

# The DDS Companies

## Safety and Health Program



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## **DDS Companies**

### **Safety and Health Policy Statement**

We are dedicated to providing a safe and healthful environment for employees and customers, protecting the public, and preserving DDS Companies assets and property.

At the DDS Companies our most valuable resource are the people who work for us. Injuries can be prevented. To achieve this objective, the DDS Companies will make all reasonable efforts to comply with all government regulations pertaining to safety and health issues. An effective Safety and Health Program will be carried out throughout our organization.

The Safety and Health Program will assist management and non-supervisory employees in controlling hazards and risks which will minimize employee and customer injuries, damage to customer's property and damage or destruction of the DDS Companies' property.

All employees will follow this program. This program is designed to encourage all employees to promote the safety of their fellow employees and customers. To accomplish our safety and health goals, all members of management are responsible and accountable for implementing this policy, and to insure it is followed.

The DDS Companies are sincerely interested in an employee's safety. The policy of the DDS Companies is to provide safe equipment, adequate tools and training, and the necessary protective equipment. It is the employee's responsibility to follow the rules of safety as established for their protection and the protection of others, and to use the protective devices, which the DDS Companies provides.

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Sean G. Donohoe, President



## Safety & Health Program Applicability

The DDS Companies share many similarities in the type and nature of the work performed. However, some elements of the DDS Companies Safety & Health Program are unique to the individual businesses. The table below summarized which Safety & Health Programs apply to the different businesses. Employees are expected to be familiar with and understand their roles and responsibilities in the programs that apply to their position.

Section	Safety Program	Gas Crews	Heavy Civil	Shop	Asphalt/ Restoration	Telecom	Office/ DDSE
1	Asbestos	✓					
2	Asphalt Safety	✓	✓		✓		
3	Bloodborne Pathogens	i	i	i	i	i	i
4	Confined Space	✓	✓			✓	
5	Concrete & Masonry Construction	✓	✓		✓		
6	Electrical Safety	✓	✓	✓	✓	✓	✓
7	Emergency Action Plan/ Life Safety	✓	✓	✓	✓	✓	✓
8	Equipment Training Program	✓	✓	✓	✓	✓	✓
9	Excavation/Trenching	✓	✓			✓	
10	Fall Protection		✓			✓	
11	Fire Protection & Safety	✓	✓	✓	✓	✓	✓
12	Flammable Storage	✓	✓	✓	✓	✓	
13	Fleet Safety	✓	✓	✓	✓	✓	✓
14	Hazard Communications/Material Safety Data Sheets	✓	✓	✓	✓	✓	✓
15	Incident Reporting & Investigation	✓	✓	✓	✓	✓	✓
16	Ladder Safety	✓	✓	✓			✓
17	Lock Out/ Tag Out			✓	✓	✓	
18	Machine Guarding	✓	✓	✓	✓	✓	
19	OSHA Inspections	✓	✓	✓	✓	✓	✓
20	Personal Protection Equipment	✓	✓	✓	✓	✓	✓
21	Powered Industrial Trucks	✓	✓	✓			
22	Recordkeeping and Posting	✓	✓	✓	✓	✓	✓
23	Respiratory Protection	✓	Optional DM	Optional DM			
24	Rigging	✓	✓		✓		
25	Safety Committee	✓	✓	✓	✓	✓	✓
26	Toolbox Talks & Tailboard Briefings	✓	✓		✓		
27	Welding & Cutting	✓		✓			
28	General Waste Management	✓	✓	✓	✓	✓	✓
29	Hydrogen Sulfide	✓	✓			✓	
30	Subcontractor Management	✓	✓	✓	✓	✓	✓
31	Today's Work Briefing	✓	✓		✓	✓	

i – The information provided regarding this Safety Program is for information purposes only. The Safety Program is not required under the OSHA Standards.

Optional DM – The optional use of dust masks (filtering facepieces).



# Asbestos

## **Policy:**

The DDS Companies handle asbestos containing material (ACM) in support of its Utility Company customers. The DDS Companies operate under the Utility Company's variance from NYS Department of Labor Code Rule 56 which regulates the disturbance of ACM. The Utility Company provides the procedures, training, and materials for the work. In addition, the DDS Companies comply with the OSHA standards regulating Asbestos exposure.

According to NYS DOL Code Rule 56, any company that performs tasks such as these must be a licensed Asbestos Contractor. The DDS Companies (under DDS Utilities, Inc.) will maintain a valid Asbestos Contractor License. Appropriate personnel will be trained and certified as Asbestos Supervisors.

## **Procedure:**

There are two situations in which DDS Utilities, Inc. disturbs asbestos containing material (ACM) in support of its Utility Company customers. They are:

- Removal of Asbestos Coal Tar Wrap on Natural Gas Pipe
- Drilling through Asbestos transite siding on homes/buildings

Asbestos Coal Tar Wrap removal is performed as per the teamNY (RG&E & NYSEG) procedure "*Procedure for Handling Asbestos Coal Tar Wrapped Natural Gas Pipe*".

As part of that procedure, a "*Coal Tar Wrap Asbestos Project Record*" is filled out at the completion of every project that involves the disturbance of Asbestos Coal Tar Wrap. The Foreman of the crew involved in the work is responsible for completing the form and returning to the DDS Utilities, Inc. Supervisor. The Supervisor shall submit a copy to the Utility company and maintain a copy for DDS Utilities, Inc.'s records.

Drilling of Asbestos transite siding on homes/buildings is performed as per the Energy East procedure "*Procedure for Drilling Asbestos Siding*".

## **Personal Protective Equipment (PPE):**

Required PPE is defined in (RG&E) procedure "*Procedure for Handling Asbestos Coal Tar Wrapped Natural Gas Pipe*" and Energy East procedure "*Procedure for Drilling Asbestos Siding*".

## **Training**

The company Safety Director and appropriate Supervisors shall receive "*Asbestos Supervisor/Contractor*" training and be certified by New York State Department of Labor.

All workers who perform Coal Tar Wrap removal shall receive "*Asbestos Coal Tar*

*Coated Pipe*" training consistent with OSHA Standard 1926.1101(g)(11), EPA standard 61.145(c)(8), and NYS DOL Code Rule 56. These workers shall also receive "*Asbestos Awareness*" training. This training does not qualify workers to handle any other type of ACM.

All workers who drill through transite siding on homes shall receive 16-hour "*Operations and Maintenance (O&M)*" training consistent with OSHA Standard 1926.1101(k)(9)(v).

All Training records will be kept in employee files and documented on the "*DDS Companies Training Matrix*".

# Asphalt Safety

## **Policy:**

All asphalt work will be conducted in a manner consistent with existing regulations and with good standard practices. This section establishes standards for asphalt paving operations.

## **Procedure:**

Asphalt is a dark brown or black substance derived from crude oil. It may be a solid, a semi-solid, or a liquid. Other names for asphalt include road tar, road binder, mineral pitch, petroleum pitch, petroleum asphalt, and seal-coating material.

There are two main hazards associated with asphalt:

- Fire and explosion hazards, and
- Health hazards associated with skin contact, eye contact, and/or inhalation of fumes and vapors.

## **Fire Prevention and Control**

Since asphalt products are often stored and handled at elevated temperatures, fire prevention is extremely important. One of the greatest hazards in handling hot asphalt is exposure to a source of ignition. Sparks, electricity, open flames, incandescent material (lighted cigarette), or other possible ignition sources should be prohibited or otherwise strictly controlled in the vicinity of asphalt operations.

## **Health Hazards**

The primary hazard associated with working with hot asphalt is burns and irritation. In addition, many of the solvents used to cut asphalt can be absorbed through unprotected skin into the bloodstream, where they can travel throughout the body and cause damage to many different organs.

## **Personal Protective Equipment (PPE):**

PPE typically worn when working with hot asphalt includes:

- Pants without cuffs which extend over the tops of the boots.
- Safety shoes at least 6 inches high and laced.
- Loose clothing in good condition

## **Training**

Employees shall be trained in the equipment they use in accordance with the company's *Equipment Training Program*.

# Bloodborne Pathogens

**The DDS Companies do not have jobs where there is an expectation that employees will come into contact with human blood. The information provided here is intended to help protect employees that may offer assistance to fellow employees or others that may need assistance due to an incident or accident.**

## What Everyone Needs to Know

Bloodborne pathogens are microorganisms carried by human blood (and other body fluids) and cannot be seen with the naked eye. They can be spread through contact with infected blood. If they get into the bloodstream, an individual may become infected and sick.

Most personnel cannot reasonably anticipate coming into contact with blood during their day-to-day work duties. That's why it's imperative that all personnel understand the danger of exposure to bloodborne pathogens and ways to minimize their risk.

Bloodborne pathogens may be present in blood and other materials, such as:

- body fluids containing visible blood
- semen and vaginal secretions
- torn or loose skin

Bloodborne pathogens can cause infection by entering the body through:

- open cuts and nicks
- skin abrasions
- dermatitis
- acne
- mucous membranes of the mouth, eyes or nose

## WORKPLACE TRANSMISSION

The most common bloodborne pathogens are HIV, Hepatitis B, and Hepatitis C:

### HIV (AIDS)

HIV, the human immuno-deficiency virus, attacks the body's immune system causing it to weaken and become vulnerable to infections that can lead to a diagnosis of acquired immune deficiency syndrome or AIDS.

HIV is transmitted mainly through sexual contact and sharing contaminated needles, but also may be spread by contact with infected blood and body fluids. HIV is NOT transmitted indirectly by touching or working around people who are HIV-positive.

Employees can prevent getting HIV by stopping the passage of the virus from a person who has HIV to them. In many instances, the employee has control over the activities that can transmit HIV. Since HIV is most frequently transmitted by sharing needles or through sexual intercourse, employees can stop transmission by refusing to engage in these behaviors.

## **Hepatitis B**

Hepatitis is a general term used to describe inflammation (swelling) of the liver. Alcohol, certain chemicals or drugs, and viruses such as hepatitis A, B, C, D, E and G may cause hepatitis.

- Hepatitis B is a serious, sometimes fatal disease, caused by a virus that infects and attacks the liver. The virus is transmitted through direct contact with infected blood, semen, or vaginal fluid. It is primarily spread through sexual contact.
- In studies that examine transmission following injections into the skin, HBV is 100 times more contagious than HIV.
- **HBV can also be transmitted indirectly because it can survive on surfaces dried and at room temperature for at least a week!** That's why contaminated surfaces are a major factor in the spread of HBV.
- Transmission of hepatitis B is preventable:
  - Use latex condoms during sex
  - Do not share needles
  - Use universal precautions in the workplace
  - The hepatitis B vaccination is available to all employees with occupational exposure at no cost to the employee.

## **Hepatitis C**

Hepatitis is a general term used to describe inflammation (swelling) of the liver. Alcohol, certain chemicals or drugs, and viruses such as hepatitis A, B, C, D, E and G may cause hepatitis.

- Hepatitis C is a serious, often fatal disease, caused by a virus that infects and attacks the liver. HCV is more common than hepatitis B and ranks slightly below alcoholism as a cause of liver disease.
- However, HCV is not as infectious as HBV because there are generally lower levels of the hepatitis C virus in the blood than of the hepatitis B virus
- HCV is primarily transmitted through blood-to-blood contact -- most commonly through shared needles. The risk of transmitting HCV through sexual contact appears to be low, but precautions should be taken anyway. HCV cannot be transmitted by casual contact such as shaking hands or sharing bathroom facilities.
- Transmission of hepatitis C is preventable:
  - Use latex condoms during sex
  - Do not share needles
  - Use universal precautions in the workplace
  - **HOWEVER**, unlike hepatitis B, currently there is **NO VACCINE** for hepatitis C. And also unlike HBV, there is no drug to prevent HCV infection after an exposure.

## **Medical Records**

Accurate medical records for each employee with occupational exposure must be maintained for at least the duration of employment plus 30 years.

## **Guidelines for Handling Blood and Other Bodily Fluids**

Very simply, it is good hygiene policy to treat all spills of body fluids as *infectious* in order to protect personnel from becoming infected with any germs and viruses. The procedures outlined below offer protection from all types of infection, and should be followed routinely.

### **How Should Blood and Body Fluid Spills be Handled?**

Whenever possible, employees shall follow universal precautions when exposed to blood and bodily fluids. Wear disposable, waterproof gloves when they expect to come into direct hand contact with body fluids (when treating bloody noses, handling clothes soiled by incontinence, or cleaning small spills by hand). Gloves used for this purpose shall be put in a plastic bag or lined trash can, secured, and properly disposed. Hands should always be washed after gloves are removed, even if the gloves appear to be intact.

If an employee has unexpected contact with body fluids or if gloves are not available (for example, applying pressure to a bleeding wound), the employee shall wash their hands and other affected skin for at least 10 seconds with soap and water after the direct contact has ended.

### **Hand-washing**

Proper hand-washing requires the use of soap and warm water and vigorous washing under a stream of running water for at least 10 seconds. If hands remain visibly soiled, more washing is required. Scrubbing hands with soap will suspend easily removable soil and microorganisms, allowing them to be washed off. Running water is necessary to carry away dirt and debris. Rinse your hands under running water and dry them thoroughly with paper towels or a blow dryer. When hand-washing facilities are not available, use a waterless antiseptic cleanser (available from Foreman), following the manufacturer's directions for use.

### **It is good hygiene to treat all bodily fluids as infectious.**

### **Contaminated Surfaces and Equipment**

All surfaces and equipment that comes into contact with blood and bodily fluids shall be handled as contaminated. Contaminated surfaces and equipment will be isolated until decontaminated. Make arrangements with Supervision to arrange for proper cleaning and sanitizing.

### **Training**

In the event an employee is assigned a job responsibility involving the exposure to bodily fluids, training in Bloodborne Pathogens will be provided upon initial assignment and annually thereafter. Training records will be kept for a minimum of 3 years.

### **Exposure Control Plan**

Where job responsibilities involve the exposure to bodily fluids, an Exposure Control Plan will be developed and made available to employees. Access to a copy of the exposure control plan shall be provided in a reasonable time, place, and manner.

# Confined Space

## Policy:

All confined spaces will be evaluated and entry into these spaces shall be managed in accordance with this program.

## Procedure:

### **Identify Confined Spaces**

A "confined space" means a space that:

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

### **Identify Permit Required Confined Spaces**

A "permit space" means a confined space that has one or more of the following characteristics:

1. Contains or has a potential to contain a hazardous atmosphere;
2. Contains a material that has the potential for engulfing an entrant;
3. Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or
4. Contains any other recognized serious safety or health hazard.

**Determine if the Confined Space is a Permit Required Confined Space.** Special precautions shall be taken when working in a Permit Required Confined Space. Permit Required Confined Spaces include:

- an active Sanitary Sewer manhole
- any Sewer system connected to an active Sanitary Sewer (unless the Sewer system is isolated from the Sanitary Sewer system)
- a communications or electric vault connected to an active Sanitary Sewer System (unless the vault is isolated from the Sanitary Sewer system)
- a Gas Regulator Vault
- any Confined Space that may have a hazardous atmosphere
- any Confined Space that may have an engulfment hazard

There are several customers that may require a "Permit-required confined space" program when entering a confined space. In these cases, follow the DDS Companies Confined Space Program.

**Hazardous Atmosphere – An atmosphere that contains any of the following:**

- Presence of toxic gases. Equal to or more than 10 ppm Hydrogen Sulfide.
- Presence of explosive/flammable gases. Equal to or greater than 10% of the Lower Flammable Limit (LFL).
- Oxygen Deficiency. A concentration of Oxygen in the atmosphere equal to or less than 19.5% by volume.

- Carbon Monoxide – A concentration equal to or more than 35 ppm Carbon Monoxide

### **Control of atmospheric hazards.**

Company employees shall not enter a Permit Required Confined Space until the atmosphere has tested “safe”. In order to ensure that the atmosphere is safe the following steps will be taken:

- Surveillance. The surrounding area shall be surveyed to avoid hazards such as drifting vapors from tanks, piping or sewers.
- Testing. The confined space atmosphere shall be tested to determine whether dangerous air contamination and/or oxygen deficiency exists. Contact the Safety Manager to arrange testing. Results of testing are to be shared with employees participating in the entry. Employees may request re-testing at any time.
- Space Ventilation. Where appropriate, open additional manholes to increase air circulation. Use portable blowers to augment natural circulation if needed. After a suitable ventilating period, repeat the testing. Entry may not begin until testing has demonstrated that the IDLH conditions have been eliminated – it is DDS policy to not enter into IDLH conditions.

### **Work Practices During Entry**

When working in a Permit Required Confined Space, employees shall follow the following work practices:

- The Confined Space Entry Permit must be completed before approval can be given to enter a Permit Required Confined Space. The Confined Space Entry Permit shall address: Atmospheric testing (initial, post-isolation, continuous); Hazard isolation; Ventilation; and Communication
- The entrance to the permit space will be posted and barricaded to prevent unauthorized entry
- The Entrant shall wear appropriate PPE
- An Attendant will be identified to maintain communication with the Entrant.
- Communications shall be maintained between the Entrant and Attendant.
- If there is a change in the conditions for which entry was approved, a new Confined Space Entry Permit must be completed.
- Appropriate signage or barriers shall be placed in order to protect employees from external hazards including, but not limited to pedestrians & vehicles.

After the work is complete, all workers removed from the confined space, and the space closed, the completed permit shall be sent to the Safety manager.

**Rescue:** Whenever feasible, the entry will be planned so rescue can be done from outside the confined space – a Non-entry rescue. Where necessary, utilize rescue services from the host facility or arrange for a rescue team prior to the work. If a rescue is initiated, call the local fire department or emergency services (911).

## **Definitions/Duties**

Attendant – an individual stationed outside Permit Required Confined Spaces who monitors the Entry Worker. One Stand-by worker is assigned to each confined space entry. Duties include:

- Know the hazards.
- Know the behavioral effects of the hazards.
- Be able to identify the authorized entrants.
- Remain outside until relieved.
- Communicate with entrants throughout the work period.
- Monitor and evacuate entrants if necessary.
- Summon rescue, if needed.
- Warn away unauthorized persons.

Entrant – an employee who is authorized by the company to enter a permit space.

Duties include:

- Know the hazards associated with confined space entry, and in particular, the hazards associated with the PRCS being entered.
- Know the behavioral effects of the hazards.
- Know how to use all required equipment.
- Know the procedures for communication with the attendant.
- Know how to alert the attendant of hazardous or prohibited conditions.
- Know how to exit the space if necessary

Entry Supervisor - the person responsible for determining if acceptable entry conditions are present at a permit space where entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry as required by this section.

Duties include:

- Know the hazards.
- Know the behavioral effects of the hazards.
- Verify safe entry conditions.
- Terminate entry and cancel permit.
- Verify availability and effectiveness of rescue services.
- Remove unauthorized persons.
- Ensure acceptable entry conditions are maintained.

## **Training**

All employees involved in a Confined Space Entry will be trained to understand their responsibilities under the OSHA Standard and the DDS Companies Confined Space Program. Training shall be conducted prior to initial assignment, prior to a change in assigned duties, when a new hazard has been created and/or if special deviations have occurred.

All Training records will be kept in employee files and documented in the Training Records in *DDS Human Resource Management System*.

## **Multiple Employers**

Prior to entering a permit space, DDS will obtain all of the Controlling Contractor's information regarding permit space hazards and entry operations and inform the Controlling Contractor of the permit space program to be followed, including any hazards likely to be confronted or created in the permit space.

After entry operations, DDS will inform the Controlling Contractor in a timely manner of the permit space program followed and any hazards confronted or created in the permit space(s) during entry operations.

In situations where employees from multiple companies must enter the same confined space, the DDS Foreman will coordinate activities with the other contractors to ensure the protection of all entrants.

## **Annual Review**

Completed permits will be returned to the Safety Department and maintained for at least one year. The Safety Manager will review all completed permits at least annually for completeness and areas of improvement.

# Concrete and Masonry Construction

## **Background:**

Concrete is composed of cement, sand, aggregate (sized stones), and water. When mixed in the correct amounts, concrete is a stable and versatile building medium which can be used in a variety of applications.

## **Scope and application:**

This chapter sets forth requirements to protect construction employees from the hazards associated with concrete and masonry construction operations performed in workplaces covered under 29 CFR Part 1926. In addition to the requirements in Subpart Q, other relevant provisions in Parts 1910 and 1926 apply to concrete and masonry construction operations.

## **General Requirements:**

It is the policy of the Company that all concrete pour operations be conducted under the direct supervision of a competent supervisor. This includes an on site pre-safety briefing to all employees, inspection of forms, and the inspection of all Personal Protective Equipment that will be used during the operation

## **Supervisor Oversight Requirements:**

Conduct a safety meeting with the workers at the beginning of each shift to review that hazards that each person may encounter and give instructions for hazard elimination and/or protection.

Inspect all tools and equipment at least daily before use.

Workers mixing dry contents of concrete, or making saw cuts or other dust raising actions with concrete, may be exposed to dust inhalation. Implement dust control measures during sawing, grinding and mixing operations.

Be aware of the swing radius of the concrete chutes, pinch points and the handling of chutes. Fingers caught in chute pinch points may be amputated.

Check for overhead power lines and avoid contact with float handles, pump booms and other tools and equipment.

Review Material Safety Data Sheets (MSDS) with the employees concerning the ingredients of the concrete, both the basic and additive ingredients, and other items such as curing compounds and sealants.

## **Equipment:**

- (a) **Concrete mixers.** Concrete mixers with one cubic yard (.8 m<sup>3</sup>) or larger loading skips shall be equipped with the following:
- a. A mechanical device to clear the skip of materials; and
  - b. Guardrails installed on each side of the skip.
- (b) **Bull floats.** Bull float handles, used where they might contact energized electrical conductors, shall be constructed of nonconductive material or insulated with a nonconductive sheath whose electrical and mechanical characteristics provide the equivalent protection of a handle constructed of nonconductive material.
- (c) **Masonry saws.**
- a. Masonry saws shall be guarded with a semicircular enclosure over the blade.
  - b. A method for retaining blade fragments shall be incorporated in the design of the semicircular enclosure.

## **Requirements For Cast-In-Place Concrete**

- (a) **General requirements for formwork.**
- a. Formwork shall be designed, fabricated, erected, supported, braced and maintained so that it will be capable of supporting without failure all vertical and lateral loads that may reasonably be anticipated to be applied to the formwork.
- (b) **Removal of formwork.**
- (1) Forms and shores (except those used for slabs on grade and slip forms) shall not be removed until the employer determines that the concrete has gained sufficient strength to support its weight and superimposed loads. Such determination shall be based on compliance with one of the following:
- i. The plans and specifications stipulate conditions for removal of forms and shores, and such conditions have been followed, or
  - ii. The concrete has been properly tested with an appropriate ASTM standard test method designed to indicate the concrete compressive strength, and the test results indicate that the concrete has gained sufficient strength to support its weight and superimposed loads.

# Electrical Safety

## **Policy:**

All electrical work will be conducted in a manner consistent with existing regulations and with good standard practices. This section establishes standards for electrical operations.

## **Requirements:**

1. Electrical installations and utilization equipment will be in accordance with the current edition of the National Electrical Code, National Fire Protection Association (NFPA 70); American National Standards Institute (ANSI) Standard C1. This code will also apply to every replacement, installation, or utilization equipment.
2. Equipment or facilities designed, fabricated for, and intended for use by Company personnel will be procured to meet the requirements of the National Electric Code.
3. Frames of all electrical equipment, regardless of voltage shall be grounded.
4. Exposed non-current carrying metal parts of electrical equipment that may be come energized under abnormal conditions shall be grounded in accordance with the National Electrical Code.
5. Wires shall be covered wherever they are joined, such as: outlets, switches, junction boxes, etc.
6. Parts of electrical equipment which in ordinary operation produce arcs, sparks, etc., shall not be operated or used in explosive atmospheres or in close proximity to combustible materials.
7. Equipment connected by flexible extension cords shall be grounded either by a 3-wire cord or by a separate ground wire (except double insulated equipment).
8. Ground fault circuit interrupters (GFCI) shall be used on all 120-volt, single-phase, 15- and 20-ampere receptacle outlets at job sites when the receptacles are not a part of the permanent wiring of the building or structure.
9. Whenever feasible, work on components will be performed when they are de-energized. When working on or near exposed energized parts, a safety review will be conducted to determine safe work practices. Only qualified personnel shall work on energized components.

