
INJURY & ILLNESS PREVENTION PROGRAM

Dowdy Corporation

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TAB 1:

SAFETY & HEALTH
RESPONSIBILITIES, POLICIES, AND
PROCEDURES

1.1 INTRODUCTION

Dowdy Corporation has developed and implemented this written Injury and Illness Prevention Program (IIPP) as part of our health and safety program. The work performed by Dowdy Corporation personnel is varied, in both nature and location. Under all circumstances, it is the intent of Dowdy Corporation to:

- provide a safe and healthful work environment for employees, and
- comply with the requirements set forth by the Occupational Safety & Health Administration

This IIPP along with the other Dowdy Corporation written safety & health programs will be readily available to all employees. Hard copies are located Warehouse, Jobsite Trailers, Project Supervisor's Company Vehicle. Lancaster Safety Consulting, Inc. also retains electronic copies.

1.2 POLICY STATEMENT

It is Dowdy Corporation's belief that our employees are our most important asset and the preservation of employee Safety and Health must remain a constant consideration in every phase of our business. We will provide the resources necessary to manage, control, or eliminate all safety and health hazards.

All employees are responsible for working safely and productively, as well as recognizing and being aware of hazards in their work areas. Employees are also responsible for following safe work practices, including the use of Personal Protective Equipment (PPE) where necessary.

It is our belief that any safety and health program must have total employee involvement.

Therefore, this program has management's highest priority, support, and participation.

PRODUCTION IS NOT SO URGENT THAT WE CANNOT TAKE TIME TO PERFORM OUR WORK SAFELY.

Dowdy Corporation CEO

1.3 EMPLOYEE RESPONSIBILITIES

Although OSHA does not cite employees for violations of their responsibilities, each employee "shall comply with all occupational safety and health standards and all rules, regulations, and orders issued under the OSH Act that are applicable. Employee responsibilities and rights in states with their own occupational safety and health programs are generally the same as for workers in states covered by Federal OSHA. An employee should do the following:

- Read the OSHA Poster at the jobsite.
- Comply with all applicable OSHA standards.
- Follow all lawful employer safety and health rules and regulations, and wear or use prescribed protective equipment while working.
- Report hazardous conditions to the project supervisor.
- Report any job-related injury or illness to the employer, and seek treatment promptly.
- Exercise rights under the Act in a responsible manner.

I have read and understand my responsibilities under the OSHA standards and Dowdy Corporation's policies and procedures and agree to abide by them. I have also had the duties of the position which I have accepted explained to me, and I understand the requirements of the position. I understand that any violation of the above policies is reason for disciplinary action up to and including termination.

Employee Name (Print)

Employee Signature

Date

1.4 GOAL

Safety begins at the top and progresses downward throughout the company. The primary goal of Dowdy Corporation is to continue operating a profitable business while protecting employees from workplace-related injuries, illness or harm. This can be achieved in part by delegating responsibility and accountability to all involved in this company's operation as follows:

- **Responsibility:** Having to answer for activities and results.
- **Accountability:** The actions taken by management to ensure the performance of responsibilities.

In other words, to reach our goal of a safe workplace everyone needs to take responsibility and be held accountable.

Benefits of achieving our goals are:

- Minimizing of injuries and accidents
- Minimizing the loss of property and equipment
- Elimination of potential fatalities
- Elimination of potential permanent disabilities
- Elimination of potential OSHA citations and fines
- Reductions in workers' compensation costs
- Reductions in operating costs
- Having the best Safety and Health conditions possible in the workplace.

1.5 MANAGEMENT COMMITMENT

The management of Dowdy Corporation is committed to the company's safety policy, and providing direction and motivation by:

- Appointing a Safety Coordinator.
- Establishing company safety goals and objectives.
- Developing and implementing written Safety and Health programs.
- Ensuring total commitment to our Safety and Health programs.
- Facilitating employees' safety training.
- Establishing responsibilities for management and employees to follow.
- Ensuring that management and employees are held accountable for performance of their safety responsibilities.
- Establishing and enforcing disciplinary procedures for employees violating safety rules.
- Reviewing the Safety and Health program annually, and revising or updating as needed.

1.6 ASSIGNMENT OF RESPONSIBILITY

SAFETY COORDINATOR

Dowdy Corporation has designated: _____ as Safety Coordinator.
The Safety Coordinator's office and cell phone numbers are:

- **Office:** _____
- **Cell:** _____

It is the duty of the Safety Coordinator to assist the project supervisor and all other levels of Management in the initiation, education, and execution of an effective safety program including the following:

- Introducing the safety program to new employees.
- Following up on recommendations, suggestions, etc., made at safety meetings. All topics of safety concerns must be documented accordingly.
- Assisting personnel in the execution of standard policies.
- Conducting safety inspections on a periodic basis.
- Addressing all hazards or potential hazards as needed.
- Performing accident investigations and preparing accident reports.
- Maintaining adequate stock of first aid supplies and other safety equipment to ensure their immediate availability.
- Making sure there is an adequate number of qualified first aid certified people on the work site.
- Becoming thoroughly familiar with OSHA regulations and local and state safety codes.
- Defining the responsibilities for safety and health of all subordinates and holding each person accountable for their results through the formal appraisal system and where necessary, disciplinary procedures.
- Emphasizing to employees that accidents create unnecessary personal and financial losses.

SUPERVISORS

The supervisors are responsible for establishing an operating atmosphere that ensures that safety and health is managed in the same manner and with the same emphasis as production, cost, and quality control.

- Regularly emphasizing that accident and health hazard exposure prevention are not only moral responsibilities, but also a condition of employment.
- Identifying operational oversights that could contribute to accidents which often result in injuries and property damage.
- Participating in safety and health related activities, including routinely attending safety meetings, reviews of the facility, and correcting employee behavior that can result in accidents and injuries.
- Spending time with each person hired to explain the hazards and safety policies relating to his/her particular work.
- Ensuring that initial orientation of "new hires" is carried out by the Safety Coordinator.

- Making sure that, if a “Competent Person” is required, one is present to oversee operations and instruct employees when necessary.
- Never short-cut safety for expediency, nor allow workers to do so.
- Enforcing safety rules consistently, and following company's discipline and enforcement procedures.
- Conducting a daily, jobsite safety inspection and correcting noted safety violations.

EMPLOYEES

It is the duty of each and every employee to know the safety rules, and conduct his work in compliance with these rules. Disregard of the safety and health rules shall be grounds for disciplinary action up to and including termination. It is also the duty of each employee to make full use of the safeguards provided for their protection. Every employee must receive an orientation when hired and receive a review of the company’s Safety and Health Program. Employee responsibilities include the following:

- Reading, understanding and following safety and health rules and procedures.
- Signing the Policies and Procedures Acknowledgement (see form above).
- Wearing Personal Protective Equipment (PPE) at all times when working in areas where there is a possible danger of injury.
- Wearing suitable work clothes as determined by the project supervisor.
- Performing all tasks safely as directed by their project supervisor.
- Reporting ALL injuries, no matter how slight to their project supervisor immediately, and seeking treatment promptly.
- Knowing the location of first aid, firefighting equipment, SDS log, and other safety devices.
- Attending any and all required safety and health meetings.
- Not performing potentially hazardous tasks, or using any hazardous material until properly trained, and following all safety procedures when performing those tasks.
- Stopping and asking questions if ever in doubt about the safety of any operation

COMPETENT PERSON

All jobsites must have a designated Competent Person who is responsible for the implementation and monitoring of the Dowdy Corporation health and safety plan. The Competent Person must be capable of identifying existing and predictable hazards and have the authority to take prompt corrective measures.

1.7 STOP WORK AUTHORITY

As part of the Dowdy Corporation health & safety policy, it is the responsibility of every employee performing work for Dowdy Corporation to exercise this Stop Work Authority Policy whenever any person in the work area is at risk of injury. Dowdy Corporation strives to provide a culture where Stop Work Authority is exercised freely.

Key elements of this program include:

- Employees will receive Stop Work Authority training before initial assignment. Training will be documented including the employee's name, the dates of training, and the subject.
- Employees have the authority and obligation to stop any task or operation where concerns or questions regarding the control of health & safety may exist.
- Employees are responsible to initiate a Stop Work intervention when warranted and management is responsible to create a culture where Stop Work Authority is exercised freely
- Employees will not face any form of retribution or intimidation directed at any individual or company for exercising their right to issue a stop work authority.
- This Stop Work Authority policy will be executed in a positive manner.

The following procedure must be initiated whenever an unsafe condition is identified:

- The Stop Work Intervention will be initiated and coordinated through the supervisor
- All affected personnel and supervision will be notified of the Stop Work Issue
- Once work has been stopped, no work may resume until all stop work issues and concerns have been adequately addressed.
- Work may resume only when it has been deemed safe to continue
- After the Stop Work Intervention has been initiated and closed, a follow-up will be completed to assess the effectiveness of the program.

Stop Work Issuance Documentation

- A Stop Work Issuance document will be completed to document the circumstances leading to the Stop Work Intervention.
- Stop Work reports will be reviewed by supervision in order to measure participation, determine quality of interventions and follow-up, trend common issues, identify opportunities for improvement, and facilitate sharing of learning

Stop Work Report

Section 1: Stop Work Issuance			
Location Of Operation		Date / Time	
Supervisor		Phone	
Individual Initiating Stop Work			
Individual Performing Work			
Work Operation Or Condition (Include Names Of Individuals Performing Work)			
Hazard (As Stated By Individual Initiating Stop Work)			
Additional Observations			
Section 2: Date / Time Informed			
Supervisor		Directorate ESH Coordinator	
Building / Area Manager		Associate Laboratory Director	
Division / Department Head		Chief Safety Officer	
Facility Manager			
Section 3: Follow-Up Action			
Section 4: Restart Concurrence			
Supervisor		Date	
Owner Client		Date	
Section 5: Restart Authorization			
General		Date	
Section 6: Restart Release			
Owner Client		Date	

1.8 OSHA MULTI-EMPLOYER WORKSITE POLICY

On multi-employer worksites, more than one employer may be citable for a hazardous condition that violates an OSHA standard. The following explains how OSHA views multi-employer worksites.

- **The Creating Employer:** The employer that caused the hazardous condition that violates an OSHA standard. Employers must not create conditions that violate OSHA standards. Any employer that does so is citable, even if the only employees exposed are those of other employers at the site.
- **The Exposing Employer:** The employer whose own employees are exposed to the hazard. Exposure could be observed by an inspector or unobserved (but determined through witness statements or other evidence). In addition, citations may be issued when the possibility exists that an employee could be exposed to a hazard because of work patterns, past circumstances, or anticipated work requirements.
- **The Correcting Employer:** An employer who is engaged in a common undertaking as the exposing employer, and is responsible for correcting the hazard. This usually occurs where an employer is given the responsibility of installing and/or maintaining particular safety/health equipment or devices. The correcting employer must exercise reasonable care in preventing and discovering violations and meet its obligations of correcting the hazard.
- **The Controlling Employer:** An employer who has general supervisory authority over the worksite, and has the power to correct safety and health violations or require others to correct them. Control can be established by contract or, in the absence of explicit contractual provisions, by the exercise of control in practice. A controlling employer must exercise reasonable care to prevent and detect violations on the site. The extent of the measures that a controlling employer must implement to satisfy this duty of reasonable care is less than what is required of an employer with respect to protecting its own employees. This means that the controlling employer is not normally required to inspect for hazards as frequently or to have the same level of knowledge of the applicable standards or of trade expertise as the employer it has hired.

If the employer falls into one of these categories, they have obligations with respect to OSHA requirements. OSHA inspectors must determine if employer actions are sufficient to meet those obligations. The extent of the actions required of employers varies based on which category applies. Note that the extent of the measures that a controlling employer must take to satisfy its duty to exercise reasonable care to prevent and detect violations is less than what is required of an employer with respect to protecting their own employees.

1.9 SAFETY RULES AND PROCEDURES

The following safety rules & procedures have been set forth by Dowdy Corporation as minimum guidelines. If a situation arises that there is not a pre-established rule, the employee is expected to take all precautions and measures available to them to act in a safe manner.

- No employee is expected to undertake a job until that person has received adequate training.
- All employees shall be trained on potential hazards that they could be exposed to and how to protect themselves.
- No employee is required to work under conditions which are unsanitary, dangerous or hazardous to their health.
- Only qualified, trained personnel are permitted to operate machinery or equipment.
- All injuries must be reported to your supervisor.
- Manufacturer's specifications /limitations /instructions shall be followed.
- Particular attention should be given to new employees and to employees moving to new jobs or doing non-routine tasks.
- All OSHA posters shall be posted.
- Emergency numbers shall be posted and reviewed with employees
- Employees working in areas where there is a possible danger of head injury, excessive noise exposure, or potential eye and face injury shall be protected by Personal Protection Equipment (PPE).
- All hand and power tools and similar equipment, whether furnished by the employer or the employee, shall be maintained in a safe condition.
- All materials stored in tiers shall be stacked, racked, blocked, interlocked, or otherwise secured to prevent sliding, falling or collapse.
- Electrical equipment must be free from recognized hazards that are likely to cause death or serious physical harm to employees.
- All places of employment shall be kept clean, the floor of every workroom shall be maintained, so far as practicable, in a dry condition; standing water shall be removed. Where wet processes are used, drainage shall be maintained and false floors, platforms, mats or other dry standing places or appropriate waterproof footwear shall be provided.
- To facilitate cleaning, every floor, working place, and passageway shall be kept free from protruding nails, splinters, loose boards, and holes and openings.
- All floor openings, open sided floor and wall openings shall be guarded by standard railings and toe boards or cover.
- The employer shall comply with the manufacturer's specifications and limitations applicable to the operation of any and all cranes and derricks.
- All equipment left unattended at night, adjacent to a highway in normal use, or adjacent to construction areas where work is in progress, shall have appropriate lights or reflectors, or barricades equipped with appropriate lights or reflectors, to identify the location of the equipment.

- No construction loads shall be placed on a concrete structure or portion of a concrete structure unless the employer determines, based on information received from a person who is qualified in structural design, that the structure or portion of the structure is capable of supporting the loads.
- A stairway or ladder shall be provided at all personnel points of access where there is a break in elevation of 19 inches or more, and no ramp, runway, sloped embankment, or personnel hoist is provided.

1.10 DISCIPLINARY POLICY

Dowdy Corporation's disciplinary policy is comprised of a corrective action process aimed to document and correct undesirable employee behavior, including violations of safety rules. The safety coordinator, supervisors, and management are responsible for enforcement of this disciplinary policy.

Major elements of this policy include:

- Physical inspections by company officials indicating violations showing overall lack of commitment to company safety goals shall be under the same level of disciplinary actions.
- Constructive criticism/instruction by the supervisor to educate and inform employees of appropriate safety performance and behavior.
- Correcting employee's negative behavior to the extent required.
- Informing the employee that continued violation of company safety policies may result in termination.
- Written documentation of disciplinary warnings and corrective action taken.

Safety violations include, but are not limited to:

- Not following safety procedures, guidelines or rules
- Horse play
- Failure to wear selected PPE
- Abuse of selected PPE

Depending on the facts and circumstances involved with each situation, the company may choose any corrective action including immediate termination. However, in most circumstances the following steps will be followed:

1. **Verbal Warning** informally documented (note to project or supervisor file), by a supervisor or safety coordinator for minor infractions of company safety rules. A supervisor or safety coordinator must inform the employee what safety rule or policy was violated and how to correct the problem.
2. **Written Warning**, documented in employee's file. Repeated minor infractions or a more substantial safety infraction requires issuance of a written warning. Every attempt should be made to re-educate the employee on the desired performance. The employee should acknowledge the warning by signing the document before it is placed in their personnel file.
3. **Suspension** for three (3) working days. If employee fails to appropriately respond or management determines the infraction is sufficiently serious.
4. **Termination** for repeated or serious safety infractions.

Disciplinary Action Form

Employee Name: _____ Employee Job Title: _____

Supervisor Name: _____ Today's Date: _____

Date/Time of Incident:		Location:	
Description of incident:			
Witnesses if any:			
Policy/Policies violated:			
Disciplinary action to be taken:			
Consequence(s) if employee repeats this offense:			
If the employee has offered an explanation of his/her conduct, detail explanation here:			

I have read the above, and I understand the consequences if I repeat my offense.

Signature of Employee

Date

Signature of Supervisor

Date

1.11 SUBCONTRACTOR MANAGEMENT PLAN

At a minimum, Dowdy Corporation requires that other employers under their control be pre-qualified. Subcontractors must identify, provide, and/or implement the following for review:

- A health & safety program, including written procedures for controlling job-related hazardous operations such as cranes, scaffolding, trenches, confined space, hot work, explosives, hazardous materials, leading edges, etc.
- A safety coordinator and competent person
- A project safety analysis for the job
- List of work activities requiring planning, design, inspection, or supervision by an engineer, competent person, or other professional
- Documentation for required health & safety training
- Signed independent contractor agreement
- Hazardous chemicals to which jobsite workers may be exposed to while in the workplace along with SDSs, measures to minimize the possibility of exposure, and procedures to follow if workers are exposed
- An emergency response plan
- Other documentation such as permits, hazard reports, inspections, uncorrected hazards, accident/incident/near miss reports, etc.
- Safety statistics

Dowdy Corporation will utilize the submitted documents to analyze the subcontractor's safety metrics to determine which subcontractors will be utilized. Subcontractors must submit a signed copy of the subcontractor agreement on the following page to document subcontractor responsibility for OSHA compliance.

