which they were tested and approved. They cannot be worn to protect against other gases or vapors, or unknown contaminants. Unknown refers to both the substance and concentration of the contaminant.

LEAK TESTING FIT CHECK OF NEGATIVE PRESSURE RESPIRATORS:

Leak testing fit checks shall be performed by each user of a negative pressure respirator before exposure occurs to a potentially hazardous atmosphere, by one or both of the following methods.

1. Positive pressure test - the user should close the exhalation valve and exhale gently into the face piece. The face fit is considered satisfactory if a slightly positive pressure can be built up inside the piece without any evidence of outward leakage of air at the seal.
2. Negative pressure test - the user should block off the inlet opening of the canister or cartridge by covering it with the palm of the hand and inhale gently so that the face piece collapses slightly. The user then should hold his/her breath for approximately 10 seconds. If the face piece remains in its slightly collapsed condition, and no inward leakage of air is detected, the tightness of the respirator is satisfactory.

INSPECTION FOR DEFECTS:

1. All respirators shall be inspected routinely before and after use by the wearer. A respirator that is not routinely used, but is kept ready for emergency use, must be inspected after each use and a least monthly to assure that it is in satisfactory working condition. A written record or log must be kept of inspection dates and findings for respirators maintained for emergency use.
2. Any respirator or part found defective must be replaced or repaired. Repair or replacement of defective parts shall be performed only by qualified persons with parts designed and approved for the particular respirator.

CLEANING AND DISINFECTING:

Routinely used respirators must be cleaned and disinfected by the wearer as frequently as necessary to insure that proper protection is provided. Respirators maintained for emergency use must be cleaned and disinfected after each use.

STORAGE:

1. After use, respirators should be stored in a plastic bag to protect against dust, excessive moisture, or damaging chemicals. Respirators should not be stored by hanging it by its straps or in such places as lockers or tool boxes, unless they are in carrying cases or in a plastic bag. Respirators must not be stored in areas where they are exposed to direct sunlight, extreme heat or cold moisture, and/or damaging chemicals.
2. Respirators must be packaged or stored so that the face piece and exhalation valve will rest in a normal position to prevent warping.

MEDICAL ASPECTS OF RESPIRATORY EQUIPMENT USAGE:

Employees will not be assigned to any task requiring the use of respirators unless it has been determined that they are physically able to safely perform the work using the respiratory protection equipment. This determination must be made by a physician or licensed health care professional. These requirements are necessary because the use of any type of respirator may impose some physiological stress on the user.

The medical status of each employee required to use respiratory protection will be reviewed periodically.

TRAINING OF RESPIRATOR USERS:

To insure the safe and proper use of any respirator, every user will be properly instructed in its selection, use, limitations and maintenance.

EVALUATION:

Periodically, the respiratory program will be evaluated by the safety manager. After the evaluation, the changes/revisions to the program deemed necessary will be made as soon as possible.

Dust Mask Acknowledgement

Information for employees using respirators when not required under the standard

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers.

However, if a respirator is used improperly, or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposure to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If your employer provides respirators for voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

You should do the following:

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

Signature of Employee

Date

ASSURED EQUIPMENT GROUNDING CONDUCTOR PROGRAM

PURPOSE:

To provide employees protection from workplace electrical hazards.

SCOPE:

All locations.

GUIDELINES:

The procedure is designed to enable employers and employees to recognize the electrical hazards associated with their work, and to establish the safety practices that are to be followed in accordance with OSHA 29 CFR 1926.404(b)(1)(iii). The program will cover all cord sets and receptacles, which are not a part of the permanent wiring of the building or structure. This will also include equipment connected by cords and plugs that are used by employees, and applies to all construction sites not equipped with ground-fault circuit interrupters.

Every employee who uses a cord set, attachment cap, plug and receptacle of a cord set, and any equipment connected by a cord and plug shall visually inspect the items for external defects before each day's use. The exception to this is if the cord sets and receptacles are fixed and not exposed to damage. Defects to look for are deformed or missing pins, insulation damage, and indications of possible internal damage. Equipment found damaged or defective may not be used until repaired.

Tests will be conducted at intervals not to exceed three months on all cord sets and receptacles that are not a part of permanent wiring of the building or structure, and company-owned cord and plug connected equipment requiring grounding.

Grounding conductors will be tested for continuity and shall be electrically continuous.

Each receptacle and attachment cap or plug shall be tested for correct attachment of the equipment grounding conductor.

The equipment grounding conductor shall be connected to its proper terminal.

The above required tests shall be performed before first use, before equipment is returned to service following repairs, and before equipment is used after any incident which can be reasonably suspected to have caused damage. Cord sets and receptacles that are fixed and not exposed to damage shall be tested at six-month intervals.

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

IMPLEMENTATION OF ASSURED EQUIPMENT AND GROUNDING CONDUCTOR PROGRAM:

A written description of this program should be available on every job site. It does not have to be posted. Double-insulated tools are not required to be grounded and do not have to be tested. The following tests will be performed on all cord sets, receptacles not part of the permanent wiring, and cord and plug-connected equipment required to be grounded:

All equipment conductors will be tested for continuity and will be electrically continuous;

Each receptacle and attachment cap or plug will be tested for correct attachment of the equipment grounding conductor and proper attachment of the hot and neutral wires; and

The equipment grounding conductor shall be connected to its proper terminal.

TEST PROCEDURES:

Receptacles - Use receptacle tester to determine correct connections to terminals.

Cord Sets - First, plug cord set into properly wired receptacle, then plug receptacle tester into cord connector (receptacle) of cord set to determine both continuity of grounding conductor and correct connections to terminals.

Cord and Plug Connected Equipment -Use continuity tester. Connect or touch one terminal of continuity tester to metal frame of equipment or tool, and the other terminal to grounding prong of attachment cap plug at end of the cord. A visual (light) signal of the tester indicates there is continuity of the grounding conductor. We further suggest this test also be made between metal frame and each of the other two prongs of the attachment cap plug. If there is a signal from this test, it indicates a possible ground fault and the tool should be checked further. Tests may be performed either at the job site or taken to the shop for testing.

COLOR CODING:

Upon completion of tests, color coding of all company-owned cord sets, receptacles, cord and plug connected tools shall be accomplished in the manner prescribed. To maintain uniformity, it is essential that the color code be followed as set forth on the chart. At the change of a quarter, and upon completion of the required three-month tests, previous quarter's color should be removed. All cord sets, receptacles, cord and plug connected tools without the proper color coding for the quarter should be immediately removed from service until tested and color coded.

Color by Code	
Quarter	Color
January 1 to March 31	White
April 1 to June 30	Green
July 1 to September 30	Red
October 1 to December 31	Orange

Color identification will be colored tape, which will adhere to the cord sets, and cord and plug connected equipment.

At the beginning of a new quarter, the previous quarter's color should be removed and the new color affixed.

All defective items shall be marked with a defective tool tag and taken out of service, unless repair is made immediately. An inspection of all items covered under the Assured Grounding Program must be conducted during the beginning of each quarter. All equipment covered by this program must be tested and color coded when it is brought onto the site, whether new or used.

HEARING CONSERVATION

PURPOSE:

The purpose of this company hearing conservation program is to control occupational noise exposure to protect employee health and prevent occupational hearing loss.

SCOPE:

All site locations.

GUIDELINES:

A hearing conservation program is required by OSHA when employee noise exposure is above an average level of 90dB (decibels, A-scale) for an eight-hour workday or TWA (time weighted average).

The use of Hearing Protection Devices along with a hearing conservation program, if the noise levels are effectively reduced, is acceptable, rather than using engineering or administrative controls. Engineering controls mean changing or adding to the machine or equipment to reduce the noise. Administrative controls mean rotating employees in some way to reduce their exposure to noise. Both control methods can be expensive and burdensome.

HEARING PROTECTION:

Hearing protection is required when levels are above 90 dB. As general rule of thumb your work environment is too noisy and requires hearing protection when you cannot carry on a normal conversation with a co-worker standing next to you, without raising your voice.

Hearing protection device requirements are as follows:

- Must be provided at no cost to the employee;
- There must be initial training to ensure a proper fit, and follow-up supervision to ensure proper use; and
- Must be replaced, as necessary.

Hearing protection devices must be selected to match the noise they are protecting against. They must attenuate the noise that reaches the employee's ear to 90 dB or below. Hearing protection devices are rated with a number called the NRR (noise reduction rating). The NRR is a rating measured in dB assigned to a hearing protection device by the manufacturer of the device. This number reaches values above 30 dB. The higher the number, the lower the noise is attenuated before it reaches the employee's ear. In theory, and based on manufacturer's laboratory testing data, an NRR of 30 would reduce the noise reaching the ear by 30 dB. In actual practice, an NRR of 30 is estimated by OSHA to only attenuate the noise by about 12 dB.

The NRR of hearing protection devices becomes very important as the noise level increases. Noise levels in the low to mid-90 dB range can be attenuated to below 90 dB by just about any kind of approved hearing protection. As noise levels approach and exceed 100 dB, only hearing protection with an NRR of around 30 will actually attenuate the noise that reaches the ears to below 90 dB. Care must be exercised to ensure that employees working in areas with noise approaching or above 100 dB wear hearing protectors with the highest NRR. In extremely high noise areas, wearing two kinds of hearing protection will attenuate the noise that reaches the ears by an additional 5 dB.

Exposure to impulsive or impact noise should not exceed 140 dB peak sound pressure level.

POWERED INDUSTRIAL TRUCK

PURPOSE:

The purpose of a powered industrial truck program is to ensure the safe operation of powered industrial trucks.

SCOPE:

All site locations.

GUIDELINES:

The OSHA standard “Powered Industrial Trucks” is found in 29 CFR 1910.178 which applies to construction. For the purpose of these guidelines, the word “truck” will be used interchangeably with “powered industrial truck.”

OPERATOR TRAINING/PERMIT:

Only trained and authorized operators are permitted to drive powered industrial trucks. A written record of the training must be maintained and available for inspection. No employee will be allowed to operate a truck (except for training purposes) until training, including testing, has been completed, and a written operator’s permit issued. Employees who do not have a valid permit shall not operate a truck. There are no exceptions!

TRAINING PROGRAM REQUIREMENTS:

Trainers must have the knowledge, training, and experience to train powered industrial truck operators and evaluate their competence. Training shall consist of a combination of formal instruction; practical, hands-on training (for those receiving a permit for the first time); and an evaluation of the operator’s performance in the workplace (for those receiving a permit for the first time). Truck-related training topics shall include:

- Operating instructions, warnings, and precautions for the types of truck the operator will be authorized to operate.
- Differences between the truck and an automobile.
- Truck controls and instrumentation: where they are located, what they do, and how they work.
- Engine or motor operation.
- Steering and maneuvering.
- Visibility (including restriction due to loading).
- Fork and attachment adaptation, operation, and use limitations.
- Vehicle capacity.
- Vehicle stability.
- Any vehicle inspection and maintenance that the operator will be required to perform.
- Refueling and/or charging and recharging of batteries.
- Operating limitations.

- Any other operating instructions, warnings, or precautions listed in the operator's manual for the types of vehicle that the employee is being trained to operate.

Workplace-related training topics shall include:

- Surface conditions where the vehicle will be operated.
- Composition of loads to be carried and load stability.
- Load manipulation, stacking, and un-stacking.
- Pedestrian traffic in areas where the vehicle will be operated.
- Narrow aisles and other restricted places where the vehicle will be operated.
- Hazardous (classified) locations where the vehicle will be operated.
- Ramps and other sloped surfaces that could affect the vehicle's stability.
- Closed environments and other areas where insufficient ventilation or poor vehicle maintenance could cause a buildup of carbon monoxide or diesel exhaust.
- Other unique or potentially hazardous environmental conditions in the workplace that could affect safe operation.

Training must be conducted every three years or as soon as one of these conditions occur:

- The operator has been observed operating a vehicle in an unsafe manner.
- The operator has been involved in an accident or near-miss in which there is some fault on his/her part.
- The operator has received an evaluation that reveals that the operator is not operating the truck safely.
- The operator is assigned to drive a truck for which he/she does not have current training.
- A condition in the workplace changes which operators will need retraining in order to continue to operate a truck safely.