## **Inspections:**

Supervisors will insure that work areas are inspected for possible electrical hazards on a daily basis.

Sufficient workspace shall be provided and maintained around electric equipment to permit safe operations and maintenance of such equipment.

## **Responsibilities:**

- a. Supervisors

1. All work hazards must be anticipated and all safeguards utilized.
  2. Ensures that all employees are properly trained and instructed in the safe operation of electrical equipment and aware of all hazards associated with the use of these electrical devices.
  3. Initiates any necessary administrative action required to enforce safety practices.
  4. Requests assistance from Company Management regarding equipment operation which require unique safety practice instructions.
- b. Employees
1. Follows the Company's electrical safety policies and procedures and instructions of responsible Supervisors and the Safety Director.
  2. Brings to the attention of the supervisor and/or Safety Director potential hazardous situations such as discrepancies between instruction, procedures, policies and manual, faulty equipment, misapplication of device, etc.
  3. Electrical equipment known to be malfunctioning must be repaired or replaced before use. The repair must be initiated as soon as possible after the malfunction is noted.

## **Electrical Safety Practices**

The following practices are to be followed by all employees:

- a. Individual
1. The user is responsible for obtaining necessary tools and safety equipment, inspecting prior to use, and identifying any faulty equipment to his/her supervisor. It shall be the Supervisor's immediate responsibility to replace any faulty safety equipment and notify the Safety Director.
  2. Eye protection is required during any electronic or electrical hardware repair, installation and/or open front operation.
  3. When working on or near exposed deenergized parts they are to be treated as if they were live electrical components.
- b. Emergency Procedures
- In the event of a medical emergency (shock etc.) contact a member of Management, contact local Emergency Rescue Units (911), and direct Emergency Rescue Units to the scene.
- c. Emergency Removal or Tag and Lock
- In the event of an emergency in which the person responsible for removing the tag and lock cannot be located, the General Foreman may remove the device with Management or Safety Director approval. Details for removal are given in the Lock out/Tag out Policy.
- d. Hazards

The extreme hazard of electrical equipment is the potential for personnel electrocution from contacting energized systems. Electrical equipment can also cause catastrophic property damage because of its potential as an ignition source for causing fire or explosion.

e. Overhead Powerlines

When working under overhead lines clearance distance must be provided or lines shall be deenergized and grounded. Unqualified employees must maintain a 10' clearance distance. Qualified employees must adhere to the approach distances defined in 29CFR1910.333 Table S5. Vehicular and mechanical equipment clearance distances of 10 ft. and protective measures

f. Entry into Electrical Vaults/Rooms

Entry into electrical vaults shall be performed in accordance with the company Confined Space Program. In addition:

- employees may not enter spaces containing exposed energized parts unless illumination is provided that enables the employees to work safely.
- protective shields, protective barriers or insulating materials as necessary shall be used when working in confined or enclosed work spaces where electrical hazards may exist.
- portable ladders and state they shall have non-conductive side rails.
- conductive apparel shall not be worn unless the items are rendered non-conductive by covering, wrapping or other insulating means.

**Control of Hazardous Energy (Lock-Out/Tag-Out)**

When necessary the company's Lock out/Tag out program will be implemented to control hazardous energy.

# Emergency Action Plan

## **Purpose:**

To establish the policy and procedures regarding management's and employee's response to various emergency situations. Examples of an emergency are fire, tornado, earthquake, and bomb threat.

## **Policy:**

The DDS Companies have developed plans that address emergency situations that may arise in work locations and which may threaten human health and safety, and damages company assets. The Policy shall be kept on-site and on-line and shall be available for all employees to review. Management is responsible for implementing the Emergency Action Plans. These Emergency Action Plans will meet the following objectives:

- Provide a means of notifying employees (alarm), customers and local authorities of an emergency situation. It shall be a distinctive signal to alert employees of an emergency situation
- Provide for a safe and orderly method of evacuation of employees and customers from company premises.
- Account for all employees who occupied company premises at the time of evacuation, should one occur.
- Emergency Action Plans will (continued):
  - Provide emergency first aid treatment or summon emergency medical assistance for injured individuals.
  - Provide training and needed information to those employees responsible for taking action in the event of an emergency. This includes the safe and orderly evacuation of the building.

Signs as required by ordinance, regulation, or law will identify emergency exits. Employees are required to be familiar with the location(s) of alarm pull stations and emergency exits.

Training on Emergency Action Plans will take place during new employee orientation, when changes occur in the action plans, and periodically as coordinated by the Safety Director.

Contact information will be provided to employees who need additional information pertaining to the plan or to their respective duties.

**Smoking is never allowed anywhere on company premises during an emergency.**

If hazardous materials are involved, disposal must be done in compliance with federal, state, and local environmental laws.

## **Procedure:**

### **I. Fire Reporting and Procedure:**

If a fire alarm or alert is sounded or a fire is reported by an employee, regardless of the reason for the alarm or the severity of the fire, the following action must be taken immediately:

#### **Senior Management**

1. Immediately notifies the Fire Department by dialing 911.
2. Gives company name, address, and area where the fire is located.
3. Assigns an employee to wait for the fire department outside and direct them to the fire's location.
4. Once outside, takes a head count of employees to insure all were safely evacuated. Double checks that all individuals are out of company premises.  
Note: When one or more employees are unaccounted for, employees are not to re-enter the building to conduct a search. Notify the ranking fire or other emergency response official on the scene and their approximate location.
5. Immediately after the fire, notify the President of the DDS Companies and all other management individuals. Coordinate any salvage and repair operations.

#### **Employee**

1. If trained in the use of fire extinguishers, may attempt to suppress a small fire, until relieved by the Fire Department or until it becomes apparent that the fire cannot be controlled by fire extinguishers.

Note: Employees should never attempt to control a fire, which endangers their health. They must immediately evacuate the area when it becomes apparent that the fire cannot be controlled or when conditions become more hazardous. No employees shall remain in the building.

## **II. Evacuation:**

### **Senior Management**

1. Telephones the local emergency agency (for example, fire, police, hazardous materials team, etc.).
2. Checks all areas of their respective departments, restrooms, and public areas to verify that employees and individuals are evacuated.
3. Secures all cash, checks, and charge documents in the safe if time permits.
4. Designates a safe area outside as a gathering point for all employees. Takes a head count of employees to insure all were safely evacuated.
5. No employees are to remain in the buildings under any circumstance.  
Note: Employees are not to re-enter the building. Management will notify the ranking fire or other emergency response official on the scene of a potentially trapped person and their approximate whereabouts.
6. Dismisses all non-essential employees.
7. Telephones the President of the DDS Companies and all other management personnel.

## **III. Bomb Threat:**

In the event someone calls and says there is a bomb in the building, the following steps will be performed:

### **Employee (Receiving Threat)**

1. Keeps the caller on the line as long as possible. Asks them to repeat the message. Tries to write down every word spoken by the caller.
2. Asks the caller where the bomb is located and when it will go off.
3. Tells the caller that the building is occupied and detonation of a bomb could result in the death and injury to innocent people.
4. Pays particular attention to background noises, such as music playing, engine noises, etc.
5. Listens to the voice, male, female, voice quality, accent, and speech impediments.
6. When the caller hangs up, **do not hang up the phone!** Sometimes, phones can be traced back to the source. Immediately notify management and describe the threat.

### **Senior Management**

1. Calls the local Police or Fire Department to report the Incident. Follows all recommendations and instructions provided by either department.
2. If the Police or Fire Department declines to give instructions to evacuate the building, search the premises (if time permits) for any suspicious looking device or package. If one is found, follow the Evacuation Plan.

**Do not touch any suspicious device or package.**

#### **IV. First Aid:**

If an employee / individual is injured, the initial responsibility of management is to provide the needed first aid or arrange for emergency medical response or professional medical care.

##### Senior Management

1. Treats the injured individual using the supplies from a first aid kit.
2. In the event an employee is seriously injured and requires professional medical care, drive the employee to a medical provider. If any individual is not mobile or has a life threatening injury or illness, arrange for emergency care and transportation (call 911).

#### **V. Hazardous Material Spill:**

Management will respond to incidental releases of hazardous substances when the substance can be absorbed, neutralized, or otherwise controlled at the time of release by employees in the immediate area or by maintenance personnel. If a large spill or fire occurs that is not controllable, Management will contact the appropriate local authorities, such as the Fire Department.

#### **VI. Robbery:**

In the event a robbery occurs, the main objective is to reduce the risk of injury to employees and individuals and to get the robber out of the building as soon as possible.

##### Employee

1. Be attentive and calm. Listen to the robber and do exactly what he/she asks you to do.
2. Do give up money as demanded.
3. Remain alert. Try to remember details of the robber's appearance, clothing, speech, etc.
4. If possible, watch the robber's method and direction of escape.
5. Expect foul/strong language. Expect to lie on the floor.
6. Do not make any sudden movements.
7. Don't overreact. Do not grab for the weapon or call for help.
8. Do not argue.
9. After the robbery, write everything down.

##### Senior Management

1. Call the Police
2. Call the President of the DDS Companies.
3. Have all witnesses write everything they can recall.

# **Equipment Training Program**

## **Policy:**

The DDS Companies use a wide array of heavy equipment (e.g. backhoes and excavators) and tools (hand and power tools) in the course of the work performed. It is the policy of the companies that all employees will be qualified by training or experience to operate the tools, equipment, and machinery they are expected to use. We recognize that our employees come to the company with different work experience and skills. Where there is previous experience, an employee's proficiency with a tool, equipment, or machine will be verified. Where necessary, an employee will be trained in the proper and safe use of the tools, equipment, and machines used.

The Occupational Safety & Health Administration (OSHA) defines "*qualified*" as "*one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated his ability to solve or resolve problems relating to the subject matter, the work, or the project*".

## **Purpose:**

The purpose of the *Equipment Training Program* is to ensure that employees are qualified to use the tools and equipment on the job. This will be accomplished by verifying existing skills and providing training where necessary. An *Equipment Training Program Checklist* will be completed for each employee expected to handle or operate a tool, piece of equipment, and/or machine.

## **Responsibilities:**

Foremen/Supervisors are responsible for:

- Ensuring that employee's use only those tools, pieces of equipment, and/or machines that they are qualified to use.
- Ensuring that all hand and power tools are maintained in a safe condition. Any tool which is not in compliance with any applicable requirement of this part is prohibited and shall be identified as unsafe by tagging or locking the controls to render them inoperable.
- Ensuring employees are instructed in the recognition and avoidance of unsafe conditions
- Completing an *Equipment Training Program Checklist* for employees on their crews.
- Informing the Safety Director when new tools, pieces of equipment, and/or machines are to be purchased, rented, or brought onto a job site for employees to use.
- Participate in periodic review of completed *Equipment Training Program Checklists* to update the tools, pieces of equipment, and/or machines employees are qualified to use.
- Ensuring equipment, materials, and job sites are inspected frequently by a competent person(s).

When filling out the *Equipment Training Program Checklist*:

- Write the employee's name in the space provided

- For each tool, piece of equipment, or machine that the employee is expected to use the Foreman/Supervisor is responsible to determine if the employee can use the tool, equipment, or machine in a proper and safe manner.
- If the Foreman believes the employee to be qualified to use the tool, equipment, and/or machine, the Foreman initials and dates the appropriate line on the checklist.
- If the Foreman believes that the employee needs to have training on a tool, piece of equipment, and/or machine, then this training should be arranged, delivered, and then the appropriate line for the tool, equipment, and/or machine should be initialed and dated.
- The Foreman shall have the employee initial the appropriate lines on the *Equipment Training Program Checklist* as well.
- Return completed checklists to the Safety Director.

Note: Not every employee has to be qualified on everything identified on the checklist. If the employee is not expected to use a tool, piece of equipment, and/or machine leave that line blank. It can be completed in the future if necessary.

Employees are responsible for:

- Using only those tools for which he is qualified.
- Ensuring all hand and power tools are maintained in a safe condition
- Maintaining and using the guards on tools equipped with guards
- Wearing appropriate PPE
- Inspecting tools prior to use. Where defects or damage is identified, tag the tool as defective and return to the Shop for repair
- Initialling the appropriate lines on the *Equipment Training Program Checklist* after Foreman has verified skills or provided training.
- Request training on proper and safe use of tools, equipment, and/or machines they are not qualified to use prior to use.

The Safety Director is responsible for:

- Updating and maintaining the *Equipment Training Program*
- Maintaining the completed *Equipment Training Program Checklist*
- Updating the *Equipment Training Program Checklist* as new tools, pieces of equipment, and/or machines are to be purchased, rented, or brought onto a job site for employees to use
- Ensuring a periodic review of completed *Equipment Training Program Checklists* to update the tools, pieces of equipment, and/or machines employees are qualified to use.



**DDS Companies**  
**Equipment Training Program**  
**Rochester Utility Contractors**  
**Gas Foremen, Operators, & Laborers**

DDS Companies  
240 Commerce Drive  
Rochester, NY 14623  
585-359-7540

Employee Name: \_\_\_\_\_

**Heavy Equipment**

Description of Equipment	Trained or Verified	Foreman's Initials	Employee's Initials	Date
Backhoe - Loader				
Backhoe - Excavating				
Payloader				
Skid Steer (All attachments)				
Small Excavator (<12,000 lbs.)				
Large Excavator (>12,000 lbs.)				
Ditch Witch Directional Drill				
Trencher				
Side Boom Tractor				
Straw Blower				
Hydroseeder				
Asphalt Roller				

**Hand and Power Tools**

Description of Equipment	Trained or Verified	Foreman's Initial	Employee's Initials	Date
Jumping Jack Compactor				
Plate Tampers				
Cutoff Saws				
Concrete Vibrators				
Tow-behind Compressors				
Jackhammers				
Speed Shore Hydraulic Jacks and Braces				
Trenchbox				
Gas Powered Generator				
Gas Powered Water Pump				
Electric Water Pump				
Vacu-Tron (vacuum trailer)				
Electric Power Tools (circular saw, reciprocating saw, drill, hammer drill)				
Hand Tools (Hammer, wrenches, pliers, screwdriver, knives, shovel, pry bar, etc.)				

# Excavation and Trenching Program

## **Policy:**

### **Excavation**

As an obvious first step in preventing any injury or fatality in the future, the Company concludes that all excavation operations shall be done only in full compliance with existing OSHA standards.

Therefore, the Company requires that the following procedures are observed and will be followed without exception:

- The Company will have all utilities marked before digging.
- Shoring systems or sloping of the walls will be used in all excavations 5 to 20 feet deep in any type of soil, except solid, stable rock.
- Appropriate shoring, shielding, or sloping requirements for all excavations deeper than 20 feet shall be determined by an engineer qualified to make these determinations.
- Materials must not be placed two feet or less from the edge of the excavation.
- Stop logs or barriers will be placed where vehicles and /or equipment that operate near the excavation do not accidentally fall into the excavation.
- Dirt generated from the excavated hole will not be stockpiled closer than two feet from the open hole.
- A means of egress shall be provided in excavations 4 feet or more deep. A means of egress shall be provided every 25 feet of trench length.
- Workers shall be protected from falling loads. Never move a load over employees.

### **Trenches**

OSHA has special rules to protect workers in trenches. Employees will follow the OSHA rules unless:

- The trench is in stable rock, or
- The trench is less than 5 feet deep.

As the Competent Person, the Company Foreman will inspect a trench:

- Before every shift
- If bad air is expected — such as, the trench is in a sewer or near a dump or stored chemicals
- After anything that can increase hazards, such as:
  - Every rainstorm (address the accumulation of water)
  - The trench wall moves, causing cracking, scaling, or bulging
  - A heavy load near the trench moves or gets heavier.

A Competent Person is one that is knowledgeable of the hazards, the OSHA standards, and has the authority to make changes on the Site to address identified hazards.

Before Employees enter a trench they shall:

- Have it inspected by the Foreman.
- Make sure all equipment is in good condition. This includes water pumps and ventilators.
- Have a way to get out fast, like a ladder, if the trench is 4 feet deep or more.

The Company will have all utilities marked before digging. In New York, contact Dig SafeNY.

If bad air is expected, the Safety Director will work with the Foreman to develop a plan to address the situation. Air must meet the following air quality standards:

- The air must have 19.5 to 23.5% oxygen.
- Substances that can burn or explode — like gasoline or methane — should be at less than 20% of the lower explosive limit (or lower flammability limit).
- Check the air for toxics like chlorine, carbon monoxide, sewer gases, and hydrogen sulfide. These toxics can kill. (Carbon monoxide has no smell. Hydrogen sulfide smells like rotten eggs).

The Foreman will also check the soil utilizing a Pocket Penetrometer. This check helps the Foreman choose the right worker-protection system:

- A trench can be in stable rock, or type A, type B, or type C soil. Stable rock and type A soils are the safest. Most soils are type B. Sand and trenches with water are type C soils.
- Water in a trench means workers are in danger.
- Clay can be type A, B, or C soil; it depends on how much water is in the clay. (Many cave-ins happen in clay, because people think it looks safe.)

### **Trench Work Procedures:**

The following procedures will be followed while digging trenches:

- Sloping, benching, or shoring will be performed to help prevent cave-ins.
- Keep the spoil pile 2 feet or more from the edge of the trench.
- Prevent materials, rocks, or soil from falling into the trench; use barriers, if needed.

### **IF A TRENCH CAVES IN:**

- Get out of the trench. Call 911(or emergency services). Help your co-workers from outside the trench, if you can.
- Never go into a trench that is caving in or has bad air — even to rescue co-workers. You can be killed.

If walkways or ramps are installed, they shall be guarded per the requirements of Fall to protect against injuries as a result of falls.

	<b>DAILY EXCAVATION CHECKLIST</b>		DDS Companies 240 Commerce Drive Rochester, NY 14623 585-359-7540		
Competent Person:		Date:			
Site Location:		Time:			
Soil Type:		Excavation Depth:	Excavation Width:		
Type of Protective System Used:					
Indicate for each item: Yes – No – or N/A for not applicable:					
<b>1. General Information:</b>					
<p>A. Is excavation less than five feet in depth?</p> <p>B. Is there a potential for a cave-in? *IF YES, excavation must be sloped, shored, or shielded.</p> <p>C. Is excavation deeper than five feet in depth? * IF YES, excavation must be sloped, shored, or shielded.</p> <p>D. Is sloping used as your protective system?</p>					
<b>2. Inspection of Job-site:</b>					
<p>A. Excavations, adjacent areas, and protective systems inspected by a competent person daily before the start of work.</p> <p>B. Competent person has the authority to remove employees from the excavation immediately.</p> <p>C. Surface encumbrances removed or supported.</p> <p>D. Employees protected from loose rock or soil that could pose a hazard by falling or rolling into the excavation.</p> <p>E. Appropriate PPE worn by all employees.</p> <p>F. Spoils, materials, and equipment set back at least two feet from the edge of the excavation.</p> <p>G. Adequate signs and/or barriers provided if necessary</p> <p>H. Warning vests or other highly visible clothing provided and worn by all employees exposed to vehicular traffic</p>					
<b>3. Utilities:</b>					
<p>A. Location of utilities marked.</p> <p>B. Underground utilities located by hand digging.</p> <p>C. Underground utilities are protected, supported, or removed when excavation is open.</p>					
<b>4. Means of Access and Egress:</b>					
<p>A. Travel distance to means of egress no greater than 25 feet in excavations four feet or more in depth.</p> <p>B. Straight ladders used in excavations extend at least three feet above the edge of the trench.</p> <p>C. Ramps being used for employee access have been designed by the competent person.</p> <p>D. Employees protected from cave-ins when entering or exiting the excavation.</p>					
<b>5. Wet Conditions:</b>					
<p>A. Precautions have been taken to protect employees from the accumulation of water.</p> <p>B. Water removal equipment monitored by a competent person.</p> <p>C. Surface water or runoff diverted or controlled to prevent accumulation in the excavation.</p> <p>D. Inspections have been made after every rainstorm or other hazard-increasing occurrence.</p>					

<b>Daily Excavation Checklist Continued:</b>			
	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>6. Hazardous Atmosphere:</b>			
A. The atmosphere within the excavation must be tested where there is a reasonable possibility of an oxygen deficiency, combustible or other harmful contaminant exposing employees to a hazard.			
<b>7. Support Systems:</b>			
A. Materials and/or equipment for support systems selected based on soil analysis, trench depth, and expected loads.			
B. Materials and equipment used for protective systems inspected and in good condition.			
C. Materials and equipment not in good condition have been removed from service.			
D. Protective systems installed without exposing employees to the hazards of cave-ins, collapses, or threat of being struck by materials or equipment.			
E. Members of support system securely fastened to prevent failure.			
F. Support systems provided to ensure stability of adjacent structures, buildings, roadways, sidewalks, walls, etc.			
G. Excavations below the level of the base of a footing have been approved by a Registered Professional Engineer.			
H. Removal of support systems progresses from the bottom and members are released slowly so you can note any indication of possible failure.			
I. Backfilling progresses with removal of support system.			
J. Shield system placed to prevent lateral movement.			
K. Employees are prohibited from remaining in shield system during vertical movement.			
<b>8. Training:</b>			
A. All employees have had Excavation Safety Awareness Training.			

<b>Description of trenching/excavation activities inspected:</b>

## ➤ Dig Safely Procedures

- Why Do I Need to Call Before I Dig?

It's the law in New York and it is also a necessary part of planning your work, Reviewing your work and your work area prior to the actual excavation can help save you and your company from unexpected downtime, loss of revenue and injury.

- Dig Safely New York

Dig Safely New York is a link between you - the excavator, and the utility owner operators. They take your calls and transfer the information on to the utility operators.

*Dig Safely New York does not mark lines!*

- Call Center Hours of Operation

Dig Safely New York takes stake out request calls, 24 hours a day. 7 days a week.

- Call Center Operation

After you have given all of the appropriate information to the one-call operator (customer service representative), this is what happens:

The customer service representative will read all the information back to you. Listen carefully and verify its accuracy.

You will be given a list of member utility owners that the one-call center will notify. Write them down so that you can check for a positive response.

You will also be given a stake-out request number that is proof of your call and a reference. Write down that number and retain it for your future records.

Remember, not all utilities and municipalities are members of the one-call system. If you are aware of any other underground facilities you should contact that operator directly.

❖ Call Before You Dig!  
Dig Safely New York  
1-800.962.7962  
[www.digsafelynewyork.com](http://www.digsafelynewyork.com)

1. You must call or go online for a stake-out request at least two working days but not more than 10 working before any excavation starts. (Excluding holidays & weekends).
2. You must call regardless of where the excavation is. Even if it is on private property, out in the middle of a field, or on a street that has no name, or if you will be digging on someone else's job.
3. You must call even if you are only excavating a few inches or just surface grading. If you move material.., you must call.
4. You must call even if the property owner tells you the site has no buried facilities, or that they know where buried facilities are located.
5. Make sure you have a proper stake out request, don't rely on old marks, or another excavator's marks or stake out request.
6. Re-call stakeout if crews are off the job site for 10 days or more.
7. Dig Safely requests that you mark out the area that you plan to excavate with white paint, flags, or stakes but this is not required. You should mark it if responders request it or if your instructions are complicated.
8. When Investigators from the Public Service Commission inspect an excavation site or investigate damage, they will check to see if you have a proper stake-out request.
9. Review the Stake-Out Request Information Sheet so that you will know what you need when you call
10. Part 753 defines an emergency as: Any abnormal condition which presents immediate danger to life or property including discontinuance of a vital utility service necessary for the maintenance of public health, safety and welfare.
11. For emergency excavations notify your one-call center with the location of the emergency excavation as soon as possible!

# Fall Protection Plan

## **Policy:**

It is the policy of the Company to take all practical measures possible to prevent employees from being injured by falls from heights. The Company will take all necessary steps to eliminate, prevent, and control fall hazards. The Company will comply fully with the OSHA Fall Protection standard (CFR 1926, Subpart M, Fall Protection).