Subcontractors are expected to participate in pre-job, tailgate, and safety meetings. They will also be included in job safety analyses, hazard assessments, and job safety inspections. Post-job safety performance reviews will be conducted to analyze the performance.

Subcontractor Prequalification Form

Company Information				
Legal Company Name				
Address:				
City, State, Zip				
Federal ID #				
Contact Person				
Telephone				
Fax				
Email				
Safety Performance Statistics				
	Current	Last Year	2 Years	2 Years
	_____	_____	_____	_____
Experience Modification Rating (EMR)				
Average Number Of Employees				
Hours Worked				
# Of Recordable Cases				
(G) # Of Deaths				
(H) # Of Cases With Days Away From Work				
(I) # Cases With Job Transfer Or Restriction				
(J) # Other Recordable Cases				
(K) # Of Days Away From Work				
(L) # Days On Job Transfer Or Restriction				
3-year Total Recordable Incidence Rate (TRIR)	$\frac{\text{(Total \# of cases for all 3 years)} \times 200,000}{\text{Total number of employee hours for all 3 years}}$			

Safety Questionnaire

Does your company have a written safety program? If yes, please attach as PDF or .doc file	<input type="checkbox"/> Yes <input type="checkbox"/> No
Does your company perform safety training for all employees? If yes, is documentation available?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
Does your company have a new hire orientation process for all new hires?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Do you hold safety meetings? If yes, how frequently?	<input type="checkbox"/> Yes <input type="checkbox"/> No _____

OSHA Inspections

Have you had an OSHA inspection in the past 5 years? If yes, were you issued citations?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
--	--

Please provide any additional details regarding citations issued:

Safety Program Overview

Please provide any additional information that is pertinent to your safety program below or attach additional documentation.

Certification

Name:	
Signature:	
Title	
Date	

Subcontractor Agreement

_____ (Company Name) _____ hereby acknowledges that they are a subcontractor of Dowdy Corporation, and therefore agrees to comply with all local, state, and federal laws and regulations, along with policies and procedures that have been established by Dowdy Corporation.

It is further understood that in the event of an OSHA site inspection, as related to the work that is being performed, it is the responsibility of _____ (Company Name) _____ to immediately correct any safety violations and/or pay any fines that may be levied by OSHA for safety violations.

Agreed By (Print): _____

Signature: _____

Date: _____

1.12 SHORT SERVICE EMPLOYEE PROGRAM

This Short Service Employee (SSE) Policy ensures that employees with less than 6 months' experience are identified, adequately supervised, trained, and managed so as to prevent injury to themselves or others, property damage, or environmental harm.

The key elements of this program are as follows:

- Before beginning any work for Dowdy Corporation, all new employees (including SSE) will receive new hire safety training. Documentation of training can be found at the end of each written safety and health program.
- Prior to the job mobilization, contractors will communicate/notify the project coordinator, contractor contact, or on-site supervisor for all jobs containing SSE personnel. The project coordinator, contractor contact, or on-site supervisor will determine approval status of the crew makeup.
- Contractors shall monitor employees, including SSE personnel, for HES awareness.
 - If, at the end of the six-month time period, the SSE has worked safely, adhered to HES policies and has no recordable incident attributed to him/her, the SSE identifier may be removed at the supervisor's discretion.
 - Any employee that does not complete the designated time period recordable free to get operator approval in writing prior to returning to operator property.
- Each SSE is designated an applicable mentor. The mentor is responsible for providing guidance and development to the SSE. A mentor can only be assigned one SSE per crew and the mentor must be onsite with the SSE to be able to monitor the SSE.
- Non-SSE employees who are new to a location will be considered by the location supervisor for inclusion in the SSE program based on the specifics of their assignment. Factors to consider include significant differences in:
 - job responsibilities/duties from previous assignments,
 - work processes/practices from previous assignments,
 - equipment/tools from previous assignments, and
 - skill level, familiarity with co-workers.
- Subcontractors must adhere to the requirements of the SSE program.

SSE VISIBILITY

SSE personnel shall be visibly identified in the field by wearing:

- High-visibility orange-colored hard hats or
- Visible hard hat stickers with the letters "SSE". The sticker shall be of contrasting color to the hardhat and be at least 2" x 3" in size

MENTOR ROLES AND RESPONSIBILITIES:

- SSE Mentor shall be responsible for overseeing Orientation, Training and Observation of SSE during first six months of employment. Mentor will Coach and supervise work. The SSE's safety will be of highest priority while learning the new job and unfamiliar tasks.
- SSE shall Consult with and listen to Mentor, and will be responsible for performing work as directed, but always has the responsibility to speak up when and if work is deemed unsafe.

REMOVAL FROM SSE STATUS

To be removed from SSE status, an employee must exhibit safe behavior for 6 months (e.g. incident free performance, proactive participation in HSE programs such as incident reporting including near misses, BBS, JHA development, safety meetings) and have a general awareness and working knowledge of the Dowdy Corporation and contractor's HSE policies.

Dowdy Corporation may recommend a reduction of the 6-month requirement based on the employee's performance and relevant industry experience. This reduction must be approved by the location supervisor. Documentation shall be maintained for a period of 1 year after a contractor employee has been removed from SSE status.

1.13 DRUG & ALCOHOL POLICY

Dowdy Corporation is dedicated to the health & safety of our employees, further clarification can be found within the Company's Drug Free Workplace Program. Drug and/or alcohol use may pose a serious threat to employee health and safety. Therefore, it is our policy to prevent the use of drugs and abuse of alcohol from having an adverse effect on our employees. Key aspects of our policy include:

- All employees are subject to random and post-accident drug and/or alcohol testing. Random testing is conducted by an approved facility.
- A positive test result will result in immediate termination of employment.
- Any employee who refuses to submit to drug and/or alcohol testing is subject to immediate termination of employment.

DRUG & ALCOHOL PROHIBITIONS:

- Any drug use that could affect the performance of safety-sensitive functions is prohibited. This drug prohibition includes:
 - Being under the influence of any drug while performing functions for Dowdy Corporation, except when administered by, or under the instructions of, a licensed medical practitioner, who has advised the employee that the substance will not affect the employee's ability to safely perform their job functions
 - Testing positive for drugs
- Any alcohol misuse that could affect performance of safety-sensitive functions is prohibited. This alcohol prohibition includes:
 - Use while performing functions for Dowdy Corporation
 - Use during the 4 hours before performing safety-sensitive functions for Dowdy Corporation
 - Reporting for duty or remaining on duty with an alcohol concentration of 0.04 or greater
 - Use of alcohol for up to 8 hours following an accident or until the employee undergoes a post-accident test

All employees will inform their supervisor of any therapeutic drug use prior to performing a safety-sensitive function. He/she may be required to present written evidence from a health care professional which describes the effects such medications may have on the driver's ability to perform his/her tasks.

DEFINITIONS:

- Alcohol means the intoxicating agent in beverage alcohol, ethyl alcohol, or other low molecular weight alcohols including methyl and isopropyl alcohol.
- Alcohol use means the consumption of any beverage, liquid mixture, or preparation, including any medication, containing alcohol.
- Controlled substances mean those substances identified in 49 CFR, Section 40.85, and include:
 - Marijuana
 - Cocaine

- Opiates
- Amphetamines
- Phencyclidine (PCP).
- Drug means any substance (other than alcohol) that is a controlled substance as defined in this policy and 49 CFR Part 40.
- Refusal to submit includes:
 - Failing to appear for any test within a pre-determined reasonable time frame after being directed to do so by the company.
 - Failing to cooperate with any part of the testing process
 - Failing to provide adequate breath or urine sample
 - Conducting any activity that obstructs the testing process

1.14 OSHA INSPECTION GUIDELINES

PROJECT SUPERVISOR

- Ask to see the OSHA inspector(s) official government identification
- Contact the appropriate Company official immediately
- Name of the authorized Company official: _____
 - Office phone: _____ Extension: _____
 - Cell phone: _____
- Ask the OSHA inspector(s) to wait until the representative above has been reached.

Note: “The inspection shall not be delayed unreasonably to await the arrival of the employer representative. This delay should not exceed one hour.” (OSHA Field Inspection Reference Manual, Section 6, Chapter II, A 2.b. (2))

COMPANY REPRESENTATIVE:

- Contact Lancaster Safety Consulting Inc. at (888) 403-6026 if you desire. A Lancaster Safety consultant can speak with the OSHA official(s) by phone for the purpose of providing an overview of your occupational health and safety program.
- After meeting the OSHA official(s), an opening conference (sit-down meeting) shall be held. The OSHA official(s) should explain the basis of the inspection, (Accident investigation, complaint, referral, follow-up, or planned local/national emphasis program). You should be advised if the inspection is partial or complete. The opening conference is an important opportunity for the employer to demonstrate the company’s “Good Faith” efforts to provide a safe workplace. Discuss safety policies and practices with the compliance officer(s). Present the safety manuals. Emphasize the worker training verification logs, and your new hire training procedures. You should also present OSHA 300 logs, safety committee paperwork, and any other written materials that demonstrate your company’s “Good Faith” efforts to comply with the applicable OSHA standards.
- Upon completion of the opening conference, accompany the OSHA inspector(s) on a walk-through inspection of your facility. (Advise the inspector(s) on any areas of your facility that have been predetermined as “trade secret” areas, if applicable). During this walk-through, the inspector(s) will advise you of potential health and safety violations. If possible, take immediate, corrective action to correct hazards while the inspector(s) are present. NOTE: The inspector(s) have the right to interview workers.
- After the walk-through, a closing conference shall be held. The inspector(s) will provide an overview of their findings, and advise you if citations are likely to be issued. (No citations are issued on the same day of an OSHA inspection. OSHA has up to 6-months to issue citations.) The closing conference provides the employer with another opportunity to demonstrate “good faith”. Take notes on the inspector(s) closing comments.
- Contact Lancaster Safety Consulting, Inc. at **(888) 403-6026** upon conclusion of the inspection.

2.1 ACCIDENT INVESTIGATION

Thorough accident investigations will help to determine why accidents occur, where they happen, and any trends that might be developing. Such identification is critical to preventing and controlling hazards and potential accidents. All incidents will be investigated to the appropriate level with regards to incident severity using a root cause analysis process or other similar method.

When an incident occurs, the following sequence of reporting events will be followed:

1. If medical attention is required, call 911 or alert the first responder
2. Alert the supervisor on site
3. Alert all personnel necessary to control further loss
4. Report all fatalities to OSHA within 8 hours of the incident.
5. Report all work-related inpatient hospitalizations, amputations, or losses of an eye to OSHA within 24 hours of the incident.
6. If working at another company's location, report all incidents to the owner client within 24 hours of the incident.

After an incident has occurred, proper actions must be taken to prevent further loss. Proper equipment to assist in conducting an incident investigation will be available to persons responsible for conducting the investigation.

Individual responsibilities for incident investigation must be assigned prior to the occurrence of an incident. Personnel are trained in their roles and responsibilities for incident response and investigation techniques. Employees who are assigned the role of first responder must be trained and qualified in first aid techniques to control the degree of loss during the immediate post-incident phase.

SUPERVISORS

- Provide first aid, call for emergency medical care if required.
- If further medical treatment is required, arrange to have an employer representative accompany the injured employee to the medical facility.
- Secure area, equipment and personnel from injury and further damage.
- Contact Safety Coordinator.

SAFETY COORDINATOR

- Investigate, identify, and document all of the evidence involved with the incident. Collect, preserve, and secure all facts, employee and witness statements; take pictures and physical measurements of incident site and equipment involved.
- Complete an incident investigation report form (see following pages), a detailed narrative, and the necessary workers' compensation paperwork within 24 hours whenever possible.
- Ensure that corrective action to prevent a recurrence is taken, assign responsibilities for corrective actions, and track the corrective actions to closure.

- Discuss incident, where appropriate, in safety and other employee meetings with the intent to prevent a recurrence.
- Discuss incident with the supervisor and other management.
- If the injury warrants time away from work, ensure that the absence is authorized by a physician and that you maintain contact with your employee while he/she remains off work.
- Monitor status of employee(s) off work, maintain contact with employee and encourage return to work even if restrictions are imposed by the physician.
- When injured employee(s) return to work they should not be allowed to return to work without “return to work” release forms from the physician. Review the release carefully and ensure that you can accommodate the restrictions, and that the employee follows the restrictions indicated by the physician.

Documentation of the incident is an important step in preventing future occurrences. Gathering facts, witness statements, and taking photos and sketches of the accident site provides a solid base to begin the review process. Once all documentation is gathered and the accident report has been written, management will assess the results, and place any necessary changes to processes into effect to prevent a reoccurrence of similar events. Any lessons learned and changes to processes will be communicated to employees.

Accident/Incident Investigation Form

Date/Time of Incident:		Jobsite:			
Injured Person:					
Name:		Title:			
Address:		Hire Date:			
City, State:		Length of Time in Current Position:			
Phone:		Supervisor:			
Employee Classification: <input type="checkbox"/> Full Time <input type="checkbox"/> Part Time <input type="checkbox"/> Contract <input type="checkbox"/> Temporary					
Description of Injury:					
Nature of Injury/Injured Part of Body: <input type="checkbox"/> Bruising <input type="checkbox"/> Dislocation <input type="checkbox"/> Strain/Sprain <input type="checkbox"/> Scratch/Abrasion <input type="checkbox"/> Internal <input type="checkbox"/> Fracture <input type="checkbox"/> Foreign Body <input type="checkbox"/> Laceration/Cut <input type="checkbox"/> Burn/Scald <input type="checkbox"/> Chemical Reaction <input type="checkbox"/> Amputation <input type="checkbox"/> Death <input type="checkbox"/> Other (describe): _____					
Treatment Provided: <input type="checkbox"/> First Aid - If First Aid was provided, please indicate the treatment performed: <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <ul style="list-style-type: none"> <input type="radio"/> non-prescription medications at nonprescription strength <input type="radio"/> tetanus immunizations <input type="radio"/> cleaning, flushing, or soaking wounds on the skin surface <input type="radio"/> wound coverings <input type="radio"/> hot or cold therapy <input type="radio"/> using totally non-rigid means of support, such as elastic bandages, wraps, non-rigid back belts, etc. <input type="radio"/> using finger guards; <input type="radio"/> using massages; </td> <td style="width: 50%; vertical-align: top;"> <ul style="list-style-type: none"> <input type="radio"/> using eye patches; <input type="radio"/> drinking fluids to relieve heat stress drilling a fingernail or toenail to relieve pressure, or draining fluids from blisters; <input type="radio"/> temporary immobilization devices while transporting an accident victim (splints, slings, neck collars, or back boards). <input type="radio"/> simple irrigation or a cotton swab to remove foreign bodies not embedded in or adhered to the eye; <input type="radio"/> irrigation, tweezers, cotton swab or other simple means to remove splinters or foreign material from areas other than the eye; </td> </tr> </table>				<ul style="list-style-type: none"> <input type="radio"/> non-prescription medications at nonprescription strength <input type="radio"/> tetanus immunizations <input type="radio"/> cleaning, flushing, or soaking wounds on the skin surface <input type="radio"/> wound coverings <input type="radio"/> hot or cold therapy <input type="radio"/> using totally non-rigid means of support, such as elastic bandages, wraps, non-rigid back belts, etc. <input type="radio"/> using finger guards; <input type="radio"/> using massages; 	<ul style="list-style-type: none"> <input type="radio"/> using eye patches; <input type="radio"/> drinking fluids to relieve heat stress drilling a fingernail or toenail to relieve pressure, or draining fluids from blisters; <input type="radio"/> temporary immobilization devices while transporting an accident victim (splints, slings, neck collars, or back boards). <input type="radio"/> simple irrigation or a cotton swab to remove foreign bodies not embedded in or adhered to the eye; <input type="radio"/> irrigation, tweezers, cotton swab or other simple means to remove splinters or foreign material from areas other than the eye;
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<input type="checkbox"/> Other treatment, please describe: <div style="border: 1px solid black; height: 40px; margin-top: 5px;"></div>					
<input type="checkbox"/> Emergency Room <input type="checkbox"/> Physician's Office <input type="checkbox"/> Hospitalization	Treating Physician/Facility:				
	Address:				

Description of Incident:

What was the employee doing just before the incident occurred? Describe the activity, as well as the tools, equipment or material the employee was using. Be specific. Examples: "climbing a ladder while carrying roofing materials"; "spraying chlorine from hand sprayer"; "daily computer key-entry."