MAINTENANCE:

If a truck is not in a safe operating condition, it must be removed from service and not used until it is placed in a safe operating condition. All repairs must be made by authorized personnel only. Replacements parts must be the safety equivalent of original parts. Prior to repairs to the electrical system, the battery should be disconnected. Trucks should be kept in a clean condition, free of excess oil and grease. Noncombustible agents should be used for cleaning by following precautions for toxicity, ventilation, and fire hazard control.

SAFETY AND HEALTH TRAINING

PURPOSE:

To provide for the most appropriate level of training that will provide protection against day-to-day occupational hazards.

SCOPE:

All locations.

GUIDELINES:

Klein-Dickert Co., Inc. understands the importance of assuring that employees are adequately trained to safely perform those tasks to which they are assigned. All company safety and health programs are designed to continually train and supplement previous training throughout the course of the year.

FIRST AID/CPR:

Because many of the project sites can be considered to be remote in terms of available medical services, this company places great emphasis on making First Aid/CPR training available to all the sites. At least one individual trained in this area is assigned to activities being performed at sites.

SITE-SPECIFIC SAFETY AND HEALTH TRAINING:

All employees, from superintendents to journeymen and apprentices, will receive safety education and training through all phases of work performed by this company. Site-specific safety and health training is presented to all employees assigned to the site at the time of startup activities, when a new employee is assigned to the site, and periodically during the course of the project when there is a change in site activities. Specific topics covered include:

- Chemical and physical hazards associated with the task to be performed
- Necessary personal protective equipment required for the task
- The type of environmental monitoring to be performed
- Actions to be initiated based on environmental monitoring results
- Emergency and contingency plans
- Task-specific topics such as drilling safety, confined space entry, etc.

NEW HIRE SAFETY ORIENTATION:

New employees must attend a new hire safety orientation. This training must be completed prior to the onset of any fieldwork. These programs provide each employee with the basic information about company project-specific safety and health plans, federal and state OSHA standards, and other applicable safety rules and regulations.

Employee attendance is mandatory prior to working on the project.

Company Safety and Health programs and policy

- The construction project and the employee's role
- Hazard Communication requirements
- Emergency procedures
- Location of First Aid stations, fire extinguishers, telephone
- Safety and Health responsibilities (including monitoring instrumentation)
- Reporting of injuries and hazardous conditions
- Use of personal protective equipment
- Tool handling and storage
- Review of each safety and health rule applicable to the job
- Introduction to safety and health representative(s)
- Introduction to supervisor

SCAFFOLDING SAFETY PROGRAM

PURPOSE:

To protect employees from falling and being struck by objects when working with scaffolding.

SCOPE:

All locations.

GUIDELINES:

Scaffolds and other elevated work platforms can expose workers to falls and falling objects if appropriate safety measures are not implemented. Scaffolds should be built using either Manufacturer's recommendations, plans designed by a Registered Professional Engineer or following the OSHA standards for the particular scaffold being built. Trained Erectors and Dismantlers shall build all scaffolds and a competent person shall witness either the erection activities, dismantling activities or alterations to the scaffolding. Prior to use, the scaffolding shall be inspected by a competent person.

There are several types of scaffolds that are addressed specifically in the OSHA standards. All scaffolding is required to be designed by a qualified person and must be erected in accordance with that design. All working levels of scaffolds are required to be fully planked or decked between the front uprights and guardrail supports in the back.

The following general rules are for maintaining all types of scaffolds in safe, working condition.

1. No scaffold should be erected, moved, dismantled or altered except under the supervision of a competent person.
2. The structure should be cleared of all rubbish daily. No tools should be left on scaffolds overnight.
3. Scaffold structures should be protected from trucks and other vehicles.
4. Working platforms should be free of ice, snow, oil and other elements.
5. No open fires are permitted on or near scaffolds.
6. Fall protection is required for each employee working on a scaffold 6 feet or higher, above floor level.

TRAINING:

Each employee who erects, dismantles, repairs, maintains, moves, inspects or works from scaffolds of any type is required to be trained by a person “qualified in the subject matter.” Training is to be completed before employees are assigned to perform the assigned work. Training for those who work from scaffolds must include:

- The nature of any fall hazards, electrical hazards and falling-objects hazards in the work area.
- The correct procedures for dealing with electrical hazards and for erecting, maintaining and disassembling the fall protection system and falling-object systems being used.
- The proper use of the scaffold and proper handling of materials while on the scaffold.
- The maximum intended load and load-carrying capacity of the scaffold.
- Any other applicable information (i.e., employees must comply with tag system).

Training for those who erect, disassemble, move, operate, repair, maintain or inspect scaffolding is to include:

- The nature of scaffold hazards
- The correct procedures for erecting, dismantling, moving, operating, inspecting and maintaining scaffolds
- The design criteria, maximum intended load bearing capacity and intended use of the scaffold
- Any other pertinent information

RETRAINING:

The work and work processes routinely change on any project. Both Scaffold Erectors and Scaffold Users are required to be retrained when:

- There are changes affecting the types of scaffolds, fall protection, falling object protection or other equipment, or procedures related to the hazards associated with site scaffolding.
- Changes in the worksite present new hazards to which the employee has not been previously trained.
- An employee demonstrates a lack of skill, understanding or where inadequacies in an affected employee’s work involving scaffolds indicates that the employee has not retained proficiency.

SCAFFOLD DESIGN:

1. Each scaffold should be capable of supporting 4 times the maximum intended load including workers, building materials and the weight of the scaffold structure itself.
2. Adequate support, such as planks (mudsills), should be provided under uprights, especially when they rest on earth, sand or loose material. Cross-bracing to provide stability should also be provided.
3. Ladders or stairs should be provided to safely access the scaffold.
4. Ladder selection and design should be in accordance with manufacturer’s recommendations.

5. Guardrails, midrails and toeboards should be provided on all open sides of working platforms. Appropriate wire mesh screening should be provided between the top guardrails and toeboards when there is a falling object hazard and personnel working below.

TUBULAR STEEL SCAFFOLDING:

1. Steel scaffolding should be erected and used in accordance with manufacturer's and/or professional registered engineer's recommendations, under the supervision of a competent person.
2. Proper seating and locking of all connections, with the correct devices, is mandatory.
3. Firm footing should be provided for each upright. Footing or anchorage should be sound, rigid and capable of carrying the maximum intended load without settling or displacement.
4. All uprights should be plumb, secured and rigidly braced to prevent swaying and displacement. Cross-bracing is required at every other section as a minimum.
5. Platforms should be constructed of 2 · 10 scaffold-grade wood planks or equivalent. All planking of platforms should be overlapped by a minimum of 12 inches or secured from movement.
6. Toeboards are designed to guard against falling objects. Toeboards should be installed on all open sides and ends of platforms more than 10 feet above the ground when workers are working or have access underneath. Toeboards should be at least four inches in height.
7. Guardrails should be provided on scaffolds to prevent falls. Guardrails should be 42 ±3 inches high and should have a midrail. Guardrails should be supported at 8-foot intervals or less.
8. Uprights should be erected and maintained in a vertical (plumb) position, and appropriate diagonal or cross-bracing should be provided for uprights. All brace connections should be made secure.
9. Scaffolds should be secured to the building or structure at intervals not to exceed 30 feet horizontally and 26 feet vertically.

ROLLING TOWER SCAFFOLD:

1. The height of mobile scaffolds should not exceed four times the minimum base dimension.
2. Casters should support four times the maximum intended load.
3. Mobile scaffolds should be properly braced with cross-bracing and horizontal bracing.
4. Platforms should be tightly planked.
5. A ladder should be provided for proper access and exit.

6. Mobile scaffolds should be moved by applying force as close to the base as practicable. All tools and equipment on the scaffold should be removed or secured before the scaffold is moved.
7. Workers should not ride on mobile scaffolds while they are being moved.
8. Scaffolds in use should rest on stable footing and should be plumb.
9. All casters or wheels should be locked once a scaffold has been placed.
10. Mobile scaffolds should be equipped with guardrail, midrail and toeboards.

INSPECTION:

Scaffold users shall read scaffold tags prior to using any scaffold. The instructions or warnings outlined on the tag must be followed. Competent persons shall inspect the scaffold prior to use, document the inspection and report any defects or concerns to their Supervisor immediately.

Scaffolds and scaffold components shall be inspected for visible defects by a competent person prior to initial use, before each work shift, and after any occurrence which could affect a scaffold's structural integrity.

Scaffold components shall be straight and free from bends, kinks, dents and severe rusting.

Scaffold frame weld zones shall be inspected for cracks and ends of tubing for splitting or cracking.

Manufactured decking shall be inspected for loose bolt or rivet connections and bent, kinked or dented frames. Plywood surfaces should be checked for softening due to rot or wear, and peeling or delaminated layers at the edges. Scaffold boards should be inspected for rot, cracks, notches, and other damage. Also, inspect cleats if used.

Each quick-connecting device, whether spring, threaded connection or toggle pin arrangement, should be inspected to see that it operates properly.

Casters, if used, should be inspected for smooth rolling surfaces, free turning, free acting swivel, and to be sure that the locking mechanism is in good working order.

STORAGE OF SCAFFOLD:

1. All scaffolds and scaffold materials should be properly stored when not in use, preferably in areas protected from weather.
2. Scaffolds and scaffold materials should be carefully loaded and transported in a manner to prevent damage, such as bending and distortion.
3. If scaffolds are to be stored outside, electrical motors, cords and other equipment should be plastic-wrapped to prevent weather damage.
4. Scaffolds stored on site should be in areas not exposed to vehicles and other work in progress.

LADDER SAFETY

PURPOSE:

This section shall serve as guidance for the proper placement, use, care and maintenance of construction ladders.

SCOPE:

This section will apply to use of ladders at all temporary construction sites as well as the home office.

GENERAL GUIDELINES:

A stairway or ladder shall be provided at all worker points of access where there is a break in elevation of 19 inches or more and no ramp nor other means of access are provided.

All access points shall be kept free from the accumulation of debris at the base and top, whenever the ladder is dismounted. At least one point of access shall be kept clear between various floor levels.

LADDERS:

Ladder rungs, cleats, and steps shall be parallel, level and uniformly spaced when the ladder is in the position of use.

Ladders shall not be tied together to create longer sections, unless they are specifically designed for such use.

Metal spreader or locking devices shall be provided on each stepladder to hold the front and back in an open position when the ladder is being used.

Non-self supporting ladders and self supporting ladders shall support at least four times the maximum intended load or by the following type: Employee should check all ladders prior to their use.

TYPE:

I-A	extra-heavy-duty	300lbs.
I	heavy duty	250lbs.
II	medium duty	225lbs.
III	light duty	200lbs.

LADDER USE:

Once the ladder has been selected for the job, it is up to the employee to make sure that it is used properly. All employees should inspect the ladder for defects prior to its use. If for any reason the ladder seems unsafe, **Do Not Use It.**

Follow these Tips:

- Only one person is permitted on a ladder at a time.
- Make sure to clean any mud from your boots.
- Always face the ladder during climbing, descending and working.
- Do not carry tools, by hand, up the ladder.
- Maintain the center of gravity at all times while on the ladder.
- Don't move the ladder while in use.
- Ask for help when large ladders are to be moved.
- NEVER use the top two steps of a self supporting ladder.
- NEVER use the last three rungs of a non-self supporting ladder.
- ALWAYS maintain the 4:1 ratio when setting your ladders.
- ALWAYS secure the ladder when using them to gain access to a different elevation.

SILICA AWARENESS

PURPOSE:

The purpose of this program is to inform all Klein-Dickert employees of the potential dangers related to silica and/or silicosis during certain work activities. The company will make every attempt to control an exposure to silica containing materials through best management practices, as well as engineering controls. In some instances, it may be necessary to use personal protective equipment to control crystalline silica during certain work activities.

SCOPE:

This program is designed only to give general awareness to the issues relative to crystalline silica. Specific training will be given to those employees that are exposed to silica in their working environments.