This policy will follow the OSHA standard for potential falls from heights of 6 feet or more. First consideration will be given to the elimination of fall hazards. If a fall hazard cannot be eliminated, effective fall protection will be planned, implemented, and monitored to control the risks of injury due to falling.

In the event of an incident or near miss involving an employee who is working under this plan, The Safety Director shall request an immediate incident investigation to determine the cause of the incident. If the findings determine that changes need to be made to this plan, the Safety Director will initiate those changes immediately.

## **Examples of Situations Requiring Fall Protection:**

When working at heights in General Industry, fall protection shall be provided when exposed to a fall of 4 feet or more. When working at heights in the Construction Industry, fall protection shall be provided when exposed to a fall of 6 feet or more. Fall protection is required whenever work is performed in an aerial lift.

Site specific Fall Protection Plans are not utilized as alternative methods.

When working on a roof, employees shall be protected by the use of guardrails, a warning line system, safety monitoring, a positioning device, tether system, or personal fall arrest system.

### **➤ Low-slope Roofs**

Each employee engaged in roofing activities on low-slope roofs with unprotected sides and edges 6 feet or more above lower levels shall be protected from falling by guardrail systems, safety net systems, personal fall arrest systems or a combination of a warning line system and guardrail system, warning line system and safety net system, warning line system and personal fall arrest system, or warning line system and safety monitoring system. On roofs 50 feet or less in width, the use of a safety monitoring system without a warning line system is permitted.

## **Fall Protection Systems:**

### **➤ Guardrail Systems**

Guardrail systems must meet the following criteria. Toprails and midrails of guardrail systems must be at least one-quarter inch nominal diameter or thickness to prevent cuts and lacerations. If wire rope is used for toprails, it must be flagged at not more 6 feet intervals with a high-visibility material. Steel and plastic banding will not be used as

toprails or midrails. Manila, plastic, or synthetic rope used for toprails or midrails must be inspected as frequently as necessary to ensure strength and stability.

The top edge height of toprails, or (equivalent) guardrails must be 42 inches plus or minus 3 inches, above the walking/working level.

Screens, midrails, mesh, intermediate vertical members, or equivalent intermediate structural members must be installed between the top edge of the guardrail system and the walking/working surface when there are no walls or parapet walls at least 21 inches high. When midrails are used, they must be installed at a height midway between the top edge of the guardrail system and the walking/working level. When screens and mesh are used, they must extend from the top rail to the walking/working level and along the entire opening between top rail supports. Intermediate members, such as balusters, when used between posts, shall not be more than 19 inches apart.

Other structural members, such as additional midrails and architectural panels, shall be installed so that there are no openings in the guardrail system more than 19 inches.

The guardrail system must be capable of withstanding a force of at least 200 pounds applied within 2 inches of the top edge in any outward or downward direction. When the 200 pound test is applied in a downward direction, the top edge of the guardrail must not deflect to a height less than 39 inches above the walking/working level.

Midrails, screens, mesh, intermediate vertical members, solid panels, and equivalent structural members shall be capable of withstanding a force of at least 150 pounds applied in any downward or outward direction at any point along the midrail or other member.

Guardrail systems shall be surfaced to protect workers from punctures or lacerations and to prevent clothing from snagging.

The ends of top rails and midrails must not overhang terminal posts, except where such overhang does not constitute a projection hazard.

When guardrail systems are used at hoisting areas, a chain, gate or removable guardrail section must be placed across the access opening between guardrail sections when hoisting operations are not taking place.

At holes, guardrail systems must be set up on all unprotected sides or edges. When holes are used for the passage of materials, the hole shall have not more than two sides with removable guardrail sections. When the hole is not in use, it must be covered or provided with guardrails along all unprotected sides or edges.

If guardrail systems are used around holes that are used as access points (such as ladderways), gates must be used or the point of access must be offset to prevent accidental walking into the hole.

If guardrails are used at unprotected sides or edges of ramps and runways, they must be erected on each unprotected side or edge.

### **Personal Fall Arrest Systems:**

These consist of an anchorage, connectors, and a body belt or body harness and may include a deceleration device, lifeline, or suitable combinations. If a personal fall arrest system is used for fall protection, it must comply with OSHA requirements and do the following:

- Limit maximum arresting force on an employee to 900 pounds when used with a body belt
- Limit maximum arresting force on an employee to 1,800 pounds when used with a body harness
- Be rigged so that an employee can neither free fall more than 4feet nor contact any lower level
- Bring an employee to a complete stop and limit maximum deceleration distance an employee travels to 3.5 feet
- Have sufficient strength to withstand twice the potential impact energy of an employee free falling a distance of 4 feet or the free fall distance permitted by the system, whichever is less.

### **The use of body belts for fall arrest is prohibited and a full body harness is required.**

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

### **Positioning Device Systems:**

These body belt or body harness systems are to be set up so that a worker can free fall no farther than 2 feet. They shall be secured to an anchorage capable of supporting at least twice the potential impact load of an employee's fall or 3,000 pounds, whichever is greater.

### **Safety Monitoring Systems:**

When no other alternative fall protection has been implemented, the Company shall implement a safety monitoring system. The Company will appoint a competent person to monitor the safety of workers and shall ensure that the safety monitor:

- Is competent in the recognition of fall hazards;
- Is capable of warning workers of fall hazard dangers and in detecting unsafe work practices;
- Is operating on the same walking/working surfaces of the workers and can see them;
- Is close enough to work operations to communicate orally with workers and has no other duties to distract from the monitoring function.

Mechanical equipment shall not be used or stored in areas where safety monitoring systems are being used to monitor employees engaged in roofing operations on low-sloped roofs.

No worker, other than one engaged in roofing work (on low-sloped roofs) or one covered by a fall protection plan, shall be allowed in an area where an employee is being protected by a safety monitoring system.

All workers in a controlled access zone shall be instructed to promptly comply with fall hazard warnings issued by safety monitors.

### **Warning Line Systems:**

Warning line systems consist of ropes, wires, or chains, and supporting stanchions and are set up as follows:

- Flagged at not more than 6-foot intervals with a high-visibility material;
- Rigged and supported so that the lowest point including sag) is no less than 34 inches from the walking/working surface and its highest point is no more than 39 inches from the walking/working surface.
- Stanchions, after being rigged with warning lines, shall be capable of resisting, without tipping over, a force of at least 16 pounds applied horizontally against the stanchion, 30 inches above the walking/working surface, perpendicular to the warning line and in the direction of the floor, roof, or platform edge;
- The rope, wire, or chain shall have a minimum tensile strength of 500 pounds and after being attached to the stanchions, must support without breaking the load applied to the stanchions as prescribed above.
- Shall be attached to each stanchion in such a way that pulling on one section of the line between stanchions will not result in slack being taken up in the adjacent section before the stanchion tips over.

Warning lines shall be erected around all sides of roof work areas. When mechanical equipment is being used, the warning line shall be erected not less than 6 feet from the roof edge parallel to the direction of mechanical equipment operation, and not less than 10 feet from the roof edge perpendicular to the direction of mechanical equipment operation.

When mechanical equipment is not being used, the warning line must be erected not less than 6 feet from the roof edge.

### **Protection From Falling Objects:**

When guardrail systems are used to prevent materials from falling from one level to another, any openings must be small enough to prevent passage of potential falling objects. No materials or equipment except masonry and mortar shall be stored within 4 feet of working edges. Excess mortar, broken or scattered masonry units, and all other materials and debris shall be kept clear of the working area by removal at regular intervals.

During roofing work, materials and equipment shall not be stored within 6 feet of a roof edge unless guardrails are erected at the edge, and materials piled, grouped, or stacked near a roof edge must be stable and self-supporting.

## **Training:**

Employees will be trained in the following areas:

- (a) The nature of fall hazards in the work area, including the recognition and elimination of fall hazards;
- (b) The correct procedures for erecting, maintaining, disassembling, and inspecting fall protection systems;
- (c) The use and operation of controlled access zones and guardrail, personal fall arrest, safety net, warning line, and safety monitoring systems;
- (d) The role of each employee in the safety monitoring system when the system is in use;
- (e) The limitations on the use of mechanical equipment during the performance of roofing work on low-sloped roofs;
- (f) The correct procedures for equipment and materials handling and storage and the erection of overhead protection; and,
- (g) The Employees' role in fall protection plans.
- (h) Modifications to all equipment shall not be made without written approval from the manufacturer
  - (i) All fall protection equipment, including aerial lift controls and equipment are to be tested and inspected before each use
  - (j) Only trained and authorized persons are allowed to operate the equipment
  - (k) The load limits of equipment are not to be exceeded.
  - (l) All mobile equipment shall have a working back-up alarm or use a spotter when backing up.
  - (m) Maintain a minimum clearance between electrical lines and any part of the equipment of at least 10 feet.
  - (n) When working in an aerial lift, employees shall stand firmly on the floor, shall not climb on the rails or the edge of the basket, and approved fall restraint system shall be worn (the fall restraint shall be attached to an approved anchor point in the basket of the lift).
  - (o) Training shall be conducted prior to being assigned to tasks involving working at heights. Re-training shall be conducted when there are changes to the work conditions or equipment.
  - (p) Employees who lack 100% understanding of this plan shall be retrained.
  - (q) Retraining shall occur when the workplace changes.
  - (r) Training shall occur when the fall protection systems or equipment changes that render previous training obsolete.
  - (s) Training is to be documented in the DDS Companies Training Matrix

## **Site Specific Safety Plan**

Where work at height is performed and Fall Protection is provided, a Site Specific Safety Plan will be developed. Participants in the plan include Supervision, Foreman, and Safety (at least one of which is qualified in Fall Protection). The plan shall address the type of fall protection to be used in specific situations. The plan shall define how the prompt rescue of employee shall be accomplished in the event of a fall.

# Safety Harness Inspection Report

JOBSITE	Date	Inspector's Name
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Harness Make/ Model	MFG.'S SERIAL NUMBER	HARNESS WEBBING OR LEATHER	ALL STITCHING	RIVETS & EYELETS	D-RINGS, BUCKLES & TONGUE	BODY PAD (IF APPL.)	LANYARDS	SAFETY LATCH / HOOK	CERTIFICATION OR DATA TAG

**0 = YES - OK**

**X = NO - REPLACE**

**Ensure Harness is COLOR-CODED with the appropriate tape marker**

**FORWARD TO SAFETY DIRECTOR AT \_\_\_\_\_**

# Fire Safety Plan

## **Purpose:**

The purpose of the Fire Safety Plan is to prevent potential injuries and deaths, and to protect the Company's property from damage or loss due to fire. This plan includes fire prevention, building exits, fire extinguishing, emergency evacuation, and employee training.

This plan will be reviewed with all new employees when they begin their job and with all employees when the plan is changed.

## **Fire Prevention:**

Our first line of defense against fire is to prevent it in the first place. It is the responsibility of all employees to prevent fires. All employees will be apprised of the potential fire hazards in their work area and will be trained in safe work procedures and practices. Employees are expected to follow proper procedures to prevent fires and to notify their supervisor or other management personnel if they observe any condition that could lead to the ignition of a fire or could increase the spread of a fire.

The following are some general fire prevention practices and procedures that will be followed:

- All ignition sources (i.e., open flames, cutting torches, spark producing equipment, electric motors, heating equipment, etc.) will be controlled. All contact of ignition sources with combustible and flammable materials will be avoided. All employees will keep all combustible materials at least five feet from such ignition sources and all flammable liquids at least twenty feet away.
- Extensive use of electrical extension cords should be avoided. Any damaged or frayed electrical wiring, equipment cords, extension cords, etc. will be removed from service immediately and replaced or repaired.
- Any use of flammable liquids will be done in a manner that prevents spills, and prevents the flammable liquid or its vapor or spray from coming into contact with any ignition source. All flammable liquids will be stored in proper flammable liquid storage containers and kept in the proper storage cabinets.
- Housekeeping and storage practices are critical to preventing fires. Any combustible materials will be stored in neat stacks with adequate aisle space provided to prevent the easy spread of fire and to allow for access to extinguish any fire that may start. Trash, scrap, and other unnecessary combustibles must be cleaned up immediately and placed in proper disposal containers.
- Smoking is restricted to designated areas.

## **Company Fire Exits:**

- Each area of the building/work site has at least two means of escape and are to be used in a fire emergency. The location of exits and the path of egress (escape) will be shown on maps (and posted throughout the building as necessary).

- Fire exit doors will not be blocked or locked during business hours in order to prevent their emergency use (when employees are within the building).
- Exit routes from the work site will be clear and free of obstructions. All exits are marked with signs designating exits from the premises.

### **Fire Extinguishers:**

Each area of the Company will have a full complement of the proper type of fire extinguisher for the fire hazards present. All fire extinguishers will be inspected annually by a fire protection equipment company and tagged with the date of inspection. If a fire extinguisher is used or discharged for any reason, it will be removed from service and replaced with another properly charged fire extinguisher while it is being recharged.

Employees who are expected or anticipated to use fire extinguishers will be instructed on the hazards of fighting fires, how to properly operate the fire extinguishers available, and what procedures to follow in alerting others to the fire emergency. These employees will only attempt to extinguish small incipient fires. If a fire cannot be immediately and easily extinguished with a fire extinguisher, the employees will evacuate the building. They will not try to fight the fire! All employees who are not trained and designated to fight fires are to immediately evacuate the premises at the first sign of fire or initiation of the fire alarm and are prohibited from using an extinguisher and re-entering the premises.

### **Emergency Fire Evacuation:**

If any employee discovers a fire or smoke, the employee will immediately pull the nearest fire alarm box. If there is time and it is safe to do so, the employee will contact a member of Management to report the fire. Management will then make an announcement over the public address system that all employees and customers are to evacuate the building. Management will then call 911 and report the fire to the fire department.

If a fire alarm sounds or a fire is otherwise announced, all employees (except those designated and trained to use fire extinguishers) are expected to immediately exit the premises by proceeding to the nearest exit in an orderly fashion. If the nearest exit is blocked by fire or smoke, the employees should proceed to an alternate exit. There should be no running, shouting, pushing, etc. A calm orderly evacuation is the safest for all concerned.

Upon exiting the building, all employees and personnel are to proceed to the designated meeting area(s) away from the building, so as not to hamper access by fire fighters, and in order to be accounted for. The designated meeting area(s) for our building is:

**the parking lot across the street from the building on Commerce Drive**

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Supervisors and managers will account for all of their employees to ensure that no one is still in the building and unaccounted for.

Where needed, special procedures for helping physically impaired employees will be established. This will be done on a case by case basis when the employee is first hired or when the physical impairment first occurs.

### **Employee Training:**

All new employees will receive fire prevention and emergency evacuation training when they are hired. All employees will also receive refresher training and a review of this plan on an annual basis.

The Company will hold fire drills and will include a practice evacuation of the building at least annually. These drills will be used to evaluate employee response and behavior and will help us determine where more training is needed.

Those employees who are designated and authorized to use fire extinguishers to fight small fires will receive training upon initial assignment and annually thereafter. The training will include the proper use of extinguishers, how to extinguish a fire, the hazards involved in fighting fires, when not to fight a fire, and when to evacuate the area.

The Safety Director administers the Company's fire prevention and life safety inspection programs. This includes reviewing all new building construction and renovations to ensure compliance with applicable state, local, and national fire and life safety standards.

Fire prevention measures propose to reduce the incidence of fires by eliminating opportunities for ignition of flammable materials.

### **Flammable and Combustible Materials:**

#### ➤ **Substitution**

Flammable liquids sometimes may be substituted by relatively safe materials in order to reduce the risk of fires. Any substituted material should be stable and nontoxic and should either be nonflammable or have a high flashpoint.

#### ➤ **Storage**

Flammable and combustible liquids require careful handling at all times. The proper storage of flammable liquids within a work area is very important in order to protect personnel from fire and other safety and health hazards.

##### 1. Cabinets

Not more than 120 gallons of Class I, Class II, and Class IIIA liquids may be stored in a storage cabinet. Of this total, not more than 60 gallons may be Class I and II liquids. Not more than three such cabinets (120 gallons each) may be located in a single fire area except in an industrial area.

##### 2. Storage Inside Buildings.

Where approved storage cabinets or rooms are not provided, inside storage will comply with the following basic conditions:

- a. The storage of any flammable or combustible liquid shall not physically obstruct a means of egress from the building or area.
- b. Containers of flammable or combustible liquids will remain tightly sealed except when transferred, poured or applied. Remove only that portion of liquid in the storage container required to accomplish a particular job.
- c. If a flammable and combustible liquid storage building is used, it will be a one-story building devoted principally to the handling and storing of flammable or combustible liquids. The building will have 2-hour fire-rated exterior walls having no opening within 10 feet of such storage.
- d. Flammable paints, oils, and varnishes in 1 or 5 gallon containers, used for building maintenance purposes, may be stored temporarily in closed containers outside approved storage cabinets or room if kept at the job site for less than 10 calendar days.

## ➤ **Ventilation**

Every inside storage room will be provided with a continuous mechanical exhaust ventilation system. To prevent the accumulation of vapors, the location of both the makeup and exhaust air openings will be arranged to provide, as far as practical, air movement directly to the exterior of the building and if ducts are used, they will not be used for any other purpose.

## ➤ **Elimination of Ignition Sources**

All nonessential ignition sources must be eliminated where flammable liquids are used or stored. The following is a list of some of the more common potential ignition sources:

- Open flames, such as cutting and welding torches, furnaces, matches, and heaters- these sources should be kept away from flammable liquids operations. Cutting or welding on flammable liquids equipment should not be performed unless the equipment has been properly emptied and purged with a neutral gas such as nitrogen.
- Chemical sources of ignition such as d.c. motors, switched, and circuit breakers- these sources should be eliminated where flammable liquids are handled or stored. Only approved explosion-proof devices should be used in these areas.
- Mechanical sparks-these sparks can be produced as a result of friction. Only non-sparking tools should be used in areas where flammable liquids are stored or handled.
- Static sparks-these sparks can be generated as a result of electron transfer between two contacting surfaces. The electrons can discharge in a small volume, raising the temperature to above the ignition temperature. Every effort should be made to eliminate the possibility of static sparks. Also proper bonding and grounding procedures must be followed when flammable liquids are transferred or transported.

➤ **Removal of Incompatibles**

Materials that can contribute to a flammable liquid fire should not be stored with flammable liquids. Examples are oxidizers and organic peroxides, which, on decomposition, can generate large amounts of oxygen.

➤ **Flammable Gases**

Generally, flammable gases pose the same type of fire hazards as flammable liquids and their vapors. Many of the safeguards for flammable liquids also apply to flammable gases, other properties such as toxicity, reactivity, and corrosivity also must be taken into account. Also, a gas that is flammable could produce toxic combustion products.

**Fire Extinguishers:**

A portable fire extinguisher is a “first aid” device and is very effective when used while the fire is small. The use of fire extinguisher that matches the class of fire, by a person who is well trained, can save both lives and property. Portable fire extinguishers must be installed in workplaces regardless of other fire fighting measures. The successful performance of a fire extinguisher in a fire situation largely depends on its proper selection, inspection, maintenance, and distribution.

Classification of Fires and Selection of Extinguishers-

Fires are classified into four general categories depending on the type of material or fuel involved. The type of fire determines the type of extinguisher that should be used to extinguish it.

1. Class A fires involve materials such as wood, paper, and cloth which produce glowing embers or char.
2. Class B fires involve flammable gases, liquids, and greases, including gasoline and most hydrocarbon liquids which must be vaporized for combustion to occur.
3. Class C fires involve fires in live electrical equipment or in materials near electrically powered equipment.
4. Class D fires involve combustible metals, such as magnesium, zirconium, potassium, and sodium.

Extinguishers will be selected according to the potential fire hazard, the construction and occupancy of facilities, hazard to be protected, and other factors pertinent to the situation.

➤ **Location and Marking of Extinguishers**

Extinguishers will be conspicuously located and readily accessible for immediate use in the event of fire. They will be located along normal paths of travel and egress. Wall recesses and/or flush-mounted cabinets will be used as extinguisher locations whenever possible. Extinguishers will be clearly visible. In locations where visual obstruction cannot be completely avoided, directional arrows will be provided to indicate the

location of extinguishers and the arrows will be marked with the extinguisher classification.

Extinguisher classification markings will be located on the front of the shell above or below the extinguisher nameplate. Markings will be of a size and form to be legible from a distance of 3 feet.

➤ **Condition of Fire Extinguishers**

Portable extinguishers will be maintained in a fully charged and operable condition. They will be kept in their designated locations at all times when not being used. When extinguishers are removed for maintenance or testing, a fully charged and operable replacement unit will be provided.

➤ **Mounting and Distribution of Extinguishers**

Extinguishers will be installed on hangers, brackets, in cabinets, or on shelves. Extinguishers having a gross weight not exceeding 40 pounds will be so installed that the top of the extinguisher is not more than 3-1/2 feet above the floor. Extinguishers mounted in cabinets or wall recesses or set on shelves will be placed so that the extinguisher operating instructions face outward. The location of such extinguishers will be made conspicuous by marking the cabinet or wall recess in a contrasting color which will distinguish it from the normal décor.

Extinguishers must be distributed in such a way that the amount of time needed to travel to their location and back to the fire does not allow the fire to get out of control. OSHA requires that the travel distance for Class A and Class D extinguishers not exceed 75 feet. The maximum travel distance for Class B extinguishers is 50 feet because flammable liquid fires can get out of control faster than Class A fires. There is no maximum travel distance specified for Class C extinguishers, but they must be distributed on the basis of appropriate patterns for Class A and B hazards.

➤ **Inspection and Maintenance of Extinguishers**

Once an extinguisher is selected, purchased, and installed, it is the responsibility of the Safety Director to oversee the monthly visual inspection, annual maintenance, and testing of fire extinguishers to ensure that they are in proper working condition and have not been tampered with or physically damaged.

**Fire Safety Inspections and Housekeeping:**

First line Supervisors and the Safety Director are responsible for conducting work site surveys at least annually. These surveys should include observations of work site safety and housekeeping issues and should specifically address proper storage of chemicals and supplies, unobstructed access to fire extinguishers, and emergency evacuation routes.

**Emergency Egress:**

Every exit will be clearly visible, or the route to it conspicuously identified in such a manner that every occupant of the building will readily know the direction of escape from any point. At no time will exits be blocked. Any doorway or passageway which is not an

exit or access to an exit but which may be mistaken for an exit, will be identified by a sign reading “Not An Exit” or a sign indicating its actual use (i.e., “Storeroom”). Exits and accesses to exits will be marked by a readily visible sign.

### **Occupant Emergency Plan for Persons with Disabilities:**

The first line supervisor is assigned the responsibility to assist Persons with Disabilities under their supervision. An alternate assistant will be chosen by the supervisor. The role of the two assistants is to report to their assigned person, and to either assist in evacuation or assure that the Persons with Disabilities is removed from danger.

- Supervisors, alternates, and the person with a disability will be trained by the Safety Director on available escape routes and methods.
- Visitors who have disabilities will be assisted in a manner similar to that of Company employees. The Host of the person with disabilities will assist in their evacuation.

### **Emergencies Involving Fire:**

#### ➤ **Fire Alarms-**

In the event of a fire emergency, a fire alarm will sound for the building.

#### ➤ **Evacuation Routes and Plans-**

Each facility shall have an emergency evacuation plan. All emergency exits shall conform to NFPA standards.

Should evacuation be necessary, go to the nearest exit or stairway and proceed to an area of refuge outside the building. Most stairways are fire resistant and present barriers to smoke if the doors are kept closed.

Do not use elevators. Should the fire involve the control panel of the elevator or the electrical system of the building, power in the building may be cut and you could be trapped between floors.

#### ➤ **Emergency Coordinators-**

Emergency Coordinators will be responsible for verifying personnel have evacuated from their assigned areas.

#### ➤ **Fire Emergency Procedures-**

If you discover a fire:

Activate the nearest fire alarm.

1. Notify the fire department by dialing 911. Give your location, the nature of the fire, and your name.
2. Notify the Manager on duty and other occupants.
3. Notify the Safety Director.