What happened? Tell how the injury occurred. Examples: "When ladder slipped on wet floor, worker fell 20 feet"; "Worker was sprayed with chlorine when gasket broke during replacement"; "Worker developed soreness in wrist over time."

What object or substance directly harmed the employee? Examples: "concrete floor"; "chlorine"; "radial arm saw." If this question does not apply to the incident, leave it blank.

Other Relevant Information (attach photos, sketch of incident scene, etc.):

Root Cause Analysis (Check All That Apply)

<p>Conditions:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Unsafe Conditions <input type="checkbox"/> Poor work area design or layout <input type="checkbox"/> Congested work area <input type="checkbox"/> Hazardous substances <input type="checkbox"/> Fire or explosion hazard <input type="checkbox"/> Inadequate ventilation <input type="checkbox"/> Slippery conditions <input type="checkbox"/> Excessive noise <input type="checkbox"/> Improper material storage <input type="checkbox"/> Improper loading or placement 	<p>Work Practices:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Improper work technique <input type="checkbox"/> Improper PPE or PPE not used <input type="checkbox"/> Hazards not identified <input type="checkbox"/> Guards not used <input type="checkbox"/> Improper lifting <input type="checkbox"/> Poor housekeeping <input type="checkbox"/> Servicing machinery in motion <input type="checkbox"/> Inadequate workplace inspection <input type="checkbox"/> Improper tool or equipment <input type="checkbox"/> Improper maintenance <input type="checkbox"/> Defective tools/equipment 	<p>Disciplinary Infraction:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Lack of written procedures or policies <input type="checkbox"/> Operating without authority <input type="checkbox"/> Safety rules not enforced <input type="checkbox"/> Safety rule violation <input type="checkbox"/> Operating at improper speeds <input type="checkbox"/> Horseplay <input type="checkbox"/> Drug or alcohol use <input type="checkbox"/> Unsafe act of others <input type="checkbox"/> By-passing safety devices <input type="checkbox"/> Unsafe Acts
<p>Planning & Training:</p> <ul style="list-style-type: none"> <input type="checkbox"/> PPE unavailable <input type="checkbox"/> Failure to warn or secure <input type="checkbox"/> Inadequate job planning <input type="checkbox"/> Inadequate guarding of hazards <input type="checkbox"/> Inadequate equipment <input type="checkbox"/> Unsafe design or construction <input type="checkbox"/> Insufficient lighting <input type="checkbox"/> Inadequate fall protection 	<ul style="list-style-type: none"> <input type="checkbox"/> Poor process design <input type="checkbox"/> Insufficient worker training <input type="checkbox"/> Insufficient foreman training <input type="checkbox"/> Insufficient knowledge of job Management Deficiencies <input type="checkbox"/> Inadequate supervision <input type="checkbox"/> Inadequate hiring practices Unrealistic scheduling <input type="checkbox"/> Unnecessary haste 	<p>Other:</p> <ul style="list-style-type: none"> <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____

Corrective Actions

Contributing Factor	Corrective Action	Responsible Party	Completion Date

Lessons Learned

--	--

Initial Report Completed by:

Printed Name:	Date:
Signature:	Job Title:

Management Review:

Printed Name:	Date:
Signature:	Job Title:

Final Review:

I certify that all Corrective Actions have been completed.	
Printed Name:	Date:
Signature:	Job Title:

2.2 NEAR-MISS REPORTING

A near-miss is similar to an accident; however, a near miss does not result in an injury or property damage. No matter how trivial they are, near misses should be reported to the supervisor in the same manner as accidents are reported. Reporting near misses in a timely manner can help to determine how to prevent a recurrence that could result in a serious injury.

Nothing is learned from unreported near misses. Hazards, causes and contributing factors are lost if not reported. Employees who do not take the time to report near misses they experience may not learn from them and neither will others who were not involved. The fact that many near misses come within inches of being disabling injury accidents makes failing to report them all the more serious.

Reasons that employees typically do not report near misses:

- Fear of supervisor's disapproval
- Production time
- Desire to not have the near miss documented on the employee's records
- Embarrassment from coworkers' ridicule or sarcasm
- Failure to understand the importance of near miss reporting
- Inability to recognize the damage that could have resulted

Important questions to ask when investigating a near miss include:

- What are the circumstances surrounding the near miss?
- Is there a safety rule covering the situation?
- If so, did the person involved know the rule?
- Were any safety devices or PPE/clothing not used or used incorrectly?
- Have there been other near misses of the same type?
- Was the employee aware of the hazard?
- Did the employee know the safe and proper procedure?

Taking the opportunity to report near misses can mean a much safer and healthier work environment for you and your coworkers and can also mean going home as you came in, in one piece! Employees are required as part of their job duties to report all near misses to their supervisor.

Near-Miss Investigation Form

Date/Time:		Jobsite:	
Injured Person:			
Name:		Title:	
Address:		Hire Date:	
		Length of Time in Current Position:	
Phone:		Supervisor:	
Employee Classification:	<input type="checkbox"/> Full Time <input type="checkbox"/> Part Time <input type="checkbox"/> Contract <input type="checkbox"/> Temporary		

Description of Incident:

What Happened?

Damaged Property:

Root Cause Analysis (Check All That Apply)

<p>Conditions:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Unsafe Conditions <input type="checkbox"/> Poor work area design or layout <input type="checkbox"/> Congested work area <input type="checkbox"/> Hazardous substances <input type="checkbox"/> Fire or explosion hazard <input type="checkbox"/> Inadequate ventilation <input type="checkbox"/> Slippery conditions <input type="checkbox"/> Excessive noise <input type="checkbox"/> Improper material storage <input type="checkbox"/> Improper loading or placement 	<p>Work Practices:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Improper work technique <input type="checkbox"/> Improper PPE or PPE not used <input type="checkbox"/> Hazards not identified <input type="checkbox"/> Guards not used <input type="checkbox"/> Improper lifting <input type="checkbox"/> Poor housekeeping <input type="checkbox"/> Servicing machinery in motion <input type="checkbox"/> Inadequate workplace inspection <input type="checkbox"/> Improper tool or equipment <input type="checkbox"/> Improper maintenance <input type="checkbox"/> Defective tools/equipment 	<p>Disciplinary Infraction:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Lack of written procedures or policies <input type="checkbox"/> Operating without authority <input type="checkbox"/> Safety rules not enforced <input type="checkbox"/> Safety rule violation <input type="checkbox"/> Operating at improper speeds <input type="checkbox"/> Horseplay <input type="checkbox"/> Drug or alcohol use <input type="checkbox"/> Unsafe act of others <input type="checkbox"/> By-passing safety devices <input type="checkbox"/> Unsafe Acts
<p>Planning & Training:</p> <ul style="list-style-type: none"> <input type="checkbox"/> PPE unavailable <input type="checkbox"/> Failure to warn or secure <input type="checkbox"/> Inadequate job planning <input type="checkbox"/> Inadequate guarding of hazards <input type="checkbox"/> Inadequate equipment <input type="checkbox"/> Unsafe design or construction <input type="checkbox"/> Insufficient lighting <input type="checkbox"/> Inadequate fall protection 	<ul style="list-style-type: none"> <input type="checkbox"/> Poor process design <input type="checkbox"/> Insufficient worker training <input type="checkbox"/> Insufficient foreman training <input type="checkbox"/> Insufficient knowledge of job <input type="checkbox"/> Management Deficiencies <input type="checkbox"/> Inadequate supervision <input type="checkbox"/> Inadequate hiring practices <input type="checkbox"/> Unrealistic scheduling <input type="checkbox"/> Unnecessary haste 	<p>Other:</p> <ul style="list-style-type: none"> <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____

Corrective Actions

Contributing Factor	Corrective Action	Responsible Party	Completion Date

Lessons Learned

--	--

Initial Report Completed by:

Printed Name:	Date:
Signature:	Job Title:

Management Review:

Printed Name:	Date:
Signature:	Job Title:

Final Review:

I certify that all Corrective Actions have been completed.

Printed Name:	Date:
Signature:	Job Title:

2.3 EMPLOYEE ACCESS TO MEDICAL RECORDS

The purpose of this program is to provide employees with information of their right to access relevant exposure records to toxic substances or harmful physical agents in their workplace. Under OSHA's standard, Access to Employee Exposure and Medical Records (1910.1020) all employees have the right to obtain these records to prevent or identify potential occupational illnesses. Employees have the right to obtain exposure records as follows:

- A current or former employee who is or may have been exposed to toxic substances or harmful physical agents.
- An employee who was assigned or transferred to work involving toxic substances or harmful physical agents.
- The legal representative of a deceased or legally incapacitated employee who was or may have been exposed to toxic substances or harmful physical agents.
- Designated employee representatives may access employee medical or exposure records and analyses created from those records only in very specific circumstances. Designated employee representatives include any individual or organization to whom an employee has given written authorization to exercise a right of access

TYPES OF EXPOSURES

- Metals and dusts, such as lead, cadmium, and silica.
- Biological agents, such as bacteria, viruses, and fungi.
- Physical stress, such as noise, heat, cold, vibration, repetitive motion, and ionizing and non-ionizing radiation.

DEFINITIONS

Access - The right and opportunity to examine and copy

Designated Representative - Any individual or organization to whom an employee gives written authorization to exercise a right of access. For the purposes of access to employee exposure records and analyses using exposure or medical records, a recognized or certified collective bargaining agent shall be treated automatically as a designated representative without regard to written employee authorization.

Employee Exposure Record - May contain any of the following:

- Monitoring results of workplace air or measurements of toxic substances or harmful physical agents in the workplace, including personal, area, grab, wipe, or other forms of sampling results.
- Biological monitoring results, such as blood and urine test results.
- Safety data sheets (SDSs) containing information about a substance's hazards to human health.

Medical Records - Records that concern the health status of an employee, and are made or maintained by a physician, nurse, or other health care personnel, or technician.

Employee Medical Record:

- Medical and employment questionnaires or histories.
- Results of medical examinations and laboratory tests.
- Medical opinions, diagnoses, progress notes, and recommendations.
- Descriptions of treatments and prescriptions.
- Employee medical complaints.

EMPLOYER RESPONSIBILITIES

- Preserve and maintain accurate medical and exposure records for each employee.
- Inform workers of the existence, location, and availability of those medical and exposure records.
- Provide information regarding the standard to all employees and where records are available
- Provide records to employees or designated representatives in a reasonable time, place and manner.
- Inform employees of the provision of recordkeeping upon initial assignment and annually thereafter.
- Provide records to employees at no cost.
- Remove personal identifiers (name, address, social security number, payroll number, etc.) from records before access is granted.
- Maintain employee records for the duration of employment, plus 30 years
- Exemptions from keeping records:
 - Physical specimens, such as blood and urine samples
 - Records concerning health insurance claims if they are (1) maintained separately from your medical program and its records, and (2) not accessible by employee name or other personal identifier (e.g., social security number or home address).
 - Records created only for use in litigation that are privileged from discovery.
 - Records created as part of voluntary employee assistance programs, such as records for alcohol and drug abuse or personal counseling, if they are maintained separately from your medical program and its records.
 - Trade secret information involving manufacturing processes or a percentage of a chemical substance in a mixture, as long as you inform health professionals and employees and their designated representatives that you have deleted that information from medical and exposure records. If the exclusion of the trade secret information substantially impairs the evaluation of when and where the exposure occurred, however, you must provide alternative information to the employee consistent with the requirements of 29 CFR Part 1910.1020.
- If the company ceases to do business, then all records all records subject to this section shall be transferred to the successor employer. If there is no successor employer to receive and maintain the records, or intends to dispose of any records required to be preserved for at least thirty (30) years, the company shall notify affected current employees of their rights of access to records at least three (3) months prior to the cessation of the employer's business.

2.4 OSHA REPORTING & RECORDKEEPING

OSHA EMERGENCY REPORTING

All incidents must be reported to an appointed company official immediately.

Company Official: _____

Office: _____ Cell: _____

Depending on the nature and severity of the incident, the company official will ensure that the necessary actions are taken (outlined below).

Type of Incident	Reporting/Recordkeeping	Time Frame
Fatality (On-the-Job Death)	Report to OSHA @ 1-800-321-OSHA (6742)	Within 8 hours of the incident.
Work-Related Inpatient Hospitalization Amputations Loss Of An Eye	Report to OSHA @ 1-800-321-OSHA (6742)	Within 24 hours of the incident.
All Incidents	Conduct an accident investigation.	Immediately.
OSHA-Recordable Injuries/Illnesses (As Outlined Below)	Complete OSHA 301 (or equivalent). Enter a log entry on OSHA Form 300.	Within 7 days of the injury or illness.

OSHA RECORDKEEPING

OSHA recordkeeping is required for any employer with 11 or more employees at any time within the year. If an injury or accident should ever occur, it must be reported to the supervisor as soon as possible. An OSHA 300 log entry and summary report (OSHA 301 form or equivalent) must be maintained for every recordable injury and illness. The entry should be completed within 7 days after the injury or illness has occurred.

An OSHA recordable injury or illness is defined as an injury resulting in loss of consciousness, days away from work, days of restricted work, or medical treatment beyond first aid. First Aid includes:

- + Tetanus shots
- + Applying Band-aids or butterfly bandages
- + Cleaning, flushing or soaking wounds
- + Applying Ace bandages and wraps
- + Taking non-prescription drugs at non-prescription strength (aspirin, Tylenol, etc.)
- + Drilling fingernails/toenails
- + Eye patches, eye flushing and foreign body removal from eye with Q-tips
- + Finger guards
- + Hot or cold packs
- + Drinking fluids for heat stress
- + Removing of a splinter (other than from the eye)

An annual summary of recordable injuries and illnesses (OSHA 300A) must be posted at a conspicuous location in the workplace from February 1 to April 30 and contain the following information: calendar year, company name, establishment name, establishment address, certifying signature of the highest-ranking company official, title, and date. If no injury or illness occurred in the year, zeroes must be entered on the total line.

The OSHA logs should be evaluated by the employer to determine trends or patterns in injuries in order to appropriately address hazards and implement prevention strategies. OSHA recordkeeping forms must be maintained for a period of 5 years.

Note: The OSHA 300 and 301 logs must be kept confidential.

TAB 3:

PRE-TASK PLANNING

3.1 JOB HAZARD ANALYSIS

Hazards-analysis can get pretty sophisticated and go into much detail. Where the potential hazards are significant and the possibility for trouble is quite real, such detail may well be essential. However, for many processes and operations — both real and proposed — a solid look at the operation or plans by a variety of affected people may be sufficient. The easiest and possibly most effective method is using the step-by-step process of the Job Hazard Analysis (JHA), which is sometimes referred to as a Job Safety Analysis (JSA).

Job Hazard Analysis (JHA) is based on the following ideas:

- A specific job or work assignment can be separated into a series of relatively simple steps.
- Hazards associated with each step can be identified.
- Solutions can be developed to control each hazard.

Job Hazard Analysis is a relatively simple process that involves the following four basic steps:

- Select the job to be analyzed. In performing JHA, the term "job" is used to describe a single task or operation workers do as part of their occupation; it is a definite sequence of steps or separate activities that lead to the completion of a work goal.
- Separate the job into its basic steps.
- Identify the hazards associated with each step.
- Control each hazard.

Through this process, responsible officials can determine the safest, most efficient manner of performing a given job. JHA systematically carries out the basic strategy of accident prevention: The recognition, evaluation, and control of hazards.

Once a JHA has been developed, it is prepared in chart form, listing the basic job steps and the corresponding hazards and safe procedures for each step. A completed JHA chart can then be used as a training guide for employees; it provides a logical introduction to the work, its associated hazards, and the proper and safe procedures to be followed.

For experienced workers, a JHA chart is reviewed periodically to maintain safety-awareness on the job and to keep abreast of current safety procedures. Review is also useful for employees who have been assigned new or infrequent tasks.