BACKGROUND:

Silicosis is a disease that causes hardening of the lung tissue and can result when particles of crystalline silica are inhaled and become embedded in the lungs. This disease can be progressive in onset, with the most severe cases being fatal. During certain construction activities, workers can be exposed to silica when using rock containing silica or concrete masonry products that contain silica sand.

REDUCTION TO EXPOSURES:

Products that contain a small amount of crystalline silica may be hazardous if they are used in such ways that produce a large amount of dust.

Here are some specific tasks that may release silica during construction activities:

- Rock drilling
- Jack hammering
- Crushing, loading, hauling, dumping and cutting rock or concrete

The following measures are some recommendations to reduce exposures to respirable crystalline silica in the working environments:

- Plan ahead. Minimize the amount of dust that is created during your work activities.
- Use engineering controls, such as wet drilling and wet cutting to protect you and those around you.
- Keep dust collection systems clean by doing routine maintenance checks and replace filters on a regular basis.

- Practice good personal hygiene by washing your hands before you eat or leave the worksite. Washing your work clothes separate from other clothing is also recommended.
- Use, maintain and store all assigned personal protective equipment in accordance with the manufacturers set requirements.
- Provide the necessary training.

DRIVER'S LICENSE & DRIVING RECORD

USE OF COMPANY VEHICLES FOR COMPANY BUSINESS:

Employees whose job responsibilities require the operation of a company vehicle must maintain a valid driver's license and driving record that is acceptable, according to the standards of our insurance carrier. The driving record of all employees who are required to operate a motor vehicle for Klein-Dickert Co., Inc. are periodically checked to ensure that those employees maintain a driving record that is acceptable to the Company's insurance carrier.

Failure to maintain a valid driver's license and acceptable driving record may result in the individual being prohibited from driving company vehicles, which may result in termination of employees whose essential job duties require operation of a motor vehicle. Any alcohol-related driving offense will result in loss of driving privileges of Klein-Dickert vehicles.

Employees are prohibited from operating a company vehicle if they have consumed alcohol within 8 hours prior to operating the vehicle. The only exception to this rule pertains to incidences where an employee/salesperson is entertaining a customer or potential customer. The employee/salesperson may join the customer in having an alcoholic drink; however, Klein-Dickert does not encourage the employee to do so. The employee must exercise caution and discretion about drinking and driving for him/herself, as well as the customer. Employees are required to obey all traffic rules and signs, wear a seat belt when operating a company vehicle for work-related purposes, and ensure all passengers wear a seat belt.

Employees must advise the CEO if they have a change in status of their driver's license or driving record.

USE OF PERSONAL VEHICLES FOR COMPANY BUSINESS:

Employees whose job responsibilities require them to use their personal vehicle in the course of their employment with Klein-Dickert Co., Inc. must maintain a valid driver's license and auto insurance with coverage that is recommended by our insurance agent (which may be revised from time-to-time). Proof of continuing auto insurance coverage must be submitted to the company at least annually, or when requested.

Employees may use their personal vehicles for company business, **only if prior approval has been obtained from the CEO.**

Failure to maintain a valid driver's license and acceptable driving record may result in suspension of driving privileges which may result in termination from Klein-Dickert Co., Inc. for employees whose essential job duties require operation of a motor vehicle.

Employees are prohibited from operating their personal vehicle for company business if they have consumed alcohol within 8 hours prior to operating the vehicle. Employees are required to obey all traffic rules and signs, wear a seat belt when operating their personal vehicle for work-related purposes, and ensure all passengers wear a seat belt.

USE OF COMPANY VEHICLES FOR PERSONAL BUSINESS:

Company vehicles are not intended for personal use by employees. Any personal use of a company vehicle must be authorized in advance by the CEO. Employees who are authorized to use a company vehicle for personal use are responsible for any expenses incurred as a result of an accident, traffic violation, etc., while operating a company vehicle for personal use.

BLOODBORNE PATHOGEN EXPOSURE CONTROL PLAN

PURPOSE:

The purpose of a bloodborne pathogen exposure program is to control occupational exposure to blood or other potentially infectious material (OPIM).

SCOPE:

All Klein-Dickert Co., Inc. locations.

GUIDELINES:

OPIM includes any body fluid that is visibly contaminated with blood and all body fluids in situations where it is difficult or impossible to differentiate between body fluids (this includes vomit, urine, and feces). Body fluids include cerebrospinal fluid, synovial fluid, semen, vaginal secretions, amniotic fluid, and saliva.

METHODS OF COMPLIANCE:

In general, universal precautions must be observed to prevent contact with blood or OPIM, which are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.

ENGINEERING AND WORK PRACTICE CONTROLS:

Engineering and work practice controls must be used to eliminate or minimize employee exposure. Engineering controls mean controls that isolate or remove the bloodborne pathogen hazard from the workplace. Work practice controls mean controls that reduce the likelihood of exposure by altering the manner in which a task is performed (e.g., prohibiting recapping of needles by a two-handed technique).

- There are detailed, special precautions for handling contaminated needles/sharps (see 29 CFR 1910.1030 paragraph (d)(2)); and
- If an occupational exposure remains after instituting these controls, then personal protective equipment (PPE) must also be used.

When there is an occupational exposure, appropriate PPE must be provided, replaced, cleaned, laundered, or disposed of at no cost to the employee. The use of PPE must be required, and the PPE must be readily accessible for use.

All equipment and surfaces must be cleaned and decontaminated after contact with blood or OPIM. Regulated waste must be discarded in proper containers and disposed of in accordance with applicable federal and state regulations. Regulated waste includes:

- Liquid or semi-liquid blood or OPIM;
- Contaminated items that would release blood or OPIM in a liquid or semi-liquid state if compressed;

- Items that are caked with dried blood or OPIM, and are capable of releasing these materials during handling;
- Contaminated sharps; and
- Pathological and microbiological wastes containing blood or OPIM.

There are detailed, special precautions for handling contaminated laundry (see 29 CFR 1910.1030 paragraph (d)(4)).

HEPATITIS B VACCINATION:

The hepatitis B vaccine and vaccination series must be made available to all employees who have an occupational exposure. It must be made available within 10 working days of initial assignment if there is an occupational exposure. If employees decline the vaccination, they must sign a statement (see Attachment).

The Hepatitis B vaccination and the post-exposure evaluation and follow-up must:

- Be made available to employees at no cost;
- Be made available at a reasonable time and place;
- Be performed under the supervision of a licensed physician, who must receive a copy of the standard;
- Follow U.S. Public Health Service current recommendations; and
- Be conducted by an accredited laboratory.

POST-EXPOSURE EVALUATION AND FOLLOW-UP:

Post-exposure evaluation and follow-up must be made available to all employees who have had an exposure incident. An exposure incident means a specific eye, mouth, other mucous membrane, non-intact skin contact with blood or OPIM that results from the performance of an employee's duties. Following an exposure incident, a confidential medical evaluation and follow-up must be made immediately available to the exposed employee (see 29 CFR 1910.1030 paragraph (f)(3)), which includes:

- Documentation of the circumstances, route(s) of exposure, and identification of the source individual;
- A blood test for the "source" individual with results made available to the exposed employee;
- Post-exposure prophylaxis, when medically indicated, as recommended by the U.S. Public Health Service;
- Counseling; and
- Evaluation of reported illness.

The health care professional handling an exposure incident must be given a copy of the standard; a description of the exposed employee's duties related to the incident; documentation of the circumstances of the incident; results of the source individual's blood test; and the employee's relevant medical records. The health care professional's written opinion must be provided to the employee within 15 days of the completion of the evaluation.

COMMUNICATION OF HAZARDS TO EMPLOYEES:

Biohazard labels must be affixed to containers of regulated waste and other containers used to store, transport or ship blood or OPIM. Training must be provided to all employees with an occupational exposure, at no cost to the employee, and during working hours. Training must be completed on an annual basis and documented with a written record. The required training content is contained in 29 CFR 1910.1030 (g)(2).

RECORDKEEPING - MEDICAL AND TRAINING RECORDS:

Medical records must be maintained for each employee with an occupational exposure. The record must include:

- Name and social security number of the employee;
- Hepatitis B vaccination record;
- A copy of all exam results, medical testing, and follow-up procedures;
- Copies of the health care professional's written opinion; and
- A copy of the information provided to the health care professional.

Records must be kept confidential and not disclosed without the employee's express written consent to any person within or outside the workplace. Records must be maintained for the duration of employment plus 30 years and copied only with the written consent of the employee.

TRAINING RECORDS:

Training records must include: dates of training sessions; content or a summary of the training session; names and qualifications of persons conducting the training; and names, shift, and job titles of all persons attending the training session. Training records must be maintained for three years from the date of training and copied when requested.

HEPATITIS B VACCINE DECLINATION:

If an employee declines the Hepatitis B vaccine, he/she must sign a statement attesting to the fact that they understand the situation and that it is their decision to decline (see Attachment).

Attachment

Hepatitis B Vaccine Declination

I understand that due to my occupational exposure to blood or other potentially infectious materials, I may be at risk of acquiring Hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with Hepatitis B vaccine at no charge to me. However, I decline Hepatitis B vaccination at this time.

I understand that by declining this vaccine I continue to be at risk of acquiring Hepatitis B, a serious disease. If, in the future, I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with Hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Name (print) _____

Signature _____

Date _____

EMERGENCY ACTION PLAN

INTRODUCTION:

The purpose of the Klein-Dickert Co., Inc.'s Emergency Action Plan is to ensure the safety of all Klein-Dickert employees, visitors, and contractors. The Plan documents the steps to be followed in the event that specific types of emergencies occur:

- Fire within facility
- Medical emergency involving an employee or visitor
- Chemical spill or release
- Weather-related emergencies
 - Tornado
 - Severe lightning Heavy snowfall
 - Flooding
- Major utility loss

This Emergency Action Plan was developed in accordance with the Occupational Safety and Health Administration (OSHA) Standard 29 CFR 1910.38-Employee Emergency Plans and Fire Prevention Plans.

EMERGENCY ESCAPE PROCEDURES AND ROUTES:

If an emergency situation requires evacuation of the facility, employees and visitors will be notified to take immediate action.

Notification will be made via the paging system, if the paging system is functioning. If the paging system is not functional, notification will be made via verbal communication by the Emergency Response Director (Jobsite Superintendent).

Upon hearing or receiving the emergency notification, employees (and their visitors if applicable) must proceed in an orderly manner to the nearest exit.

SHUTDOWN OF MACHINERY:

Employees who are operating machinery must shutdown the equipment. As soon as the stop button has been activated, employees must proceed in an orderly manner to the nearest exit and report to the Designated Meeting Location.

DESIGNATED MEETING LOCATION:

After evacuating the building, all employees and their visitors must proceed to the designated meeting location.

Emergency Response Director must account for all employees, and quickly determine if anyone is still inside the facility.

The Emergency Response Director will provide the following information to the first arriving official from the (outside) emergency response organization, e.g., Fire Department:

- Nature of the emergency
- Status and extent of the evacuation
- Status of the employee count

No employee or visitor will be allowed to re-enter the facility once it has been evacuated, until approved by the Emergency Response Director.

REPORTING EMERGENCIES:

Any employee who becomes aware of or suspects that an emergency situation is developing, must immediately report it to any of the following individuals:

- Immediate supervisor
- Emergency Response Director (Jobsite Superintendent)

Any request for outside assistance, e.g., from the fire department, ambulance service, police department, utility company, will be made by the Emergency Response Director or his/her designate.

When making a 911 call, the caller must be prepared to provide the following information:

- For Fires: What is burning, size of fire, evacuation status.
- For Police: Reason police assistance is required, description of suspects, direction traveling, etc.
- For Ambulance: Nature of the medical emergency, description of the individual and his/her symptoms, and current condition of the individual.

As soon as the call is made to any of the above, the Emergency Response Director will assign an employee to guide the responder(s) to the appropriate location within the facility.

FIRE EMERGENCIES:

Fire extinguishers are strategically located throughout the facility.

Employees must not attempt to use fire extinguishers, unless they have been trained.