Fight the fire ONLY if:

1. The fire department has been notified of the fire, AND

2. The fire is small and confined to its area of origin, AND
3. You have a way out and can fight the fire with your back to the exit, AND
4. You have the proper extinguisher, in good working order, AND know how to use it.
5. If you are not sure of your ability or the fire extinguisher's capacity to contain the fire, leave the area.

If you hear a fire alarm:

1. Evacuate the area. Close windows, turn off gas jets, and close doors as you leave.
2. Leave the building and move away from exits and out of the way of emergency operations.
3. Assemble in a designated area.
4. Report to the Manager/monitor so he/she can determine that all personnel have evacuated your area.
5. Remain outside until competent authority (Physical Security, Safety Director, or your supervisor) states that it is safe to re-enter.

### **Evacuation Routes**

1. Learn at least two escape routes, and emergency exits from your area.
2. Never use an elevator as part of your escape route.
3. Learn to activate a fire alarm.
4. Learn to recognize alarm sounds.
5. Take an active part in fire evacuation drills.

# Flammable Liquids

## **Purpose:**

Proper Storage and use of flammable liquids can significantly reduce the possibility of accidental fires and injury to employees. To minimize risk to life and property, the requirements of NFPA 30 & 321 and OSHA Standard 1910.106 have been implemented. MSDS for flammable liquids are kept in the Safety and Health Office and at each storage location.

## **Responsibilities:**

### Management

- Provide proper storage for flammable liquids
- Ensure proper training is provided to employees who work with flammable liquids
- Ensure containers are properly labeled

### Supervisors

- Provide adequate training in the use and storage of flammable liquids
- Monitor for proper use and storage
- Keep only the minimum amount required on hand
- Ensure MSDS are current for all flammable liquids

### Employees

- Follow all storage and use requirements
- Report deficiencies in storage and use to supervisors
- Immediately report spills to supervisors

## **Hazard Control:**

### Engineering Controls

- Properly designed flammable storage areas
- Ventilated Storage areas
- Grounding Straps on Drums and dispensing points

### Administrative Controls

- Designated storage areas
- Limiting amount of flammable liquids in use and storage
- Employee Training
- Limited & controlled access to bulk storage areas
- Posted Danger, Warning and Hazard Signs

## **Definitions:**

**Flammable Liquid** - a liquid with a flashpoint below 100°F

Class IA - flashpoint below 73°F and boiling point below 100°F

Class IB - flashpoint below 73<sup>0</sup>F and boiling point above 100<sup>0</sup>F

Class IC - flash at or above 73<sup>0</sup>F and below 100<sup>0</sup>F

**Combustible Liquids** - a liquid having a flash point at or above 100<sup>0</sup> F.

**Class II Combustibles** - Flashpoint above 100<sup>0</sup>F and below 140<sup>0</sup>F

**Class III Combustibles** - Flashpoint at or above 140<sup>0</sup>F

Subclass IIIA - flashpoint at or above 140<sup>0</sup>F and below 200<sup>0</sup>F

Subclass IIIB - flashpoint at or above 200<sup>0</sup>F

### **Substitution**

Flammable liquids sometimes may be substituted by relatively safe materials in order to reduce the risk of fires. Any substituted material should be stable and nontoxic and should either be nonflammable or have a high flashpoint.

### **Storage & Usage of Flammable Liquids**

Flammable and combustible liquids require careful handling at all times. The proper storage of flammable liquids within a work area is very important in order to protect personnel from fire and other safety and health hazards.

- Storage of Flammable liquids shall be in NFPA approved flammable storage lockers or in low value structures at least 50 feet from any other structure. Do not store other combustible materials near flammable storage areas or lockers
- Bulk drums of flammable liquids must be grounded and bonded to containers during dispensing
- Portable containers of gasoline or diesel are not to exceed 5 gallons
- Safety cans used for dispensing flammable or combustible liquids shall be kept at a point of use.
- Appropriate fire extinguishers are to be mounted within 75 feet of outside areas containing flammable liquids, and within 10 feet of any inside storage area for such materials.
- Storage rooms for flammable and combustible liquids must have explosion-proof light fixtures
- Bulk storage of gasoline or diesel are kept in above ground tanks. Tank areas are diked to contain accidental spills. Tanks shall be labeled IAW NFPA guidelines. All tank areas shall be designated no smoking - no hot work - no open flame areas.

**No Flame Zones** – No hotwork or smoking is permitted in flammable or combustible liquid storage areas.

The maximum amount of flammable liquids that may stored in a building are:

20 gallons of Class IA liquids in containers

100 gallons of Class IB, IC, II, or III liquids in containers

500 gallons of Class IB, IC, II, or III liquids in a single portable tank.

### **Usage of Flammable Liquids**

- Flammable liquid transfer areas are to be separated from other operations by distance or by construction having proper fire resistance.
- When not in use flammable liquids shall be kept in covered containers.
- Class I liquids may be used only where there are no open flames or other sources of ignition within the possible path of vapor travel.
- Flammable or combustible liquids shall be drawn from or transferred into vessels, containers, or portable tanks within a building only through a closed piping system, from safety cans, by means of a device drawing through the top, or from a container or portable tanks by gravity through an approved self-closing valve.
- Maintenance and operating practices shall be in accordance with established procedures which will tend to control leakage and prevent the accidental escape of flammable or combustible liquids. Spills shall be cleaned up promptly.
- Combustible waste material and residues in a building or unit operating area shall be kept to a minimum, stored in covered metal receptacles and disposed of daily.
- Rooms in which flammable or combustible liquids are stored or handled by pumps shall have exit facilities arranged to prevent occupants from being trapped in the event of fire.
- Inside areas in which Class I liquids are stored or handled shall be heated only by means not constituting a source of ignition, such as steam, hot water or forces central systems located away from the area.

### **Cabinets**

Not more than 120 gallons of Class I, Class II, and Class IIIA liquids may be stored in a storage cabinet. Of this total, not more than 60 gallons may be Class I and II liquids. Not more than three such cabinets (120 gallons each) may be located in a single fire area except in an industrial area.

### **Containers**

The capacity of flammable and combustible liquid containers will be in accordance with the below table.

**Maximum allowable capacity of containers and portable tanks**

Container	Flammable		Combustible Liquids		
	1A	1B	1C	II	III
Glass or approved plastic <sup>1</sup>	1 pt <sup>2</sup>	1 qt <sup>2</sup>	1 gal	1 gal	1 gal
Metal (Other than DOT drums)	1 gal	5 gal	5 gal	5 gal	5 gal
Safety Cans	2 gal	5 gal	5 gal	5 gal	5 gal
Metal drums (DOT specifications)	60 gal	60 gal	60 gal	60 gal	60 gal
Approved portable tanks	660 gal	660 gal	660 gal	660 gal	660 gal
(1) Nearest metric size is also acceptable for the glass and plastic (2) One gallon or nearest metric equivalent size may be used if metal and labeled with their contents.					

**Storage Inside Buildings**

Where approved storage cabinets or rooms are not provided, inside storage will comply with the following basic conditions:

- The storage of any flammable or combustible liquid shall not physically obstruct a means of egress from the building or area.
- Containers of flammable or combustible liquids will remain tightly sealed except when transferred, poured or applied. Remove only that portion of liquid in the storage container required to accomplish a particular job.
- If a flammable and combustible liquid storage building is used, it will be a one-story building devoted principally to the handling and storing of flammable or combustible liquids. The building will have 2-hour fire-rated exterior walls having no opening within 10 feet of such storage.
- Flammable paints, oils, and varnishes in 1 or 5 gallon containers, used for building maintenance purposes, may be stored temporarily in closed containers outside approved storage cabinets or room if kept at the job site for less than 10 calendar days.

**Designated Flammable Storage Areas are:**

1. Flammable Storage Cabinet in Shop (Fuel additives, paints, and other flammable Shop materials).
2. Flammable Storage Cabinet in Dry Storage Area by Waste Oil tank (Gasoline cans and other flammable field materials).

# Fleet Safety

## **Policy:**

Protecting our employee drivers, their passengers, and the general public is of the highest priority to the Company. The Company's Vehicle Safety Program establishes guidelines and procedures to be followed to protect the safety of individuals operating any motor vehicle on company business.

## **Procedure:**

Everyone shares in the responsibility to make the vehicle safety policy a success.

Driver responsibilities are outlined as follows:

1. Read, understand and follow the requirements contained in this program;
2. Participate in company-sponsored activities or programs designed to improve driver safety;
3. Maintain a valid driver's license and adhere to license restrictions;
4. Complete the *Driver Evaluation Form*, and thereby provide signed permission for the company or its designated representative to enroll you in the New York State Department of Motor Vehicles License Event Notification System (LENS).

Management will:

1. Ensure each driver completes the Driver Evaluation Forms.
2. Ensure that all drivers participate in company safe driving training programs;
3. Secure and retain training documentation for all safe driving training;
4. Investigate all accidents and ensure that Accident Reports are completed.
5. Enroll all "driving" employees in the LENS Program in order to review their driving background and accident information.

## **Authorization of Driving Privileges**

The DDS Companies' Management will not assign or allow the use of a "Motor Vehicle", if:

- ◆ The driver does not have a valid operator's license issued by their state of residence; or if
- ◆ The driver possesses licenses from more than one state, or if
- ◆ The "Driver's" license is suspended or revoked for any reason.

In addition, a driver will be subject to termination if his/her license is revoked, unless a suitable replacement non-driving job in the company is available; or the employee may be subject to other disciplinary action if his/her license is only temporarily suspended.

## **Personal Use of A Company-Owned Vehicle**

A company-owned vehicle when not used for business purposes may not be driven for personal use UNLESS THE USE IS PRE-APPROVED BY A MEMBER OF SENIOR

MANAGEMNT. A vehicle assigned to an employee may not be driven by non-approved employees or family members.

The privilege of driving a company-owned vehicle for personal use is subject to change by the company at any time.

### **Unauthorized Use of A Company-Owned Vehicle**

On a job site, a foreman may allow an employee to use their company vehicle only if management has authorized the use.

If a company employee allows an unauthorized individual to drive a company-owned vehicle, disciplinary action may be taken, up to and including suspension of driving privileges or dismissal of the company employee.

### **Personal Vehicles Used For Business**

Employees who drive personal vehicles while conducting business for the company are subject to all the provisions and standards of this program.

Additional responsibilities include:

1. Maintaining automobile liability insurance limits of at least \$100,000 per person, \$300,000 per accident, and \$25,000 property damage; but in no case less than the minimum required by New York State law.
2. Maintaining current state vehicle inspection if the state requires one; and
3. Maintaining their personal vehicle in safe operating condition.

### **The NYS License Event Notification Service (LENS) – Updates on Driving Records**

- The LENS Program provides the DDS Companies with the enrolled employee's driving background information provides notification to management of any activity on an employee's license, such as a moving violation, suspension or revocation.
- If an employee applicant is to be allowed to operate a company-owned vehicle or a personal vehicle on company business, the DDS Companies will obtain a completed *Driver Evaluation Form* from the applicant and will enroll the employee in the LENS Program.
- If the information obtained through the LENS Program or the *Driver Evaluation Form* indicates that the new employee is a "High Risk Driver", the DDS Companies may, after careful consideration, grant driving privileges, but only on a probationary basis.
- If an existing employee is changing from a non-driving position to a position requiring driving on company business, the employee must complete and sign a *Driver Evaluation Form*.
- The employee will be enrolled in the LENS Program and evaluated prior to granting a change in job status.
- The DDS Companies will, at a minimum, obtain and review each authorized driver's license information at least annually.

## **Identification of High Risk Drivers**

A driver will be classified as a "High Risk Driver" if information obtained from LENS indicates that the driver has one or more of the following:

### **Capital Violations:**

Generally, these violations reflect a severe moral hazard. These violations consist of licensing or registration offenses or felonies directly involving a motor vehicle such as:

- Operating a vehicle after the registration has been suspended or revoked.
- Using false or fictitious registration plates or driver's license.
- Driving after a driver's license has been suspended.
- Murder or assault with a motor vehicle.
- Theft of a motor vehicle and related offenses.
- Hit and run.

### **Major Violations:**

These are serious violations which indicate a disregard for public safety and include such readily identifiable violations as:

- Driving while under the influence.
- Reckless driving resulting in bodily injury or property damage.
- Negligent homicide.

## **Management Controls for High Risk Drivers**

If an employee is identified as a "High Risk Driver", DDS Management will choose one of the following operations:

### **Place the driver on probation**, which requires all of the following:

1. Place the "High Risk Driver" on probation (ending two years from the date of the most recent violation);
2. Obtain an MVR every six months for the duration of the probationary period;
3. Notify the Safety Manager of any additional violations while the employee is on probation;
4. Immediately suspend driving privileges if any single repeat violation or an additional violation occurs while on probation;
5. The terms of the probation are to be made to the employee in writing. The employee will be required by signature to signify that he/she has been informed of the probation terms and duration. The signed terms of probation should be kept in the employee's file.

### **OR**

6. **Suspension of Driving Privileges**, which means that the "High Risk Driver" will NOT be authorized to drive a motor vehicle at any time on company business. This action may result in either transferring the employee to a non-driving

position, if such a position exists, or the employee may be subject to dismissal procedures.

Drivers are required to notify their immediate supervisor immediately of:

1. Any illness, injury, physical condition or use of medication that may impair or affect their ability to safely drive a "Motor Vehicle"; or
2. The suspension, revocation or administrative restriction of his/her operator's license. If this occurs, the driver must also immediately discontinue use of the "Motor Vehicle".

### ***Safety Regulations***

- The driver and ALL OCCUPANTS are required to wear safety belts when operating or riding in a "Motor Vehicle". The driver is responsible to ensure all passengers are wearing their safety belts.
- Only authorized/approved passengers (i.e. those with a defined business relationship) are permitted in the vehicles during the course of business use.
- A driver may not operate a "Motor Vehicle" at any time, when his/her ability is impaired, affected, or influenced by alcohol, illegal drugs, medication, illness, fatigue or injury.
- All drivers are required to abide by all federal, state, and local motor vehicle regulations, laws and ordinances.
- Each driver is responsible for ensuring that the "Motor Vehicle" is maintained in safe driving condition. At least daily, a walk-around safety inspection by the driver is required.
- Drivers may not:
  - pick-up hitchhikers;
  - use a cell phone in the vehicle without placing the phone in the, company supplied, "hand's free" device;
  - accept payment for carrying passengers or materials;
  - use any radar detector, laser detector, or similar devices;
  - push or pull another vehicle, or tow a trailer without authorization;
  - transport flammable liquids and gases unless a DOT or UL approved container is utilized, and only then in limited quantities and only when necessary;
  - assist disabled motorists or accident victims beyond the level of their medical training: EMT, CPR, Basic First-Aid, etc. If a driver is not qualified to provide the above services, he/she must restrict his/her assistance to calling the proper authorities.

# DDS Companies

## Driver Evaluation/Application Form

Your duties as an employee of the DDS Companies may require you to drive company vehicles or your own vehicle for business purposes. In order to qualify for driving authority, the following form must be completed. As part of the qualifying process, the DDS Companies will obtain a copy of your Motor Vehicle Report which details your driving history over at least the past five years. This report will be used as part of the evaluation and qualification process. It will be evaluated against established, uniform criteria.

**Location:** \_\_\_\_\_

**Driver Candidate's Name:** \_\_\_\_\_

**License No:** \_\_\_\_\_

**State:** \_\_\_\_\_

**Expiration Date:** \_\_\_\_\_

**If licensed less than three years in current state list prior state(s) that licenses were held in** \_\_\_\_\_

I certify that all information on this form is true and that nothing asked for has been omitted. I understand that the information is being requested to determine fitness and ability to drive for DDS Companies purposes only. I understand that any mis-statement, omission or false statement will be sufficient cause for refusal to employ and/or if already employed, grounds for dismissal.

**Candidate Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

# **Hazard Identification and Communication**

The purpose of this written program is to inform employees that the DDS Companies are complying with the OSHA HAZARD COMMUNICATION STANDARD, TITLE 29 CODE OF FEDERAL REGULATIONS 1910.1200, by developing, implementing, and maintaining a written hazard communication program which addresses these elements; SDS's, labels and other forms of warnings, Hazards Chemicals List, by insuring that containers are labeled, and by providing each employee with training.

This written program applies to all work operations in the DDS Companies where the employee may be exposed to hazardous substances under normal working conditions or during emergency situations.

The Safety Director is the program coordinator, acting as the representative of company, who has overall responsibility for the program. The Safety Director will review and update the program as necessary. Copies of the written program may be obtained from the Safety Director.

Under this program, each employee will be informed of the contents of the Hazard Communication Standard, the hazardous properties of chemicals with which they will use, safe handling procedures, and measures to be taken to protect themselves from these chemicals. Employees will also be informed of the hazards associated with chemicals in unlabeled pipes.

## **List of Hazardous Chemicals**

The Safety Director will make a list of all hazardous chemicals and related work practices used in the DDS Companies and will update the list as necessary. This list of chemicals will be found on all Foreman Trucks. This list also identifies the corresponding Material Safety Data Sheet (MSDS) for each chemical. Any new hazardous chemicals received by the company will have an MSDS document available for inspection before any employee uses the chemical. A master list of these chemicals will be maintained by, and is available from the Safety Director.

## **Material Safety Data Sheets (MSDS')**

MSDS's provide each employee with specific information on the chemicals used. The Safety Director will maintain a binder with an MSDS on every substance on the list of hazardous chemicals. The Safety Director, will insure that each Foreman truck maintains an MSDS for hazardous materials used by the company and will be made readily available to any employee at every work site.

## **MSDS Responsibility**

The Safety Director is responsible for acquiring and updating MSDS's. The Safety Director will contact the chemical manufacturer or vendor if additional research is necessary or if an MSDS has not been supplied with an initial shipment.

### **Labels and Other Forms of Warning**

The Safety Director will insure that all hazardous chemicals in the work place are properly labeled and updated as necessary. Labels should list at least the chemicals identity, appropriate hazard warnings, and the name, and address of the manufacturer, importer, or other responsible party. The chemicals shall be labeled, tagged or marked product identifier and words, pictures, symbols, or a combination thereof, which provide at least general information regarding the hazards of the chemicals. Employees must not remove or deface existing labels on incoming containers of hazardous chemicals, unless the container is immediately marked with the required information. Labels shall be legible in English, and prominently displayed on the container, or readily available in the area throughout each work shift. Employers who have employees who speak other languages may have the information available in their language as well, providing the information is provided in English as well. The Safety Director will refer to the corresponding MSDS to assist each employee in verifying label information. Labels are required on portable containers.

### **Non-Routine Tasks**

When employees are required to perform hazardous, non-routine tasks (e.g., cleaning tanks, entering confined spaces, etc.), a special training session will be conducted to inform them of the hazardous hazards to which they may come into contact with, and the precautions to take to reduce and avoid exposure or danger.

### **Training**

Everyone who works with or is potentially exposed to hazardous chemicals will receive initial training on the Hazardous Communication Standard and the safe use of those hazardous chemicals by the Safety Director. Whenever a new hazard is introduced, additional training will be conducted to address the new hazard and protective measures to be taken.

The training plan will emphasize these components:

- Summary of the standard and this written program.
- Chemical and physical properties of hazardous materials (e.g., flash point, reactivity, etc.) and methods that can be used to detect the presence or release of chemicals (including chemicals in unlabeled pipes).
- Physical hazards of chemicals (e.g., potential for fire, explosion, etc.), health hazards, including signs and symptoms of exposure, associated with exposure to chemicals and any medical condition known to be aggravated by exposure to the chemical.

- Procedures to protect against hazards (e.g. personal protective equipment required, proper use and maintenance, work practices, methods to assure the proper use and handling techniques, and procedures for emergency response).
- Work procedures to follow to assure protection when cleaning hazardous chemical spills and leaks.
- Where MSDS's are located, how to read and interpret information on both labels and MSDS's and how employees may obtain additional hazard information.

Training is documented and records maintained by the Safety Department.

### **Contractor Employees**

The Safety Director will advise outside contractors in person of any chemical hazards that may be encountered in the normal course of their work on company premises, the labeling system in use, the protective measures to be taken, and the safe handling procedures to be used. In addition, these individuals will be notified of the location of all MSDS's. Each contractor that brings chemicals onto company premises must provide the DDS Companies with the appropriate hazard information on these substances, including the labels used and the precautionary measures to be taken in working with these chemicals.

### **Identification of Workplace Hazards:**

Periodic, scheduled inspections will occur as a routine part of company business. The Safety Director will insure these inspections occur.

Employees who wish to remain anonymous may report unsafe conditions or hazards by submitting a Safety Suggestion Form to the Safety Director, or their immediate supervisor, without identifying themselves.

Employees must report immediately any unsafe condition or unsafe practice. No employee will be disciplined or discharged for reporting any workplace hazard or unsafe condition. Failure to report any obvious unsafe situation may result in disciplinary action, up to and including termination.

The Safety Director will insure that Material Safety Data Sheets are present, up to date, and accessible at the appropriate locations. In addition, the Safety Director will assure that employees are trained in the Hazard Communication Program before beginning work or changing job functions, and will continuously monitor the work site to assure employees follow safe work practices.

### **Multiple Employer Worksites**

On multiple employer worksites, the DDS Foreman will make available the list of chemicals used by DDS and MSDS for those chemicals to the General Contractor's representative.

## **EMERGENCY INFORMATION (To Be Posted)**

**FIRE:**

Telephone Fire Department: \_\_\_\_\_  
Nearest Alarm Box: \_\_\_\_\_

**Crime:**

Telephone Police: \_\_\_\_\_

**Injury/Illness:**

Avoid infection of minor injuries; always get medical attention or skilled first aid

Employees who are First Aid and/or CPR Certified

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Doctor \_\_\_\_\_

Office \_\_\_\_\_ Phone \_\_\_\_\_

Residence \_\_\_\_\_ Phone \_\_\_\_\_

Hospital \_\_\_\_\_

Address \_\_\_\_\_ Phone \_\_\_\_\_

Ambulance \_\_\_\_\_

Address \_\_\_\_\_ Phone \_\_\_\_\_

**In all cases of Fire, Crime, Accident, or Sickness, promptly notify:**

1. Name \_\_\_\_\_ Office Phone \_\_\_\_\_  
Home Phone \_\_\_\_\_

2. Name \_\_\_\_\_ Office Phone \_\_\_\_\_  
Home Phone \_\_\_\_\_

Additional Numbers: \_\_\_\_\_  
(Alarm Company., Office Phone, etc.)  
\_\_\_\_\_

# Incident Reporting & Investigation

## **Policy:**

It is important that you report all accidents and incidents that result in injury, illness, or damage (however slight), to your supervisor immediately. The DDS Companies can learn how to prevent them from occurring in the future. It is the company's responsibility to investigate each incident, and your responsibility to report them when they occur.

It is company policy that:

- All incidents will be investigated to the appropriate level with regards to incident severity
- Written records shall be kept of work-related fatalities, injuries, and illnesses
- All recordable illnesses or injuries shall be recorded on the OSHA 300 Log within seven calendar days of receiving information that the injury occurred
- The OSHA 300A Summary shall be signed by a company official
- The annual OSHA 300A summary shall be posted in a place visible to employees
- The summary shall be posted from February 1st through April 30
- The recordkeeping forms shall be maintained for 5 years

## **Responsibilities**

Safety Director –

- Shall provide training for all personnel in their responsibilities and incident investigation techniques.
- Shall ensure that the proper equipment shall be available to assist in conducting an investigation

Supervisor/Project Manager –

- Shall be responsible for the proper investigation of all incidents
- Following an incident the Supervisor/Project Manager shall secure the scene in order to facilitate the initial identification/assessment of evidence.
- Shall ensure the collection, preservation, and security of evidence.
- Shall conduct witness interviews and collect statements
- Shall ensure the preparation of the written incident report

Incident Review Team –

- Shall consist of the Safety Director, Operations Manager, Supervisor of incident location and any witnesses to the incident. Optional members include Human Resources, Witnesses, and others.
- Shall identify corrective actions resulting from incident investigations
- Shall ensure the documentation and communication of lessons learned and review of similar operations to prevent reoccurrence

## **Procedure:**

When an incident occurs employees are expected to:

1. Report all incidents and injuries immediately to your supervisor,

2. Notify your supervisor should you become ill while on the job,
3. Inform your supervisor if you have a disability or physical handicap,
4. Never move an injured or ill person, unless to prevent further injury

### **Reporting Incidents to Regulatory Agencies/Customers**

For Incidents that require reporting to Regulatory Agencies:

- It is the responsibility of the Safety Director to determine the need for reporting
  - o Reporting fatalities to OSHA within 8 hours.
  - o Reporting all work-related inpatient hospitalizations, all amputations and all losses of an eye within 24 hours
- The Safety Director shall make the appropriate notifications

Reporting Incidents to Customers:

- It is the responsibility of the Supervisor of the incident location to report the incident to the host facility/client within 24 hours of the incident

### **Near Miss Reporting**

A “Near Miss” is an unplanned event that did not result in injury, illness, or damage – but had the potential to do so. Only a fortunate break in the chain of events prevented an injury, fatality or damage (i.e. “Luck”).