Risk Analysis Form

Project #: _____ Client Name: _____ Project Location: _____

Date of Analysis: _____ Contractor: _____ Sub-Contractor: _____

Date of Work: _____ Project Name: _____

Hazard Risk Rating

Process/Activity	Job/Task Hazard Sub Category	Hazardous Element <small>(List the hazards relating to the work)</small>	Hazard Risk Rating <small>(prior to control)</small>	Controls <small>(List the controls to manage each of the hazards)</small>	Hazard Risk Rating <small>(After Controls)</small>	Comments and/or Assigned to

What are the consequences of this hazard occurring? Consider what the most probable consequence is (below) with respect to this work hazard.	What is the likelihood (below) of the hazard consequence in Step 1 occurring?	1. Take Step 1 rating and select the correct column. 2. Take Step 2 rating and select the correct line. 3. Use the risk score where the two ratings cross on the matrix below. H = High, S = Serious, M = Medium, L = Low																																																													
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Extreme</td> <td style="width: 15%;">Multiple fatalities or permanent injuries</td> <td style="width: 15%;">Almost Certain</td> <td style="width: 15%;">Is expected to occur in most circumstances</td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> </tr> <tr> <td>Critical</td> <td>Single fatality or permanent injury</td> <td>Likely</td> <td>Will probably occur at least once</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Major</td> <td>Medical treatment or lost time injury</td> <td>Possible</td> <td>Event might occur at some time</td> <td rowspan="4" style="writing-mode: vertical-rl; transform: rotate(180deg);">Likelihood</td> <td>Almost Certain</td> <td style="background-color: yellow;">M</td> <td style="background-color: orange;">S</td> <td style="background-color: red;">H</td> <td style="background-color: red;">H</td> <td style="background-color: red;">H</td> </tr> <tr> <td>Minor</td> <td>First aid treatment</td> <td>Unlikely/Rare</td> <td>Event not expected to occur or only in exceptional circumstances</td> <td>Likely</td> <td style="background-color: yellow;">M</td> <td style="background-color: orange;">M</td> <td style="background-color: red;">S</td> <td style="background-color: red;">H</td> <td style="background-color: red;">H</td> </tr> <tr> <td>Insignificant</td> <td>Incident or near miss –no treatment</td> <td></td> <td></td> <td>Possible</td> <td style="background-color: green;">L</td> <td style="background-color: yellow;">M</td> <td style="background-color: orange;">M</td> <td style="background-color: orange;">S</td> <td style="background-color: orange;">S</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Unlikely/ Rare</td> <td style="background-color: green;">L</td> <td style="background-color: green;">L</td> <td style="background-color: yellow;">M</td> <td style="background-color: orange;">M</td> <td style="background-color: orange;">S</td> </tr> </table>	Extreme	Multiple fatalities or permanent injuries	Almost Certain	Is expected to occur in most circumstances							Critical	Single fatality or permanent injury	Likely	Will probably occur at least once							Major	Medical treatment or lost time injury	Possible	Event might occur at some time	Likelihood	Almost Certain	M	S	H	H	H	Minor	First aid treatment	Unlikely/Rare	Event not expected to occur or only in exceptional circumstances	Likely	M	M	S	H	H	Insignificant	Incident or near miss –no treatment			Possible	L	M	M	S	S					Unlikely/ Rare	L	L	M	M	S		
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Minor	First aid treatment	Unlikely/Rare	Event not expected to occur or only in exceptional circumstances		Likely	M	M	S	H	H																																																					
Insignificant	Incident or near miss –no treatment				Possible	L	M	M	S	S																																																					
					Unlikely/ Rare	L	L	M	M	S																																																					

3.2 PERMIT TO WORK

A permit to work program is a systematic program which specifies the foreseeable hazards and risk control measures related to specific activities that will be carried out in a workplace. These work activities are not permitted to commence before the necessary control measures, procedures, training and documents have been completed. Activities include new construction, general construction, maintenance, repairs, business operations and activities that pose a hazardous health, safety or environmental risk. An effective permit to work program ensures that all activities in the workplace are accounted for, effectively coordinated and safely managed.

Types of activities that may require a work permit include, but are not limited to:

- Confined space entry
- Hot work
- Working with a crane
- Working on energized systems
- Performing lockout/tagout
- Working near water with a drowning potential
- Working in an environment with the potential for H₂S exposure
- Working with explosives or radioactive material
- Any high hazard or high-risk activity

Please refer to Dowdy Corporation's individual written safety & health programs for topic-specific permits (i.e., confined space, hot work, lockout/tagout). A general work permit is included on the following pages.

General Work Permit

Permit Number: _____

Work Request:

Location of Work: _____
Contact Name: _____
Contact Phone Number: _____
Summary of Work to be Done: _____

Safety Procedures to be Implemented Prior to Commencement of Work:

1. The following processes are to be suspended during the course of the work:

2. The following equipment is to be withdrawn from service during the course of the work:

3. All users have been made aware of this suspension/withdrawal. Yes No

4. Safety warning notices have been posted where required. Yes No

5. The following steps have been taken to eliminate, control or contain hazards in the area:

6. The following safety measures are recommended:

Approval:

I confirm that I have inspected the work area detailed above and declare that to the best of my knowledge and belief the work can be carried out safely and without serious risk of injury to health.

Signed Date Time

4.1 EXTREME WEATHER CONDITIONS – HEAT & COLD

HEAT RELATED WEATHER CONDITIONS

When the body is unable to cool itself by sweating, several heat-induced illnesses can occur, and can result in death. Supervisors shall be trained in preventing heat related illnesses and the emergency response procedures prior to supervising employees.

Work factors that can contribute to heat related illnesses should be taken into consideration before performing a task. High temperature and humidity, direct sun or heat, limited air movement, physical exertion, poor physical condition, certain medications, inadequate tolerance for hot workplaces, and insufficient water intake can all lead to heat stress. Supervisors must take personal factors into consideration before assigning a task where there is a possibility of a heat related illness occurring.

The Jobsite Foreman will take the role of the Designate Hydration Monitor in order to observe and ensure that employees are and remain properly hydrated.

TYPES OF HEAT ILLNESSES

Heat Stroke is the most serious heat related disorder and occurs when the body's temperature regulation fails and body temperature rises to critical levels. It is a medical emergency that may result in death. If a person shows signs of possible heat stroke, professional medical treatment should be obtained immediately.

The primary signs and symptoms of heat stroke are:

- Dry, hot skin with no sweating.
- Mental confusion or losing consciousness.
- Seizures or convulsions

Heat Exhaustion is a result of the combination of excessive heat and dehydration. Signs and symptoms of heat exhaustion include:

- Headaches, dizziness, lightheadedness or fainting.
- Weakness and moist skin.
- Mood changes such as irritability or confusion.
- Upset stomach or vomiting

Heat Cramps are usually caused by performing hard physical labor in a hot environment.

- Thirst cannot be relied on as a guide for the need for water, drink water every 15-20 minutes
- Studies have shown that drinking carbohydrate-electrolyte replacement liquids is effective in recovery

Heat Rashes are the most common problem in hot environments where the skin is persistently wetted by un-evaporated sweat.

PREVENTION

Water coolers are provided for drinking water only and shall be periodically cleaned and sanitized to eliminate any build-up, prevent growth of bacteria and keep the water safe to drink. Water coolers shall be periodically cleaned with a simple solution of soap and water. Use a sponge to wash it, getting into all of the crevices. After washing, rinse and dry the cooler.

Do not store sodas, drinking bottles, or anything else in the water cooler. Your hands carry germs and bacteria that will be transferred into the drinking water when retrieving bottles and cans from inside the water cooler.

Caution: Employees under doctor orders limiting their intake of fluids and employees on low-salt diets should consult with their doctor before drinking a sports beverage or taking salt tablets.

Tips for preventing heat illness include:

- Adjust work schedules to provide workers with a rest from the heat
- Postpone nonessential tasks
- Provide cool rest areas as well as shade and water for workers
- Wear proper protective clothing
- Ensure workers are drinking enough water to stay hydrated
- Allow workers time to acclimate to the hot environment
- Educate workers and supervisors to recognize heat illness and how to prevent it
- Know signs/symptoms of heat-related illnesses; monitor yourself and coworkers.
- Allow yourself to become acclimatized to hot weather
- Block out direct sun or other heat sources.
- Use cooling fans/air-conditioning and rest regularly
- Drink lots of water; $\frac{1}{2}$ your body weight in oz (i.e. – if you weight 150 lbs drink 75 oz of water.)
- Wear lightweight, light colored, loose-fitting clothes (do not remove your shirt).
- Avoid alcohol, caffeinated drinks, or heavy meals

FIRST AID FOR HEAT ILLNESS

- Call 911 (or local emergency number) at once.
- While waiting for help to arrive:
 - Move the worker to a cool, shaded area.
 - Loosen or remove heavy clothing.
 - Provide cool drinking water.
 - Fan and mist the person with water.

COLD RELATED WEATHER CONDITIONS

Working in any cold environment poses the risk of cold-related illness. In a cold environment, the body must work harder in to maintain its temperature. Whenever temperatures drop below normal and wind speed increases, heat can leave the body more rapidly.

In a cold environment, the body's energy is focused on keeping the internal core temperature warm. Over time, the body will begin to shift blood flow from the extremities (hands, feet, arms, and legs) and outer skin to the core (chest and abdomen). This shift allows the exposed skin and the extremities to cool rapidly and increases the risk of frostbite and hypothermia.

Cold stress occurs when the skin temperature is lowered, thus lowering the internal body temperature (core temperature). Cold exposure may lead to serious health problems and may cause tissue damage, and possibly death.

- Some of the risk factors that contribute to cold stress are:
- Wetness/dampness, dressing improperly, and exhaustion
- Predisposing health conditions such as hypertension, hypothyroidism, and diabetes
- Poor physical conditioning

TYPES OF COLD ILLNESSES

Working in a cold environment poses the risk of cold-related injuries and illnesses such as:

- Hypothermia
- Frostbite
- Trench Foot

Hypothermia is a condition in which the body uses up its stored energy and can no longer produce heat.

A core temperature of the body is less than 95 degrees Fahrenheit. It often occurs after prolonged exposure to cold temperature or if the person becomes chilled from rain, sweat, or submersion in cold water. The primary signs and symptoms of hypothermia are:

- Early symptoms include: shivering, fatigue, loss of coordination, confusion & disorientation.
- Late symptoms include: no shivering, blue skin, dilated pupils, and loss of consciousness

Frost Bite is an injury to the body caused by freezing of the skin and underlying tissues. The primary signs and symptoms of frostbite are:

- Reddened skin develops gray/white patches
- Numbness in the affected part
- Feels firm or hard
- Blisters may occur in the affect part.

What not to do for frostbite:

- Do not rub the affected area to warm it because this action can cause more damage.
- Do not apply snow/water.
- Do not break blisters.
- Do not try to rewarm the frostbitten area before getting medical help; for example, do not place in warm water. If a frostbitten area is rewarmed and gets frozen again, more tissue damage will occur. It is safer for the frostbitten area to be rewarmed by medical professionals.

Immersion/Trench Foot is caused by prolonged exposure to wet and cold temperatures, and may occur at temperatures as high as 60 degrees Fahrenheit if the feet are constantly wet. Injury occurs because wet feet lose heat 25-times faster than dry feet. The primary signs and symptoms of hypothermia:

- Redness of the skin, swelling, numbness, & blisters.

PREVENTION

Preventive measures are implemented to avoid cold induced injuries. An assessment will be conducted to identify the types of jobs or employees who are at risk for cold exposure. The results of the assessment will help us to identify which employees who are at the greatest risk of cold exposure. Measures that may be implemented to prevent cold-induced injuries include:

- Encourage drinking plenty of liquids to avoid dehydration.
- Scheduling heavy work during warmer parts of the day.
- Avoiding fatigue during the coldest parts of the day since energy is needed to keep muscles warm.
- Take frequent breaks outside of the cold.
- Consume warm, high calorie food such as pasta to maintain energy reserves.

Employees who are required to work in cold weather conditions will receive initial and annual training regarding the health effects of cold exposure. Training will address:

- the signs and symptoms of cold weather induced health problems such as hypothermia, frostbite and trench foot,
- proper first aid treatment on cold induced injuries or illnesses
- the dangers associated with working around unstable snow and ice build ups

Proper cold weather protection must be worn by employees when working in cold, wet and windy conditions.

- Choose fabric that retain their insulation when wet such as wool, silk, or synthetic materials.
- Layer loose-fitting clothing to provide better insulation. At least 3 layers is recommended.
 - Innermost layer: wool, silk or synthetic to keep moisture away from the body.
 - Middle layer: wool or synthetic to provide insulation even when wet.
 - Outer layer: wind and rain protection layer with some ventilation to prevent overheating
- Wear a hat or hood to reduce the amount of heat that escapes, thus keeping your entire body warmer.

- Consider using a knit mask that covers the face and mouth.
- Wear insulated gloves protect the hands.
- Wear insulated and waterproof boots.

EFFECTS ON THE WORKSITE

During cold weather conditions, preventive measures are implemented to avoid cold induced injuries. The following practices will be followed:

- Time is allotted throughout the day, every day, to walk through the jobsite and look for hazards created by snow and ice. Regularly used walkways and travel ways shall be sanded, salted, or cleared of snow and ice as soon as practicable
- Ensure to take time snow-clearing equipment, de-icing equipment, heating systems, winterized vehicles and cold-weather clothing
- Carefully remove icicles, especially if temperatures are beginning to warm. If this isn't possible, rope off the area under the icicles until they are no longer a hazard.
- Cold weather supplies will be regularly inspected and restocked when necessary
- Workers will be under in constant communication or observation by a co-worker or supervisor.

4.2 DRIVING SAFETY

According to the Bureau of Labor Statistics' National Census of Fatal Occupational Injuries in 2006, more than 2,400 deaths a year result from occupational motor vehicle incidents. That number is more than 42 percent of the annual number of fatalities from occupational injuries. While fatal highway incidents remained the most frequent type of fatal work-related event, accounting for nearly one out of four fatal work injuries, the number of highway incidents fell 8 percent in 2006. The following Driving Safety rules and procedures have been established.

SAFETY RULES:

- Only authorized employees may drive a motor vehicle in the course and scope of work or operate a company-owned vehicle.
- Drivers must have a valid and current license to operate the vehicle.
- Operating a vehicle while under the influence of alcohol, illegal drugs, or certain medications that may impair driving skills is prohibited.
- Seatbelts must be worn by all vehicle occupants at all times whenever a vehicle is in motion.
- Authorized drivers must follow safe driving practices including, but not limited to:
 - Practice defensive driving techniques
 - Do not use any electronic equipment that may cause distraction
 - Obey all posted traffic and speed limit signs
 - Maintain a safe distance between vehicles at all times
 - Report all traffic violations and accidents to supervisors
- All collisions and traffic violations that have occurred while driving on company duties must be reported.
- All vehicles used for company business must be fit for purpose and maintained in a safe working order.
- Loads must be secure and shall not exceed the manufacturer's specifications and legal limits for the vehicle.

DEFENSIVE DRIVING TECHNIQUES

Following the rules of the road can help you concentrate on what you should be doing...driving. Stay out of the other vehicle's blind spot and avoid tailgating. Instead, keep a safe distance from other drivers by maintaining a safety cushion of driving space between your vehicle and those around you. As an extra precaution, know the condition of the weather and road and drive only as fast as those conditions allow.

Be cautious by staying alert and expecting the unexpected. Watch out for and anticipate other drivers, pedestrians or children on or near the road. Safe drivers scan constantly for hazards, predicting how they may be affected by a hazard and pre-determining how to avoid or reduce them.

The ever-changing variable of the road and other vehicles can make drivers instantly vulnerable to accidents. If drivers don't practice these safe practices on the road, they might personally discover why vehicle deaths and serious injuries now total more than all the wartime wounded and fatalities since 1776.

Be aware of the following items while driving:

- Know and observe all traffic rules and regulations
- Constantly be alert for the illegal acts and driving errors of other drivers. Make timely adjustments in your own driving so that these illegal acts and errors will not involve you in an accident.
- Know your vehicle and be aware of special hazards presented by abnormal, unusual, or changing conditions.
- Be aware of the rules of right-of-way, and be willing to yield to the right of way of the other driver, when necessary.

The following outlines general principles of defensive driving:

- **See the hazard**—when driving, think about what is going to happen or what might happen as far ahead of encountering a situation as possible. You should never assume everything will be "all right."
- **Understand the defense**—specific situations require specific ways of handling. Become familiar with the unusual conditions which you may face and learn them well so that you can apply them when the need arises.
- **Act in time**—once you've noted a hazard and understand the defense against it, act! Never take a "wait and see" attitude.

PARKING SAFETY - FIRST MOVE FORWARD

A large amount of driving accidents occurs while vehicles are in reverse. Driving in a parking lot presents a lot of distractions, including crowded, tight areas, with plenty of vehicles moving in various directions. The National Highway Traffic Safety Administration (NHTSA) estimates that "267 people are killed and 15,000 injured each year by drivers not parking forward first, usually in driveways or parking lots. The First Move Forward parking technique takes only a bit of planning and reduces the number of vehicles reversing into a flow of traffic, improves visibility, and improve safety of everyone in the parking area.

- When selecting a parking spot, choose one with open-ended stalls and pull through, so your vehicle is facing out and does not need to reverse to exit the space.
- If such a spot is not available, back into the spot, so your vehicle is facing out.

While forward parking is usually the safest option, there are certain situations where this may not be possible, or allowed:

- When you have to load or unload large or numerous items from the back of your vehicle
- When signage states that you cannot park forward-facing
- In Diagonal Parking spaces

When parking, use the following strategies:

- Be alert. Scan the area all around your vehicle using mirrors or rear-view cameras.
- Watch for pedestrians.
- Obey posted speed limits. Drive slowly.
- Wear your seat belt.
- Keep distance between your vehicle and others

Taking these three steps and keeping good driving techniques in mind, you'll learn to "give in" a little; to tailor your driving behavior to the unexpected actions of other drivers and pedestrians; the unpredictable and ever-changing factors of light, weather, road, and traffic conditions; and the mechanical condition of your vehicle.