Employees who discover an uncontrolled fire must immediately report it to either their supervisor or the Emergency Response Director. The following information must be provided when reporting an uncontrolled fire:

- Location of the fire.
- What is burning.
- Size of the fire.
- Any attempt being made to extinguish the fire.

The Emergency Response Director will determine if the Fire Department should be contacted.

Employees in the immediate area of the fire may attempt to extinguish the fire by using portable fire extinguishers. Attempts to extinguish a fire should only be made by those who have received training in the use of a fire extinguisher, and if the fire is small and well defined. Large, rapidly spreading fires are beyond the capability of fire extinguishers and employees must not attempt to extinguish these types of fires.

Any attempt to extinguish a fire must be done in groups of at least two employees. No employee should attempt to extinguish a fire alone. If alone, an employee must evacuate to a safe location and notify others of the fire.

If attempts to extinguish a small and well-defined fire are unsuccessful, and the fire continues to grow, employees must abandon their attempts and evacuate the area immediately.

If the fire is extinguished with portable fire extinguishers, the Emergency Response Director must be contact immediately. While notification is being made to the Emergency Response Director, at least two employees must remain with the extinguished fire, with charged fire extinguishers, to ensure the fire remains extinguished.

MEDICAL EMERGENCIES:

Klein-Dickert Co., Inc. does not have trained first-aid responders. The company utilizes 911 for medical emergencies.

Medical emergencies must be reported to the Emergency Response Director.

Serious medical emergencies may include: chest pains, difficulty breathing, reaction to medication, shock, severe bleeding, unconsciousness, dizziness, fractures, sprains, complications from a medical condition, such as diabetes or epilepsy.

The Emergency Response Director or his/her alternate will make the decision to contact trained emergency responders via 911.

The following steps will be taken if a medical emergency requires the services of an (outside) emergency responder:

- Attempt to keep the individual calm.
- Do not attempt to move the individual.
- Monitor the individual for any changes in condition.
- When the emergency Responder arrives, advise them of any changes that occurred.
- If the individual experiences a seizure, remove any potential hazards from around him/her.
- Avoid contact with any body fluids.

If a chemical is involved, the applicable Material Safety Data Sheet(s) must be obtained from the Klein-Dickert Co., Inc.'s MSDS Binder and given to the emergency responders.

If the employee is transported to the hospital, the Emergency Response Director or his/her designee will accompany the employee to the hospital.

CHEMICAL EMERGENCIES:

Material Safety Data Sheets are maintained in the MSDS Binder, as part of the Klein-Dickert Co., Inc.'s Hazard Communication Program.

Any accidental spill, release or exposure of a hazardous substance must be immediately reported to the Emergency Response Director, who will determine whether outside assistance is required.

If the spill involves "a discharge of a hazardous substance that adversely impacts, or threatens to adversely impact public health, welfare, or the environment" it must be immediately reported to the Department of Natural Resources (DNR) Spill Reporting Hotline at 1-800-943-0003. The Emergency Response Director is responsible for the ensuring that this call is made.

Material Safety Data Sheets must be reviewed in determining how to properly clean up spills of any chemical or hazardous substance.

WEATHER-RELATED EMERGENCIES:**Tornado**

When weather conditions are such that a tornado may develop, the Emergency Response Director or his/her designee will monitor radio broadcasts to determine the likelihood of a tornado. If a tornado is imminent, the Emergency Response Director will make the decision to shutdown operations and evacuate to the designated tornado shelter areas.

The necessity to shutdown and evacuate will be communicated over the paging system, as well as verbally by the Emergency Response Director.

Employees (and their visitors, if applicable) will be directed to proceed in an orderly manner to the designated Tornado Shelter. Any employee who is operating a machine must turn off the machine before proceeding to the Tornado Shelter.

The Emergency Response Director is responsible for taking attendance and ensuring that all employees and visitors are accounted for. The Emergency Response Director will conduct a damage assessment. If fires or other dangerous situations are present within the facility, employees will be evacuated to the designated meeting location outside the facility, if it is safe to do so.

Severe Lightning

In the event of serious weather conditions that include severe lightning, the Emergency Response Director will ensure the following precautions are taken:

- Loose materials outside on Company premises will be brought inside, if possible.
- Emergency lighting will be checked to ensure it is functional. Flashlights will be made available.
- Everyone will be advised to remain alert for possible fires started by lightning.

Heavy Snowfall

Typically, winter storms are recognizable while in the “threatening” or “warning” stage, thereby allowing time for appropriate action to be taken before making a decision to close the facility.

The Emergency Response Director is responsible for monitoring weather reports and conditions. A decision to suspend operations or to not open the facility due to heavy snowfall will be made by the Jobsite Superintendent.

Employees will be notified by their supervisor if a decision is made to close the facility prior to the end of the scheduled workday, or if the facility will not open on a scheduled workday.

Flooding

During periods of heavy rainfall, the Emergency Response Director or his/her designee will monitor conditions to determine the potential threat of flooding. If flooding occurs, employees will be evacuated from any areas affected by flooding. Employees will be notified by their supervisor or Emergency Response Director of the need to evacuate. Utility services to evacuated areas will be disconnected if possible. (Decision will be made by the Emergency Response Director.)

The Emergency Response Director will determine when it is safe to return to evacuated areas.

Major Utility Loss

Any interruption to utility services (electricity, natural gas, water, telephone) that affects normal facility operation must be immediately reported to the Emergency Response Director. Changes to regular operations will be determined by the Emergency Response Director and will be communicated to affected employees.

Employees working in areas where the loss of electricity causes machine failure or loss of light, must turn the control of the machine to the “off” position. When electricity is restored, equipment start-up will be done according to normal start-up operations at the direction of the applicable supervisor.

EMERGENCY PREPARATION:**Drills**

In order to ensure that the employees of Klein-Dickert are prepared to respond to the types of emergencies covered by this Emergency Action Plan, a drill will be (periodically) conducted, simulating an emergency situation that requires summoning Klein-Dickert Co., Inc.’s Emergency Response Team and evacuating employees from the building, or to the tornado shelter. A record of the drills will be maintained. The Emergency Response Director is responsible for planning and conducting the periodic drills.

Employee Training

All employees receive information regarding this Emergency Action Plan.

All employees will receive additional training on this subject if the Emergency Action Plan is changed. Any employees whose responsibilities under this Plan are changed will receive training related to the change. The

Emergency Response Director is responsible for coordinating any training associated with this Emergency Action Plan.

HEAT ILLNESS PREVENTION

PURPOSE:

Klein-Dickert is dedicated to the protection of its employees from heat related illnesses. All the employees of this company have the responsibility to work safely on the job. The purpose of this policy is to ensure that every employee who works for this company recognizes the potential for heat hazards and takes the appropriate measures to address those hazards.

SCOPE:

The Heat Illness Prevention Policy is designed to enable employers and employees to recognize when high heat temperatures may cause illness and what to do to prevent this from happening.

Monitor Temperature: Track the weather for the work site and assess the risk to workers. Know how hot it will be during the scheduled work hours. Adjust work schedule appropriately.

Provide Fluids: Employees should be encouraged to drink plenty of fluids. Drinking water should be readily accessible.

Provide Shade: Employees suffering from heat illness, or believes that a preventative recovery period is needed, must be provided access to an area with shade that is either open to the air or provided with ventilation or cooling. Access to shade must be permitted at all times. Sitting in a vehicle or piece of equipment is not acceptable, unless the air conditioner is providing cool, forced air.

Allow for Acclimatization: Employees must be allowed the opportunity to acclimate (adjust) to the temperature. At employee's request, or identified need, acclimatization should be coordinated with supervisor. Employees will be paid for hours actually worked.

Enforce Rest Breaks: All employees must adhere to mandatory rest breaks.

Provide Prompt Medical Attention: Employees displaying serious symptoms of heat illness must receive medical attention and should be escorted to the nearest designated treatment facility (or call 911).

Provide Employee Training: Educational material will be distributed to employees on an annual basis. Supervisors must incorporate discussion on Heat Illness Prevention at toolbox meetings on a regular basis during the summer season.

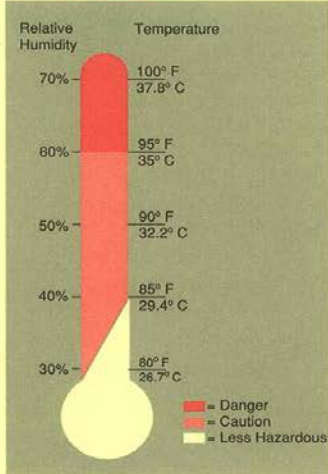


U.S. Department of Labor
Occupational Safety and Health Administration
OSHA 3154
1998

THE HEAT EQUATION

HIGH TEMPERATURE + HIGH HUMIDITY + PHYSICAL WORK = HEAT ILLNESS

When the body is unable to cool itself through sweating, **serious** heat illnesses may occur. The most severe heat-induced illnesses are **heat exhaustion** and **heat stroke**. If actions are not taken to treat heat exhaustion, the illness could progress to heat stroke and possible **death**.



HEAT EXHAUSTION

What Happens to the Body:

HEADACHES, DIZZINESS/LIGHT HEADEDNESS, WEAKNESS, MOOD CHANGES (irritable, or confused/can't think straight), FEELING SICK TO YOUR STOMACH, VOMITING/THROWING UP, DECREASED and DARK COLORED URINE, FAINTING/PASSING OUT, and PALE CLAMMY SKIN.

What Should Be Done:

- Move the person to a cool shaded area to rest. Don't leave the person alone. If the person is dizzy or light headed, lay them on their back and raise their legs about 6-8 inches. If the person is sick to their stomach lay them on their side.
- Loosen and remove any heavy clothing.
- Have the person drink some cool water (a small cup every 15 minutes) if they are not feeling sick to their stomach.
- Try to cool the person by fanning them. Cool the skin with a cool spray mist of water or wet cloth.
- If the person does not feel better in a few minutes call for emergency help (Ambulance or Call 911).

(If heat exhaustion is not treated, the illness may advance to heat stroke.)

HEAT STROKE—A MEDICAL EMERGENCY

What Happens to the Body:

DRY PALE SKIN (no sweating), HOT RED SKIN (looks like a sunburn), MOOD CHANGES (irritable, confused/not making any sense), SEIZURES/FITS, and COLLAPSE/PASSED OUT (will not respond).

What Should Be Done:

- Call for emergency help (Ambulance or Call 911).
- Move the person to a cool shaded area. Don't leave the person alone. Lay them on their back and if the person is having seizures/fits remove any objects close to them so they won't strike against them. If the person is sick to their stomach lay them on their side.
- Remove any heavy and outer clothing.
- Have the person drink some cool water (a small cup every 15 minutes) if they are alert enough to drink anything and not feeling sick to their stomach.
- Try to cool the person by fanning them. Cool the skin with a cool spray mist of water, wet cloth, or wet sheet.
- If ice is available, place ice packs under the arm pits and groin area.

How to Protect Workers

- Learn the signs and symptoms of heat-induced illnesses and what to do to help the worker.
- Train the workforce about heat-induced illnesses.
- Perform the heaviest work in the coolest part of the day.
- Slowly build up tolerance to the heat and the work activity (usually takes up to 2 weeks).
- Use the buddy system (work in pairs).
- Drink plenty of cool water (one small cup every 15-20 minutes)
- Wear light, loose-fitting, breathable (like cotton) clothing.
- Take frequent short breaks in cool shaded areas (allow your body to cool down).
- Avoid eating large meals before working in hot environments.
- Avoid caffeine and alcoholic beverages (these beverages make the body lose water and increase the risk for heat illnesses).

Workers Are at Increased Risk When

- They take certain medication (check with your doctor, nurse, or pharmacy and ask if any medicines you are taking affect you when working in hot environments).
- They have had a heat-induced illness in the past.
- They wear personal protective equipment (like respirators or suits).

MOLD ILLNESS PROTECTION

PURPOSE:

This Company is dedicated to the protection of its employees from mold-related illnesses. All the employees of this company have the responsibility to work safely on the job. The purpose of this policy is to ensure that every employee who works for this company recognizes the potential for mold hazards and takes the appropriate measures to address those hazards.