A Safety Issue is a work practice, work area, tool, or piece of equipment that you feel may put you or others at risk of injury or may lead to damage to property.

#### **Reporting a “Near Miss” or “Safety Issue”:**

1. First, address the “Near Miss” or “Safety Issue” at the time it is identified by taking steps necessary to minimize the risk to you or others.
2. Fill out the “*DDS Near Miss Reporting Form*”.
3. Turn in the form to your Foreman, Supervisor, or a member of the Safety Team.

Near Miss Reporting Forms are available in the Foreman’s Book or from Supervisors or members of the Safety Team. The Safety Director is responsible for tracking Near Misses. *Near Miss Reporting Forms* will be reviewed by the Safety Team. Action Items will be assigned and Due Dates assigned. Completion of Action Items will be reported back to the Safety Team by the person assigned the Action Item.

### **First Aid and Medical Treatment**

In the absence of medical assistance that is reasonably accessible in terms of time and distance to the worksite, a person who has a valid certificate in first aid shall be available to render first aid.

Where appropriate, a valid certificate in first aid training will be obtained from the U.S. Bureau of Mines, the American Red Cross, or equivalent training. Training will be documented and records retained by the Safety Team.

The DDS Companies provide a First Aid Kit on the Foremen trucks. First Aid Kits shall consist of appropriate items determined to be adequate for the environment in which they will be used. It is there for your use in the treatment of minor scratches, burns, headaches, nausea, etc. Ask your supervisor to show you its location. Let your supervisor know if you need to use the First Aid Kit. The contents of First Aid Kits shall be periodically assessed by the Foreman to ensure the availability of adequate first aid supplies.

If you have a work related injury or illnesses that require professional medical assistance notify your supervisor and let him/her know before you receive this assistance. If you fail to notify your supervisor, you may be ineligible for Worker's Compensation benefits to pay for doctor's bills, and/or lost wages.

## **FIRST AID PROCEDURES AND INSTRUCTIONS**

**In all cases requiring emergency medical treatment, immediately call, or have a co-worker call, to request emergency medical assistance.**

### **EMERGENCY PHONE NUMBERS**

**Safety Director:** Ken Jackson

**Poison Control:** 911

**First Aid:** 911

**Fire Department:** 911

**Ambulance:** 911

**Police:** 911

**Medical Clinic:** \_\_\_\_\_

**Clinic Address:** \_\_\_\_\_

### **Minor First Aid Treatment**

First aid kits are stored in every Foreman truck. If you sustain an injury or are involved in an accident requiring minor first aid treatment:

- Inform your supervisor.
- Administer first aid treatment to the injury or wound.
- Access to a first aid kit is not intended to be a substitute for medical attention.
- Provide details for the completion of the Incident Report.

### **Non-Emergency Medical Treatment**

For non-emergency work-related injuries requiring professional medical assistance, management must first authorize treatment. If you sustain an injury requiring treatment other than first aid:

- Inform your supervisor.
- Proceed to the posted medical facility. Your supervisor will assist with transportation, if necessary.
- Provide details for the completion of the Incident Report.

## **Emergency Medical Treatment**

If you sustain a severe injury requiring emergency treatment:

- Call for help and seek assistance from a co-worker.
- Use the emergency telephone numbers to request assistance and transportation to the local hospital emergency room. Injured employee is to be escorted by another employee.
- Provide details for the completion of the Incident Report.

## **First Aid Training**

Designated employees will receive training and instructions in first aid procedures.

## **Medical Records**

All medical records, whether from an injury or evaluation for one of the H&S Programs, will be maintained for the duration of employment 30 years.

## **Safety Hazard Citation**

In cases where an employee violates the company's Safety & Health Program a "Safety Hazard Citation" can be issued. These violations will be documented and a copy of the below form will become part of the employee's personnel record:

<b><u>Safety Hazard Citation</u></b>	Date: _____
Name of Violator: _____	
Location of Violation: _____	
Type of Violation: _____ _____	
Violator's Signature: _____	

# Ladder Safety

## **Purpose:**

Employees who use ladders must be trained in proper selection, inspection, use and storage. Use caution on ladders. OSHA reference: (29 CFR 1910.25, 1910.26, and 1910.27).

## **Hazards:**

Falls are the primary hazard associated with the use of ladders. Falls result from a number of unsafe acts and conditions such as:

1. Ladders being set on unstable surfaces.
2. Personnel reaching too far out to the sides.
3. Personnel standing too high to maintain balance.
4. Personnel using defective ladders (e.g., broken rails, rungs, missing hardware).

These hazards are minimized if workers adhere to proper ladder safety practices and if supervisors ensure equipment is used, inspected, and maintained in good condition. Tasks which require frequent use of ladders and involve significant climbing effort must be accomplished by workers capable of the physical exertion required under these conditions.

## **Procurement:**

Portable ladders procured for the Company shall meet the design and construction specification of OSHA 29 CFR 1910.25 for wood ladders and 29 CFR 1910.26 for metal ladders. Portable ladders constructed of reinforced plastic shall meet the specifications of ANSI A14.5-1974.

## **Requirements:**

The following requirements apply to all ladders as indicated, including job-made ladders.

- (1) Ladders shall be capable of supporting the following loads without failure:
  - (i) Each self-supporting portable ladder: At least four times the maximum intended load, except that each extra-heavy-duty type 1A metal or plastic ladder shall sustain at least 3.3 times the maximum intended load. The ability of a ladder to sustain the loads indicated in this paragraph shall be determined by applying or transmitting the requisite load to the ladder in a downward vertical direction.
  - (ii) Each portable ladder that is not self-supporting: At least four times the maximum intended load, except that each extra-heavy-duty type 1A metal or plastic ladders shall sustain at least 3.3 times the maximum intended load. The ability of a ladder to sustain the loads indicated in this paragraph shall be determined by applying or transmitting the requisite load to the ladder in a downward vertical direction when the ladder is placed at an angle of 75½ degrees from the horizontal.
  - (iii) Each fixed ladder: At least two loads of 250 pounds (114 kg) each, concentrated between any two consecutive attachments (the number and

position of additional concentrated loads of 250 pounds (114 kg) each, determined from anticipated usage of the ladder, shall also be included), plus anticipated loads caused by ice buildup, winds, rigging, and impact loads resulting from the use of ladder safety devices. Each step or rung shall be capable of supporting a single concentrated load of at least 250 pounds (114 kg) applied in the middle of the step or rung.

- (2) Ladder rungs, cleats, and steps shall be parallel, level, and uniformly spaced when the ladder is in position for use.
- (i) Rungs, cleats, and steps of portable ladders (except as provided below) and fixed adders (including individual rung/step ladders) shall be spaced not less than 10 inches (25 cm) apart, nor more than 14 inches (36 cm) apart, as measured between center lines of the rungs, cleats and steps.
  - (ii) Rungs, cleats, and steps of step stools shall be not less than 8 inches (20 cm) apart, nor more than 12 inches (31 cm) apart, as measured between center lines of the rungs, cleats, and steps.
  - (iii) Rungs, cleats, and steps of the base section of extension trestle ladders shall be not less than 8 inches (20 cm) nor more than 18 inches (46 cm) apart, as measured between center lines of the rungs, cleats, and steps. The rung spacing on the extension section of the extension trestle ladder shall be not less than 6 inches (15 cm) nor more than 12 inches (31 cm), as measured between center lines of the rungs, cleats and steps.
  - (iv) The minimum clear distance between the sides of individual-rung/step ladders and the minimum clear distance between the side rails of other fixed ladders shall be 16 inches (41 cm).
  - (v) The minimum clear distance between side rails for all portable ladders shall be 11½ inches (29 cm).
  - (vi) The rungs of individual-rung/step ladders shall be shaped such that employees' feet cannot slide off the end of the rungs.
  - (vii) The rungs and steps of fixed metal ladders manufactured after March 15, 1991, shall be corrugated, knurled, dimpled, coated with skid-resistant material, or otherwise treated to minimize slipping.
  - (viii) The rungs and steps of portable metal ladders shall be corrugated, knurled, dimpled, coated with skid-resistant material, or otherwise treated to minimize slipping.
- (3) Ladders shall not be tied or fastened together to provide longer sections unless they are specifically designed for such use.
- (4) A metal spreader or locking device shall be provided on each stepladder to hold the front and back sections in an open position when the ladder is being used.
- (5) Except when portable ladders are used to gain access to fixed ladders (such as those on utility towers, billboards, and other structures where the bottom of the fixed ladder is elevated to limit access), when two or more separate ladders are used to reach an elevated work area, the ladders shall be offset with a platform or landing between the ladders.

- (6) Ladder components shall be surfaced so as to prevent injury to an employee from punctures or lacerations, and to prevent snagging of clothing.
- (7) Wood ladders shall not be coated with any opaque covering, except for identification or warning labels which may be placed on one face only of a side rail.
- (8) The minimum perpendicular clearance between fixed ladder rungs, cleats, and steps, and any obstruction behind the ladder shall be 7 inches (18 cm), except in the case of an elevator pit ladder, for which a minimum perpendicular clearance of 4½ inches (11 cm) is required.
- (9) The minimum perpendicular clearance between the center line of fixed ladder rungs, cleats, and steps, and any obstruction on the climbing side of the ladder shall be 30 inches (76 cm), except as provided in paragraph (a)(15) of this section.
- (10) When unavoidable obstructions are encountered, the minimum perpendicular clearance between the centerline of fixed ladder rungs, cleats, and steps, and the obstruction on the climbing side of the ladder may be reduced to 24 inches (61 cm), provided that a deflection device is installed to guide employees around the obstruction.
- (11) Through fixed ladders at their point of access/egress shall have a step-across distance of not less than 7 inches (18 cm) nor more than 12 inches (30 cm) as measured from the centerline of the steps or rungs to the nearest edge of the landing area. If the normal step-across distance exceeds 12 inches (30 cm), a landing platform shall be provided to reduce the distance to the specified limit.
- (12) Fixed ladders without cages or wells shall have a clear width to the nearest permanent object of at least 15 inches (38 cm) on each side of the centerline of the ladder.
- (13) Fixed ladders shall be provided with cages, wells, ladder safety devices, or self-retracting lifelines where the length of climb is less than 24 feet (7.3 m) but the top of the ladder is at a distance greater than 24 feet (7.3 m) above lower levels.
- (14) Where the total length of a climb equals or exceeds 24 feet (7.3 m), fixed ladders shall be equipped with one of the following:
  - (i) Ladder safety devices; or
  - (ii) Self-retracting lifelines, and rest platforms at intervals not to exceed 150 feet (45.7 m); or
  - (iii) A cage or well, and multiple ladder sections, each ladder section not to exceed 50 feet (15.2 m) in length. Ladder sections shall be offset from adjacent sections, and landing platforms shall be provided at maximum intervals of 50 feet (15.2 m).
- (15) Cages for fixed ladders shall conform to all of the following:
  - (i) Horizontal bands shall be fastened to the side rails of rail ladders, or directly to the structure, building, or equipment for individual- rung ladders;
  - (ii) Vertical bars shall be on the inside of the horizontal bands and shall be fastened to them;

- (iii) Cages shall extend not less than 27 inches (68 cm), or more than 30 inches (76 cm) from the centerline of the step or rung (excluding the flare at the bottom of the cage), and shall not be less than 27 inches (68 cm) in width;
  - (iv) The inside of the cage shall be clear of projections;
  - (v) Horizontal bands shall be spaced not more than 4 feet (1.2 m) on center vertically;
  - (vi) Vertical bars shall be spaced at intervals not more than 9½ inches (24 cm) on center horizontally;
  - (vii) The bottom of the cage shall be at a level not less than 7 feet (2.1 m) nor more cage shall be flared not less than 4 inches (10 cm) all around within the distance between the bottom horizontal band and the next higher band;
  - (viii) The top of the cage shall be a minimum of 42 inches (1.1 m) above the top of the platform, or the point of access at the top of the ladder, with provision for access to the platform or other point of access.
- (16) Wells for fixed ladders shall conform to all of the following:
- (i) They shall completely encircle the ladder;
  - (ii) They shall be free of projections;
  - (iii) Their inside face on the climbing side of the ladder shall extend not less than 27 inches (68 cm) nor more than 30 inches (76 cm) from the centerline of the step or rung;
  - (iv) The inside clear width shall be at least 30 inches (76 cm);
  - (v) The bottom of the wall on the access side shall start at a level not less than 7 feet (2.1 m) nor more than 8 feet (2.4 m) above the point of access to the bottom of the ladder.
- (17) Ladder safety devices, and related support systems, for fixed ladders shall conform to all of the following:
- (i) They shall be capable of withstanding without failure a drop test consisting of an 18-inch (41 cm) drop of a 500-pound (226 kg) weight;
  - (ii) They shall permit the employee using the device to ascend or descend without continually having to hold, push or pull any part of the device, leaving both hands free for climbing;
  - (iii) They shall be activated within 2 feet (.61 m) after a fall occurs, and limit the descending velocity of an employee to 7 feet/sec. (2.1 m/sec.) or less;
  - (iv) The connection between the carrier or lifeline and the point of attachment to the body belt or harness shall not exceed 9 inches (23 cm) in length.
- (18) The mounting of ladder safety devices for fixed ladders shall conform to the following:
- (i) Mountings for rigid carriers shall be attached at each of the carrier, with intermediate mountings, as necessary, spaced along the entire length of the carrier, to provide the strength necessary to stop employees' falls.
  - (ii) Mountings for flexible carriers shall be attached at each end of the carrier. When the system is exposed to wind, cable guides for flexible carriers shall be installed at a minimum spacing of 25 feet (7.6 m) and maximum spacing of

- 40 feet (12.2 m) along the entire length of the carrier, to prevent wind damage to the system.
- (iii) The design and installation of mountings and cable guides shall not reduce the design strength of the ladder.
- (19) The side rails of through or side-step fixed ladders shall extend 42 inches (1.1 m) above the top of the access level or landing platform served by the ladder. For a parapet ladder, the access level shall be the roof if the parapet is cut to permit passage through the parapet; if the parapet is continuous, the access level shall be the top of the parapet.
- (20) For through-fixed-ladder extensions, the steps or rungs shall be omitted from the extension and the extension of the side rails shall be flared to provide not less than 24 inches (61 cm) nor more than 30 inches (76 cm) clearance between side rails. Where ladder safety devices are provided, the maximum clearance between side rails of the extensions shall not exceed 36 inches (91 cm).
- (21) For side-step fixed ladders, the side rails and the steps or rungs shall be continuous in the extension.
- (22) Individual-rung/step ladders, except those used where their access openings are covered with manhole covers or hatches, shall extend at least 42 inches (1.1 m) above an access level or landing platform either by the continuation of the rung spacings as horizontal grab bars or by providing vertical grab bars that shall have the same lateral spacing as the vertical legs of the rungs.

### **Use of Ladders:**

The following requirements apply to the use of all ladders, including job-made ladders, except as otherwise indicated. The correct procedures for using ladders are as follows:

- (1) When portable ladders are used for access to an upper landing surface, the ladder side rails shall extend at least 3 feet (.9 m) above the upper landing surface to which the ladder is used to gain access; or, when such an extension is not possible because of the ladder's length, then the ladder shall be secured at its top to a rigid support that will not deflect, and a grasping device, such as a grabrail, shall be provided to assist employees in mounting and dismounting the ladder. In no case shall the extension be such that ladder deflection under a load would, by itself, cause the ladder to slip off its support.
- (2) Ladders shall be maintained free of oil, grease, and other slipping hazards.
- (3) Ladders shall not be loaded beyond the maximum intended load for which they were built, nor beyond their manufacturer's rated capacity.
- (4) Ladders shall be used only for the purpose for which they were designed.
- (i) Non-self-supporting ladders shall be used at an angle such that the horizontal distance from the top support to the foot of the ladder is approximately one-quarter of the working length of the ladder (the distance along the ladder between the foot and the top support).

- (ii) Wood job-made ladders with spliced side rails shall be used at an angle such that the horizontal distance is one-eighth the working length of the ladder.
  - (iii) Fixed ladders shall be used at a pitch no greater than 90 degrees from the horizontal, as measured to the back side of the ladder.
- (5) Ladders shall be used only on stable and level surfaces unless secured to prevent accidental displacement.
- (6) Ladders shall not be used on slippery surfaces unless secured or provided with slip-resistant feet to prevent accidental displacement. Slip-resistant feet shall not be used as a substitute for care in placing, lashing, or holding a ladder that is used upon slippery surfaces including, but not limited to, flat metal or concrete surfaces that are constructed so they cannot be prevented from becoming slippery.
- (7) Ladders placed in any location where they can be displaced by workplace activities or traffic, such as in passageways, doorways, or driveways, shall be secured to prevent accidental displacement, or a barricade shall be used to keep the activities or traffic away from the ladder.
- (8) The area around the top and bottom of ladders shall be kept clear.
- (9) The top of a non-self-supporting ladder shall be placed with the two rails supported equally unless it is equipped with a single support attachment.
- (10) Ladders shall not be moved, shifted, or extended while occupied.
- (11) Ladders shall have nonconductive side rails if they are used where the employee or the ladder could contact exposed energized electrical equipment.
- (12) The top or top step of a stepladder shall not be used as a step.
- (13) Cross-bracing on the rear section of stepladders shall not be used for climbing unless the ladders are designed and provided with steps for climbing on both front and rear sections.
- (14) Ladders shall be inspected by a competent person for visible defects on a periodic basis and after any occurrence that could affect their safe use.
- (15) Portable ladders with structural defects, such as, but not limited to, broken or missing rungs, cleats, or steps, broken or split rails, corroded components, or other faulty or defective components, shall either be immediately marked in a manner that readily identifies them as defective, or be tagged with "Do Not Use" or similar language, and shall be withdrawn from service until repaired.
- (16) Fixed ladders with structural defects, such as, but not limited to, broken or missing rungs, cleats, or steps, broken or split rails, or corroded components, shall be withdrawn from service until repaired.

The requirement to withdraw a defective ladder from service is satisfied if the ladder is either:

- (i) Immediately tagged with "Do Not Use" or similar language.
- (ii) Marked in a manner that readily identifies it as defective;
- (iii) Or blocked (such as with a plywood attachment that spans several rungs).

- (17) Ladder repairs shall restore the ladder to a condition meeting its original design criteria, before the ladder is returned to use.
- (18) Single-rail ladders shall not be used.
- (19) When ascending or descending a ladder, the user shall face the ladder.
- (20) Each employee shall use at least one hand to grasp the ladder when progressing up and/or down the ladder.
- (21) An employee shall not carry any object or load that could cause the employee to lose balance and fall.

### **Care of Ladders:**

- a. Handle ladders with care. Do not drop, jar or misuse them.
- b. Ladders shall be stored in a manner that will provide easy access for inspection and will permit safe withdrawal for use. They shall not be stored in a manner that presents a tripping hazard nor where they can fall on someone. They should be stored in a manner that will prevent sagging.
- c. Lubricate metal bearings of locks, wheels, pulleys, etc., as required to keep them working.
- d. Replace frayed or badly worn rope.
- e. Keep safety feet and other parts in good condition to ensure they work.
- f. Maintain ladders in good usable condition. Inspect ladders prior to use.
- g. Ladders with defects which cannot be immediately repaired, shall be removed from service for repair or destruction, and shall be tagged with a danger tag. Do not attempt to straighten or use a bent ladder made of reinforced plastic.
- h. Rungs or steps on metal ladders that are not corrugated, knurled, or dimpled will have skid-resistant materials applied.

# Lock Out / Tag Out Program

## **Purpose:**

This policy and procedure establishes the minimum requirements for the DDS Companies Lock Out / Tag Out Program. It governs lock out and/or tag out procedures to be used to verify that equipment or machines are isolated from all potentially hazardous energy and to prevent the reaccumulating of stored energy to a hazardous level. Machinery is to be locked out or tagged out before employees perform any servicing or maintenance activities where the unexpected energizing, start up or release of stored energy could cause injury.

## **Policy:**

Procedures described apply to all electrical equipment and machinery connected to an energy source by either hard wire or other permanent connection (hydraulic lines, electrical, etc.) that is repaired, serviced, or maintained by company personnel. The Lock Out / Tag Out Program applies to all equipment or machinery operated by mechanical, hydraulic, pneumatic, chemical, thermal, or other energy resources where the unexpected energizing could cause injury to employees or customers.

Circuit breakers disconnect switches, and other energy isolating devices used to control the flow of energy to the machine/equipment must be operated in such a manner as to shut off or “isolate” all energy to the machine.

The machine or equipment shall be turned off or shutdown using the procedures established for the machine or equipment. An orderly shutdown must be utilized to avoid any additional or increased hazard(s) to employees as a result of the equipment stoppage.

## **Definitions:**

**Energy Source-** Any source of electrical, mechanical, hydraulic, chemical, thermal, or any other energy source.

**Energized-** Connected to an energy source or containing residual or stored energy.

**Energy Isolating Device-** A mechanical device that physically prevents the transmission or release of energy (for example, circuit breaker, disconnect switch, slide gate, line valve, etc.)

**Lock out-** Placing a lock out device on an energy isolating device to shut down it's flow of energy.

**Lock out device-** A device such as a lock, either combination or key type, to hold an energy isolating device in the “safe” position and prevent energizing of a machine or equipment.

**Tag out-** Placing a tag or sign on an energy isolating device indicating that the equipment shall not be operated until the tag out sign is removed.

**Tag out device-** A prominent warning device or sign that can be attached to the energy isolating device. Tags will state the following:

**DANGER-DO NOT OPERATE**

## **Initial Training:**

Employees involved in the use of this Lock Out / Tag Out Program shall receive training in the requirements of this program upon initial assignment. Retraining is required when there is a change in job assignments, in machines, a change in the energy control procedures, or a new hazard is introduced. The Safety Director is responsible for verifying that training is documented and certified.

Affected employees (Foremen, Operators, and Laborers) are those individuals who have been designated by the company to operate equipment or machinery that can be affected during shutdowns for service and/or maintenance. Shutdowns are performed by Authorized Persons using Lock Out/Tag Out procedures

Authorized employees (Mechanics) will be trained in the recognition of hazardous energy sources present at the location they work, the type and magnitude of the energy available in the workplace, and the methods/means needed for energy isolation and control.

Employees must be trained to recognize when the Lock Out / Tag Out Program is being implemented and understand the purpose of the procedure and the importance of not attempting to start up or use machinery or equipment that has been locked or tagged out.

When tags are used, employees must be specifically instructed in the following:

- Tags are to include the name of the individual tagging out the equipment
- Tags are warning devices: they do not provide physical restraint that a lock out does.
- When a tag or lock is attached, it is not to be removed by anyone without authorization from the employee who placed it on the machine or equipment. They are never to be bypassed, ignored, or defaced.
- Tags must be legible and understandable to be effective.
- Tags and locks, and their means of attachment must be made of material that will withstand the working environment where the tags will be used.
- Tags and locks must be attached securely so they cannot inadvertently be detached.
- Tags evoke a false sense of security. They are only part of the entire Lock Out / Tag Out Program.

## **Verification of Isolation**

The isolation of energy sources will be verified by the Authorized Employee prior to beginning work on the equipment.