4.3 ELECTRONIC DEVICE USE WHILE DRIVING POLICY

It has become an increasing concern in the workplace to inform and educate employees on the dangers of distracted working and driving. All employees must review the company policies and safe work practices listed below and sign/date at the bottom. If employees have any questions or concerns regarding this policy, they can contact their supervisor.

Deadly crashes resulting from distracted driving has become a growing danger on the roads. Numerous studies have demonstrated how the use of hand-held cell phones, music devices, tablets, etc. while driving, pose a significant safety risk to motorists, their passengers, and others on the road.

KEY ASPECTS OF THIS POLICY INCLUDE:

- Ban of answering or making phone calls, engaging in phone conversations, reading or responding to e-mails and text messages.
- All cell phones, music devices, tablets, radios, pagers, etc. are strictly prohibited from being used while operating a company vehicle.
- The use of a company-issued cell phone is also prohibited from being used while operating a company or personal vehicle.
- The use of any electronic device is prohibited while refueling vehicles and unloading/loading operations.
- Hands-free devices are not an alternative.

SAFE WORK PRACTICES TO FOLLOW:

- Before starting the vehicle, turn cell phones on vibrate, silent or off.
- Pull over to a safe place if a call must be made or received while on the road.
- Consider modifying the voicemail greeting to indicate that you are unavailable to answer calls or return text messages while driving.
- Inform clients, associates, and business partners of this policy as an explanation of why calls may not be returned immediately.

Violations of this policy will lead to disciplinary actions that could result in an employee being terminated.

Signature of Employee

Date

4.4 TOOLS AND EQUIPMENT

Hand and power tools are a common part of our everyday lives and are present in nearly every industry. These tools help us to easily perform tasks that otherwise would be difficult or impossible. However, these simple tools can be hazardous and have the potential for causing severe injuries when used or maintained improperly. Special attention toward hand and power tool safety is necessary in order to reduce or eliminate these hazards.

Hand and power tools are addressed in specific standards for the construction industry. General OSHA requirements state that all hand and power tools and similar equipment, whether furnished by the employer or the employee, be maintained in a safe condition. They establish standards for guarding, personal protective equipment, and switches. Specific standards apply to hand tools; power-operated hand tools; abrasive wheels and tools; woodworking tools; jacks; air receivers; and mechanical power-transmission apparatuses. The items below summarize safe practices for use of hand and power tools.

- Maintain all hand tools and equipment in a safe condition and check them regularly for defects. Identify broken or damaged tools and equipment by tagging or locking the controls until they can be repaired or disposed of.
- Follow the manufacturer's requirements for safe use of all tools.
- Use double insulated tools, or ensure that the tools are grounded.
- Equip all power saws (circular, skill, table, etc.) with blade guards.
- Make sure guards are in place before using power saws. Don't use power saws with the guard tied or wedged open.
- Turn off saws before leaving them unattended.
- Raise or lower tools by their handles, not by their cords.
- Don't use wrenches when the jaws are sprung to the point of slippage. Replace them.
- Don't use impact tools with mushroomed heads. Replace them.
- Keep wooden handles free of splinters or cracks and be sure the handles stay tight in the tool.
- Workers using powder-activated tools must receive proper training prior to using the tools.
- Always be sure that hose connections are secure when using pneumatic tools.
- Never leave cartridges for pneumatic or powder-actuated tools unattended. Keep equipment in a safe place, according to the manufacturer's instructions.
- Employees using hand and power tools and exposed to the hazard of falling, flying, abrasive, and splashing objects, or exposed to harmful dust, fumes, mists vapors, or gases will be provided with particular PPE necessary to protect them from the hazard.

HAND TOOLS

Hand tools are non-powered. They include anything from axes to wrenches. The greatest hazards posed by hand tools result from misuse and improper maintenance.

Some examples of misused hand tools:

- Using a screwdriver as a chisel may cause the tip of the screwdriver to break and fly, hitting the user or other employees.
- If a wooden handle on a tool such as a hammer or an axe is loose, splintered, or cracked, the head of the tool may fly off and strike the user or another worker.
- A wrench must not be used if its jaws are sprung, because it might slip.
- Impact tools such as chisels, wedges, or drift pins are unsafe if they have mushroomed heads. The heads might shatter on impact, sending sharp fragments flying.

Saw blades, knives, or other tools are to be directed away from walkways, aisles, and other employees working in close proximity. Knives and scissors must be kept sharp to reduce the need to use excessive force and the potential for slippage.

Around flammable substances, sparks produced by iron and steel hand tools can be a dangerous ignition source. Where this hazard exists, spark-resistant tools made from brass, plastic, aluminum, or wood will be provided for safety.

PNEUMATIC POWER TOOLS

Pneumatic tools are powered by compressed air; they include chippers, drills, hammers, and sanders. There are several dangers encountered in the use of pneumatic tools. The main hazard is the danger of getting hit by one of the tool's attachments, or some kind of fastener the worker is using with the tool. Noise is another hazard associated with pneumatic tools.

Pneumatic tools that shoot nails, rivets, or staples, and operate at more than 100 pounds per square inch (psi), must be equipped with a special device to keep fasteners from being ejected unless the muzzle is pressed against the work surface. Eye protection is required and face protection is recommended for employees working with pneumatic tools. Noise is another hazard. Working with noisy tools such as jackhammers requires proper, effective use of ear protection.

When using pneumatic tools, employees must check to see that they are fastened securely to the hose by a positive means to prevent them from becoming disconnected. A short wire or positive locking device attaching the air hose to the tool will serve as an added safeguard.

Airless spray guns which atomize paints and fluids at high pressures (1,000 psi or more) must be equipped with automatic or visual manual safety devices which will prevent pulling the trigger until the safety device is manually released.

If an air hose is more than one-half inch in diameter, a safety excess flow valve must be installed at the source of the air supply to shut off the air automatically in case the hose breaks. In general, the same precautions should be taken with an air hose that are recommended for electric cords, since the hose is

subject to the same kind of damage or accidental striking and presents tripping hazards. The manufacturer's safe operating pressure for hoses, pipes, valves, filters, and other fittings shall not be exceeded. In addition, the use of hoses for hoisting or lowering is not permitted.

A safety clip or retainer must be installed to prevent attachments, such as chisels on a chipping hammer, from being unintentionally shot from the barrel. Screens must be set up to protect nearby workers from being struck by flying fragments around chippers, riveting guns, staplers, or air drills.

Compressed air guns should never be pointed toward anyone. The user should never "dead-end" it against him or herself or anyone else. Compressed air shall not be used to blow dirt, debris, or similar material off of your clothing, unless reduced to less than 30 psi. If using less than 30 psi for cleaning purposes, effective chip guarding and personal protective equipment meeting the requirements of 29 CFR 1926, Subpart E must be used.

Heavy jackhammers can cause fatigue and strains; heavy rubber grips reduce these effects by providing a secure handhold. Workers operating a jackhammer must wear safety glasses and safety shoes, which protect against injury if the hammer slips or falls. A face shield should also be used.

ELECTRIC TOOLS

Employees using electric tools must be aware of several dangers; the most serious is the possibility of electrocution. Among the chief hazards of electric-powered tools are burns and slight shocks which can lead to injuries or even heart failure. Under certain conditions, even a small amount of current can result in fibrillation of the heart and eventual death. A shock may cause the user to fall off a ladder or other elevated work surface.

To protect the user from shock, tools must either have a three-wire cord and be grounded, be double insulated, or be powered by a low-voltage isolation transformer. Three-wire cords contain two current-carrying conductors and a grounding conductor. One end of the grounding conductor connects to the tool's metal housing. The other end is grounded through a prong on the plug. Anytime an adapter is used to accommodate a two-hole receptacle, the adapter wire must be attached to a known ground. The third prong should never be removed from the plug.

Double insulation is more convenient. The user and the tools are protected in two ways: by normal insulation on the wires inside, and by a housing that cannot conduct electricity to the operator in the event of a malfunction.

The following general practices should be followed when using electric tools:

- Electric tools should be operated within their design limitations.
- Gloves and safety footwear are recommended during use of electric tools.
- When not in use tools should be stored in a dry place.
- Electric tools should not be used in damp or wet locations.
- Work areas should have adequate lighting.

POWDER-ACTUATED TOOLS

Powder-actuated tools used for fastening operate and can injure and kill much like a loaded gun and should be treated with the same respect and precautions. In fact, they are so dangerous, that they must be operated only by specially trained employees. For these reasons, OSHA regulates powder-actuated tools under 29 CFR 1926.302(e).

The following requirements are to be followed when using powder-actuated tools:

- The tool must be tested each day before loading according to the manufacturer's recommended procedure.
- If a defect develops during use, the tool must be removed from service until properly repaired.
- Employees using powder-actuated tools must wear proper personal protective equipment.
- Tools must not be loaded until just prior to the intended firing time. People and hands must be kept clear of the open barrel end.
- Loaded tools must not be left unattended.
- Fasteners must not be driven into very hard or brittle materials.
- Driving into easily penetrable materials must be avoided unless these materials are backed by an impenetrable substance.
- No fastener shall be driven into a spalled area caused by an unsatisfactory fastening.
- Powder-actuated tools shall not be used in an explosive or flammable atmosphere.
- Powder-actuated tools must be used with correct shield, guard, or attachment recommended by the manufacturer.
- Powder-actuated tools must meet ANSI A10.3-1970, Safety Requirements for Explosive-Actuated Fastening Tools.

TRAINING

- Only employees who have been trained in the operation of a particular tool in use may be allowed to operate a powder-actuated tool.
- Employees must be trained to recognize and avoid unsafe conditions and the regulations applicable to their work environment to control or eliminate the hazards.
- Protection limitations and precautions must be provided to users of eye protection equipment necessary for powder-actuated tool use.

ABRASIVE WHEELS

Abrasive wheels are power tools used to grind, cut, polish, and buff materials and surfaces. There are different types of wheels, depending upon their uses. Refer to 29 CFR 1910.215.215 for exact language and specific details about abrasive wheels.

The tasks abrasive wheels are used for involve the hazards of flying particles. As the wheels spin, material is applied against them to achieve the desired results, whether it is to grind, cut, polish, or buff. There is also a risk that, while the wheel is spinning at high speeds, it could fly apart.

Before an abrasive wheel is mounted, it should be inspected closely and ring tested to be sure that it is free from cracks or defects. To test, wheels should be tapped gently with a light non-metallic implement. If they sound cracked or dead, they could fly apart in operation and so must not be used. A sound and undamaged wheel will give a clear metallic tone or "ring."

To prevent the wheel from cracking, the user should be sure it fits freely on the spindle. The spindle nut must be tightened enough to hold the wheel in place, but not tight enough to distort the flange. Follow the manufacturer's recommendations. Care must be taken to assure that the spindle wheel will not exceed the abrasive wheel specifications.

Due to the possibility of a wheel disintegrating (exploding) during start-up, the employee should never stand directly in front of the wheel as it accelerates to full operating speed.

In addition, when using a powered grinder:

- Always use eye protection.
- Turn off the power when not in use.
- Never clamp a hand-held grinder in a vise.

To help prevent injuries, closely inspect the wheels to ensure they have not been damaged. Do not mount a wheel if there are signs of damage or defects. The spindle speed of the machine must be checked before mounting the wheel to be certain that it does not exceed the maximum operating speed marked on the wheel. Use only wheels marked with the type of wheel and maximum speed in revolutions per minute. Always select the right wheel for the job. A wheel is dangerous when used for work for which it was not designed.

Abrasive wheels need to be handled and stored carefully; avoid dropping or bumping them. Transport wheels in containers designed to provide support for the wheels if they are too heavy to carry by hand. When storing abrasive wheels, do not allow other items, such as tools, to be piled on top. Place them in racks or bins with dividers for different types of wheels. This will help with quick and safe identification. Place straight or tapered wheels on end in a cradle or chocked position to prevent them from rolling.

Never store wheels near excessive heat or cold, in contact with oil or moisture, or in drawers with loose tools. This may cause them to bump together and may cause the wheels to crack. Follow the manufacturer's instructions for length of time a wheel should be stored and how to store thin wheels.

Maintain grinding machines in good working condition. Make sure that only qualified employees provide maintenance on grinding machines.

Abrasive wheels greater than 2 inches can only be used on machines with safety guards. Because of the hazards involved, safety guards must be installed and located so as to be between the operator and the wheel during use. Adjustment of the guard must be done so pieces of an accidentally broken wheel will be deflected away from the operator. The top half of the wheel should be enclosed at all times.

GUARDING

Hazardous moving parts of a power tool need to be safeguarded. For example, belts, gears, shafts, pulleys, sprockets, spindles, drums, fly wheels, chains, or other reciprocating, rotating, or moving parts of equipment must be guarded if such parts are exposed to contact by employees.

Guards, as necessary, should be provided to protect the operator and others from the following:

- Point of operation
- In-running nip points
- Rotating parts, and
- Flying chips and sparks.

Safety guards must never be removed when a tool is being used. For example, portable circular saws must be equipped with guards. An upper guard must cover the entire blade of the saw. A retractable lower guard must cover the teeth of the saw, except when it makes contact with the work material. The lower guard must automatically return to the covering position when the tool is withdrawn from the work.

When power tools are designed to accommodate guards, they will be equipped with such guards at all times when in use. All power saws (circular, skill, table, etc.) will be equipped with blade guards. Ensure that guards are in place before using a piece of equipment that is equipped with guards. Do not use power saws with the guard tied or wedged open.

Portable grinding tools need to be equipped with safety guards to protect workers, not only from the moving wheel surface, but also from flying fragments in case of breakage.

Guarding shall meet the requirements set forth in ANSI B15.1. Guards may not be manipulated in such a way that will compromise its integrity or the protection intended.

4.5 GENERAL WASTE MANAGEMENT

Dowdy Corporation views responsible waste management as an essential aspect in all work and necessary for providing a safe and healthy work environment for employees. The purpose of this policy is to provide guidance and requirements for safe and effective management of waste.

Waste management includes the collection, transportation, processing, recycling, disposal and monitoring of waste materials. Before starting work on a job, all project wastes, trash, and/or scrap must be taken into consideration. The waste that will be generated must be estimated and the need for containers and waste removal, if necessary, can be determined.

Waste materials must be properly stored and handled to minimize the potential for an accident or injury due to excessive clutter, the potential for a spill, or impact to the environment. During outdoor activities, receptacles must be covered to prevent dispersion of waste materials and to control potential runoff.

Before a job, employees must be instructed on the proper disposal method for wastes, including general instruction on disposal of non-hazardous wastes, trash or scrap metals. If wastes generated are classified as hazardous, employees must be trained to ensure proper disposal and the risks associated with this waste. Training will occur prior to any work dealing with hazardous waste.

To minimize environmental impact, recycling is encouraged. All recyclable wastes should be segregated to ensure opportunities for reuse or recycling. Recycling bins will be provided and properly labeled to ensure the proper disposal of waste materials.

For the safety of the employees, the necessary personal protective will be provided and required to be used. This PPE can include gloves, safety glasses or goggles and face protection as needed per jobsite.

4.6 GOOD HOUSEKEEPING POLICY

There are good safety reasons for OSHA's concern about housekeeping. A messy workplace is not only annoying and inefficient; it creates a number of potential safety hazards:

- Tripping and falling over equipment that doesn't belong on the floor, such as machines, tools, cords, hoses, scrap, and boxes.
- Getting hit by or bumping into objects: For instance, tools left perched on the edge of a roof, shelf or table, or a drawer that's left open.
- Punctures and splinters from sharp tools left lying around, or from rough pieces of wood or other sharp objects.
- Serious electrical hazards such as cords left near heat or water.
- Fire hazards, including flammable liquids or scrap left near ignition sources; dust or lint on machinery; or materials blocking fire exits or equipment.
- Chemical exposure or spills when chemical containers are left open.
- Chemical reactions from open chemical container contents exposed to other chemicals, water, or air.
- Potential fatalities if obstacles inhibit an emergency evacuation
- Potential injuries from falling objects.

The best way to prevent these dangers is to follow this simple and old-fashioned rule: Assign a specific storage place for each item, and then insist that every item be kept in its assigned place whenever it is not in use.

Yes, that's easier said than done. But the first step is to say it—repeatedly—and then insist that it be done right then and there. If necessary, take the time to reorganize or rearrange the work area to provide an assigned place for all items. You may also want to obtain extra boxes, bins, etc., for storage.

Be sure workers understand that the maintenance department or cleaning staff can't be expected to handle internal housekeeping. Workers don't know where tools and supplies are supposed to be kept and, in many cases, are prohibited from handling various tools, machines, or chemical containers. In addition, the maintenance personnel are not standing around waiting to clean up a spill or throw away trash. It only takes a second to put, or throw, things away—NOW.