SCOPE:

The Mold Illness Prevention Policy is designed to enable employers and employees to recognize when mold on the jobsite may cause illness and what to do to prevent this from happening.

MOLD INFORMATION AND IDENTIFICATION:

What is mold?

Mold is a rapidly reproducing microscopic fungus that feeds on decomposing organic matter.

Why is mold a problem?

Many molds are harmless, and are, in fact, a vital part of our ecosystem. But, if you've ever gotten food poisoning or suffered from allergies, you know that all molds are not benign. Some molds create toxins, which can seriously affect the health of plants, animals and people.

Where do you find mold?

Homes and commercial buildings make an ideal growing place for mold. Molds thrive in temperatures between 60° and 100° F, where moisture and an abundant food supply are present.

Are certain surfaces more susceptible to mold?

Yes. Building materials like drywall, gypsum wallboard, wood, adhesive, ceiling tiles, paint, plywood, paper and cardboard all contain cellulose, which is a source of food for molds.

Is mold the same as mildew?

They are similar but not the same. Mildew is a mold-like organism that feeds on organic tissues. In homes, mildew thrives on damp surfaces, especially in kitchens and bathrooms.

What if I find mold growing in a project I am painting?

Mold growing on non-porous surfaces can be cleaned with a detergent. But the affected parts of porous surfaces such as drywall must be completely replaced, and the area must then be cleaned thoroughly.

What about wood trim?

A semi-porous surface like solid wood, if infected, may require a combination of cleaning and replacing, depending on the severity of mold growth.

Hidden Mold:

In some cases, indoor mold growth may not be obvious. It is possible that mold may be growing on hidden surfaces, such as the back side of dry wall, wallpaper, or paneling, the top of ceiling tiles, the underside of carpets and pads, etc. Possible locations of hidden mold can include pipe chases and utility tunnels (with leaking or condensing pipes), walls behind furniture (where condensation forms), condensate drain pans inside air handling units, porous thermal or acoustic liners inside ductwork, or roof materials above ceiling tiles (due to roof leaks or insufficient insulation).

Hidden Mold Growth



Photo 5: Mold growth behind wallpaper. Click on the image for larger version.

Some building materials, such as drywall with vinyl wallpaper over it or wood paneling, may act as vapor barriers, trapping moisture underneath their surfaces and thereby providing a moist environment where mold can grow. You may suspect hidden mold if a building smells moldy, but you cannot see the source, or if you know there has been water damage and building occupants are reporting health problems. Removal of wallpaper can lead to a massive release of spores from mold growing on the underside of the paper.

THE MYTHS ABOUT MOLD:

- 1. All molds are toxic:** Not quite true. Only a few can cause health problems under certain conditions.
- 2. Black mold is the worst:** There are many molds that are black. But however threatening a mold may look, you cannot determine toxicity by color.
- 3. Mold only grows in warm and humid climates:** Certain kinds of mold have adapted to survive in almost any climate. But most flourish in temperatures between 60° and 100° F.
- 4. Old buildings have more mold problems than new construction:** Actually newer builds may have more problems because their tighter insulation allows moisture to build up inside.
- 5. Using bleach eliminates mold:** Bleach can control mold growth on surfaces, but often does not affect the source of the problem. Also, bleach should not be used on porous materials or metals.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Always use gloves and eye protection when cleaning up mold! If the remediation job disturbs mold and mold spores become airborne, then the risk of respiratory exposure goes up. Actions that are likely to stir up mold include: breakup of moldy porous materials such as wallboard; invasive procedures used to examine or remediate mold growth in a wall cavity; actively stripping or peeling wallpaper to remove it; and using fans to dry items.

The primary function of Personal Protective Equipment (PPE) is to avoid inhaling mold and mold spores and to avoid mold contact with the skin or eyes. The following sections discuss the different types of PPE that can be used during minimal remediation activities. **Klein-Dickert will not perform any mold remediation beyond the “minimum” size job. This means that painters will only be responsible for cleaning small areas of non-porous surfaces and wood surfaces as long as no other remediation is required.**

Please note that all individuals using certain PPE equipment, such as half-face or full-face respirators, must be trained, must have medical clearance, and must be fit-tested by a trained professional. In addition, the use of respirators must follow a complete respiratory protection program as specified by the Occupational Safety and Health Administration.

Skin and Eye Protection:

Gloves are required to protect the skin from contact with mold allergens (and in some cases mold toxins) and from potentially irritating cleaning solutions. Long gloves that extend to the middle of the forearm are recommended. The glove material should be selected based on the type of materials being handled. If you are using a biocide (such as chlorine bleach) or a strong cleaning solution, you should select gloves made from natural rubber, neoprene, nitrile, polyurethane, or PVC. If you are using a mild detergent or plain water, ordinary household rubber gloves may be used.

To protect your eyes, use properly fitted goggles or a full-face respirator with HEPA filter. Goggles must be designed to prevent the entry of dust and small particles. Safety glasses or goggles with open vent holes are not acceptable.

Respiratory Protection:

Respirators protect cleanup workers from inhaling airborne mold, mold spores, and dust. When cleaning up a small area affected by mold, you should use an N-95 respirator. This device covers the nose and mouth, will filter out 95% of the particulates in the air, and is available in most hardware stores.

Disposable Protective Clothing:

Disposable clothing is recommended during a medium or large remediation project to prevent the transfer and spread of mold to clothing and to eliminate skin contact with mold. Disposable clothing is not required for minimal mold clean-up.

ADDENDUM – CONFINED SPACE FINAL RULE EFFECTIVE MAY 1, 2015**Subpart AA—Confined Spaces in Construction**

1926.1200	Reserved
1926.1201	Scope
1926.1202	Definitions
1926.1203	General requirements
1926.1204	Permit-required confined space program
1926.1205	Permitting process
1926.1206	Entry permit
1926.1207	Training
1926.1208	Duties of authorized entrants
1926.1209	Duties of attendants
1926.1210	Duties of entry supervisors
1926.1211	Rescue and emergency services
1926.1212	Employee participation
1926.1213	Provision of documents to Secretary

Authority: 40 U.S.C. 3701 et seq.; 29 U.S.C. 653, 655, 657; Secretary of Labor's Order No. 1-2012 (77 FR 3912); and 29 CFR Part 1911.

§1926.1201 Scope.

- (a) This standard sets forth requirements for practices and procedures to protect employees engaged in construction activities at a worksite with one or more confined spaces, subject to the exceptions in paragraph (b) of this section.

Note to paragraph §1926.1201(a). Examples of locations where confined spaces may occur include, but are not limited to, the following: Bins; boilers; pits (such as elevator, escalator, pump, valve or other equipment); manholes (such as sewer, storm drain, electrical, communication, or other utility); tanks (such as fuel, chemical, water, or other liquid, solid or gas); incinerators; scrubbers; concrete pier columns; sewers; transformer vaults; heating, ventilation, and air-conditioning (HVAC) ducts; storm drains; water mains; precast concrete and other pre-formed manhole units; drilled shafts; enclosed beams; vessels; digesters; lift stations; cesspools; silos; air receivers; sludge gates; air preheaters; step up transformers; turbines; chillers; bag houses; and/or mixers/reactors.

- (b) Exceptions. This standard does not apply to: (1) Construction work regulated by §1926 subpart P—Excavations. (2) Construction work regulated by §1926 subpart S—Underground Construction, Caissons, Cofferdams and Compressed Air. (3) Construction work regulated by §1926 subpart Y—Diving.
- (c) Where this standard applies and there is a provision that addresses a confined space hazard in another applicable OSHA standard, the employer must comply with both that requirement and the applicable provisions of this standard.

§1926.1202 Definitions.

The following terms are defined for the purposes of this subpart only:

Acceptable entry conditions means the conditions that must exist in a permit space, before an employee may enter that space, to ensure that employees can safely enter into, and safely work within, the space.

Attendant means an individual stationed outside one or more permit spaces who assesses the status of authorized entrants and who must perform the duties specified in §1926.1209.

Authorized entrant means an employee who is authorized by the entry supervisor to enter a permit space.

Barrier means a physical obstruction that blocks or limits access.

Blanking or blinding means the absolute closure of a pipe, line, or duct by the fastening of a solid plate (such as a spectacle blind or a skillet blind) that completely covers the bore and that is capable of withstanding the maximum pressure of the pipe, line, or duct with no leakage beyond the plate.

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 the authorization to take prompt corrective measures to eliminate them.

Confined space means a space that:

- (1) Is large enough and so configured that an employee can bodily enter it;
- (2) Has limited or restricted means for entry and exit; and
- (3) Is not designed for continuous employee occupancy.

Control means the action taken to reduce the level of any hazard inside a confined space using engineering methods (for example, by ventilation), and then using these methods to maintain the reduced hazard level. Control also refers to the engineering methods used for this purpose. Personal protective equipment is not a control.

Controlling Contractor is the employer that has overall responsibility for construction at the worksite.

Note. If the controlling contractor owns or manages the property, then it is both a controlling employer and a host employer.

Double block and bleed means the closure of a line, duct, or pipe by closing and locking or tagging two in-line valves and by opening and locking or tagging a drain or vent valve in the line between the two closed valves.

Early-warning system means the method used to alert authorized entrants and attendants that an engulfment hazard may be developing. Examples of early-warning systems include, but are not limited to: alarms activated by remote sensors; and lookouts with equipment for immediately communicating with the authorized entrants and attendants.

Emergency means any occurrence (including any failure of power, hazard control or monitoring equipment) or event, internal or external, to the permit space that could endanger entrants.

Engulfment means the surrounding and effective capture of a person by a liquid or finely divided (flowable) solid substance that can be aspirated to cause death by filling or plugging the respiratory system or that can exert enough force on the body to cause death by strangulation, constriction, crushing, or suffocation.

Entry means the action by which any part of a person passes through an opening into a permit-required confined space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space, whether or not such action is intentional or any work activities are actually performed in the space.

Entry Employer means any employer who decides that an employee it directs will enter a permit space.

Note. An employer cannot avoid the duties of the standard merely by refusing to decide whether its employees will enter a permit space, and OSHA will consider the failure to so decide to be an implicit decision to allow employees to enter those spaces if they are working in the proximity of the space.

Entry permit (permit) means the written or printed document that is provided by the employer who designated the space a permit space to allow and control entry into a permit space and that contains the information specified in §1926.1206 of this standard.

Entry rescue occurs when a rescue service enters a permit space to rescue one or more employees.

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

Note. An entry supervisor also may serve as an attendant or as an authorized entrant, as long as that person is trained and equipped as required by this standard for each role he or she fills. Also, the duties of entry supervisor may be passed from one individual to another during the course of an entry operation.

Hazard means a physical hazard or hazardous atmosphere. See definitions below.

Hazardous atmosphere means an atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue (that is, escape unaided from a permit space), injury, or acute illness from one or more of the following causes:

- (1) Flammable gas, vapor, or mist in excess of 10 percent of its lower flammable limit (LFL);
- (2) Airborne combustible dust at a concentration that meets or exceeds its LFL;

Note: This concentration may be approximated as a condition in which the combustible dust obscures vision at a distance of 5 feet (1.52 meters) or less.

- (3) Atmospheric oxygen concentration below 19.5 percent or above 23.5 percent;
- (4) Atmospheric concentration of any substance for which a dose or a permissible exposure limit is published in Subpart D—Occupational Health and Environmental Control, or in Subpart Z—Toxic and Hazardous Substances, of this part and which could result in employee exposure in excess of its dose or permissible exposure limit;

Note. An atmospheric concentration of any substance that is not capable of causing death, incapacitation, impairment of ability to self-rescue, injury, or acute illness due to its health effects is not covered by this definition.

- (5) Any other atmospheric condition that is immediately dangerous to life or health.

Note. For air contaminants for which OSHA has not determined a dose or permissible exposure limit, other sources of information, such as Safety Data Sheets that comply with the Hazard Communication Standard, §1926.59 of this part, published information, and internal documents can provide guidance in establishing acceptable atmospheric conditions.