## **Annual Review**

Periodic inspections of the energy control procedure will be conducted by Safety and documented at least annually to ensure procedures and requirements are being followed.

## **Group Lock Out Setting**

The DDS authorized employee shall coordinate LO/TO with all other contractors. The DDS authorized employee has primary responsibility for DDS employees working under the protection of a group lockout or tagout device.

# Machine Guards

## **Purpose:**

The Machine Guard Program is designed to protect employees from hazards of moving machinery. All hazardous areas of a machine shall be guarded to prevent accidental "caught in" situations.

**References:** General Requirements for all Machines (29 CFR 1910.212), Woodworking Machinery (29 CFR 1910.213), Abrasive Wheels (29 CFR 1910.215), Power Presses (29 CFR 1910.217), Power Transmission (29 CFR 1910.219).

Many accidents are caused by machinery that is improperly guarded or not guarded at all. Important factor that must be kept in mind relative to machinery guarding is that no mechanical motion that threatens a worker's safety should be left without a safeguard.

The following areas of machinery will be provided with barriers and/or enclosures that will effectively prevent personnel from coming in contact with moving components:

- a. Point of operation exposures such as blades, knives and cutting heads.
- b. Power transmission exposures such as belts, pulleys, shaft, gears, etc.
- c. Top, bottom and backside exposures, such as the underside of table saws and the wheels on band saws.
- d. When a point-of-operation guard cannot be used because of unusual shapes or cuts, jigs or fixtures which will provide equal safety for the operator will be used.
- e. Upon completion of an unusual operation, the guard will be immediately replaced.

Whenever a guard is removed for other than an operational requirement, the machine will be shut down and the control switch(es) locked and tagged in the "OFF" position.

Guards will be affixed to the machine. Where possible, the guards will be of the hinged type to enhance maintenance or adjustments.

## **Responsibilities:**

### **Management**

- Ensure all machinery is properly guarded
- Provide training to employees on machine guard rules
- Ensure new purchased equipment meets the machine guard requirements prior to use

### **Supervisors**

- Train assigned employees on the specific machine guard rules in their areas
- Monitor and inspect to ensure machine guards remain in place and functional
- Immediately correct machine guard deficiencies

## **Employees**

- Do not remove machine guards unless equipment is locked and tagged
- Replace machine guards properly
- Report machine guard problems to supervisors immediately
- Do not operate equipment unless guards are in place and functional
- Only trained and authorized employees may remove machine guards

## **Definition of Terms:**

**Guards:** Barriers that prevent Employees from contact with moving portions or parts of exposed machinery or equipment which could cause physical harm to the Employees.

**Enclosures:** Mounted physical barriers which prevent access to moving parts of machinery or equipment.

**Point-of-Operation:** The area on a machine or item of equipment, where work is being done and material is positioned for processing or change by the machine.

**Power Transmission:** Any mechanical parts which transmit energy and motion from a power source to the point-of-operation. Example: Gear and chain drives, cams, shafts, belt and pulley drives and rods. NOTE: Components which are (7) feet or less from the floor or working platform shall be guarded.

**Nip Points:** In-Running Machine or equipment parts, which rotate towards each other, or where one part rotates toward a stationary object.

**Shear points:** The reciprocal (back and forth) movement of a mechanical part past a fixed point on a machine.

**Rotating Motions:** Rotating Motions are produced by the rotation of an exposed mechanism and are dangerous unless guarded. Even a smooth, slowly rotating shaft or coupling can grasp clothing or hair upon contact with the skin and force an arm or hand into a dangerous position. Affixed or hinged guard enclosure protects against this exposure.

**Reciprocating:** Reciprocating motions are produced by the back and fourth movements of certain machine or equipment parts. This motion is hazardous, when exposed, offering pinch or shear points to an Employee. A fixed enclosure such as a barrier guard is an effective method against this exposure.

**Transverse Motions:** Transverse motions are hazardous due to straight line action and in-running nip points. Pinch and shear points also are created with exposed machinery and equipment parts operating between a fixed or other moving object. A fixed or hinged guard enclosure provides protection against this exposure.

**Cutting Actions:** Cutting action results when rotating, reciprocating, or transverse motion is imparted to a tool so that material being removed is in the form of chips. **Exposed points:** Exposed points of operation must be guarded to protect the operator from contact

with cutting hazards, being caught between the operating parts and from flying particles and sparks.

**Shearing Action:** The danger of this type of action lies at the point of operation where materials are actually inserted, maintained and withdrawn. Guarding is accomplished through fixed barriers, interlocks, remote control placement (2 hand controls), feeding or ejection.

### **Machine Guarding Requirements:**

1. Guards shall be affixed to the machine where possible and secured.
2. A guard shall not offer an accident hazard in itself.
3. The point-of-operation of machines whose operation exposes an employee to injury shall be guarded.
4. Revolving drums, barrels and containers shall be guarded by an enclosure which is interlocked with the drive mechanism.
5. When periphery of fan blades are less than 7 feet above the floor or working level the blades shall be guarded with a guard having openings no larger than 1/2 inch.
6. Machines designed for a fixed location shall be securely anchored to prevent walking or moving. For example; Drill Presses, Bench Grinders, etc.

### **General Requirements for Machine Guards:**

1. Guards must prevent hands, arms or any part of an employees body from making contact with hazardous moving parts. A good safeguarding system eliminates the possibility of the operator or other employees from placing parts of their bodies near hazardous moving parts.
2. Employees should not be able to easily remove or tamper with guards. Guards and safety devices should be made of durable material that will withstand the conditions of normal use and must be firmly secured to the machine.
3. Guard should ensure that no objects can fall into moving parts. An example would be a small tool which is dropped into a cycling machine could easily become a projectile that could and injure others.
4. Guard edges should be rolled or bolted in such a way to eliminate sharp or jagged edges.
5. Guard should not create interference which would hamper employees from performing their assigned tasks quickly and comfortably.
6. Lubrication points and feeds should be placed outside the guarded area to eliminate the need for guard removal.

### **Training:**

All Employees shall be provided training in the hazards of machines and the importance of proper machine guards. Machine safety and machine guarding rules will be thoroughly explained as part of the new hire orientation program and annually as refresher safety training.

# OSHA Inspection

## **Purpose:**

To establish the policy for all managers to follow if an OSHA Compliance inspection will be conducted.

## **Overview:**

The Occupational Safety and Health Administration (OSHA) is authorized to conduct workplace inspections to determine whether employees are complying with standards issued by the agency for safe and healthful workplaces. Inspections are usually conducted without advance notice and can be conducted for one or more of the following reasons”

- Imminent Danger Situations – Any condition where there is reasonable danger that a danger exists that can be expected to immediately cause death or serious harm.
- Catastrophes and Fatal Accidents – Investigation of fatalities and accidents resulting in the hospitalization of 5 or more employees. Such catastrophes must be reported to OSHA within 48 hours.
- Employee Complaints
- Programmed Inspections – Based on injury rates, previous citation history, and employee exposure to toxic substances or random computerized selection.

This policy details the phases of an OSHA compliance inspection, the response and attitude of management to an inspection and steps to insure completion of the appropriate follow-up corrective action.

## **Policy:**

The DDS Companies’ policy is to demonstrate “good faith” effort to comply with all OSHA standards and any health and safety issues raised in an OSHA compliance inspection.

Management is responsible for implementing this policy and correcting all health and safety deficiencies revealed during compliance inspections. The Safety Director will provide technical assistance and coordination of corrective action, as required.

## **Admitting an OSHA Compliance Officer:**

If an OSHA compliance inspector requests to conduct an inspection, the senior management member is to ask to see the officer’s credentials.

Note: DO NOT REFUSE THE COMPLIANCE OFFICER ADMITTANCE.

The senior management member is to contact the Safety Director immediately.

An OSHA Inspection is divided into three parts:

1. The Opening Conference
2. The Walk Around Inspection
3. The Closing Conference

There are no time limits specifying how long an inspector may remain on the premises.

### **Opening Conference:**

Before inspecting the premises, the OSHA compliance officer will conduct an opening conference at which they will explain:

- The reason for the inspection (for example. employee or individual complaint)
- Purpose of the visit
- Scope of the inspection
- OSHA Standards that apply

Senior Management must arrange for the following to attend the opening conference:

- The President of Rochester Utility Contractors
- The Safety Director
- Other Personnel, as directed

Management must request copies of all applicable safety and health standards as well as a copy of any employee complaint.

### **The Walk Around Inspection:**

After the opening conference, the OSHA compliance officer will go through the facility to inspect for safety and health hazards.

When senior management members and other employees accompany an OSHA compliance officer on an inspection, they should be respectful while firmly standing up for company rights and viewpoints. The conduct of company personnel shall be in accordance with the following guidelines:

- Do not physically interfere with the OSHA compliance officer when they are making the inspection
- Do not give false or misleading information.
- Accompany the OSHA compliance officer at all times during the inspection.
- Answers to an OSHA compliance officer's questions are to be responsive to the question asked. Do not offer any information beyond the scope of the question. Avoid making any statement that could be construed as an admission of a violation of any recognized health standard.
- Do not discuss with the OSHA compliance officer any previous safety inspections.
- If the OSHA compliance officer wants to take photographs, senior management must request copies of the photographs. Senior management will also take photographs of the area from the same and different angle.

- Watch and take notes regarding all activities of the OSHA compliance officer. Notes should be detailed and should include such pertinent information as to the name(s) of the OSHA compliance officer(s), time of arrival, activities of OSHA compliance officer, amount of time spent at each location, comments about violations and potential citations, who was interviewed, what was said, etc.
- Immediately correct minor but apparent safety problems in order to help establish the company's "good faith" effort to comply with all OSHA health and safety standards.

### **Closing Conference:**

After the walk around inspection, a closing conference is held with the OSHA compliance officer, senior management, and any employee representative. The OSHA compliance officer will discuss all unsafe and unhealthy situations observed and will identify all applicable sections of the standards which may have been violated. Management will insure that all violations are understood. When appropriate, Management will produce records to show compliance efforts and fully explain any difficulties that will be encountered in the correction of safety hazards. Management and employees will not admit violation or indicate how long it will take to correct a potential violation.

### **Post Inspection Activities:**

Time limits to correct violations generally range from 5 to 30 days, unless an extension is requested. Time limits will be given in person at the closing conference or mailed within 30 days in a written report of the inspection findings. Follow-up action will be documented in writing, by senior management, listing specific action steps, the individual accountable, and the target date for completion. Management is responsible for completing all corrective action.

OSHA inspection reports, company responses, and all correspondence to and from OSHA will be retained permanently by the Safety Director.

# Personal Protective Equipment Program

## **Policy:**

Protective clothing will be provided whenever it is necessary by reason of hazards, processes, or environmental conditions. The Company requires that protective clothing, properly fitted to each affected employee, be used when chemical hazards, radiological hazards, or mechanical irritants are encountered in a manner capable of causing injury or impairment through absorption, inhalation, or physical contact.

## **Responsibilities:**

The Safety Director will be responsible for assessing the hazards and exposures that may require the use of PPE, determining the type of equipment to be provided, and purchasing the equipment. Input from managers, supervisors, and employees will be obtained and considered in selecting appropriate equipment.

Managers/supervisors will be responsible for training employees in the use and proper care of PPE, ensuring that all employees are assigned appropriate PPE, and ensuring that PPE is worn by employees when and where it is required.

Employees are responsible for following all provisions of this program and related procedures. They are expected to wear PPE when and where it is required. Employee-owned PPE is not permitted, DDS provides all PPE (except for Safety Shoes) at no cost to employees.

## **Procedures:**

- a. Personal protective clothing is to include, gloves, safety shoes, hard hats, safety glasses, and high visibility clothing.
- b. Requests for all personal protective clothing not available as Company stock items are generated by the supervisor and are approved by the Safety Director. The protective clothing must be worn by the employees and visitors as dictated by Company policy.
- c. Sandals, and open-toed shoes, are prohibited in the shop and on job sites.
- d. Safety shoes should be worn by all shop and field personnel as dictated by the nature of the work. The user will be responsible for the proper cleaning, maintenance and use of the safety shoes.
- e. Hard hats should be worn on all job sites and when performing work in which the risk of falling objects exist.

## **Hazard Assessment:**

The Company will perform an assessment of the workplace subject to the OSHA General Industry Standard (i.e. the Shop) to determine if hazards are present, or likely to be present, which necessitate the use of personal protective equipment (PPE). This assessment will consist of a survey of the workplace to identify sources of hazards to workers. Where such hazards are present, or likely to be present, the Company will:

- Select, and have each affected employee use, the types of PPE that will protect the employee from the hazards identified in the hazard assessment.

- Communicate equipment selection decisions to each affected employee
- Where such hazards are present, or likely to be present, the Company will:
  - Select PPE that properly fits each affected employee
  - Train employees in the use and care of PPE as described elsewhere in this program

The Company will verify that the workplace hazard assessment has been performed by conducting a written certification. This certification will be dated and signed by the Safety Director. Whenever there is a change in process or in the workplace that might introduce or change an exposure or hazard, the company will perform an assessment to determine if there needs to be additional PPE or a change in the PPE provided. These supplemental hazard assessments will also be documented, signed and dated by the person performing the assessment. The Company will review and update the workplace hazard assessment on an annual basis.

### **Training:**

Each employee who is required to use PPE will be trained in the following:

- Why PPE is necessary
- When PPE is necessary
- What PPE is necessary and any alternative choices of equipment
- How to properly don, doff, adjust, and wear PPE
- The proper care, maintenance, storage, useful life, and disposal of PPE

The training will include an opportunity for employees to handle the PPE and demonstrate that they understand the training and have the ability to use the PPE properly. Training will be provided by the manager or supervisor of the affected employees.

If an employee, who has been trained, demonstrates a lack of knowledge or behavior which leads the supervisor to believe the employee does not have a proper understanding of the PPE involved, that employee will be retrained. If there are changes in the workplace or processes that change the exposures or type of PPE to be used, all affected employees will be retrained. All PPE training shall be documented in the *DDS Companies Training Matrix*. PPE training certification shall include the employee name, the dates of training, and the certification subject.

### **Care Of Personal Protective Equipment:**

Whenever practical, PPE will be assigned to individual workers for their exclusive use. Employees will be responsible for the PPE equipment assigned to them or used by them.

PPE will be regularly cleaned, inspected and stored according to instructions given during the training sessions or as directed by supervisors or managers. Defective or damaged PPE shall not be used. Employees are to report any defective or damaged equipment to their supervisor for repair or replacement.

### **Personal Protective Equipment:**

Engineering controls shall be the primary methods used to eliminate or minimize hazard exposure in the workplace. When such controls are not practical or applicable, personal protective equipment shall be employed to reduce or eliminate personnel exposure to hazards.

➤ **Equipment Specifications and Requirements**

Only those items of protective clothing and equipment that meet National Institute of Occupational Safety and Health (NIOSH) or American National Standards Institute (ANSI) standards will be procured or accepted for use.

**Eye and Face Protection**

Approved eye and face protection shall be worn when there is a reasonable possibility of personal injury. Supervisors, with assistance from the Safety Director, determine jobs and work areas that require eye protection and the type of eye and face protection that will be used.

Typical hazards that can cause eye and face injury are:

- Splashes of toxic or corrosive chemicals, hot liquids, and molten metals;
- Flying objects, such as chips of wood, metal, and stone dust;
- Fumes, gases, and mists of toxic or corrosive chemicals; and
- Aerosols of biological substances.

➤ **Emergency Eyewash Facilities**

Emergency eyewash facilities meeting the requirements of ANSI Z358.1-1981 shall be provided in all areas where the eyes of any employee may be exposed to corrosive materials. All such emergency facilities shall be located where they are easily accessible to those in need.

➤ **Respiratory Protection**

When used, respiratory protection shall be used in accordance with the company's Respiratory Protection Program.

➤ **Head Protection**

Hats and caps have been designed and manufactured to provide workers protection from impact, heat, electrical and fire hazards..

Head protection will be furnished to, and used by, all employees and contractors engaged in construction and other miscellaneous work in head-hazard areas. Head protection will also be required to be worn by engineers, inspectors, and visitors at construction sites.

➤ **Hand Protection**

Skin contact is a potential source of exposure to toxic materials; it is important that the proper steps be taken to prevent such contact. Gloves should be selected on the basis of the material being handled, the particular hazard involved, and their suitability for the operation being conducted. One type of glove will not work in all situations. The

Safety Director can assist in determining the specific type of glove material that should be worn for a particular chemical.

Gloves should be replaced periodically, depending on frequency of use and permeability to the substance(s) handled. Gloves overtly contaminated should be rinsed and then carefully removed after use.

Gloves should also be worn whenever it is necessary to handle rough or sharp-edged objects, and very hot or very cold materials. The type of glove materials to be used (in these situations) include leather, welder's gloves, aluminum-backed gloves, and other types of insulated glove materials.

➤ **Safety Shoes**

Safety shoes shall be worn in the shop and on job sites.

➤ **Hearing Personal Protective Equipment**

Hearing protective devices (ear plugs, muffs, etc.) shall be the permanent solution only when engineering or administrative controls are considered to be infeasible or cost prohibitive. Hearing protective devices are defined as any device that can be worn to reduce the level of sound entering the ear. A Hearing Conservation Program including the use of hearing protective devices shall be instituted when employees work in an area where the operations generate noise levels of:

- Greater than 85 dBA sound levels, or
- 120 dB peak sound pressure level or greater

Types of Hearing Protective Devices Hearing protective devices include the following:

a. Insert Type Earplugs

A device designed to provide an air-tight seal with the ear canal. There are three types of insert earplugs – pre-molded, formable, and custom earplugs.

b. Earmuffs

Earmuffs are devices worn around the ear to reduce the level of noise that reaches the ear. Their effectiveness depends on an air tight seal between the cushion and the head.

c. Canal Caps

### Selection of Hearing Protective Devices

Employees will be given the opportunity to select hearing protective devices from a variety of suitable ones provided by the Safety Director. In all cases the chosen hearing protectors shall have a Noise Reduction Rating (NRR) high enough to reduce the noise at the ear drum to 80 dBA or lower.

### Training in Use of Hearing Protective Devices

Employees required to wear hearing protection shall be provided with training on at least an annual basis, and shall be updated to be consistent with changes in the PPE and work processes.

## Use of Hearing Protective Devices

Always use and maintain HPDs as originally intended and in accordance with instructions provided.

## Maintenance of Hearing Protective Devices

Reusable earplugs, such as the triple flange or formable devices should be washed in lukewarm water using hand soap, rinsed in clean water, and dried thoroughly before use. Wet or damp earplugs should not be placed in their containers. Cleaning should be done as needed Earmuff cushions should be kept clean. The plastic or foam cushions may be cleaned in the same way as earplugs, but the inside of the muff should not get wet. When not in use, ear muffs should be placed in open air to allow moisture that may have been absorbed into the cups to evaporate.

## Routine Monitoring

In work areas where sound levels exceed 85dbA for an 8 hour TWA routine monitoring will be conducted on a semi-annual basis. This monitoring will be conducted by the Safety Department to determine if exposure levels have changed and verify if exposure controls are working properly.

## Audiometric Testing

In work areas where sound levels exceed 85dbA for an 8 hour TWA audiometric testing of employees will be conducted. A baseline audiogram for each exposed employee will be conducted within 6 months of first exposure and annually thereafter. Prior to the employee's baseline audiogram, at least 14 hours without exposure to workplace noise is to be observed. If a standard threshold shift is observed in the audiogram, the employee will be notified in writing within 21 days of determination. When a standard threshold shift occurs, hearing protection shall be re-evaluated and/or refitted and if necessary a medical evaluation may be required.

## Recordkeeping

Training records, monitoring records, and the results of audiometric testing shall be maintained by the Safety Department for the duration of employment plus 30 years.

# Powered Industrial Trucks

## **Policy:**

The purpose of the Powered Industrial Truck Program is to facilitate the company in providing a safe work environment while meeting Occupational Safety and Health Administration (OSHA) regulations, 29 CFR 1910.178.

## **Procedure:**

The DDS Companies has one fork truck in the Shop for use in the Shop, Dry Storage, and in the yard. Only employees that have been certified to use the DDS Companies' fork truck may use it. Employees working in the Shop, Truck drivers, and a few other employees have been certified to operate the fork truck.

Prior to use, an inspection of the fork truck shall be performed. An inspection sheet is mounted on the fork truck and the inspection includes:

- |  |  |
|--|--|
| Check for leaks  | Check Condition (Wear/Damage)  |
| <ul style="list-style-type: none"><li>▪ Oil</li><li>▪ Hydraulic</li></ul>  | <ul style="list-style-type: none"><li>▪ Tires, Wheels, Tire pressure</li><li>▪ Forks</li></ul>                                       |
| - Check Operation  | - Check Operation  |
| <ul style="list-style-type: none"><li>▪ Horn</li><li>▪ Seat belt</li><li>▪ Transmission/Clutch</li><li>▪ Steering and Brakes</li></ul> | <ul style="list-style-type: none"><li>▪ Backing Alarm</li><li>▪ Gauges</li><li>▪ Lights</li><li>▪ Hoist, Tilt, Attachments</li></ul> |

If the fork truck does not pass inspection for any reason, the employee I to remove the key from fork truck and deliver key to the Fleet Manager.

Provide Fleet Manager with a description of the reason for failure of inspection.

## **Training**

Employees working in the Shop, Truck drivers, and a few other employees have been certified to operate the fork truck. Training shall be conducted upon initial assignment and at least every 3 years. Mandatory refresher training is required whenever unsafe operations are observed, following an accident, acquisition of a different vehicle type, or changes in conditions at the facility. Training shall consist of formal classroom instruction, hands on training with the equipment, and an evaluation in the workplace by a qualified instructor. training content shall include load capacity, operating instructions, distances, refueling, ramps, visibility and balancer and counterbalances. All Training records will be kept in employee files and documented on the "*DDS Companies Training Matrix*".

When unloading a trailer the operator must verify trailer chocks, supports, and dock plates prior to loading/unloading.

# Recordkeeping and Posting Requirements

## **Purpose:**

To establish the policy and procedures regarding the DDS Companies requirements for compliance with OSHA record keeping and posting guidelines for occupational injuries and illnesses.

## **Policy:**

All locations are to post the “Job Safety and Health Protection” poster (or state equivalent) in prominent places in the workplace. These postings are located on the Shop wall by the offices

OSHA requires that employers maintain a record of certain occupational injuries that occur at each business establishment on the OSHA Form Log 300 and 300A: Log of Work-Related Injuries and Illnesses and Summary of Work-Related Injuries and Illnesses. At the end of each year, OSHA requires the summary section of the OSHA Form Log 300A to be posted at each business establishment no later than February 1 and remain in place until April 30. The company will comply with this requirement by posting the Log on the Shop wall by the offices. The Safety Director is responsible for maintaining the information on the log in a current status and distributing the OSHA Form Logs.

## **Record Retention:**

OSHA Form Log, January – November reports can be discarded upon receipt of the next monthly report.

Year-end OSHA Form Log 200, 300, 300A, and 301, retain for 5 years following the year to which they relate

# Respiratory Protection Program

## **Policy:**

It is the Company's policy to provide employees with a safe and healthful working environment. This is accomplished by utilizing facilities and equipment that have all feasible safeguards incorporated into their design. When effective engineering controls are not feasible, or when they are being initiated, protection shall be used to ensure personnel protection.

## **Responsibilities:**

### a. Supervisor

Supervisors must be aware of tasks requiring the use of respiratory protection, and ensure all employees engaged in such work use the appropriate respirators at all times. The Supervisors are responsible for the following:

1. Ensures that all employees who wear respiratory protective devices are thoroughly trained in their use.
2. Provides employees with the respiratory protection appropriate for the operation, and ensures the use of such devices.
3. Identifies potentially hazardous conditions and immediately notifies the Safety Director for corrective action.