Remember that a neat workplace is more than "nice to have." With persistence, neatness will eventually become a habit. People are even likely to discover that they can do their jobs a lot faster and easier in a neat work area.

Good housekeeping in the workplace is more than an attempt to keep things looking presentable. It's also an important safety issue. OSHA requires general housekeeping for all jobsites during the course of construction, alteration, or repairs. Refer to 29 CFR 1926.25 of the OSHA standards for specific language and details.

4.7 MANUAL LIFTING

A hazard assessment shall be accomplished prior to any employee manually lifting an object. This assessment must consider the size, bulk, and weight of the object or objects. The assessment must consider if mechanical lifting equipment is required, if two-man lift is required, and whether vision will be obscured while carrying the object.

Training shall be provided on proper lifting techniques. The training shall include general principles of ergonomics, recognition of hazards and injuries, procedures for reporting hazardous conditions, and methods and procedures for early reporting of injuries. Additionally, job specific training should be given on safe lifting and work practices, hazards, and controls.

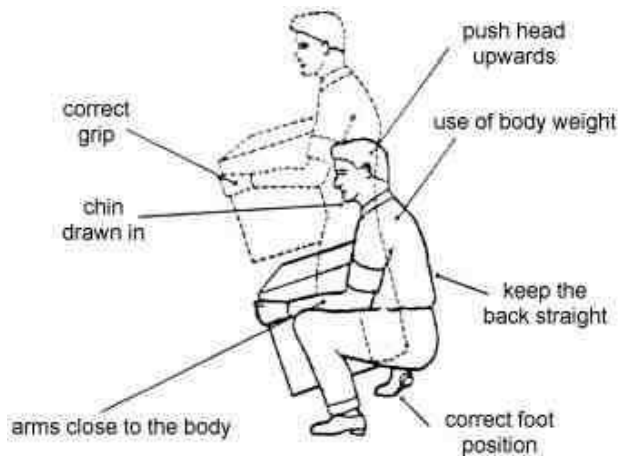
Musculoskeletal injuries caused by improper lifting must be investigated and documented. Incorporation of investigation findings into work procedures must be accomplished to prevent future injuries.

Where use of lifting equipment is impractical or not possible, two-man lifts must be used.

Supervision must periodically evaluate work areas and employees' work techniques to assess the potential for and prevention of injuries. New operations should be evaluated to engineer out hazards before work processes are implemented.

Manual lifting equipment such as dollies, hand trucks, lift-assist devices, jacks, carts, and hoists must be provided for employees. Other engineering controls such as conveyors, lift tables, and work station design should be considered.

Use of provided manual lifting equipment by employees must be enforced.



4.8 COMPRESSED GAS AWARENESS

Hazards associated with compressed gases include oxygen displacement, fires, explosions, and toxic gas exposures, as well as the physical hazards associated with high pressure systems. Special storage, use, and handling precautions are necessary in order to control these hazards

Compressed gas is defined as:

- A material or mixture in a container with an absolute pressure of 40 psi (pounds per square inch) at 70 degrees Fahrenheit.
- A material or mixture in a container with an absolute pressure exceeding 104 psi at 130 degrees Fahrenheit.
- A liquid material having a vapor pressure exceeding 40 psi absolute at 100 degrees Fahrenheit.

Absolute pressure is the pressure reading on the gauge plus local atmospheric pressure (14.7 psi at sea level).

COMPRESSED GAS HAZARDS

Gases may be hazardous because they are:

- Under high pressure: When a high-pressure cylinder accidentally ruptures or when a valve assembly breaks off, rocketing can occur. If the pressure of the contents increases enough, it can drive the cylinder, turning it into a missile that can blast its way right through a concrete wall.
- Flammable: Flammable gases catch fire easily and burn quickly. Hydrogen, acetylene, ethylene, propane, and natural gas are some examples. If you were to add flammability to a compression hazard, you would have some extremely dangerous materials.
- Asphyxiant (inert): Inert gases displace oxygen for breathing and can lead to suffocation of the exposed employee.
- Oxidizing: Oxidizing gases can explode violently when they react with organic and combustible materials. It is important that containers of oxidizing gases or oxygen and associated equipment be free of oils, greases, and other hydrocarbon-based materials. In addition, clothing which has been exposed to an oxygen-rich atmosphere is a fire hazard.
- Corrosive: Corrosive gases attack tissue and other materials. Employees should be aware that they will be required to wear special PPE and a self-contained breathing apparatus when handling these gases. Eyewashes and emergency showers must be available. Point out their location.
- Toxic or highly toxic: Poison (toxic) gases such as arsine, diborane, methyl bromide, nitric oxide, nitrogen dioxide, phosgene, and phosphine can only be handled by specially trained personnel. Workers must be fully aware of the potential hazards involved and must wear the appropriate PPE to handle them.
- Cryogenic (extremely cold): A cryogenic liquid has a boiling point colder than -150 degrees Fahrenheit at 14.7 psia. Besides causing frostbite or burning the skin on contact, such a liquid has an asphyxiation hazard associated with it, too. Cryogenic liquids require a higher level of PPE than other substances contained in pressurized tanks.

STORAGE, MAINTENANCE, & HANDLING

Employees must be trained on the proper use, handling and storage of compressed gas cylinders. The following is a list of recommendations for storage, maintenance, and handling of compressed gas cylinders:

- Make sure the contents of the compressed gas cylinder are clearly stenciled or stamped on the cylinder or on a durable label.
- Do not identify a gas cylinder by the manufacturer's color code.
- Never use cylinders with missing or unreadable labels.
- Visually inspect all cylinders for damage before use.
- Be familiar with the properties and hazards of the gas in the cylinder before using.
- Wear appropriate protective eyewear when handling or using compressed gases.
- Use the proper regulator for each gas cylinder.
- Do not tamper with or attempt to repair a gas cylinder regulator.
- Never lubricate, modify, or force cylinder valves.
- Open valves slowly using only wrenches or tools provided by the cylinder supplier directing the cylinder opening away from people.
- Check for leaks around the valve and handle using a soap solution, "snoop" liquid, or an electronic leak detector.
- Leaking cylinders should be moved to an isolated, well-ventilated area, away from ignition sources. Soapy water should be used to detect leaks. If the leak is at the junction of the cylinder valve and cylinder, do not try to repair it. Contact the supplier and ask for response instructions.
- Close valves and relieve pressure on cylinder regulators when cylinders are not in use. Label empty cylinders "EMPTY" or "MT" and date the tag; treat in the same manner that you would if it were full.
- Always attach valve safety caps when storing or moving cylinders.
- Transport cylinders in a vertical secured position with an approved cart with a safety chain; never move or roll gas cylinders by hand.
- Securely attach all gas cylinders (empty or full) to a wall or laboratory bench with a clamp or chain, or secure in a metal base in an upright position.
- Store cylinders by gas type, separating oxidizing gases from flammable gases by either 20 feet or a 30-minute firewall that is 5 feet high.
- Store gas cylinders in cool, dry, well-ventilated areas away from incompatible materials and ignition sources.
- Do not subject any part of a cylinder to a temperature higher than 125 °F or below 50 °F.
- Store empty cylinders separately from full cylinders.
- When a cylinder cap cannot be removed by hand, cylinder shall be tagged "Do Not Use" and returned to the designated storage area for return to vendor.
- Hoses and connections should be inspected regularly for damage. Hoses should be stored in cool areas and protected from damage.
- Cylinders must be equipped with the correct regulators. Regulators and cylinder valves should be inspected for grease, oil, dirt and solvents.

RESOURCES

With so many compressed gas hazards, OSHA developed general compressed gas regulations as well as gas-specific regulations to eliminate and prevent injury and illness associated with compressed gases, regardless of content or packaging (cylinder, portable tank, or standing tank). General compressed gas requirements are outlined in 29 CFR 1910.101, and are summarized below:

- Each compressed gas cylinder under the employer's control must be maintained in a safe condition as determined by a visual inspection
- The in-plant handling, storage, and utilization of all compressed gases in cylinders, portable tanks, rail tank cars, or motor vehicle cargo tanks shall be in accordance with Compressed Gas Association Pamphlet P-1-1965, which is incorporated by reference as specified in Sec. 1910.6.
- Compressed gas cylinders, portable tanks, and cargo tanks shall have pressure relief devices installed and maintained in accordance with Compressed Gas Association Pamphlets S-1.1-1963 and 1965 addenda and S-1.2-1963, which is incorporated by reference as specified in Sec. 1910.6.

4.9 CONCRETE & MASONRY WORK

OSHA's standard for concrete and masonry construction is located in 29 CFR 1926, Subpart Q—Concrete and Masonry Construction. The Subpart addresses requirements construction employers must comply with to protect employees from accidents and injuries resulting from the:

- Premature removal of formwork.
- Failure to brace masonry walls
- Failure to support precast panel.
- Inadvertent operation of equipment.
- Failure to guard reinforcing steel.

In order to meet the requirements of the standard and help protect all construction employees from hazards associated with concrete and masonry construction operations at construction, demolition, alteration, or repair jobsites, the following requirements must be met.

SAFE WORK PRACTICES

General work practice requirements related to construction loads, reinforcing steel, concrete buckets, working under loads, and personal protective equipment include the following:

- All protruding reinforcing steel, onto and into which employees could fall, must be guarded to eliminate an impalement hazard.
- Employees (except those essential to the post-tensioning operations) must not be permitted to be behind the jack during tensioning operations.
- Employees must not be permitted to ride concrete buckets.
- Employees must not be permitted to work under concrete buckets while the buckets are being elevated or lowered into position.

TOOL & EQUIPMENT REQUIREMENTS

To address the hazards associated with equipment and tools used in concrete and masonry construction, employees must be aware of the following:

- Powered and rotating type concrete troweling machines that are manually guided must have a control switch that automatically shuts off the power whenever the operator's hands are removed from the handles.
- Masonry saws must be guarded with a semicircular enclosure over the blade.
- When using bull float handles where they might contact energized electrical conductors, must be constructed of nonconductive material or insulated with a nonconductive sheath.

CAST-IN-PLACE CONCRETE REQUIREMENTS

Requirements for formwork in general, shoring and reshoring, vertical slip forms, reinforcing steel, and removal of formwork include:

- Formwork must be designed, fabricated, erected, supported, braced, and maintained so that it will be capable of supporting without failure all vertical and lateral loads that might be applied to the framework.
- Drawings and plans, including all revisions for the jack layout, formwork (including shoring equipment), working decks, and scaffolds, must be available at the jobsite.
- All shoring equipment (including equipment used in reshoring operations) must be inspected prior to erection to determine that the equipment meets the requirements specified in the formwork drawings.
- Damaged shoring equipment must not be used for shoring. Shoring equipment found to be damaged or weakened after erection must be immediately reinforced.
- Reinforcing steel for walls, piers, columns, and similar vertical structures must be adequately supported to prevent overturning and collapse.
- Forms and shores (except those that are used for slabs on grade and slip forms) must not be removed until the employer determines that the concrete has gained sufficient strength to support its weight and superimposed loads.

PRECAST CONCRETE REQUIREMENTS

While ensuring that precast concrete wall units, structural framing, and tilt-up wall panels are adequately supported to prevent overturning collapse until permanent connections are completed, some rules apply:

- Precast concrete wall units, structural framing, and tilt-up wall panels must be adequately supported to prevent overturning and to prevent collapse until permanent connections are completed.
- Only essential employees are permitted under precast concrete that is being lifted or tilted into position.

LIFT-SLAB OPERATIONS

Specific requirements for lift-slab construction operations include:

- Lift-slab operations must be designed and planned by a registered professional engineer who has experience in lift-slab construction.
- Lift-slab operation plans and designs must include provisions for ensuring lateral stability of the building/structure during construction.
- Jacking equipment must be marked with the manufacturer's rated capacity and must be capable of supporting at least two and one-half times the load being lifted during jacking operations and the equipment must not be overloaded.

- Jacks/lifting units must be designed and installed so that they will neither lift nor continue to lift when loaded in excess of their rated capacity.
- Under no circumstances shall any employee who is not essential to the jacking operation be permitted immediately beneath a slab while it is being lifted.

MASONRY CONSTRUCTION

Whenever a masonry wall is being constructed, employers must establish a limited access zone prior to the start of construction. The limited access zone must be:

- Equal to the height of the wall to be constructed plus 4 feet, and must run the entire length of the wall.
- On the side of the wall that will be unscaffolded.
- Restricted to entry only by employees actively engaged in constructing the wall.
- Kept in place until the wall is adequately supported to prevent overturning and collapse unless the height of the wall is more than 8 feet and unsupported, in which case it must be braced. The bracing must remain in place until permanent supporting elements of the structure are in place.

There have been a number of tragic accidents over the years involving concrete and masonry construction including one that happened during the time OSHA was preparing the current regulation. In that accident a building in Bridgeport, Connecticut, collapsed, taking the lives of 28 workers. The collapse caused the highest death toll from a workplace accident in the United States since 51 employees were killed in 1978 during construction of a cooling tower at Willow Island, West Virginia. The Bridgeport building that collapsed was being erected using the lift-slab method of construction. OSHA's investigation of the collapse revealed that there had been a failure to comply with the OSHA regulations.

Even after fifteen years of the current regulations being in place, you often hear of or read about a wall collapse at construction sites. Don't let this happen at your jobsites.

OSHA believes that complying with the regulations in Subpart Q will reduce the deaths and injuries that have plagued the workers in concrete and masonry construction.

EMPLOYEE TRAINING

There are no specific training requirements for Subpart Q. However, the OSHA regulations at 29 CFR 1926.21 requires employers to train employees in the recognition and avoidance of unsafe conditions and the regulations applicable to his work environment to control or eliminate any hazards or other exposure to illness or injury. As always, retraining should occur as needed or when changes in personnel, operation, equipment, processes, etc.

4.10 VEHICLES AND MOBILE EQUIPMENT

If vehicle safety practices are not observed, employees risk being pinned between vehicles and walls, struck by swinging backhoes, crushed beneath overturned vehicles, or other similar accidents. In addition, work near public roadways present the risk of being struck by trucks or cars.

Provided below are suggested practices for operations involving vehicles and mobile equipment. For further details, refer to the OSHA standards covering motor vehicles and mechanized equipment.

- Only authorized employees are allowed to operate mobile equipment.
- Employees must be instructed to stay clear of backing and turning vehicles and equipment with rotating cabs.
- All off-road equipment used on site must be equipped with rollover protection (ROPS).
- Back-up alarms for equipment with limited rear view must be maintained, or use someone to help guide them back.
- Conduct pre-shift inspections on the assigned equipment to verify that the equipment is in working order.
- Be sure that all vehicles have fully operational braking systems, brake lights, and a working backup alarm.
- Use seat belts when transporting workers in motor and construction vehicles.
- Maintain at least a 10-foot clearance from overhead power lines when operating equipment.
- Block up the raised bed when inspecting or repairing dump trucks.
- Know the rated capacity of the crane and use accordingly.
- Ensure the stability of the crane.
- Use a tag line to control materials moved by a crane.
- Verify experience or provide training to crane and heavy equipment operators.
- Passengers are not permitted to ride on equipment unless it is equipped to accommodate passengers.
- The equipment operator shall use access provided to get on and off equipment.
- If the mobile equipment does not have an enclosed cab, eye protection must be used when in operation.
- Vehicles and mobile equipment must only be used in the manner in which it was designed and intended for.
- Before fueling, the operator of a gasoline or diesel vehicle must shut off the engine and shall see that the nozzle of the filling hose makes contact with the filling neck of the tank. No one shall be on the vehicle during fueling operations, except as specifically required by design. There shall be no smoking or open flames in the immediate area during fueling operation.

4.11 PREVENTATIVE MAINTENANCE PROGRAM

Dowdy Corporation has implemented a preventive maintenance program to mitigate the potential of equipment failure. In order to accomplish this planned maintenance inspections are required to meet manufacturer and legislated requirements. This will include oil changes, lubrication, replace parts, and complete overhauls. An equipment inventory must be established and maintained. The main purpose is to preserve the equipment and improve the reliability of the equipment. The preventive maintenance program will help prevent equipment failure before it ever occurs. Equipment found to be defective is removed from service until it is repaired.

Examples of preventive maintenance:

- Oil changes
- Fluid inspections
- Lubrication
- Replace worn parts
- Replace worn tires
- Replace brakes
- Replace worn belts and hoses
- Complete equipment overhauls

Dowdy Corporation is responsible for monitoring the preventive maintenance program and tracking costs and maintenance activity.

4.12 SPILL PREVENTION & RESPONSE

Chemicals whether liquid, solid, or gas can spill or leak and be harmful to both personnel and the environment. In order to prevent the release of chemicals, Dowdy Corporation will ensure that all chemical substances are stored in proper containers (preferably closed) and stored so that they are not exposed to storm water. Areas where chemicals may be used or stored must be maintained using good housekeeping best management practices. This includes, but is not limited to, clean and organized storage, labeling, and secondary containment where necessary. A proper spill kit will be maintained in an easily accessible area and will contain the appropriate supplies for materials that may be spilled.