Host employer means the employer that owns or manages the property where the construction work is taking place.

Note. If the owner of the property on which the construction activity occurs has contracted with an entity for the general management of that property, and has transferred to that entity the information specified in §1203(h)(1), OSHA will treat the contracted management entity as the host employer for as long as that entity manages the property. Otherwise, OSHA will treat the owner of the property as the host employer. In no case will there be more than one host employer.

Hot work means operations capable of providing a source of ignition (for example, riveting, welding, cutting, burning, and heating).

Immediately dangerous to life or health (IDLH) means any condition that would interfere with an individual's ability to escape unaided from a permit space and that poses a threat to life or that would cause irreversible adverse health effects.

Note. Some materials—hydrogen fluoride gas and cadmium vapor, for example—may produce immediate transient effects that, even if severe, may pass without medical attention, but are followed by sudden, possibly fatal collapse 12-72 hours after exposure. The victim "feels normal" after recovery from transient effects until collapse. Such materials in hazardous quantities are considered to be "immediately" dangerous to life or health.

Inerting means displacing the atmosphere in a permit space by a noncombustible gas (such as nitrogen) to such an extent that the resulting atmosphere is noncombustible.

Note. This procedure produces an IDLH oxygen-deficient atmosphere.

Isolate or isolation means the process by which employees in a confined space are completely protected against the release of energy and material into the space, and contact with a physical hazard, by such means as: blanking or blinding; misaligning or removing sections of lines, pipes, or ducts; a double block and bleed system; lockout or tagout of all sources of energy; blocking or disconnecting all mechanical linkages; or placement of barriers to eliminate the potential for employee contact with a physical hazard.

Limited or restricted means for entry or exit means a condition that has a potential to impede an employee's movement into or out of a confined space. Such conditions include, but are not limited to, trip hazards, poor illumination, slippery floors, inclining surfaces and ladders.

Line breaking means the intentional opening of a pipe, line, or duct that is or has been carrying flammable, corrosive, or toxic material, an inert gas, or any fluid at a volume, pressure, or temperature capable of causing injury.

Lockout means the placement of a lockout device on an energy isolating device, in accordance with an established procedure, ensuring that the energy isolating device and the equipment being controlled cannot be operated until the lockout device is removed.

Lower flammable limit or lower explosive limit means the minimum concentration of a substance in air needed for an ignition source to cause a flame or explosion.

Monitor or monitoring means the process used to identify and evaluate the hazards after an authorized entrant enters the space. This is a process of checking for changes that is performed in a periodic or continuous manner after the completion of the initial testing or evaluation of that space.

Non-entry rescue occurs when a rescue service, usually the attendant, retrieves employees in a permit space without entering the permit space.

Non-permit confined space means a confined space that meets the definition of a confined space but does not meet the requirements for a permit-required confined space, as defined in this subpart.

Oxygen deficient atmosphere means an atmosphere containing less than 19.5 percent oxygen by volume.

Oxygen enriched atmosphere means an atmosphere containing more than 23.5 percent oxygen by volume.

Permit-required confined space (permit space) means a confined space that has one or more of the following characteristics: (1) Contains or has a potential to contain a hazardous atmosphere; (2) Contains a material that has the potential for engulfing an entrant; (3) Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or (4) Contains any other recognized serious safety or health hazard.

Permit-required confined space program (permit space program) means the employer's overall program for controlling, and, where appropriate, for protecting employees from, permit space hazards and for regulating employee entry into permit spaces.

Physical hazard means an existing or potential hazard that can cause death or serious physical damage. Examples include, but are not limited to: explosives (as defined by paragraph (n) of §1926.914, definition of "explosive"); mechanical, electrical, hydraulic and pneumatic energy; radiation; temperature extremes; engulfment; noise; and inwardly converging surfaces. Physical hazard also includes chemicals that can cause death or serious physical damage through skin or eye contact (rather than through inhalation).

Prohibited condition means any condition in a permit space that is not allowed by the permit during the period when entry is authorized. A hazardous atmosphere is a prohibited condition unless the employer can demonstrate that personal protective equipment (PPE) will provide effective protection for each employee in the permit space and provides the appropriate PPE to each employee.

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

Representative permit space means a mock-up of a confined space that has entrance openings that are similar to, and is of similar size, configuration, and accessibility to, the permit space that authorized entrants enter.

Rescue means retrieving, and providing medical assistance to, one or more employees who are in a permit space.

Rescue service means the personnel designated to rescue employees from permit spaces.

Retrieval system means the equipment (including a retrieval line, chest or full body harness, wristlets or anklets, if appropriate, and a lifting device or anchor) used for non-entry rescue of persons from permit spaces.

Serious physical damage means an impairment or illness in which a body part is made functionally useless or is substantially reduced in efficiency. Such impairment or illness may be permanent or temporary and includes, but is not limited to, loss of consciousness, disorientation, or other immediate and substantial reduction in mental efficiency. Injuries involving such impairment would usually require treatment by a physician or other licensed health-care professional.

Tagout means: (1) Placement of a tagout device on a circuit or equipment that has been deenergized, in accordance with an established procedure, to indicate that the circuit or equipment being controlled may not be operated until the tagout device is removed; and (2) The employer ensures that (i) tagout provides equivalent protection to lockout, or (ii) that lockout is infeasible and the employer has relieved, disconnected, restrained and otherwise rendered safe stored (residual) energy.

Test or testing means the process by which the hazards that may confront entrants of a permit space are identified and evaluated. Testing includes specifying the tests that are to be performed in the permit space.

Note. Testing enables employers both to devise and implement adequate control measures for the protection of authorized entrants and to determine if acceptable entry conditions are present immediately prior to, and during, entry.

Ventilate or ventilation means controlling a hazardous atmosphere using continuous forced-air mechanical systems that meet the requirements of §1926.57—Ventilation.

§1926.1203 General requirements.

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

(b) If the workplace contains one or more permit spaces, the employer who identifies, or who receives notice of, a permit space must:

(1) Inform exposed employees by posting danger signs or by any other equally effective means, of the existence and location of, and the danger posed by, each permit space; and

Note to paragraph §1926.1203(b)(1). A sign reading “DANGER -- PERMITREQUIRED CONFINED SPACE, DO NOT ENTER” or using other similar language would satisfy the requirement for a sign.

(2) Inform, in a timely manner and in a manner other than posting, its employees’ authorized representatives and the controlling contractor of the existence and location of, and the danger posed by, each permit space.

(c) Each employer who identifies, or receives notice of, a permit space and has not authorized employees it directs to work in that space must take effective measures to prevent those employees from entering that permit space, in addition to complying with all other applicable requirements of this standard.

- (d) If any employer decides that employees it directs will enter a permit space, that employer must have a written permit space program that complies with §1926.1204 implemented at the construction site. The written program must be made available prior to and during entry operations for inspection by employees and their authorized representatives.
- (e) An employer may use the alternate procedures specified in paragraph §1926.1203(e)(2) for entering a permit space only under the conditions set forth in paragraph §1926.1203(e)(1).
 - (1) An employer whose employees enter a permit space need not comply with §§1926.1204 through 1206 and §1926.1208 through 1211, provided that all of the following conditions are met:
 - (i) The employer can demonstrate that all physical hazards in the space are eliminated or isolated through engineering controls so that the only hazard posed by the permit space is an actual or potential hazardous atmosphere;
 - (ii) The employer can demonstrate that continuous forced air ventilation alone is sufficient to maintain that permit space safe for entry, and that, in the event the ventilation system stops working, entrants can exit the space safely;
 - (iii) The employer develops monitoring and inspection data that supports the demonstrations required by paragraphs §1926.1203(e)(1)(i) and §1926.1203(e)(1)(ii);
 - (iv) If an initial entry of the permit space is necessary to obtain the data required by paragraph §1926.1203(e)(1)(iii), the entry is performed in compliance with §§1926.1204 through 1211 of this standard;
 - (v) The determinations and supporting data required by paragraphs §1926.1203(e)(1)(i), (e)(1)(ii), and (e)(1)(iii) are documented by the employer and are made available to each employee who enters the permit space under the terms of paragraph §1926.1203(e) or to that employee's authorized representative; and
 - (vi) Entry into the permit space under the terms of paragraph §1926.1203(e)(1) is performed in accordance with the requirements of paragraph §1926.1203(e)(2).

Note to paragraph §1926.1203(e)(1). See paragraph §1926.1203(g) for reclassification of a permit space after all hazards within the space have been eliminated.
 - (2) The following requirements apply to entry into permit spaces that meet the conditions set forth in paragraph §1926.1203(e)(1):
 - (i) Any conditions making it unsafe to remove an entrance cover must be eliminated before the cover is removed.

- (ii) When entrance covers are removed, the opening must be immediately guarded by a railing, temporary cover, or other temporary barrier that will prevent an accidental fall through the opening and that will protect each employee working in the space from foreign objects entering the space.
- (iii) Before an employee enters the space, the internal atmosphere must be tested, with a calibrated direct-reading instrument, for oxygen content, for flammable gases and vapors, and for potential toxic air contaminants, in that order. Any employee who enters the space, or that employee's authorized representative, must be provided an opportunity to observe the pre-entry testing required by this paragraph.
- (iv) No hazardous atmosphere is permitted within the space whenever any employee is inside the space.
- (v) Continuous forced air ventilation must be used, as follows:
 - (A) An employee must not enter the space until the forced air ventilation has eliminated any hazardous atmosphere;
 - (B) The forced air ventilation must be so directed as to ventilate the immediate areas where an employee is or will be present within the space and must continue until all employees have left the space;
 - (C) The air supply for the forced air ventilation must be from a clean source and must not increase the hazards in the space.
- (vi) The atmosphere within the space must be continuously monitored unless the entry employer can demonstrate that equipment for continuous monitoring is not commercially available or periodic monitoring is sufficient. If continuous monitoring is used, the employer must ensure that the monitoring equipment has an alarm that will notify all entrants if a specified atmospheric threshold is achieved, or that an employee will check the monitor with sufficient frequency to ensure that entrants have adequate time to escape. If continuous monitoring is not used, periodic monitoring is required. All monitoring must ensure that the continuous forced air ventilation is preventing the accumulation of a hazardous atmosphere. Any employee who enters the space, or that employee's authorized representative, must be provided with an opportunity to observe the testing required by this paragraph.
- (vii) If a hazard is detected during entry:
 - (A) Each employee must leave the space immediately;
 - (B) The space must be evaluated to determine how the hazard developed; and
 - (C) The employer must implement measures to protect employees from the hazard before any subsequent entry takes place.
- (viii) The employer must ensure a safe method of entering and exiting the space. If a hoisting system is used, it must be designed and manufactured for personnel hoisting; however, a job-made hoisting system is

permissible if it is approved for personnel hoisting by a registered professional engineer, in writing, prior to use.