Supervisors shall contact the Safety Director for an evaluation prior to non-routine work which may expose workers to hazardous substances or oxygen deficient (IDLH) atmospheres. Examples of work which may require the use of respirators includes, but are not limited to:

- Asbestos abatement activities
- Abrasive blasting
- Cutting or melting lead or stripping lead-based paints from surfaces
- Painting, especially with epoxy or organic solvent coatings
- Using solvents, thinners, or degreasers
- Any work which generates large amounts of dust
- Working in a confined space
- Bioaerosols

### b. Employee

1. Uses respiratory protective equipment as instructed and required under hazardous agent protocols.
2. Stores respirator properly to prevent damage and inspects prior to each use.
3. Cleans and sanitizes their own respirators
4. Reports any malfunction of respiratory protective equipment to the immediate supervisor.

### c. Safety Director

1. Acts as the Program Administrator.
2. Develops and implements all aspects of the respiratory protection program.
3. Develops training programs and standard operating procedures to fulfill the requirements of existing OSHA regulations and amendments.
4. Purchases, selects, inspects, maintains, cleans, stores, and fit tests respiratory protective equipment.

5. Periodically inspects and replaces all respiratory protective devices stored for emergency use.

### **Procedures:**

- a. Selection – NIOSH approved respirators shall be selected by the Safety Director on the basis of the potential hazards to which the worker is exposed. The use of a dust mask or filtering facepiece is optional for protection against nuisance dusts. The company complies with the requirements of Appendix D of the OSHA Respirator Standard regarding the optional use of dust masks.
- b. Medical Evaluations – It is the responsibility of the Safety Director to arrange for medical evaluation of all employees who may be required to wear respiratory equipment (beyond the use of a dust mask). Medical evaluation shall be conducted prior to fit-testing, be confidential, during normal working hours, convenient, understandable, and provide the employee a chance to discuss the results with a physician or other licensed health care professional (PLHCP).
- c. Fitting – Each individual required to use a respirator (beyond a dust mask) will have a quantitative fit test for each tight fitting respirator they are required to wear. The fit test will include a demonstration of proper donning, wearing, and fit testing. Any individual with a beard or other facial hair that may prevent a proper facepiece-to-face seal will not be fit tested until the hair has been removed. A separate Respirator Fitting and Training Record shall be maintained for each participating individual.

#### **➤ Fit Checking**

Each time a respirator is donned, the user will perform positive and negative pressure fit checks. These checks are not a substitute for fit testing. Respirator users must be properly trained in the performance of these checks and understand their limitations.

##### **A. Negative Pressure Check**

Close off the inlet opening of the respirator's canister(s), cartridge(s), or filter(s) with the palm of the hand, or squeeze the breathing air tube or block its inlet so that it will not allow the passage of air. Inhale gently and hold for at least 10 seconds. If the facepiece collapses slightly and no inward leakage of air into the facepiece is detected, it can be reasonably assumed that the respirator has been properly positioned and the exhalation valve and facepiece are not leaking.

##### **B. Positive Pressure Check**

Close off the exhalation valve or the breathing tube with the palm of the hand. Exhale gently. If the respirator has been properly positioned, a slight positive pressure will build up inside the facepiece without detection of any outward air leak between the sealing surface of the facepiece and the face.

### **Special Problems**

#### **A. Facial Hair**

No attempt is made to fit a respirator on an employee who has facial hair which comes between the sealing periphery of the face piece and the face, or if facial hair interferes with normal functioning of the exhalation valve of the respirator.

#### **B. Glasses and Eye/Face Protective Devices**

Proper fitting of a respiratory protective device face piece for individuals wearing corrective eyeglasses or goggles, may not be established if temple bars or straps extend through the sealing edge of the face piece. If eyeglasses, goggles, face shield or welding helmet must be worn with a respirator, they must be worn so as not to adversely affect the seal of the face piece. If a full-face piece respirator is used, special prescription glasses inserts are available.

- d. Training – Appropriate training and instructions in the proper use of each type of respirator shall be provided by the Safety Director. Training shall be provided upon initial assignment to a job requiring the use of respirators and annually thereafter. Respirator users and their supervisors will receive training on the contents of this Respiratory Protection Program and their responsibilities under it. They will be trained on the proper selection and use, as well as the limitations of the respirator. Training also covers how to ensure a proper fit before use and how to determine when a respirator is no longer providing the protection intended.

The Safety Director provides training of respirator wearers in the use, maintenance, capabilities, and limitations of respirators initially upon assignment of personnel to tasks requiring the use of respirators. Retraining is given annually thereafter and only upon successful completion of the medical evaluation.

Respirator training will be properly documented and will include the type and model of respirator for which the individual has been trained and fit-tested.

This training will include, but not be limited to:

1. Nature and degree of respiratory hazard
  2. Respirator selection, based on the hazard and respirator capabilities and limitations
  3. Donning procedures and fit tests including hand's-on practice to ensure an effective face piece to face seal
  4. Actual handling of the respirator and wearing it for a period.
  5. A discussion of respirators construction, operating principles and limitations.
  6. Care of the respirator, e.g., need for cleaning, maintenance, storage, and/or replacement
  7. Instruction on the nature of the hazard, including information on its physical properties, possible concentrations, modes of physiological action and means of detection.
  8. Use and limitations of respirator
  9. Discussions of maintenance and inspection procedures
  10. Requirement for employees to leave the area to wash, change cartridges, or if they detect break-through or resistance.
- e. Inspection – For sanitary and health reasons, clean respirators shall be used by one individual only and shall be returned to the Safety Director for cleaning, maintenance, and repairs. Cleaning and disinfecting of reusable components of a respirator unit will be performed by utilizing recognized procedures corresponding to the exposure atmosphere. Disposable respirators will be discarded properly after use by the individual. Units receiving routine use shall be inspected by the employee before and after each use. The inspection shall include the following checks when applicable:

1. Lens of face pieces
  2. Condition of face piece, headbands, exhalation and inhalation valves, connecting tube, and canister
  3. Deterioration of all rubber parts
  4. Seal on cartridge package
- f. Location and Storage of Respirators – Location and storage of all respiratory devices shall be controlled by the Safety Director. When the need for respiratory equipment is anticipated, approval by the Safety Director should be obtained in advance.

After inspection, cleaning, and any necessary minor repairs, store respirators to protect against sunlight, heat, extreme cold, excessive moisture, damaging chemicals or other contaminants. Routinely used respirators, such as half-mask or full-face air-purifying respirators, shall be placed in sealable plastic bags. Respirators may be stored in such places as lockers or tool boxes only if they are first placed in carrying cases or cartons. Respirators shall be packed or stored so that the face piece and exhalation valves will rest in a normal position and not be crushed.

g. Immediately Dangerous to Life or Health (IDLH) Atmospheres.

The following procedures shall be followed when working in IDLH atmospheres.

- Prior to working in an area that may be IDLH, the Supervisor will arrange a hazard review with the Safety Department
- When working in an IDLH atmosphere:
  - o The atmosphere shall be monitored
  - o All workers will share wear a SCBA or an air supplied respirator with escape bottle
  - o An appropriately trained and equipped standby employee shall remain outside the IDLH atmosphere and maintain constant voice and visual communication with the employee
  - o In the event of an emergency requiring the standby person to enter the IDLH environment, the standby person shall immediately notify their supervisor and/or the Safety Representative prior to providing necessary assistance appropriate to the situation.

# Rigging Safety

## **Purpose:**

Many types of rigging devices are used at the DDS Companies for lifting and moving materials. It is the company's policy is to maintain a safe workplace for its employees; therefore, it cannot be overemphasized that the lifting of loads be performed with appropriate equipment and by trained employees.

## **Responsibilities:**

Supervisors are responsible for:

- Ensuring that employees under their supervision receive the required training.
- Ensuring that rigging equipment is inspected before use and annually.
- Maintaining written records of inspections and tests, and providing copies of all inspections as necessary

## **General Safety Rules:**

Operators shall comply with the following rules while lifting with rigging equipment:

- Do not engage in any practice that will divert your attention.
- Respond to signals only from the person who is directing the lift, or any appointed signal person. Obey a stop signal at all times, no matter who gives it.
- Do not move a load over people. People shall not be placed in jeopardy by being under a suspended load. Also, do not work under a suspended load unless the load is supported by blocks, jacks, or a solid footing that will safely support the entire weight.
- Know the weight of the object being lifted.
- To prevent shock loading, avoid sudden stops or starts. Shock loading can occur when a suspended load is accelerated or decelerated. When completing an upward or downward motion, ease the load slowly to a stop.

## **Operation Rules:**

### **Moving a Load**

- Center the hook over the load to keep the cables from slipping, and to prevent the load from swinging when it is lifted.
- Use a tag line when loads must traverse long distances or must otherwise be controlled. Manila rope may be used for tag lines.
- Plan and check the travel path to avoid personnel and obstructions.
- Lift the load only high enough to clear the tallest obstruction in the travel path.
- Start and stop slowly.
- Land the load when the move is finished. Choose a safe landing.
- Never leave suspended loads unattended. In an emergency where the crane or hoist has become inoperative, if a load must be left suspended, barricade and post signs in the surrounding area, under the load, and on all four sides.
- When not in use, remove rigging from immediate work area.

## **Rigging:**

### General Rigging Safety Requirements

Only select rigging equipment that is in good condition. All rigging equipment shall be inspected prior to use and annually; defective equipment is to be removed from service and destroyed to prevent inadvertent reuse. The load capacity limits shall be stamped or affixed to all rigging components – never lift beyond the working load limit of the rigging.

The following types of slings shall be rejected or destroyed:

- Nylon slings with
  - Abnormal wear.
  - Torn stitching.
  - Broken or cut fibers.
  - Discoloration or deterioration.
- Wire-rope slings with
  - Kinking, crushing, bird-caging, or other distortions.
  - Evidence of heat damage.
  - Cracks, deformation, or worn end attachments.
  - Six randomly broken wires in a single rope lay.
  - Three broken wires in one strand of rope.
  - Hooks opened more than 15% at the throat.
  - Hooks twisted sideways more than 10deg. from the plane of the unbent hook.
- Alloy steel chain slings with
  - Cracked, bent, or elongated links or components.
  - Cracked hooks.
  - Shackles, eye bolts, turnbuckles, or other components that are damaged or deformed.

## **Rigging a Load**

Do the following when rigging a load:

- Determine the weight of the load. Do not guess.
- Determine the proper size for slings and components.
- Do not use manila rope for rigging.
- Ensure latches are in place on all hooks, eliminating the hook throat opening
- Make sure that shackle pins and shouldered eye bolts are installed in accordance with the manufacturer's recommendations.
- Make sure that ordinary (shoulderless) eye bolts are threaded in at least 1.5 times the bolt diameter.
- Use safety hoist rings (swivel eyes) as a preferred substitute for eye bolts wherever possible.
- Pad sharp edges to protect slings. Wood, tire rubber, or other pliable materials may be suitable for padding.
- Do not use slings, eye bolts, shackles, or hooks that have been cut, welded, or brazed.
- Determine the center of gravity and balance the load before moving it.
- Initially lift the load only a few inches to test the rigging and balance.

## **Hand Signals**

Signals to the operator shall be in accordance with the standard hand signals unless voice communications equipment (telephone, radio, or equivalent) is used. Signals shall be discernible or audible at all times. Some special operations may require addition to or modification of the basic signals. For all such cases, these special signals shall be agreed upon and thoroughly understood by both the person giving the signals and the operator, and shall not be in conflict with the standard signals.

## **Inspection, Maintenance, and Testing:**

All inspections shall be conducted in accordance with the manufacturer's recommendations.

### **Annual Inspections:**

The Safety Director shall schedule and supervise (or perform) annual preventive maintenance (PM) and annual inspections of all rigging equipment. The annual PM and inspection shall cover:

- Wire rope.
- Hoist chains.

### **Records:**

The Safety Manager shall maintain records for all rigging equipment.

## Safety Committee

The Safety Committee will be composed of rank and file employees. The President will appoint the Safety Committee Chairperson. The Safety Committee will function as an advisory body to develop and recommend to Management matters of policy and procedure affecting administration of the DDS Companies' Safety and Health Program.

The Committee will meet at a mutually convenient time, at the request of a member of the Committee, but not less than quarterly. The Committee is responsible for:

- Reviewing statistical data, records, and reports of safety matters to determine the effectiveness of overall accident and loss prevention efforts and to develop recommendations for improvement.
- Reviewing and analyzing accident and property loss investigation reports for:
  - Accuracy and completeness.
  - Provide recommendations for corrective action and provide consistency throughout company operations.
  - Identification of accident problem or trend and determination of what order they should be given attention.
- Reviewing safety and property inspection reports, job safety analyses, and employees' suggestions for:
  - Possible changes in work practices or procedures.
  - Need for safety procedures.
  - Need for protective device or equipment.
  - Need for training.
- Developing practical safety and property inspection procedures, and assisting in making inspections when requested by the Safety Director.
- Keeping Managers informed of the progress of the Safety Program and informed as to the safety records of employees or other segments of the companies.
- Assisting in developing the records and statistical data necessary to provide an accurate picture of the companies' safety performance
- Identify unsafe work practices and conditions and suggest appropriate remedies.
- Ensure that employees and others (visitors, contractors, etc.) are informed about safety policies, training programs, injury risks and causation, and other health and safety-related matters.
- Maintain an open channel of communication between employees and management concerning occupational and environmental health and safety matters.
- Provide a means by which employees can utilize their knowledge of workplace operations to advise management in the improvement of policies, condition, and practices.
- Ensure Managers and Supervisors complete routine work area inspections and review the results of those inspections.

## **SAFETY SUGGESTION FORM**

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_  
(OPTIONAL)

DESCRIPTION OF UNSAFE CONDITION OR PRACTICE:

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CAUSE OR CONTRIBUTING FACTORS:

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SUGGESTION FOR IMPROVING SAFETY:

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Draw a picture to describe situation:



# Toolbox Talks

## **Policy:**

Toolbox Talks are training opportunities that occur in the field and are delivered by the Foreman or Superintendent.

## **Procedure:**

The tailboard briefing shall describe obvious, as well as potential, job site hazards and provide employees a plan for eliminating or controlling them. The employee in charge shall give the tailboard:

- At the start of the job.
- When job site conditions change, i.e. scope of work, crewmembers, new equipment introduced. Etc.

The tailboard shall be given in a positive manner and encourage employee participation so that all employees involved understand:

- The work methods, procedures, and job sequence.
- What each employee is expected to do.
- What to do in an emergency.
- Known or potential hazards and how to control or eliminate them.

Toolbox Talks are a method of communicating Health & Safety information to employees. Toolbox Talks topics are included in the DDS Utilities, Inc. (RNewsletter that is distributed weekly along with paychecks. Foreman for DDS Constructors, LLC are provided Toolbox Talks books and expected to conduct Toolbox Talks on a weekly basis.

Topics to be covered by Toolbox Talks include:

- Health & Safety program information.
- Hazard identification and control.
- Home Safety.

# Welding Safety

## **Policy:**

This welding safety program is designed to protect life and property from fire, atmospheric contaminants, and other associated hazards that may occur during these operations. This policy applies to all of those employees who may perform welding, cutting, or brazing as part of their job function.

## **Procedures:**

The following provides minimum guidance on procedures and operating precautions:

- Safety - if the welding work can not be done safely do not perform the work.
- Training in these requirements shall be provided for welders and their supervisors. The training shall be documented.
- Provide ventilation in shops or rooms where work is to be performed to minimize hazardous gases, mists and fumes.
- If the welding work can not be moved to a welding room, move combustible material away from piece to be worked on.
- Do not place work to be welded or heated on a concrete floor. Concrete, when heated, may splatter and fly, exposing the welder to possible burns (and also throwing hot particles a considerable distance creating a potential fire hazard).
- Provide appropriate protection for welders and helpers when working on elevated surfaces. Welding areas shall be kept neat, clean, and free from tripping hazards.
- Provide approved personal protective equipment for welders who must enter confined spaces, manholes or other space restricted areas. Also, provide a means to ensure their quick removal in case of an emergency.
- Do not perform cutting and welding operations in sprinklered buildings when the sprinkler system is inoperable; in explosive atmospheres or where explosive atmospheres may develop; or, within 50 feet of storage of large quantities of exposed, readily ignitable materials.
- Before lighting the torch for the first time each day, allow enough of each gas to flow through its respective hose to purge any flammable gas mixture.
- Purge hoses in open spaces and away from ignition sources. Light the torch with a friction lighter or stationary pilot flame keeping a safe distance between the torch and the welder's hands. Point the torch away from persons or combustible materials when lighting. Do not attempt to light a torch from hot metal.
- When working in a confined space, the fuel gas and oxygen supply shall be located outside the confined space. The torch and hose should be removed from confined spaces when not in use.

- Fuel gas and oxygen torch valves shall be closed and the fuel gas and oxygen supply to the torch shall be shut off during lunch or break periods, when not in use for extended periods, and when unattended.
- Welding torch hoses must be protected from damage by contact with hot metal, open flames, corrosive agents or sharp edges. Pressure on hoses will be released at the end of each workday. Hoses must be visually inspected for damage at the beginning of each shift. Hose showing leaks, cuts, burns, worn spots or other evidence of deterioration must be repaired or replaced prior to use. Replacement hoses or fittings must be approved for use with acetylene equipment.
- Shielding shall be provided to protect personnel from heat, sparks, slag, light, and radiation.
- A fire watch will be maintained for at least 30 minutes after completion of cutting or welding operations to detect and extinguish possible smoldering fires. Only those trained in the use of fire extinguishers may perform the fire watch. A fire extinguisher (at least 10 lbs) must be readily available to the fire watch.

### **Personal Protective Equipment:**

Key portions of OSHA Standard 1910.252 covering protective equipment are included here. Personnel engaged in or exposed to welding, cutting, or brazing activities will be provided and use personal protective equipment to include eye and face protection, head protection when in a hard hat area, foot protection, and body, arm, and hand protection.

### **Eye Protection**

- a. Helmets shall be used during all arc welding or arc cutting operations. Goggles should also be worn during arc welding or cutting operations to provide protection from injurious rays from adjacent work, and from flying objects. The goggles may have either clear or colored glass, depending upon the amount of exposure to adjacent welding operations. Helpers or attendants shall be provided with proper eye protection. Helmets shall be arranged to protect the face, neck, and ears from direct radiant energy from the arc.
- b. Goggles or other suitable eye protection shall be used during all gas welding or oxygen cutting operations. Spectacles with side shields and suitable filter lenses are permitted for use during gas welding operations on light work, for torch brazing or for inspection. Goggles shall be ventilated to prevent fogging of the lenses as much as practicable.
- c. All operators and attendants of resistance welding or resistance brazing equipment shall use transparent face shields or goggles, depending on the particular job, to protect their faces or eyes, as required.
- d. Eye protection in the form of suitable goggles shall be provided where needed for brazing operations.

### **Protective Clothing:**

- a. All welders should wear flame-resistant gauntlet gloves and shirts with sleeves of sufficient length and construction to protect the arms from heat, UV radiation, and sparks.
- b. All welders should wear fire-resistant aprons, coveralls, and leggings.
- c. Clothing should be kept reasonably free of oil or grease. Front pockets and upturned sleeves or cuffs should be prohibited, and sleeves and collars should be kept buttoned to prevent hot metal slag or sparks from contacting the skin.

### **Respiratory Protection:**

The Safety Director shall be consulted to determine appropriate levels of respiratory protection to be worn by personnel performing welding operations.

### **Fire Prevention and Protection:**

1. The welding operation environment shall be free of flammable liquids and vapors. Combustible materials within a radius of 35 feet of the operation will be protected from activity residue (flame, heat, sparks, slag, etc.).
2. If the object to be welded or cut cannot be moved and if all the fire hazards cannot be removed, then guards shields, fire blankets, etc. shall be used to confine the heat, sparks and slag and to protect the immovable fire hazards.
3. Fire watcher procedures shall be implemented whenever welding activities are conducted within 35 feet of combustible materials, regardless of protection provided. A qualified individual proficient in the operation of available fire extinguishing equipment and knowledgeable of fire reporting procedures shall observe welding or cutting activities. His or her duty is to detect and prevent the spread of fire produced by welding or cutting activities.
4. Whenever there are cracks or other floor openings within 35 feet of the welding or cutting that cannot be closed or covered, precautions shall be taken to remove or otherwise protect combustible materials on the floor below that may be exposed to sparks. The same precautions shall be observed with regard to cracks or openings in walls, open doorways, and open or broken windows.
5. Fire extinguishing equipment shall be maintained, ready for use, while welding or cutting operations are being performed. Equipment may consist of pails of water, buckets of sand, hose, or portable extinguishers depending upon the nature and quantity of the combustible material exposed.
6. Where sprinkler protection exists, it shall be in full service while welding or cutting work is being performed. If welding or cutting is to be done within three feet of automatic sprinkler heads, noncombustible sheet material or damp cloth guards will be used to temporarily shield the individual heads.

### **Arc Welding:**

Arc welding equipment shall conform to the design and installation criteria of OSHA 29 CFR 1910.252, "Welding, Cutting, and Brazing." The frame or case of the welding machine (except engine-driven machines) shall be grounded under the conditions and according to the methods prescribed in OSHA Standard 1910, Subpart S, "Electrical", and 1910.252.

Before starting operations, all connections to the arc welding machine shall be checked. The work lead shall be firmly attached to the work; contact surfaces of the magnetic work clamps shall be free of metal splatter particles. Coiled welding cable shall be spread out before use to avoid serious overheating and damage to insulation. Work and electrode lead cables shall be inspected for damage and wear before use. Cables with damaged insulation or exposed conductors shall be replaced. Electrode cables shall be joined and insulated in accordance with approved methods. Operators of equipment should report any equipment defect or safety hazards and discontinue use of equipment until its safety has been assured. Repairs shall be made only by qualified personnel.

Grounding of the welding machine frame shall be checked. Special attention shall be given to the ground connections of portable machines.

Electrode holders, when not in use, shall be placed where they cannot make electrical contact with persons, conducting objects, fuel, or compressed gas cylinders.

When it is necessary to splice cables to extend their length, only certified electricians shall make the splices. Cables with splices within 10 feet of the electrode holder shall not be used. The welder shall not coil or loop welding electrode cables around parts of their body.

Welders shall not place welding cable and other equipment where it will obstruct passageways, ladders, and stairways.

Machines which have become wet shall be thoroughly dried and tested before being used.

When welders are working close to one another on one structure where they may touch the exposed parts of more than one electrode holder simultaneously, the machines shall be connected to minimize shock hazard as follows:

All direct current (DC) machines shall be connected with the same polarity.

All alternating current (AC) machines shall be connected to the same phase of the supply circuit and with the same instantaneous polarity.

### **Resistance Welding:**

Thermal Protection

Every pair of ignition tubes used in resistance welding equipment shall be equipped with a thermal protection switch. When used in a series-connected water line, a single switch shall be adequate if related to the downstream tube.

### Control Safeguards

Controls, such as push buttons, foot switches, retraction, and dual-schedule switches on portable guns, etc., shall be arranged or guarded to prevent inadvertent activation.

### Guarding Welding Machines

Multi-gun welding machines shall be effectively guarded at the point of operation. Devices such as an electronic eye, latches, blocks, barriers, or two-hand controls shall be installed. All chains, gears, operating bus linkage, and belts shall be protected by adequate guards.

### **Electrical Hazards:**

All external weld-initiating control circuits shall operate on low voltage, not over 120 volts for stationary equipment and not over 36 volts for portable equipment. All electrical equipment shall be suitably interlocked and insulated to prevent access by unauthorized persons to live portions of the equipment. Only non-ferrous welding clamps should be used to prevent magnetic induction during actuation of the equipment.

### Welding in Confined Spaces Procedures-

Confined space means a relatively small or restricted space such as a tank, boiler, pressure vessel, mixing vat, sump, or pit. Ventilation is a prerequisite to work in confined spaces. All welding and cutting operations carried on in confined spaces shall be adequately ventilated to prevent the accumulation of toxic materials, possible oxygen deficiency, or explosive atmosphere.

This applies not only to the welder but also to helpers and other personnel in the immediate vicinity. All air replacing *that* which is withdrawn shall be clear and breathable. Oxygen shall never be used as makeup air.

In such circumstances where it is impossible to provide such ventilation, respirators or hose masks approved for this purpose by NIOSH/MSHA shall be used. In areas immediately hazardous to life, hose masks with blowers or self-contained breathing apparatus shall be used.

Where welding operations are carried on in a confined space and where welders and helpers are provided with hose masks, hose masks with blowers, or self-contained breathing apparatus, a worker shall be stationed on the outside of the confined space to ensure the safety of those working within.

When welding or cutting is being performed in any confined space, the gas cylinders and welding machines shall be left on the outside. Before operations

are started, heavy portable equipment mounted on wheels shall be securely blocked to prevent accidental movement.

Where a welder must enter a confined space through a manhole or other small opening, a means shall be provided for quick removal of the worker in case of emergency. When safety belts and lifelines are used for this purpose, they shall be attached to the welder's body in a way that ensures his or her body cannot be jammed in a small exit opening. A wrist harness assembly shall be used. An attendant with a preplanned rescue procedure shall be stationed outside to observe the welder at all times and shall be capable of putting rescue operations into effect.

When arc welding is to be stopped for any substantial period of time, such as during lunch or overnight, all electrodes shall be removed from the holders and the holders carefully located so accidental contact cannot occur. The machine shall be disconnected from the power source.

When gas welding or cutting, the torch valves shall be closed and the fuel-gas and oxygen supply to the torch positively shut off at some point outside the confined area whenever the torch is not to be used for a substantial period of time, such as during lunch or overnight. Where practicable, the torch and hose shall also be removed from the confined space.

All confined spaces shall be monitored for oxygen content, combustible vapors, and toxic material prior to entry and periodically throughout the operation. Periodic testing shall depend on the type of space being entered. The Safety Director shall be consulted for guidance.

#### Portable Gas Units Procedures-

Portable gas welding, cutting, and brazing equipment must be of a type approved for the use intended.

Cylinders of compressed gas must have pressure reducing regulators installed.

Cylinders in use or in a transport must be stored in an upright position and secured to prevent them from falling.

Pressure hoses shall be secured to prevent whipping.

Oxygen cylinders and fittings shall be kept free of grease and oil at all times.

Cylinders shall be kept away from external sources of heat at all times.

Cylinders shall not be dropped or handled roughly. Cylinders or welding sets in excess of 40 pounds total weight shall be transported to and from work sites by push cart or motorized vehicle.

#### Portable Electric Unit Procedures-

Circuits shall be de-energized before testing, checking or transporting.

Motor-generator sets and other electrical welding equipment shall be grounded prior to use.

Rotary and polarity switches shall not be operated while the equipment is under an electrical load.

Arc welding equipment shall be inspected periodically and inspected prior to use following relocation. Power cables and electrode holders shall be inspected prior to every use.

**Hot Work Permit:**

Precautions that are to be taken shall be in the form of a written permit. Before welding/cutting is permitted the area shall be inspected and a written permit shall be used to authorize welding and cutting operations. It is the Welder's responsibility to complete the Hot Work Permit. The Foreman shall review the Hot Work Permit and not permit the welding to continue until all issues have been addressed.

# General Waste Management

## **Purpose:**

The purpose of the General Waste Management program is to ensure that the waste generated by the DDS Companies is handled in compliance with all federal and state and local regulations.

## **Policy:**

It is the policy of the DDS Companies to protect employees, the general public, and the environment from any exposure to the hazards of the waste generated.

The DDS Companies strive to minimize the amount of waste generated from projects through:

- Recycling
- Re-use on site
- Salvage

## **Responsibilities:**

Project Managers/Supervisors –

- Prior to the beginning of a project, the Project Manager/Supervisor will define the waste management plan for the project – including all waste, trash, and/or scrap materials.
- Identify opportunities for re-use and recycling of waste generated on the project.
- Ensure the means to manage waste are arranged for the site.

Foreman –

- Communicate proper waste disposal methods to all employees on site.
- Report the discovery/identification of any waste that was not anticipated prior to the project to the Project Manager/Supervisor.
- Ensure waste is segregated according to plan defined by Project Manager/Supervisor.
- Ensure that all waste and scrap material is handled, organized, and stored so as to minimize potential impact to the environment.

Employees –

- Ensure all waste is handled according to the methods defined for the site.
- Handle, organize and store waste and scrap material to minimize potential impact to the environment.
- Segregate waste according to the waste management plan for the site.

# Hydrogen Sulfide

## **Purpose:**

The purpose of the Hydrogen Sulfide program is to ensure that all company employees performing job tasks in which a potential Hydrogen Sulfide exposure could occur are protected.

## **Hydrogen Sulfide in the workplace:**

Hydrogen sulfide is an extremely toxic, flammable gas that may be encountered in the production of gas well gas, high-sulfide high sulfur content crude oil, crude oil fractioning, associated gases, and waters. Hydrogen sulfide is heavier than air, and can collect in low places. As an employee of the company, potential exposure to various forms and amounts of hydrogen sulfide may occur during certain job activities. Most commonly, Hydrogen Sulfide is a potential contaminant during the confined space entry of a sewer manhole or during the connection to a live sewer. If an exposure cannot be avoided through ventilation, proper personnel protective equipment must be used.

## **Characteristics of Hydrogen Sulfide:**

Hydrogen sulfide ( $H_2S$ ) is a highly toxic, colorless, and flammable gas with a powerful nauseating smell of rotten eggs. The odor is a poor warning property because hydrogen sulfide exposure quickly deadens the sense of smell. The gas is heavier than air and may collect in low areas such as sewers, pits, tunnels or gullies. High airborne levels of hydrogen sulfide (between 4.3 and 46.0 percent of gas by volume in the air) may catch fire if there is a source of ignition. If the gas is burned, toxic products such as sulfur dioxide will be formed. Hydrogen sulfide is slightly soluble in water and acts as a weak acid, giving the hydrosulfide ion  $HS^-$ .

## **Health Effects of Hydrogen Sulfide:**

Hydrogen sulfide is extremely toxic. It may cause death instantaneously in high airborne concentrations. Low levels may be extremely irritating to the lungs, nose, throat and eyes.

Hydrogen sulfide can be detected by smell at levels as low as 0.13 parts hydrogen sulfide per million parts air (ppm). Odor cannot be used as a warning because the gas can deaden the sense of smell within 2 to 15 minutes in exposures of approximately 100 ppm. A single breath of hydrogen sulfide at about 1000 ppm may paralyze the respiratory system and result in coma and death. Convulsions may also occur. Prolonged exposure at about 250 ppm hydrogen sulfide may cause the lung tissue to swell and fill up with water (pulmonary edema).

This effect may occur after the exposed worker recovers from the irritant effects of the gas. Exposures of 20 to 50 ppm hydrogen sulfide for one hour may cause inflammation of the cornea and the delicate lining of the eye and eyelid (a condition called keratoconjunctivitis). Exposures for long periods at 50 ppm may cause severe irritation of the nose, throat and lungs. Workers exposed to lower concentrations of hydrogen sulfide may develop headaches, eye disorders and chronic bronchitis.

### **Methods of Detection for Hydrogen Sulfide:**

In locations where Hydrogen Sulfide may be present, its presence can be detected using multi-gas meters equipped with sensors specific for Hydrogen Sulfide. The DDS Companies owns a number of multi-gas meters capable of detecting Hydrogen Sulfide. The meters have the capability to measure levels of Hydrogen Sulfide between 0 and 50 parts per million (ppm). The Hydrogen Sulfide alarms are set to go off at 10 ppm on all meters.

If any of the alarms on the meters go off, employees are to leave the work area immediately or don a Self-Contained Breathing Apparatus (SCBA) or air-line respirator.

### **Responsibilities:**

Project Managers/Supervisors –

- Prior to the beginning of a project, the Project Manager/Supervisor will identify potential Hydrogen Sulfide exposures.

Foreman –

- Communicate potential Hydrogen Sulfide exposures to all employees on site.
- Report the discovery/identification of any exposures that were not anticipated prior to the project to the Project Manager/Supervisor.
- Communicate site specific contingency/emergency plans to all employees on site.

Employees –

- Follow safe work practices for Hydrogen Sulfide.
- Follow site specific contingency/emergency plans for the site.

# Subcontractor Management

## **Purpose:**

The purpose of the Subcontractor Management program is to ensure that subcontractor safety programs, training, procedures and initiatives coordinate with the Company's own standards of safety.

## **Policy:**

The policy is intended to help ensure that, in the event subcontractors are utilized by The DDS Companies as part of a work project, each subcontractor's safety programs, OSHA compliance, training, confirmations, documentations and statistical results of previous safety performance are in accordance with requirements of both DDS and any general contractors DDS may work for.

## **Responsibilities:**

Project Managers/Supervisors –

- Prior to awarding work to subcontractors, ensure the subcontractor is pre-qualified by reviewing their safety programs, safety training documents, and safety statistics.
  - o All potential Sub-contractors must complete and submit *The DDS Companies Subcontractor Safety Pre-Qualification* form
  - o The form captures the Safety metrics to be used to qualify subcontractors including OSHA Incident Data, EMR, Fatality Rate, TRIR, etc.
  - o The Project Manager must review all submitted forms and select only those that meet expectations.
- Include subcontractors in pre-job meetings, kick-off meetings, and safety orientations.
- Track subcontractor hours and incidents on projects and report them to the Safety Team.
- Ensure post-job safety performance reviews are conducted on subcontractors.

Foreman –

- Include subcontractors in *Today's Work Briefings*, tailgate safety meetings, job safety analysis or hazard assessments, and on the job safety inspections.
- Report any incidents involving subcontractors to the Project Manager.

Safety Team –

- Work with Project Managers to pre-qualify Subcontractors.
- Maintain *The DDS Companies Subcontractor Safety Pre-Qualification* forms submitted by Subcontractors.
- Maintain a list of qualified Subcontractors

# Today's Work Briefing/ Job Hazard Analysis

## **Purpose:**

The purpose of the *Today's Work Briefing* program is to establish a formal process so that crews start each day planning out the work to be completed, evaluating the hazards of the work, and determining how they will control those hazards.

## **Policy:**

*Today's Work Briefing* is a tool used by The DDS Companies to aid in the successful completion of our work every day. To The DDS Companies successful work is work that is **done right, the first time, without incident**. Our goal is to create an environment where in everyone's mind, at every level, Safety, Quality, and Productivity carry the same weight.

By completing *Today's Work Briefing* each morning before work begins several things are accomplished:

- Communication amongst the crew working at a jobsite.
- Communication with the Project Managers, Superintendents, Safety, and other staff that visit the site during the day.
- Hazard analysis of the work to be done – sometimes called a Task Hazard Analysis, Job Hazard Analysis, or Risk Assessment.
- Satisfying customer requirements for a Hazard Analysis
- Documentation of Hazard Analysis

## **Completing Today's Work Briefing**

At the start of each day, the Foreman on each DDS jobsite is responsible for bringing the crew members and any subcontractors together to discuss the tasks to be completed that day. All Crew members are expected to participate in the Work briefing. The Foreman, or someone designated by the Foreman, completes the following sections on the Work Briefing form:

- Project Location
- Date
- Crew
- Define the Work – “*What are we doing Today?*”
- Identify Potential Hazards – “*What are the potential risks?*”
- Develop Hazard Controls – “*How will we stay safe Today?*”

During this evaluation, hazards are classified based on severity.

Questions designed to help complete these sections are provided in the *Today's Work Briefing* book.

## **Changes to the plan**

If, at any time during the day, there is a change to the work plan the entire crew is to come back together and make the appropriate changes to the form.

### Verification

During the course of the work day, several staff people may visit the jobsite. This includes:

- Project Managers
- Superintendent
- Safety
- Management

*Work Briefing* form shall be used by them to quickly find out what is being done on the site. It is their responsibility to ensure that identified hazards are addressed and mitigated. The “*Verify the Work done as Planned*” section is used by these Staff folks to document that the work was done per the plan.

### Thinking Ahead

This section of the form is to be used to capture issues that need to be addressed in the coming days or weeks in order to maintain work flow. These may be issues that need to be brought to the attention of the Project Manager or Superintendent. Information can be added to this section at any time during the course of the day or at the end of the day as a reminder for the next day or days.

### Responsibilities:

#### Safety Director

- Develop and maintain the *Today's Work Briefing* Program.
- Provide training in the *Today's Work Briefing* Program.

#### Project Managers/Supervisors –

- Ensure all employees are trained in the *Today's Work Briefing* process.
- Verify the completion of the *Today's Work Briefing* during visits to jobsites.

#### Foreman –

- Complete a *Today's Work Briefing* each morning and whenever work plans change.
- Include sub-contractors in *Today's Work Briefings*, tailgate safety meetings, job safety analysis or hazard assessments, and on the job safety inspections.

# Respirable Crystalline Silica

## Policy:

This program establishes the requirements and responsibilities for the control of dust containing respirable crystalline silica necessary to protect the health and safety of our employees, and to ensure full compliance with OSHA standard, 29 CFR 1926.1153, Respirable Crystalline Silica..

This program requires the implementation of control measures to reduce Respirable Silica dust and restricts any housekeeping practices that expose employees to Respirable Crystalline Silica.

## Procedure:

Requirements of this program include:

- Employee exposure assessments must be conducted for those employees who are expected to be exposed to respirable crystalline silica at or above the action level. Exposure Assessment records shall be shared with all affected employees and maintained by the Safety Team.
- Competent Person – the DDS Foremen are the Competent Persons for Respirable Crystalline Silica.
- The use of engineering and work practice controls to reduce and maintain employee exposure to respirable crystalline silica to the lowest feasible level, as defined in the DDS *Respirable Silica Exposure Control Plan*.
- Use of respiratory protection when required, as defined in the DDS *Respirable Silica Exposure Control Plan*.
- Medical examinations for employees who are required to wear a respirator under this program for more than 30 days a year.
- Maintaining records of medical examinations,
- Implementation of the written DDS *Respirable Silica Exposure Control Plan*.  
This plan is available to all employees via the company's website.

## Personal Protective Equipment (PPE):

Required PPE is defined in the DDS *Respirable Silica Exposure Control Plan*.

## Training

Employees that conduct tasks involving Silica containing materials shall receive training in the hazards of Crystalline Silica and this program, including the list of tasks summarized in the DDS *Respirable Silica Exposure Control Plan*.

Foremen shall be trained as Competent Persons for Respirable Crystalline Silica.

All Training records will be kept by the Safety Department and documented in the Training Database in the HRMS managed by Human Resources Department.

## **Annual Review**

An assessment of the effectiveness of the Respirable Silica Program will be conducted by the Safety Team at least once a year. The assessment will include a review of:

- The written program
- The DDS *Respirable Silica Exposure Control Plan*
- Silica Training Records
- Medical surveillance records

## DDS Respirable Crystalline Silica Exposure Control Plan

<b>Task</b>	<b>Controls</b>	<b>Housekeeping</b>
Handheld Power Saws	<p>Use saw equipped with integrated water delivery system that continuously feeds water to the blade.</p> <p>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</p>	<p>Clean-up area before the mud has a chance to dry up.</p> <p>Wash saw down with water after use.</p>
Walk-behind Saws	<p>Use saw equipped with integrated water delivery system that continuously feeds water to the blade.</p> <p>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</p>	<p>Clean-up area before the mud has a chance to dry up.</p> <p>Wash saw down with water after use.</p>
Drivable Saws	<p>Use saw equipped with integrated water delivery system that continuously feeds water to the blade.</p> <p>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</p>	<p>Clean-up area before the mud has a chance to dry up.</p> <p>Wash saw down with water after use.</p>
Jackhammers and handheld powered chipping tools	<p>Outdoors - Use tool with water delivery system that supplies a continuous stream or spray of water at the point of impact.</p> <p>In Enclosed Spaces - Wear a respirator with an APF 10 and use tool with water delivery system that supplies a continuous stream or spray of water at the point of impact.</p>	<p>Clean-up area before the mud has a chance to dry up.</p> <p>Wash tools down with water after use.</p>

<u>Task</u>	<u>Controls</u>	<u>Housekeeping</u>
Handheld and Stand-mounted drills (including impact and rotary hammer drills)	<p>Use drill equipped with commercially available shroud or cowling with dust collection system.</p> <p>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</p> <p>Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism.</p> <p>Use a HEPA-filtered vacuum when cleaning holes.</p>	Use vacuum of dust collection system to clean-up any dust and debris created during drilling operation.
Handheld grinders for uses other than mortar removal	<p>Outdoors - Use grinder equipped with integrated water delivery system that continuously feeds water to the grinding surface. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</p> <p>In Enclosed Spaces - Wear a respirator with an APF 10 and use tool with water delivery system that supplies a continuous stream or spray of water at the point of impact.</p>	Use vacuum of dust collection system to clean-up any dust and debris created during drilling operation.
Small drivable milling machines	<p>Use a machine equipped with supplemental water sprays designed to suppress dust. Water must be combined with a surfactant.</p> <p>Operate and maintain machine to minimize dust emissions.</p>	Clean-up area before the mud has a chance to dry up.
Heavy Equipment and Utility Vehicles used to abrade or fracture Silica-containing materials (e.g. hoe-ramming, rock ripping) or used during demolition activities involving silica-containing materials.	<p>Operate equipment from within an enclosed cab.</p> <p>When employees outside of the cab are engaged in the task, apply water and/or dust suppressants as necessary to minimize dust emissions.</p>	

<u>Task</u>	<u>Controls</u>	<u>Housekeeping</u>
Heavy Equipment and Utility Vehicles for tasks such as grading and excavating but not including: demolishing, abrading, or fracturing Silica-containing materials	Apply water and/or dust suppressants as necessary to minimize dust emissions.  OR  When the equipment operator is the only employee engaged in the task, operate equipment from within an enclosed cab.	
Adding Bore Gel to Directional Drill Mix Tank	Slice a small opening in the bag and set on hopper to allow material to slowly empty into hopper. Leave the area while the bag empties. Wear a respirator with an APF of 10 while rolling up the bag and disposing of the bag.	
Mixing dry Concrete or Mortar Mix	Slice open the bag and gently empty the bag into the wheelbarrow being used to mix the cement or mortar with water - do not dump or shale the bag. Wear a respirator with an APF of 10. Once a bag is empty, carefully and slowly roll the empty bag from the sealed end to the open end for disposal.	Clean-up area before the mud has a chance to dry up.
Sweeping	No dry sweeping. Use come-alongs, garden hose, power washer, or other wet method to clean areas.	Clean-up area before the mud has a chance to dry up.
Stoning Pipe	Use clean stone. If stone contains residual dust, use a respirator with an APF of 10 or greater.	
Concrete demo in a Confined Space.	Address in Confined Space Assessment process.	
Abrasive Blasting	Use non-Silica containing material (Black Beauty)	
Crusher Run - Delivery - Raking - Tamping (Plate Tamper, Jumping Jack, Trench Roller)	Delivery - keep workers away from area during the delivery of the stone Raking – use water to suppress dust Tamping - use trench roller whenever feasible.	
Blow gun for digging	Since there is no abrasion, cutting, or grinding of the soil, the soil is not being ground into respirable size particles.	

# Gas Hazards

## **Purpose:**

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## **Policy:**

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- 1. Does the program address Gas Hazard Awareness training shall be conducted before initial assignment and annually thereafter?
- 2. Does the program address training includes gas characteristics, health effects and personal protection equipment?
- 3. Does the program address the Gas Hazard Awareness training shall be documented?

Gas Hazard Awareness training should include at a minimum:

- a. Locations of alarm stations
  - b. Gas Monitoring Equipment- portable and Fixed Detection
  - c. Gas Alarms
  - d. Gas Hazards- Characteristics of gases, to include oxygen deficiency, oxygen or nitrogen enrichment, carbon monoxide and hydrogen sulfide at a minimum. Hazard training must also include any plant or department specific gases of concern. Training must include signs and symptoms of overexposure
  - e. Personnel Rescue Procedures
  - f. Use and care of Self-Contained Breathing Apparatus (SCBA)- includes donning and emergency procedures (if applicable)
  - g. Evacuation Procedures
  - h. Staging Areas – Primary and Secondary
4. Does the program address a personal portable gas detector shall be used in high gas hazard areas?

5. Does the program address all gas monitors shall be calibrated per manufacturer's recommendations and have a current calibration sticker on the monitor?  
The gas monitor must be calibrated per manufacturer's recommendations and contain a current calibration sticker on the monitor providing the date of calibration
6. Does the program address daily bump tests are performed to ensure the monitor and alarms are working correctly?  
Bump test are required to be completed at the beginning of each day the monitor is in use per the requesting client and manufacturer's guidelines to ensure the monitor is functioning correctly
7. Does the program address that employees will be aware of the provisions of site specific contingency/emergency plans and participate in drills?  
Employees will be aware of the client's contingency plan provisions including evacuation routes and alarms. Employees should participate in emergency evacuation drills and practice rescue procedures

# Stop Work Authority

## **Stop Work Authority**

### **Policy:**

All DDS employees and contractors are obligated to utilize their STOP WORK AUTHORITY (SWA) anytime there is an unsafe act, condition, or environmental concern. SWA is used under the expectation that there will be no recourse for using SWA.

In performance of their duties DDS employees may come across situations when they have questions or concerns about the task they will be performing. Varying levels of experience and understanding exist in the workplace:

- Less experienced employees may be unfamiliar with certain tasks and
- More experienced employees are very familiar but become complacent and overlook hazards.

In these situations, all employees (regardless of seniority) have the authority and obligation to stop work they recognize as hazardous, until they understand the task and feel comfortable with the work to be performed. If you are unsure whether SWA needs to be utilized, first call the stop and contact your supervisor or a member of the Safety Department.

Key elements of Stop Work Authority include but are not limited to the following:

1. No work shall resume until all issues and concerns have been addressed.
2. No employee shall be reprimanded for issuing a stop work directive.
3. Additionally, no other form of retribution or intimidation shall be tolerated.

### **Procedure:**

The following procedure should be followed if a stop work order is given:

#### **Stop, Notify, Correct or Clarify, and Resume**

When an unsafe condition is identified:

- the Stop Work Intervention will be initiated,
- notify all affected personnel and supervision of the stop work issue,
- the resolution of the Stop Work will be coordinated through the supervisor,
- the Supervisor will conduct the response in a positive manner,
- correct the issue,
- clarify the resolution with all affected personnel and supervision, and
- resume work when safe to do so.

#### **SWA Report:**

All stop work interventions shall be documented for lessons learned and corrective measures to be put into place. Supervisors are to work with the Safety Team member to complete a SWA Report.

Stop Work Reports shall be reviewed by a supervisor, manager, or member of the safety team in order to measure participation, determine quality of interventions and follow-up, trend common issues, identify opportunities for improvement, and facilitate sharing or learnings.

Following the initiation and closing of a stop work intervention, the identified safety concern(s) have been addressed to the satisfaction of all involved persons prior to the resumption of work. Most issues can be adequately resolved in a timely manner at the job site, occasionally additional investigation and corrective actions may be required to identify and address root causes.

**Training:**

All DDS personnel must receive Stop Work Authority training before beginning the task to be performed. The training shall include employee name and the dates of the training. As part of the Stop Work Authority training the following information shall be given:

1. Stop work must be communicated at the site.
2. No work shall resume until all issues and concerns have been addressed.
3. Agreement must be sought on the appropriate interventions to resolve the issue.
4. Confirm that interventions have resolved the issue.
5. Communicate the re-start of work.
6. Review and make changes to the TWB/THA.
7. No employee shall be reprimanded for issuing a stop work directive.
8. Additionally, no other form of retribution or intimidation shall be tolerated.
9. A Stop Work Report must be filled out when work is stopped and completed when work returns to normal operations.

# **Safety & Health Program Acknowledgement**

Name: \_\_\_\_\_

Date of Hire: \_\_\_\_\_

**By signing this document the employee acknowledges that they have been provided a copy of the DDS Companies Safety & Health Program. It is the employee's responsibility to understand their roles and responsibilities under each of the Safety Programs that apply to the work they perform.**

**In the event an employee encounters a hazard not addressed by the programs in the DDS Companies Safety & Health Program, they are to contact their supervisor to have the hazard assessed and if necessary an appropriate safety program can be implemented.**

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

DDS Truck #: \_\_\_\_\_      Plate #: \_\_\_\_\_

**(Remove and retain this sheet in the Employee's Personnel File)**