Employees will be instructed on the proper response procedures for spilled materials. The training should include materials available for use, proper waste disposal, and communication procedures.

In the event of a spill or chemical release, the following procedures will be initiated:

- Once discovered, all employees must leave the area immediately and notify their supervisor.
- Consult the SDS for the spilled or leaking material to identify potential hazards, protective equipment required, and correct procedures for clean-up.
- Shut off ignition sources, flames, spark producing or heat producing equipment, and provide adequate ventilation.
- If the spill or leak is too big to handle with available equipment, an emergency response team should be notified.

4.13 GROUND-FAULT CIRCUIT INTERRUPTERS (GFCI)

Dowdy Corporation uses Ground Fault Circuit Interrupters when 120-volt, single phase 15 and 20-ampere temporary wiring is in exclusive use. When deemed appropriate, a competent person will be assigned to oversee the GFCI program.

A ground-fault occurs when there is a break in the low-resistance grounding path from a tool or electrical system. The electrical current may then take an alternative path to the ground through the user, resulting in serious injuries or death. The ground-fault circuit interrupter, or GFCI, is a fast-acting circuit breaker designed to shut off electric power in the event of a ground-fault within as little as 1/40 of a second. It works by comparing the amount of current going to and returning from equipment along the circuit conductors. When the amount going differs from the amount returning by approximately 5 milliamperes, the GFCI interrupts the current.

The GFCI is rated to trip quickly enough to prevent an electrical incident. If it is properly installed and maintained, this will happen as soon as the faulty tool is plugged in. If the grounding conductor is not intact or of low-impedance, the GFCI may not trip until a person provides a path. In this case, the person will receive a shock, but the GFCI should trip so quickly that the shock will not be harmful.

The GFCI will not protect you from line contact hazards (i.e. a person holding two "hot" wires, a hot and a neutral wire in each hand, or contacting an overhead power line). However, it protects against the most common form of electrical shock hazard, the ground-fault. It also protects against fires, overheating, and destruction of wire insulation.

Because GFCIs are so complex, they require testing on a regular basis. Test permanently wired devices monthly, and portable-type GFCIs before each use. All GFCIs have a built-in test circuit, with test and reset buttons, that triggers an artificial ground-fault to verify protection. Ground-fault protection, such as GFCIs provide, is required by OSHA in addition to (not as a substitute for) general grounding requirements.

Receptacle Type: The Receptacle Type incorporates a GFCI device within one or more receptacle outlets. Such devices are becoming popular because of their low cost.



Portable: Portable Type GFCIs come in several styles, all designed for easy transport. Some are designed to plug into existing non-GFCI outlets, or connect with a cord and plug arrangement. The portable type also incorporates a no-voltage release device that will disconnect power to the outlets if any supply conductor is open. Units approved for outdoor use will be in enclosures suitable for the environment. If exposed to rain, they must be listed as waterproof.



Cord-Connected: The Cord-Connected Type of GFCI is an attachment plug incorporating the GFCI module. It protects the cord and any equipment attached to the cord. The attachment plug has a non-standard appearance with test and reset buttons. Like the portable type, it incorporates a no-voltage release device that will disconnect power to the load if any supply conductor is open.



4.14 IN-PLANT RAIL SAFETY

SAFETY RULES

- When in designated areas, employees must wear proper PPE including, but not limited to:
 - Hard hat
 - Safety glasses
 - High visibility clothing.
- In all cases, pedestrians/employees shall cross at existing designated pedestrian rail crossings where provided. Additionally, vehicle crossings are not intended as pedestrian crossings unless they are so identified and/or located and no other pedestrian crossings exist in the area.
- If a designated rail crossing is not available, the following general procedures must be followed:
 - Do not cross within 10 feet of the end of a parked rail car
 - Do not cross between uncoupled cars
 - Stop, look, and listen prior to proceeding across the tracks
 - Never step on rails; they may be slippery
- Never attempt to crawl under rail equipment or climb over moving rail equipment.
- Never attempt to cross in front of moving equipment
- Never position any part of the body in a potential pinch point. Rail equipment can move in either direction at any time.
- Prior to performing work within six (6) feet of any railroad track, permission must be obtained from the railroad supervisor/designated person to take the track out of service.

TRAINING

Appropriate training based on the complexity of the job and potential hazards related to plant rail shall be provided to all applicable employees. Assessments shall be used to determine whether the personnel have the knowledge and have demonstrated skills to safely perform their work assignments. Retraining and testing shall be required for unsatisfactory/unsafe performance of job assignments.

4.15 RADIO FREQUENCY SAFETY

Radiofrequency (RF) and microwave (MW) radiation are electromagnetic radiation in the frequency ranges 3 kilohertz (kHz) - 300 Megahertz (MHz), and 300 MHz - 300 gigahertz (GHz), respectively. Research continues on possible biological effects of exposure to RF/MW radiation from radios, cellular phones, the processing and cooking of foods, heat sealers, vinyl welders, high frequency welders, induction heaters, flow solder machines, communications transmitters, radar transmitters, ion implant equipment, microwave drying equipment, sputtering equipment and glue curing.

HEALTH EFFECTS

Electric and magnetic fields are complex physical agents whose potential health effects are the subject of much research. Particularly controversial are the biophysical mechanisms by which these RF fields may affect biological systems. General health effects reviews explore possible carcinogenic, reproductive and neurological effects. Health effects by exposure source are noted in radar traffic devices, wireless communications with cellular phones, radio transmission, and magnetic resonance imaging (MRI).

HAZARD LOCATIONS AND SOLUTIONS

In recent years there has been considerable discussion and concern about the possible hazards of RF/MW radiation. Extensive research on this topic is underway in many countries. Natural low-frequency EM fields come from two main sources: the sun, and thunderstorm activity, but man-made fields at much higher frequencies have altered this natural EMF. At sufficiently high-power densities, RF/MW energy can cause thermal effects that can cause blindness, and sterility. Non-thermal effects, such as alteration of the human body's circadian rhythms, immune system and the nature of the electrical and chemical signals communicated through the cell membrane have been demonstrated. However, none of the research has conclusively proven that low-level RF/MW radiation causes adverse health effects.

EVALUATING RF AND MICROWAVE EXPOSURE

RF energy includes frequencies ranging from about 3000 cycles per second (3 kHz) to 300 billion cycles per second (300 GHz). Microwaves are a subset of radio waves and includes frequencies ranging from around 300 million cycles per second (300 MHz) to 3 GHz. RF exposures are directly linked to absorption and distribution of RF energy in the body, and the absorption and distribution are strongly dependent on body size and orientation and on frequency and polarization of the incident radiation. A common measure of exposure is the Specific Absorption Rate (SAR), the rate of energy absorption in tissue, measured in watts per kilogram of tissue.

SAFETY RULES

The warning symbol for radio frequency radiation hazards shall consist of a red isosceles triangle above an inverted black isosceles triangle, separated and outlined by an aluminum color border. The words "Warning - Radio-Frequency Radiation Hazard" shall appear in the upper triangle.

- Reports that workers near RF sealers may be unaware of their exposure to RF emissions, because the RF energy from sealers and heaters can penetrate deeply into the body without activating the heat sensors located in the skin. The results of a NIOSH study indicate that the majority of the workers surveyed were exposed to RF energy at levels exceeding values citable by OSHA. The following controls are recommended:
 - When in designated areas, employees must wear proper PPE.
 - Properly design and install shielding material.
 - Maximize the distance between the worker and the source of RF energy emission should be maximized. Examples of means to accomplish this include the use of automatic feeding devices, rotating tables, and remote materials handling.
 - Tune the equipment electronically to minimize the stray power emitted.
 - Whenever possible, switch off equipment when it is not being used. Maintenance and adjustment of the equipment should be performed only while the equipment is not in operation.
 - After the performance of maintenance or repair, all machine parts, including cabinetry, should be reinstalled so that the equipment is intact and its configuration is unchanged.
 - Post warnings and information.
 - Develop a medical surveillance program tailored to the expected degree of employee use of RF equipment and potential for exposure to RF energy.
 - Take exposure measurements at regular intervals.

TRAINING

Appropriate training based on the complexity of the job and potential hazards related to radio frequency shall be provided to all applicable employees. Assessments shall be used to determine whether the personnel have the knowledge and have demonstrated skills to safely perform their work assignments. Retraining and testing shall be required for unsatisfactory/unsafe performance of job assignments.

4.16 AMMONIA AWARENESS

Ammonia is a colorless gas with a very sharp pungent, suffocating odor, which is usually detectable before it causes any harm. It is made both by humans and found naturally throughout the environment in soil, air, and water. It dissolves easily in water and evaporates quickly. It is commonly sold in liquid forms.

The amount of ammonia produced by humans every year is almost equal to that produced by nature every year. Ammonia is produced naturally in soil by bacteria, decaying plants and animals, and animal wastes. Ammonia is essential for many biological processes.

Most of the ammonia produced in chemical factories is used to make fertilizers. The remaining is used in textiles, plastics, explosives, pulp and paper production, food and beverages, household cleaning products, refrigerants, and other products. It is also used in smelling salts.

ENVIRONMENTAL EFFECTS

- Most of the ammonia in water changes to ammonium, an odorless liquid. Ammonia and ammonium can change back and forth in water. Plants and bacteria rapidly take up ammonia from soil and water. Some ammonia in water and soil is changed to nitrate and nitrite by bacteria.
- Ammonia is recycled naturally in the environment as part of the nitrogen cycle. It does not last very long in the environment. If released to the air, ammonia is rapidly removed by rain or snow or by reactions with other chemicals.
- Ammonia does not build up in the food chain, but serves as a nutrient source for plants and bacteria.

EXPOSURE

Ammonia can be found in a variety of places, including, but not limited to:

- Household cleaning products
- Fertilizers
- Leaks & spills from production plants, storage facilities, pipelines, tank trucks, and rail cars.
- Refrigeration
- Petroleum refineries

The Occupational Safety and Health Administration (OSHA) has set a limit of 50 parts of ammonia per million parts of air (50 ppm) in the workplace during an 8-hour shift and a short-term limit (15 minutes) of 35 ppm.

HEALTH EFFECTS

Exposure to high concentrations of ammonia in the air may cause severe burns in your skin, eyes, throat, and lungs. In extreme cases, blindness, lung damage, or death could occur. Breathing lower concentrations will cause coughing and nose and throat irritation.

If swallowed, ammonia can cause burns in the mouth, throat, and stomach. Concentrated ammonia spilled on the skin will cause burns. Exposure of the eyes to ammonia may cause burning, tearing, temporary blindness and severe eye damage. Animal studies show effects similar to those observed in people. We do not know if ammonia affects reproduction in humans.

There are tests that can detect ammonia in blood and urine. However, these tests cannot definitely determine if you have been exposed because ammonia is normally found in the body.

An exposure to harmful amounts of ammonia would be immediately noticed due to the strong, unpleasant smell and strong taste. The skin, eyes, nose, and throat would also be irritated.

Experts do not know whether ammonia can cause cancer in humans or in laboratory animals. The Department of Health and Human Services (DHHS), the International Agency for Research on Cancer (IARC), and the EPA have not classified ammonia for carcinogenicity.

PERSONAL PROTECTIVE EQUIPMENT

Dowdy Corporation will provide employees who are exposed to ammonia with proper PPE such as impervious clothing, gloves, face shields and other appropriate protective clothing necessary to prevent any possibility of skin contact with liquid anhydrous ammonia or aqueous solutions of ammonia containing more than 10% by weight of ammonia. Similar precautions will be taken to prevent the skin from becoming frozen from contact with vessels containing liquid anhydrous ammonia.

4.17 ERGONOMICS

Ergonomics is the science of fitting the job to the worker. In the workplace, ergonomic principles are used to make alterations to a job so that it conforms to the person doing that job, rather than to force the person to fit the job. Redesigning various job functions to match a person's stature will reduce stress on the body and eliminate many potential injuries associated with the overuse of muscles, unnatural postures, and repetitive motions.

Ergonomic solutions may involve the following:

- Restructuring of tasks,
- Redesigning workstations
- Implementing new or different tools, lighting, and equipment to fit a worker's physical capabilities and limitations

Some of these options may mean adjusting the height of a workstation or a computer screen, or rearranging the steps in a process so the worker will not have to lift and twist in the same motion.

The goal of a workplace ergonomics program is to reduce or eliminate the risk factors that lead to musculoskeletal disorders (MSDs). Jobs that expose workers to excessive vibration, repetitive motions, heavy lifting, awkward postures, and continual contact pressure will be assessed and ways found to reduce exposure to those factors that cause MSDs. Identifying ergonomic risk factors in your workplace is the first step toward making changes that will improve the safety and health of all workers.

MUSCULOSKELETAL DISORDERS

Musculoskeletal disorders are caused or aggravated by repetitive motions, forceful exertions, vibration, mechanical compression (hard and sharp edges), and sustained or awkward postures that occur over extended periods of time. MSDs can affect nearly all tissues, the nerves, tendons, tendon sheaths, and muscles, with the upper extremities being the most frequently affected. These injuries range from disorders of the back, the neck, the arms and legs, or the shoulders and involve strains, sprains, or tissue inflammation, and dislocation.

Workers suffering from MSDs may experience less strength for gripping, less range of motion, loss of muscle function, and inability to do everyday tasks. These painful and sometimes crippling injuries develop gradually over periods of weeks, months, and years as the result of the repeated actions required to perform their jobs.

RISK FACTORS THAT CAUSE MSDS

The physical stresses that can contribute to or cause MSDs are called "risk factors." The initial symptoms of MSDs may include fatigue, discomfort, and pain; as tissue damage worsens, other symptoms, such as weakness, numbness, or restricted movement, may also appear. Work-related MSDs occur when the risk factors that cause or contribute to musculoskeletal system pathology are associated with a person's job duties. Workplace musculoskeletal disorders are caused by exposure to the following risk factors:

Repetition

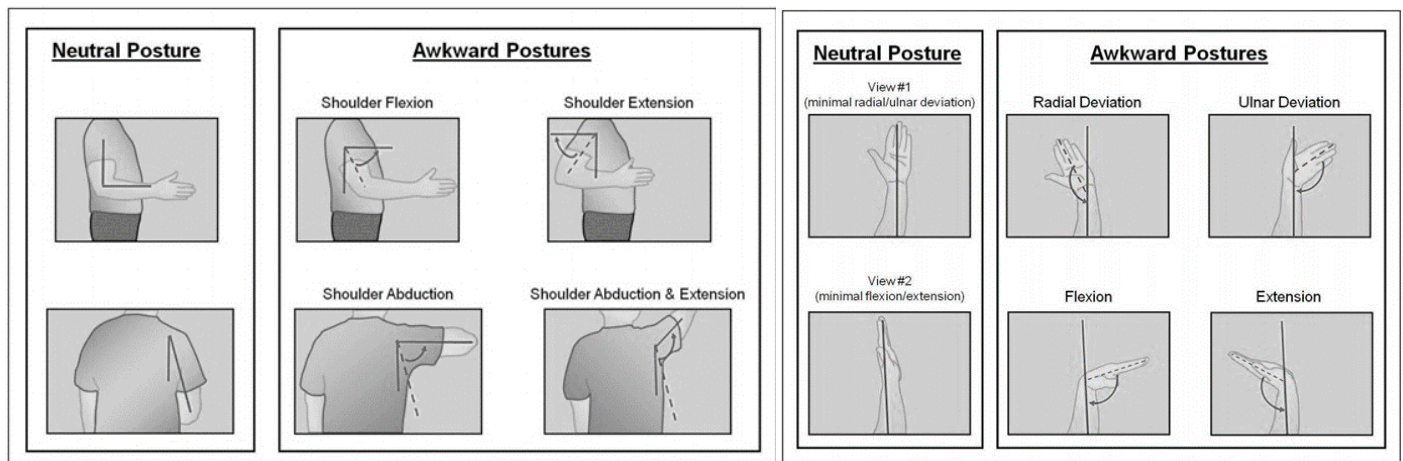
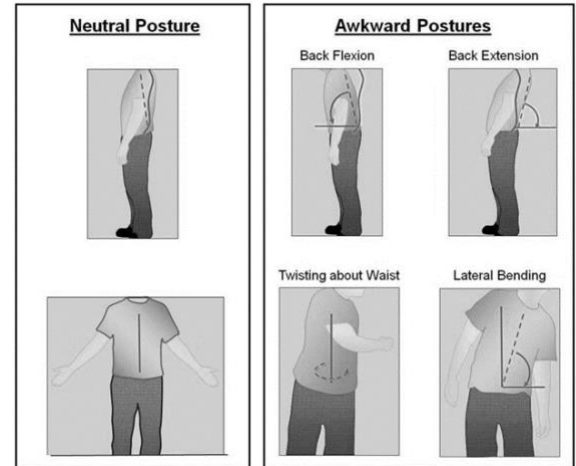
Doing the same motions over and over again places stress on the muscles and tendons. The severity of risk depends on how often the action is repeated, the speed of movement, the number of muscles involved, and the required force.