- (ix) The employer must verify that the space is safe for entry and that the pre-entry measures required by paragraph §1926.1203(e)(2) have been taken, through a written certification that contains the date, the location of the space, and the signature of the person providing the certification. The certification must be made before entry and must be made available to each employee entering the space or to that employee's authorized representative.
- (f) When there are changes in the use or configuration of a non-permit confined space that might increase the hazards to entrants, or some indication that the initial evaluation of the space may not have been adequate, each entry employer must have a competent person reevaluate that space and, if necessary, reclassify it as a permit required confined space.
- (g) A space classified by an employer as a permit-required confined space may only be reclassified as a non-permit confined space when a competent person determines that all of the applicable requirements in paragraphs §1926.1203(g)(1) through (g)(4) have been met:
 - (1) If the permit space poses no actual or potential atmospheric hazards and if all hazards within the space are eliminated or isolated without entry into the space (unless the employer can demonstrate that doing so without entry is infeasible), the permit space may be reclassified as a non-permit confined space for as long as the non-atmospheric hazards remain eliminated or isolated;
 - (2) The entry employer must eliminate or isolate the hazards without entering the space, unless it can demonstrate that this is infeasible. If it is necessary to enter the permit space to eliminate or isolate hazards, such entry must be performed under §§1926.1204 through 1211 of this standard. If testing and inspection during that entry demonstrate that the hazards within the permit space have been eliminated or isolated, the permit space may be reclassified as a non-permit confined space for as long as the hazards remain eliminated or isolated;

Note to paragraph §1926.1203(g)(2). Control of atmospheric hazards through forced air ventilation does not constitute elimination or isolation of the hazards. Paragraph §1926.1203(e) covers permit space entry where the employer can demonstrate that forced air ventilation alone will control all hazards in the space.
 - (3) The entry employer must document the basis for determining that all hazards in a permit space have been eliminated or isolated, through a certification that contains the date, the location of the space, and the signature of the person making the determination. The certification must be made available to each employee entering the space or to that employee's authorized representative; and
 - (4) If hazards arise within a permit space that has been reclassified as a non-permit space under paragraph §1926.1203(g), each employee in the space must exit the space. The entry employer must then reevaluate the space and reclassify it as a permit space as appropriate in accordance with all other applicable provisions of this standard.
- (h) Permit Space Entry Communication and Coordination:

- (1) Before entry operations begin, the host employer must provide the following information, if it has it, to the controlling contractor:
 - (i) The location of each known permit space;
 - (ii) The hazards or potential hazards in each space or the reason it is a permit space; and
 - (iii) Any precautions that the host employer or any previous controlling contractor or entry employer implemented for the protection of employees in the permit space.
- (2) Before entry operations begin, the controlling contractor must:
 - (i) Obtain the host employer's information about the permit space hazards and previous entry operations; and
 - (ii) Provide the following information to each entity entering a permit space and any other entity at the worksite whose activities could foreseeably result in a hazard in the permit space:
 - (A) The information received from the host employer;
 - (B) Any additional information the controlling contractor has about the subjects listed in paragraph (h)(1) of this section; and
 - (C) The precautions that the host employer, controlling contractor, or other entry employers implemented for the protection of employees in the permit spaces.
- (3) Before entry operations begin, each entry employer must:
 - (i) Obtain all of the controlling contractor's information regarding permit space hazards and entry operations; and
 - (ii) Inform the controlling contractor of the permit space program that the entry employer will follow, including any hazards likely to be confronted or created in each permit space.
- (4) The controlling contractor and entry employer(s) must coordinate entry operations when:
 - (i) More than one entity performs permit space entry at the same time; or
 - (ii) Permit space entry is performed at the same time that any activities that could foreseeably result in a hazard in the permit space are performed.
- (5) After entry operations:
 - (i) The controlling contractor must debrief each entity that entered a permit space regarding the permit space program followed and any hazards confronted or created in the permit space(s) during entry operations;

- (ii) The entry employer must inform the controlling contractor in a timely manner of the permit space program followed and of any hazards confronted or created in the permit space(s) during entry operations; and
- (iii) The controlling contractor must apprise the host employer of the information exchanged with the entry entities pursuant to this subparagraph.

Note to paragraph §1926.1203(h). Unless a host employer or controlling contractor has or will have employees in a confined space, it is not required to enter any confined space to collect the information specified in this paragraph (h).

- (iv) If there is no controlling contractor present at the worksite, the requirements for, and role of, controlling contractors in §1926.1203 must be fulfilled by the host employer or other employer who arranges to have employees of another employer perform work that involves permit space entry.

§1926.1204 Permit-Required Confined Space Program.

Each entry employer must:

- (a) Implement the measures necessary to prevent unauthorized entry;
- (b) Identify and evaluate the hazards of permit spaces before employees enter them;
- (c) Develop and implement the means, procedures, and practices necessary for safe permit space entry operations, including, but not limited to, the following:
 - (1) Specifying acceptable entry conditions;
 - (2) Providing each authorized entrant or that employee's authorized representative with the opportunity to observe any monitoring or testing of permit spaces;
 - (3) Isolating the permit space and physical hazard(s) within the space;
 - (4) Purging, inerting, flushing, or ventilating the permit space as necessary to eliminate or control atmospheric hazards;

Note to paragraph §1204(c)(4). When an employer is unable to reduce the atmosphere below 10 percent LFL, the employer may only enter if the employer inertes the space so as to render the entire atmosphere in the space noncombustible, and the employees use PPE to address any other atmospheric hazards (such as oxygen deficiency), and the employer eliminates or isolates all physical hazards in the space.

- (5) Determining that, in the event the ventilation system stops working, the monitoring procedures will detect an increase in atmospheric hazard levels in sufficient time for the entrants to safely exit the permit space;
- (6) Providing pedestrian, vehicle, or other barriers as necessary to protect entrants from external hazards;

- (7) Verifying that conditions in the permit space are acceptable for entry throughout the duration of an authorized entry, and ensuring that employees are not allowed to enter into, or remain in, a permit space with a hazardous atmosphere unless the employer can demonstrate that personal protective equipment (PPE) will provide effective protection for each employee in the permit space and provides the appropriate PPE to each employee; and
 - (8) Eliminating any conditions (for example, high pressure) that could make it unsafe to remove an entrance cover.
- (d) Provide the following equipment (specified in paragraphs §1926.1204(d)(1) through (d)(9)) at no cost to each employee, maintain that equipment properly, and ensure that each employee uses that equipment properly:
- (1) Testing and monitoring equipment needed to comply with paragraph §1926.1204(e);
 - (2) Ventilating equipment needed to obtain acceptable entry conditions;
 - (3) Communications equipment necessary for compliance with paragraphs §1926.1208(c) and §1926.1209(e), including any necessary electronic communication equipment for attendants assessing entrants' status in multiple spaces;
 - (4) Personal protective equipment insofar as feasible engineering and work-practice controls do not adequately protect employees;

Note to paragraph §1926.1204(d)(4). The requirements of subpart E of this part and other PPE requirements continue to apply to the use of PPE in a permit space. For example, if employees use respirators, then the respirator requirements in §1926.103 (Respiratory protection) must be met.
 - (5) Lighting equipment that meets the minimum illumination requirements in §1926.56, that is approved for the ignitable or combustible properties of the specific gas, vapor, dust, or fiber that will be present, and that is sufficient to enable employees to see well enough to work safely and to exit the space quickly in an emergency;
 - (6) Barriers and shields as required by paragraph §1926.1204(c)(4);
 - (7) Equipment, such as ladders, needed for safe ingress and egress by authorized entrants;
 - (8) Rescue and emergency equipment needed to comply with paragraph §1926.1204(i), except to the extent that the equipment is provided by rescue services; and
 - (9) Any other equipment necessary for safe entry into, safe exit from, and rescue from, permit spaces.
- (e) Evaluate permit space conditions in accordance with the following paragraphs (e)(1) through (6) of this section when entry operations are conducted:

- (1) Test conditions in the permit space to determine if acceptable entry conditions exist before changes to the space's natural ventilation are made, and before entry is authorized to begin, except that, if an employer demonstrates that isolation of the space is infeasible because the space is large or is part of a continuous system (such as a sewer), the employer must:
 - (i) Perform pre-entry testing to the extent feasible before entry is authorized; and,
 - (ii) If entry is authorized, continuously monitor entry conditions in the areas where authorized entrants are working, except that employers may use periodic monitoring in accordance with paragraph §1926.1204(e)(2) for monitoring an atmospheric hazard if they can demonstrate that equipment for continuously monitoring that hazard is not commercially available;
 - (iii) Provide an early-warning system that continuously monitors for non-isolated engulfment hazards. The system must alert authorized entrants and attendants in sufficient time for the authorized entrants to safely exit the space.
 - (2) Continuously monitor atmospheric hazards unless the employer can demonstrate that the equipment for continuously monitoring a hazard is not commercially available or that periodic monitoring is of sufficient frequency to ensure that the atmospheric hazard is being controlled at safe levels. If continuous monitoring is not used, periodic monitoring is required with sufficient frequency to ensure that acceptable entry conditions are being maintained during the course of entry operations;
 - (3) When testing for atmospheric hazards, test first for oxygen, then for combustible gases and vapors, and then for toxic gases and vapors;
 - (4) Provide each authorized entrant or that employee's authorized representative an opportunity to observe the pre-entry and any subsequent testing or monitoring of permit spaces;
 - (5) Reevaluate the permit space in the presence of any authorized entrant or that employee's authorized representative who requests that the employer conduct such reevaluation because there is some indication that the evaluation of that space may not have been adequate; and
 - (6) Immediately provide each authorized entrant or that employee's authorized representative with the results of any testing conducted in accordance with §1926.1204 of this standard.
- (f) Provide at least one attendant outside the permit space into which entry is authorized for the duration of entry operations;
- (1) Attendants may be assigned to more than one permit space provided the duties described in §1926.1209 of this standard can be effectively performed for each permit space.
 - (2) Attendants may be stationed at any location outside the permit space as long as the duties described in §1926.1209 of this standard can be effectively performed for each permit space to which the attendant is assigned.

- (g) If multiple spaces are to be assigned to a single attendant, include in the permit program the means and procedures to enable the attendant to respond to an emergency affecting one or more of those permit spaces without distraction from the attendant's responsibilities under §1926.1209 of this standard;
- (h) Designate each person who is to have an active role (as, for example, authorized entrants, attendants, entry supervisors, or persons who test or monitor the atmosphere in a permit space) in entry operations, identify the duties of each such employee, and provide each such employee with the training required by §1926.1207 of this standard;
- (i) Develop and implement procedures for summoning rescue and emergency services (including procedures for summoning emergency assistance in the event of a failed non-entry rescue), for rescuing entrants from permit spaces, for providing necessary emergency services to rescued employees, and for preventing unauthorized personnel from attempting a rescue;
- (j) Develop and implement a system for the preparation, issuance, use, and cancellation of entry permits as required by this standard, including the safe termination of entry operations under both planned and emergency conditions;
- (k) Develop and implement procedures to coordinate entry operations, in consultation with the controlling contractor, when employees of more than one employer are working simultaneously in a permit space or elsewhere on the worksite where their activities could, either alone or in conjunction with the activities within a permit space, foreseeably result in a hazard within the confined space, so that employees of one employer do not endanger the employees of any other employer;
- (l) Develop and implement procedures (such as closing off a permit space and canceling the permit) necessary for concluding the entry after entry operations have been completed;
- (m) Review entry operations when the measures taken under the permit space program may not protect employees and revise the program to correct deficiencies found to exist before subsequent entries are authorized; and

Note to paragraph §1926.1204(m). Examples of circumstances requiring the review of the permit space program include, but are not limited to: any unauthorized entry of a permit space, the detection of a permit space hazard not covered by the permit, the detection of a condition prohibited by the permit, the occurrence of an injury or near-miss during entry, a change in the use or configuration of a permit space, and employee complaints about the effectiveness of the program.

- (n) Review the permit space program, using the canceled permits retained under paragraph §1926.1205(f), within 1 year after each entry and revise the program as necessary to ensure that employees participating in entry operations are protected from permit space hazards.

Note to paragraph §1926.1204(n). Employers may perform a single annual review covering all entries performed during a 12-month period. If no entry is performed during a 12-month period, no review is necessary.

§1926.1205 Permitting Process.

- (a) Before entry is authorized, each entry employer must document the completion of measures required by paragraph §1926.1204(c) of this standard by preparing an entry permit.

- (b) Before entry begins, the entry supervisor identified on the permit must sign the entry permit to authorize entry.
- (c) The completed permit must be made available at the time of entry to all authorized entrants or their authorized representatives, by posting it at the entry portal or by any other equally effective means, so that the entrants can confirm that pre-entry preparations have been completed.
- (d) The duration of the permit may not exceed the time required to complete the assigned task or job identified on the permit in accordance with paragraph §1926.1206(b) of this standard.
- (e) The entry supervisor must terminate entry and take the following action when any of the following apply:
 - (1) Cancel the entry permit when the entry operations covered by the entry permit have been completed; or
 - (2) Suspend or cancel the entry permit and fully reassess the space before allowing reentry when a condition that is not allowed under the entry permit arises in or near the permit space and that condition is temporary in nature and does not change the configuration of the space or create any new hazards within it; and
 - (3) Cancel the entry permit when a condition that is not allowed under the entry permit arises in or near the permit space and that condition is not covered by subparagraph (e)(2) of this section.
- (f) The entry employer must retain each canceled entry permit for at least 1 year to facilitate the review of the permit-required confined space program required by paragraph §1926.1204(n) of this standard. Any problems encountered during an entry operation must be noted on the pertinent permit so that appropriate revisions to the permit space program can be made.

§1926.1206 Entry permit.

The entry permit that documents compliance with this section and authorizes entry to a permit space must identify:

- (a) The permit space to be entered;
- (b) The purpose of the entry;
- (c) The date and the authorized duration of the entry permit;
- (d) The authorized entrants within the permit space, by name or by such other means (for example, through the use of rosters or tracking systems) as will enable the attendant to determine quickly and accurately, for the duration of the permit, which authorized entrants are inside the permit space;

Note to paragraph §1926.1206(d). This requirement may be met by inserting a reference on the entry permit as to the means used, such as a roster or tracking system, to keep track of the authorized entrants within the permit space.

- (e) Means of detecting an increase in atmospheric hazard levels in the event the ventilation system stops working;
- (f) Each person, by name, currently serving as an attendant;

- (g) The individual, by name, currently serving as entry supervisor, and the signature or initials of each entry supervisor who authorizes entry;
- (h) The hazards of the permit space to be entered;
- (i) The measures used to isolate the permit space and to eliminate or control permit space hazards before entry;

Note to paragraph §1926.1206(i). Those measures can include, but are not limited to, the lockout or tagging of equipment and procedures for purging, inerting, ventilating, and flushing permit spaces.
- (j) The acceptable entry conditions;
- (k) The results of tests and monitoring performed under paragraph §1926.1204(e) of this standard, accompanied by the names or initials of the testers and by an indication of when the tests were performed;
- (l) The rescue and emergency services that can be summoned and the means (such as the equipment to use and the numbers to call) for summoning those services;
- (m) The communication procedures used by authorized entrants and attendants to maintain contact during the entry;
- (n) Equipment, such as personal protective equipment, testing equipment, communications equipment, alarm systems, and rescue equipment, to be provided for compliance with this standard;
- (o) Any other information necessary, given the circumstances of the particular confined space, to ensure employee safety; and
- (p) Any additional permits, such as for hot work, that have been issued to authorize work in the permit space.

§1926.1207 Training.

- (a) The employer must provide training to each employee whose work is regulated by this standard, at no cost to the employee, and ensure that the employee possesses the understanding, knowledge, and skills necessary for the safe performance of the duties assigned under this standard. This training must result in an understanding of the hazards in the permit space and the methods used to isolate, control or in other ways protect employees from these hazards, and for those employees not authorized to perform entry rescues, in the dangers of attempting such rescues.
- (b) Training required by this section must be provided to each affected employee:
 - (1) In both a language and vocabulary that the employee can understand;
 - (2) Before the employee is first assigned duties under this standard;
 - (3) Before there is a change in assigned duties;

- (4) Whenever there is a change in permit space entry operations that presents a hazard about which an employee has not previously been trained; and
 - (5) Whenever there is any evidence of a deviation from the permit space entry procedures required by paragraph §1926.1204(c) of this standard or there are inadequacies in the employee's knowledge or use of these procedures.
- (c) The training must establish employee proficiency in the duties required by this standard and must introduce new or revised procedures, as necessary, for compliance with this standard.
 - (d) The employer must maintain training records to show that the training required by paragraphs §1926.1207(a) through (c) of this standard has been accomplished. The training records must contain each employee's name, the name of the trainers, and the dates of training. The documentation must be available for inspection by employees and their authorized representatives, for the period of time the employee is employed by that employer.

§1926.1208 Duties of authorized entrants.

The entry employer must ensure that all authorized entrants:

- (a) Are familiar with and understand the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure;
- (b) Properly use equipment as required by paragraph §1926.1204(d) of this standard;
- (c) Communicate with the attendant as necessary to enable the attendant to assess entrant status and to enable the attendant to alert entrants of the need to evacuate the space as required by paragraph §1926.1209(f) of this standard;
- (d) Alert the attendant whenever:
 - (1) There is any warning sign or symptom of exposure to a dangerous situation; or
 - (2) The entrant detects a prohibited condition; and
- (e) Exit from the permit space as quickly as possible whenever:
 - (1) An order to evacuate is given by the attendant or the entry supervisor;
 - (2) There is any warning sign or symptom of exposure to a dangerous situation;
 - (3) The entrant detects a prohibited condition; or
 - (4) An evacuation alarm is activated.

§1926.1209 Duties of attendants.

The entry employer must ensure that each attendant:

- (a) Is familiar with and understands the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure;
- (b) Is aware of possible behavioral effects of hazard exposure in authorized entrants;
- (c) Continuously maintains an accurate count of authorized entrants in the permit space and ensures that the means used to identify authorized entrants under paragraph 1926.1206(d) of this standard accurately identifies who is in the permit space;
- (d) Remains outside the permit space during entry operations until relieved by another attendant;

Note to paragraph §1926.1209(d). Once an attendant has been relieved by another attendant, the relieved attendant may enter a permit space to attempt a rescue when the employer's permit space program allows attendant entry for rescue and the attendant has been trained and equipped for rescue operations as required by paragraph §1926.1211(a).

- (e) Communicates with authorized entrants as necessary to assess entrant status and to alert entrants of the need to evacuate the space under paragraph §1926.1208(e);
- (f) Assesses activities and conditions inside and outside the space to determine if it is safe for entrants to remain in the space and orders the authorized entrants to evacuate the permit space immediately under any of the following conditions:
 - (1) If there is a prohibited condition;
 - (2) If the behavioral effects of hazard exposure are apparent in an authorized entrant;
 - (3) If there is a situation outside the space that could endanger the authorized entrants; or
 - (4) If the attendant cannot effectively and safely perform all the duties required under §1926.1209 of this standard;
- (g) Summons rescue and other emergency services as soon as the attendant determines that authorized entrants may need assistance to escape from permit space hazards;
- (h) Takes the following actions when unauthorized persons approach or enter a permit space while entry is underway:
 - (1) Warns the unauthorized persons that they must stay away from the permit space;
 - (2) Advises the unauthorized persons that they must exit immediately if they have entered the permit space; and

- (3) Informs the authorized entrants and the entry supervisor if unauthorized persons have entered the permit space;
- (i) Performs non-entry rescues as specified by the employer's rescue procedure; and
- (j) Performs no duties that might interfere with the attendant's primary duty to assess and protect the authorized entrants.

§1926.1210 Duties of entry supervisors.

The entry employer must ensure that each entry supervisor:

- (a) Is familiar with and understands the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure;
- (b) Verifies, by checking that the appropriate entries have been made on the permit, that all tests specified by the permit have been conducted and that all procedures and equipment specified by the permit are in place before endorsing the permit and allowing entry to begin;
- (c) Terminates the entry and cancels or suspends the permit as required by paragraph 1926.1205(e) of this standard;
- (d) Verifies that rescue services are available and that the means for summoning them are operable, and that the employer will be notified as soon as the services become unavailable;
- (e) Removes unauthorized individuals who enter or who attempt to enter the permit space during entry operations; and
- (f) Determines, whenever responsibility for a permit space entry operation is transferred, and at intervals dictated by the hazards and operations performed within the space, that entry operations remain consistent with terms of the entry permit and that acceptable entry conditions are maintained.

§1926.1211 Rescue and emergency services.

- (a) An employer who designates rescue and emergency services, pursuant to paragraph §1926.1204(i) of this standard, must:
 - (1) Evaluate a prospective rescuer's ability to respond to a rescue summons in a timely manner, considering the hazard(s) identified;

Note to paragraph §1926.1211(a)(1). What will be considered timely will vary according to the specific hazards involved in each entry. For example, §1926.103—Respiratory Protection requires that employers provide a standby person or persons capable of immediate action to rescue employee(s) wearing respiratory protection while in work areas defined as IDLH atmospheres.

- (2) Evaluate a prospective rescue service's ability, in terms of proficiency with rescue-related tasks and equipment, to function appropriately while rescuing entrants from the particular permit space or types of permit spaces identified;
 - (3) Select a rescue team or service from those evaluated that:
 - (i) Has the capability to reach the victim(s) within a time frame that is appropriate for the permit space hazard(s) identified;
 - (ii) Is equipped for, and proficient in, performing the needed rescue services;
 - (iii) Agrees to notify the employer immediately in the event that the rescue service becomes unavailable;
 - (4) Inform each rescue team or service of the hazards they may confront when called on to perform rescue at the site; and
 - (5) Provide the rescue team or service selected with access to all permit spaces from which rescue may be necessary so that the rescue team or service can develop appropriate rescue plans and practice rescue operations.
- (b) An employer whose employees have been designated to provide permit space rescue and/or emergency services must take the following measures and provide all equipment and training at no cost to those employees:
- (1) Provide each affected employee with the personal protective equipment (PPE) needed to conduct permit space rescues safely and train each affected employee so the employee is proficient in the use of that PPE;
 - (2) Train each affected employee to perform assigned rescue duties. The employer must ensure that such employees successfully complete the training required and establish proficiency as authorized entrants, as provided by §§1926.1207 and 1926.1208 of this standard;
 - (3) Train each affected employee in basic first aid and cardiopulmonary resuscitation (CPR). The employer must ensure that at least one member of the rescue team or service holding a current certification in basic first aid and CPR is available; and
 - (4) Ensure that affected employees practice making permit space rescues before attempting an actual rescue, and at least once every 12 months, by means of simulated rescue operations in which they remove dummies, manikins, or actual persons from the actual permit spaces or from representative permit spaces, except practice rescue is not required where the affected employees properly performed a rescue operation during the last 12 months in the same permit space the authorized entrant will enter, or in a similar permit space. Representative permit spaces must, with respect to opening size, configuration, and accessibility, simulate the types of permit spaces from which rescue is to be performed.
- (c) Non-entry rescue is required unless the retrieval equipment would increase the overall risk of entry or would not contribute to the rescue of the entrant. The employer must designate an entry rescue service whenever non-entry rescue is not selected. Whenever non-entry rescue is selected, the entry employer must ensure that retrieval systems or methods are used whenever an authorized entrant enters a permit space, and must confirm, prior to

entry, that emergency assistance would be available in the event that non-entry rescue fails. Retrieval systems must meet the following requirements:

- (1) Each authorized entrant must use a chest or full body harness, with a retrieval line attached at the center of the entrant's back near shoulder level, above the entrant's head, or at another point which the employer can establish presents a profile small enough for the successful removal of the entrant. Wristlets or anklets may be used in lieu of the chest or full body harness if the employer can demonstrate that the use of a chest or full body harness is infeasible or creates a greater hazard and that the use of wristlets or anklets is the safest and most effective alternative.
- (2) The other end of the retrieval line must be attached to a mechanical device or fixed point outside the permit space in such a manner that rescue can begin as soon as the rescuer becomes aware that rescue is necessary. A mechanical device must be available to retrieve personnel from vertical type permit spaces more than 5 feet (1.52 meters) deep.
- (3) Equipment that is unsuitable for retrieval must not be used, including, but not limited to, retrieval lines that have a reasonable probability of becoming entangled with the retrieval lines used by other authorized entrants, or retrieval lines that will not work due to the internal configuration of the permit space.
- (d) If an injured entrant is exposed to a substance for which a Safety Data Sheet (SDS) or other similar written information is required to be kept at the worksite, that SDS or written information must be made available to the medical facility treating the exposed entrant.

§1926.1212 Employee participation.

- (a) Employers must consult with affected employees and their authorized representatives on the development and implementation of all aspects of the permit space program required by §1926.1203 of this standard.
- (b) Employers must make available to each affected employee and his/her authorized representatives all information required to be developed by this standard.

§1926.1213 Provision of documents to Secretary.

For each document required to be retained in this standard, the retaining employer must make the document available on request to the Secretary of Labor or the Secretary's designee.