Forceful Exertions

Force is the amount of physical effort required to perform a task, such as heavy lifting or pushing/pulling, or to maintain control of equipment or tools. The amount of force depends on the type of grip, the weight of an object, body posture, the type of activity, and the duration of the task.

Awkward Postures

Posture is the position your body is in and affects muscle groups that are involved in physical activity. Awkward postures include repeated or prolonged reaching, twisting, bending, kneeling, squatting, working overhead with your hands or arms, or holding fixed positions.



Contact Stress

Pressing the body against a hard or sharp edge can result in placing too much pressure on nerves, tendons, and blood vessels. For example, using the palm of your hand as a hammer can increase your risk of suffering an MSD.

Vibration

Operating vibrating tools or equipment that typically have high or moderate vibration levels such as sanders, grinders, chippers, routers, drills, and other saws can lead to nerve damage.

Cold Temperatures

Operations where the work environment is a cold setting, such as a food processing plant, or meatpacking facility, the risk for potential MSDs to develop increases, especially in combination with any of the previously mentioned risk factors.

Other Factors

Not every solution will work for every employee. Keep an eye out for employees who may be doing any behaviors that may indicate there are still ergonomic issues. If any of the following behaviors are observed, certain actions should be made such as re-assessing work stations and tasks to find ergonomic improvement opportunities:

- Modifying their tools, equipment or work area
- Shaking their arms and hands
- Rolling their shoulders
- Bringing products such as back belts or wrist braces into the workplace

MSD SIGNS & SYMPTOMS

Symptoms can vary in severity, depending on the amount of exposure to MSD hazards and often appear gradually. Usually, symptoms become more severe as exposure continues. If the employee continues to be exposed, symptoms may increase to the point that they interfere with performing the job. Finally, pain may become so severe that the employee is unable to perform physical work activities).

Signs that may indicate an MSD include deformity, decreased grip strength, decreased range of motion, and loss of function. Common symptoms of MSDs include:

- Painful joints,
- Pain, tingling, or numbness in the hands or feet,
- Shooting or stabbing pains in the arms or legs,
- Swelling or inflammation,
- Burning sensation,
- Pain in wrists, shoulders, forearms, or knees,
- Fingers or toes turning white,
- Back or neck pain, and

BREAKS, REST PERIODS, & STRETCHING

Pay attention to signs of discomfort and fatigue on the job; these are warning signs from your body. As muscles tire during a work task, slouching can lead to poor posture, sloppy, uncontrolled movements, and injuries. Rest breaks mean recovery for the body. During a job task, take micro-breaks lasting 10-15 seconds every ten minutes. Take periodic mini-breaks lasting 3-5 minutes. These short breaks give the body a rest, reduce discomfort, and improve your performance.

Alternate your work activities and postures throughout the day. Rotating tasks may seem inefficient, but the rest and use of different muscle groups increases energy and maintains productivity. For example, if

you are a landscaper, don't trim all of the shrubs, sweep up the trimmings, and then leaf-blow the whole area; work in sections and trim, sweep, and leaf-blow in alternating tasks. If you work at a single workstation and job task all day, move into different postures while you work: first standing, then standing with one foot resting on a stool, then sitting.

Stretches help you warm-up before work and relax during breaks; they increase flexibility and boost blood flow and oxygen to muscles. Perform stretches slowly and gently; avoid extreme postures and stop stretching if you feel pain or discomfort. Physical and Occupational Therapists are the most qualified individuals to generate a specific stretching and warm-up program.

REPORTING SYMPTOMS OR INJURIES

Report any signs or symptoms of suspected musculoskeletal disorders as soon as you believe one may be developing. It is always best to report a symptom or injury to the appropriate personnel sooner rather than later. The sooner it is reported the sooner action can be taken to redirect the course or degree of injury.

Re assess the employees work station

Once an injury has been brought to management's attention, the employees' workstation will be re-evaluated to determine what factors may be contributing to the injury. Once the root cause of the injury is determined, appropriate action must be taken to ensure the hazard is eliminated. This may include restructuring the employee's tasks or workstation or even introducing tools or equipment that may aid in the comfort of the worker.

Continue to monitor for worsening/further injuries

This is the last and most crucial step. Once the problem has been identified and mitigated; it is important to monitor it to ensure that the symptoms or injury do not continue or worsen. Should that be the case, the workstation should be re-evaluated

TRAINING

Training will be provided to employees. Training includes:

1. Review what Ergonomics is and why it is important.
2. Review Musculoskeletal Disorders (MSDs)
 - Signs and symptoms
 - The risk factors
3. Review the most prevalent types of ergonomics concerns and how to help prevent or reduce injuries

TAB 5:

TRAINING & EDUCATION

5.1 SAFETY MEETINGS

Safety meetings are an important part of jobsite safety. They are an opportunity for employees and their supervisor to discuss specific hazards encountered at the jobsite and how best to address them.

Meetings will focus on situations faced by the workers in the current work environment. Prior to each shift, supervisors should address the hazards that will face the workers on the particular jobsite. Individual workers should be encouraged to provide input on their observations of hazards that exist or will be encountered during the shift that is about to begin.

Effective safety meetings should incorporate the following:

- Discuss safety policies and procedures with management and make recommendations for improvements.
- Review accident investigation reports on all accidents and “near-misses”.
- Identify unsafe conditions and work practices and make recommendations for corrections.
- Discuss problems that have arisen or that are anticipated along with any other safety and health topics.

The meeting should be a valuable educational experience by:

- Keep the discussion flowing and on-topic
- Start and stop the meetings on time
- Use illustrated material and demonstrations to make the point
- Discuss each topic thoroughly
- Review accidents, injuries, property losses, and near misses
- Evaluate accidents, injuries, property losses, and near misses for trends and similar causes to initiate corrective actions.

Safety meetings may also incorporate various training topics in the form of toolbox talks which are brief discussions regarding areas of safety applicable to a particular task or jobsite. Tool box talks that include subject matter applicable to construction are included in the training section of this document.

Each safety meeting will be documented on the form on the following page.

Safety Meeting Minutes

Jobsite: _____

Date: _____

Supervisor: _____

Topics Discussed:

Action Items:

Meeting Attended By:

Print Name:

Signature:

5.2 TRAINING & EDUCATION

Training is an essential component of an effective safety and health program addressing the responsibilities of both management and employees at the site. Training is most effective when incorporated into other education on performance requirements and job practices.

Training programs should be provided as follows:

- Initially when the safety and health plan is developed
- For all new employees before beginning work
- When new equipment, materials, or processes are introduced
- When procedures have been updated or revised
- When experiences/operations show that employee performance must be improved
- At least annually

Besides the standard training, employees should also be trained in the recognition of hazards – be able to look at an operation and identify unsafe acts and conditions. A list of typical hazards employees should be able to recognize may include:

- **Fall Hazards** – Falls from- Floors, Roofs and roof openings, Ladders (Straight and Step), Scaffolds, Wall openings, Tripping, Trenches, Steel Erection, Stairs, Chairs
- **Electrical Hazards** – Appliances, Damaged cords, Outlets, Overloads, Overhead High Voltage, Extension cords, Portable Tools (broken casing or damaged wiring), Grounding, Metal Boxes, Switches, Ground fault circuit interrupters(GFCI)
- **Caught Between** – Cave-Ins, Unguarded Machinery, Equipment, Confined Spaces
- **Struck-By** – Vehicles, Machinery, Flying/Falling Objects, Concrete/Masonry Walls
- **Housekeeping Issues** – Exits, Walkways, Floors, Trash, Storage of Materials (Hazardous and Non-Hazardous), Protruding Nails, Exits (blocked), Trips/Slips, Stairs, Un-even flooring, Electrical cords, icy walkways, etc.
- **Fire Hazards** – Oily-Dirty Rags, Combustibles, Fuel Gas Cylinders, Exits (blocked)
- **Health Hazards** – Silicosis, Asbestos, Loss of hearing, Eye injury due to flying objects, Chemical exposures, Poison Ivy, Stagnant water

Employees trained in the recognition and reporting of hazards and supervisors trained in the correction of hazards will substantially reduce the likelihood of a serious injury.

Annual safety training is conducted by Lancaster Safety Consulting, Inc. The annual training session lasts approximately four hours. Additional training may be conducted throughout the year by authorized in-house trainers. Training topics for all employees include, but are not limited to:

- Hazard communication & labeling
- Personal Protective Equipment & Hazard assessment review
- Respiratory & Dust Mask Safety
- Emergency Action Plan, Fire safety, flammables & fire extinguishers
- Bloodborne Pathogens
- Confined Space

- Fall Protection: slips/trips/falls, fall arrest training, & walkways/stairs
- Powered industrial trucks
- Trenching/excavation
- Heat Stress
- Machine Guarding
- Housekeeping
- Ergonomics
- Electrical Safety
- Silica

Training methods and media may include, but not be limited to PowerPoint based training, videos, quizzes, scenarios, and group discussions. Alternative training methods are not utilized at this time.

Dowdy Corporation measures training comprehension based on verbal discussions, group activities, or quizzes administered throughout the training class and through on the job monitoring. Training documentation and training programs are maintained at the main office and are available for review, upon request. Training records are kept in accordance with established procedures and are maintained for a minimum of five years.

Dowdy Corporation conducts audits of the safety program on an annual basis, at minimum. Factors addressed in the annual audit include, but are not limited to the following.

- Hazard Assessment review
- Personal Protective Equipment analysis
- Written safety program review
- The need for medical clearances or evaluations
- Renewal of training and professional certifications, if applicable

5.3 NEW HIRE ORIENTATION

Whenever a new employee comes on board, there is a period of training and learning in which the new employee learns about the company's safety and health programs, emergency action plans, fire protection policy, and any other safety-related issues that the employee must know.

This is also an opportunity to influence the new employee on the safety culture of the company, and positively influence that employee to keep safety always in mind.

The employee orientation will be started during the employee's first day on his or her new job. A qualified company representative will conduct the new hire orientation. The entire orientation program may be broken up over a period of a few days, but when it is complete, employees should know the following safety information:

- The organization's safety objectives and goals.
- The function of the corporate safety committee.
- What employees should do if they are injured on the job.
- The procedures for reporting accidents, near-miss incidents, hazards, injuries, and illness.
- What to do in case of an emergency.
- The facility's use of warning signs and tags.
- OSHA's recordkeeping requirements and employee access to exposure and medical records.
- The safety rules and safe procedures that apply to their jobs (especially for tasks with OSHA-required training).

As part of the new hire orientation process, the following topics, at minimum, will be covered:

- Personal Protective Equipment
- Hazard Communication
- Emergency Evacuation & Fire Safety
- Bloodborne Pathogens

Depending on the job classification, the following training may also be provided at the company's discretion:

- OSHA 10 Hour training
- OSHA 30 Hour training
- First Aid, CPR, and AED training

5.4 MISCELLANEOUS TRAINING LOGS

OSHA's Employee Responsibilities

- Read the OSHA Poster at the workplace.
- Comply with all applicable OSHA standards.
- Follow all lawful employer safety and health rules and regulations and wear or use prescribed protective equipment while working.
- Report hazardous conditions to the supervisor.
- Report any work-related injury or illness to the employer, and seek treatment promptly.
- Exercise rights under the Act in a responsible manner.

TAB 6:

FORMS DIRECTORY

BLOODBORNE PATHOGENS FORMS

Name:	Location:	Responsibility:	Occurrence:
Hepatitis B Vaccine Declination Form	Bloodborne Pathogens Exposure Control Plan	Management/Employee	Once employees are exposed to bloodborne pathogens, they must be offered the Hep. B Vaccination. If they decline, a declination form will need to be reviewed & signed.
Sharps Injury Form	Bloodborne Pathogens Exposure Control Plan	Management and affected employee	Following exposure to bloodborne pathogens
Bloodborne Pathogens Exposure Report Form	Bloodborne Pathogens Exposure Control Plan	Management and affected employee	Following exposure to bloodborne pathogens

CONFINED SPACE FORMS

Name:	Location:	Responsibility:	Occurrence:
Confined Space Entry Permit	Confined Space Entry Program	Entry Supervisor	Before entering confined spaces
Confined Space Pre-Entry Checklist and Reclassification	Confined Space Entry Program	Entry Supervisor	Before entering confined spaces

EMERGENCY ACTION & FIRE SAFETY FORMS

Name:	Location:	Responsibility:	Occurrence:
Emergency Evacuation Drill Attendance Log & Completion Form	Emergency Action and Fire Safety	Personnel in charge of head count	Annually
General Fire Prevention Checklist	Emergency Action Plan & Fire Safety Program	Management or designated employee	Monthly
Exit Checklist	Emergency Action Plan & Fire Safety Program	Management or designated employee	Monthly
Flammable & Combustible Materials Checklist	Emergency Action Plan & Fire Safety Program	Management or designated employee	Monthly
Fire Extinguisher Inspection Checklist	Emergency Action Plan & Fire Safety Program	Management or designated employee	Monthly
Hot Work Permit	Emergency Action Plan & Fire Safety Program	Supervisor	Before completing hot work; Only valid for 24 hours

FALL PROTECTION FORMS

Fall Protection Forms			
Name:	Location:	Responsibility:	Occurrence:
Walking-Working Surfaces Inspection Checklist	Fall Protection Program	Supervisor	As needed (weekly, monthly, quarterly, etc.)
Fall Arrest Harness Inspection Report	Fall Protection Program	Employee wearing the PPE	Pre/post use
Fall Protection Safety Inspection Report	Fall Protection Program (1926 only)	Supervisor	Before use
Fall Protection Safety Audit Checklist	Fall Protection Program	Supervisor	As needed
Fall Protection Accident Investigation Report	Fall Protection Program	Management and affected employee	Following an accident involving fall protection
Fall Protection Safety Meeting Report	Fall Protection Program	Supervisor with employees	To be completed during/following any safety meetings regarding fall protection
Site Specific Fall Protection Plan	Fall Protection Program (1926 only)	Jobsite supervisor	Before starting work on a new jobsite

INJURY & ILLNESS PREVENTION PROGRAM FORMS

Name:	Location:	Responsibility:	Occurrence:
Stop Work Report	Injury & Illness Prevention Program	Any employee	When necessary
Disciplinary Action Form	Injury & Illness Prevention Program	Management with employee(s) involved	Following any violations
Subcontractor Prequal Form	Injury & Illness Prevention Program	Subcontractors	Before working with subcontractors
Accident Investigation Report	Injury & Illness Prevention Program	Management with employee(s) involved	Following any accident. Complete right away.
Near Miss Reporting	Injury & Illness Prevention Program	Management with employee(s) involved	Following any near misses
Job Hazard Analysis Form	Injury & Illness Prevention Program	Management or designated employee	Encouraged to be completed for all job tasks
Risk Analysis Form	Injury & Illness Prevention Program	Management or designated employee	Encouraged to be completed for all job tasks
General Work Permit	Injury & Illness Prevention Program	Management or designated employee	Refer to Section 3.2 for a list of tasks that require a work permit
Safety Meeting Minutes	Injury & Illness Prevention Program	Management or designated employee	Following safety committee meetings, if applicable.

JOBSITE SAFETY & HEALTH MANUAL FORMS

Name:	Location:	Responsibility:	Occurrence:
Emergency Information	Jobsite Safety & Health Manual	Management or designated employee	Prior to the start of each job
Stop Work Report	Jobsite Safety & Health Manual	Supervisor	Any time a person in the work area is at risk of injury
Jobsite Inspection Checklist	Jobsite Safety & Health Manual	Safety Coordinator	Prior to the start of each job

PERSONAL PROTECTIVE EQUIPMENT FORMS

Name:	Location:	Responsibility:	Occurrence:
Personal Protective Equipment Checklist	Personal Protective Equipment	Affected Employee	Initial Assignment

RESPIRATORY PROTECTION FORMS

Name:	Location:	Responsibility:	Occurrence:
Personnel in Respiratory Program	Respiratory Protection Program	Employer/Employee	Initial assignment
Medical Release Form	Respiratory Protection Program	Employees required to wear a respirator	Before an employee can wear a respirator
Voluntary Dust Mask Use Acknowledgement	Respiratory Protection Program	Employees who voluntarily wear a respirator	When an employee decides to voluntarily wear a dust mask
Respirator Fit Test Log	Respiratory Protection Program	Employees who wear respirators	When an employee is fit tested for a respirator
Respirator Fit Test Form	Respiratory Protection Program	Employees who wear respirators	Before an employee can be fit tested
Respirator Inspection Checklist	Respiratory Protection Program	Employees who wear respirators	Pre use of the respirator

TRENCHING FORMS

Name:	Location:	Responsibility:	Occurrence:
Trench Inspection & Entry Authorization Form	Trenching & Excavation Safety Program	Jobsite Supervisor Competent Person	Daily when working in trenches

TAB 7:

TAB 8:
