

# JDL Warm Construction LLC Safety & Health Procedures Manual

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# Company Policy

## **Purpose**

JDL Warm Construction, LLC is firmly committed to providing each of our employees a safe and healthy work environment. It is recognized that construction and other essential procedures may pose actual and/or potential safety and health risks to our employees. It is our policy to reduce these risks to the lowest possible level and to provide our employees with the necessary training, equipment and support to achieve this goal. We fully expect our total incident rate to be Zero.

It is our policy to fully implement and maintain this program and we expect our employees to use safety information contained herein on a daily basis and to be accountable for their actions.

## **Scope**

This procedure applies to all JDL Warm Construction, LLC projects, offices and personnel.

### **1.1 Introduction**

This manual has been prepared to fulfill the following functions:

- i. Provide guidance to the Corporate Safety Manager concerning individual procedures within the JDL Warm Construction, LLC Safety & Health Program.
- ii. Provide direction to project managers, supervisors, superintendents, etc. on the proper steps to take concerning a variety of situations.
- iii. Provide consistency and accuracy to documentation and procedures within the JDL Warm Construction, LLC Safety & Health Program.

### **1.2 Applicability**

The following procedures apply to all JDL Warm Construction, LLC projects, offices and personnel. The Corporate Safety Manager will administer the procedures.

### **1.3 Revisions**

On an annual basis, the following actions must take place:

- i. Corporate Safety Manager to review all written manuals for the following:
  - a. Accuracy
  - b. Needed updates and issuance of updated material to manual holders
  - c. Dissemination of manuals to newly assigned persons
  - d. Retrieval of manuals from those persons no longer assigned to have them
- ii. Report to senior management of the status of the Safety & Health Program and summary of updates included to the program.

### **1.4 Executive Management Participation and Approval**

It is very important for Executive Management to participate in and approve the entire Corporate Safety & Health Program.

Executive participation can include activities such as but not limited to:

- i. Approval of necessary funding for the Safety & Health Program
- ii. Attendance at Safety Committee Meetings
- iii. Issuance of Safety-related memos
- iv. Review of written programs on periodic basis
- v. Review of annual report on Safety & Health

# Company Policy

## **1.5 Assignment of Responsibility and Accountability**

In order to function properly and effectively, aspects of the Safety and Health Program must be assigned to designated individuals to ensure all necessary functions are being handled in a systematic way.

Without responsibility assignment, the program will not succeed as designed. In order to provide proper assessments and effectiveness of the program, responsible persons must be held accountable for their safety related duties.

# Administrative Procedures

## **Purpose**

- i. To ensure that the entire Safety & Health Program is administered in the most effective manner.
- ii. To ensure consistent application, reporting and record keeping concerning all aspects of the safety program.
- iii. To set standards that can be adhered to Corporate-wide.

## **Scope**

This procedure applies to the JDL Warm Construction, LLC Safety & Health Program.

# Administrative Procedures

## 2.1 Recordkeeping

### Purpose

To ensure accurate records of all safety related efforts and proper training levels for all employees.  
To document all for trend analysis efforts.  
To assist in preparing the annual report.

### Scope

This procedure applies to the JDL Warm Construction, LLC Safety & Health Program.

### Procedure

All safety related documentation generated must be forwarded to the Corporate Safety Manager and/or his affiliate designee. Each affiliate is to designate a person to be responsible for collecting and inputting information into the database.

Hard copies of all safety related documentation must be maintained on file with the Corporate Safety Manager and/or the designated affiliate contact. All hard copies must be made available to the Corporate Safety Manager for review as directed.

Typical records to maintain and record include but are not limited to:

- i. Employee Training
- ii. Safety Inspections
- iii. Job Box Safety Meetings
- iv. Enforcement and Disciplinary Records
- v. Accident Reports
- vi. O.S.H.A. Inspections
- vii. Respirator Fit Testing
- viii. Safety Committee Meetings
- ix. Newsletters
- x. Safety Memos



# Administrative Procedures

## 2.2 Employee Communications

### Purpose

To maintain an open line of communication with employees concerning safety.  
To ensure the dissemination of safety related information in a timely and consistent format.

### Scope

This procedure applies to the JDL Warm Construction, LLC Safety & Health Program.

### Procedure

Safety related information is to be communicated to all affected employees in a timely and consistent manner. In order to achieve this, the following types of information will be disseminated:

- i. Safety Memos
- ii. Job Box Meeting Forms
- iii. Safety Publication Copies
- iv. Safety Committee Meeting Minutes

The Corporate Safety Manager will disseminate all information; however; all employees are encouraged to submit information directly to the Corporate Safety Manager and/or by use of the suggestion program.

All information disseminated will be maintained on file for future reference as needed.

# Administrative Procedures

## 2.3 Employee Training

### Purpose

To ensure that all project managers, supervisors, and field personnel are properly trained on the tasks and potential hazards employees may face with their job functions.

To ensure compliance with the appropriate O.S.H.A. standards.

To reduce the risk of employee injury and/or illness from work-related activities.

### Scope

This procedure applies to all JDL Warm Construction, LLC employees.

### Training Programs

Employee training is to be conducted to comply with at least the following:

- i. New Employees
  - a. All new employees are to attend the JDL Warm Construction, LLC “New Employee Orientation” training program to be administered by the Corporate Safety Manager and/or the Human Resources Department.
  - b. All new employees are to be scheduled for the appropriate O.S.H.A. 10-hour and/or the O.S.H.A. 30-hour class as soon as possible, with completion time not to exceed 3 months.
- ii. Managers, Project Managers, and Supervisors are to attend the O.S.H.A. 30-hour upon hire, promotion and/or transfer from another position no later than 3 months after assuming their position.
- iii. Field personnel are to attend at least the O.S.H.A. 10-hour upon hire, promotion, and/or transfer from another position no later than 3 months after assuming their position.
- iv. Job Box Safety Meetings
  - a. All field persons are to participate in weekly “job box safety meetings” covering topics as outlined by the Corporate Safety Manager. Each person is to be given a copy of the appropriate handout and is expected to maintain that handout in his/her safety binder.

### Contracted Training Agencies

There will be circumstances where an outside training / consulting agency is utilized to conduct JDL Warm Construction, LLC employee safety training. Much of this training requires that the training agency be accredited and the employees be certified as having met minimum acceptable standards.

An example of training programs that require this include but are not limited to:

- i. O.S.H.A. 10-Hour
- ii. O.S.H.A. 30-Hour
- iii. Aerial Lifts
- iv. Industrial Fork Lifts
- v. Powder Actuated Tools
- vi. First Aid
- vii. CPR
- viii. AED

# Administrative Procedures

For training of this nature, the training agency must submit the following to the Corporate Safety Manager:

- i. Training Accreditation Records / Certificates
- ii. Class Agendas / Formats
- iii. References

The Corporate Safety Manager will review the submitted information and either approve, approve with modifications, and/or disapprove the training.

All training records, employee certificates, etc. must be submitted to the Corporate Safety Director after each class. Each class is to document a signed student roster.

## **Training Records**

- i. All training records are to be maintained by the Corporate Safety Manager in both hard copy and digital format.
- ii. All training rosters are to be completely and accurately filled out and forwarded to the Corporate Safety Manager immediately upon completion of the class.
- iii. Training certificates are to be reviewed by the Corporate Safety Manager and disseminated to the appropriate individuals after review.
- iv. A copy of all training information is to be forwarded to the appropriate HR department contact for inclusion in their database.

## **Attendance**

Employees scheduled to attend training are required to be on time and remain for the entire class. It is understood that circumstances may prohibit an employee from attending every session of a multi-session training program such as the O.S.H.A. 10-hour. If this situation arises, that employee must attend make-up sessions for the portion of the class missed prior to receiving his/her certificate of completion.

# Administrative Procedures

## 2.4 Accident Reporting

### Purpose

To describe the procedure to be utilized to inform management of serious incidents, whether or not they include employee injury / illness.

To assure timely access to company resources to help investigate, document and resolve incidents, and to comply with applicable federal and state reporting / recording requirements.

To ensure timely care for all injured and/or ill employees.

### Scope

This procedure applies to all JDL Warm Construction, LLC projects, offices, and employees.

### Initial Incident Actions

Immediate actions must concern the health and welfare of all employees, patrons, contractors, vendors and/or other persons on our property.

- i. Secure appropriate medical treatment for injured employees by:
  - a. Calling 911 or appropriate in-house number for emergency medical help.
  - b. Calling 911 or appropriate in-house number for all fire / spill related emergencies
  - c. Secure non-emergency treatment for minor injuries by using company supplied 1st aid kits etc. If there is any doubt to the seriousness of any injury / illness, notify the local emergency response organization.
- ii. Take appropriate steps to prevent further injuries, illnesses, or damage to equipment including placing "Do Not Operate" tags if equipment or machinery is defective or barricading holes etc.
- iii. For serious incidents, those beyond 1st aid only and/or major damage, the area of the incident must be secured to prevent persons moving equipment etc. to ensure that a proper investigation can be conducted. For incidents involving hospitalization of an employee, patron, contractor etc. and/or a fatality, a supervisor and/or security guard must be placed at the scene to ensure the area is not tampered with and that no unauthorized person(s) enter the area. If possible, begin taking photographs of the entire area, without disturbing any equipment etc. Notify the Corporate Safety Manager of any photos that have been taken and surrender the camera and/or film to him upon his arrival and/or his designee.
- iv. Notify the Corporate Safety Manager of any incidents that require the assistance of outside response agencies and/or result in shutdown of any project and/or release of a chemical to areas outside of JDL Warm Construction, LLC property.
- v. For incidents involving a fatality and/or hospitalization of an injured person, the JDL Warm Construction, LLC "Occupational Injury / Illness Report" and "Incident Report" must be immediately and completely filled out and submitted to the Corporate Safety Manager via hand delivery or fax. The Corporate Safety Manager will then notify the Vice President of Facilities Management.
- vi. For incidents that impact the subsequent operations of facilities such as power outages due to fire etc., the office must be notified immediately.

# Administrative Procedures

## Follow-up Actions

After the initial care of the patient and the isolation of the area has taken place, the following actions must be taken:

- i. As soon as possible after any incident, including 1st aid type incidents, an “Occupational Injury/ Illness Report” and “Incident Report” must be completed and delivered to the Corporate Safety Manager via hand delivery or fax. In no case shall this time exceed 24 hours. This form must be completely and accurately filled out prior to submittal. Note that further investigation may be conducted. Complete the form with information, as you know it at that time of the incident.
- ii. For situations requiring the response of the Corporate Safety Manager and/or his designee, a comprehensive accident investigation will be conducted. During the investigation, the Corporate Safety Manager will take control of any items that contributed to the accident such as electrical extension cords, tools, PPE etc.
- iii. After conducting the accident investigation, the Corporate Safety Manager shall prepare a detailed report of the incident including photos, measurements, etc. and provide a copy to the Director of Construction Operations for review. Additional copies shall be made to all supervisors so that a safety meeting can be held and documented with all employees to ensure no future, similar incidents.
- iv. The incident report must be reviewed by the Corporate Safety Manager to determine if the injury / illness is classified as:
  - a. Non-Reportable
  - b. 1st Aid only
  - c. Recordable, No lost time
  - d. Recordable, Lost time
  - e. Reportable

All information must then be added to the O.S.H.A. 300 log and referenced to the 301-accident report form.

- v. The Corporate Safety Manager must maintain communications with any employee on lost time leave to determine when the employee will be returning to work and if any work restrictions will have to be implemented for a specified period of time.

# Administrative Procedures

## 2.5 Safety Enforcement / Employee Discipline

An essential part of the overall Employee Safety & Health Program is the strict enforcement of its policies and procedures. All employees will be given proper training, tools, etc. to do their job and are expected to follow the guidelines enclosed herein.

We believe that all of our employees have a genuine desire to perform top quality, time effective and safe work and that the Safety & Health Program as a whole will provide them with the skills to accomplish that work. Our goal is not to use these discipline guidelines to bring about safe work activities. The goal is to provide the company and its workers protection against those individuals who cannot or will not meet the JDL Warm Construction, LLC safety expectations.

Without proper enforcement, the policy will not be able to deliver the intended results. Therefore, it is essential that all employees be held accountable to these guidelines. For employees knowingly disobeying or lacking the ability to adhere to the safety standards, there will be a series of progressive disciplinary actions. Discipline may range from verbal counseling up to and including discharge. Retraining and/or remedial training may also be included in the disciplinary process.

### **Purpose**

To ensure that all Safety & Health procedures / policies are properly carried out and that employees not following these procedures / policies are held accountable for their actions. To prevent multiple occurrences of safety infractions by notifying employees of the infractions and what will be expected in the future.

### **Scope**

This procedure applies to all JDL Warm Construction, LLC employees.

### **Responsible Management**

Management Personnel responsible for implementing this policy and carrying it out include:

- i. Principals
- ii. Director of Construction Operations
- iii. Corporate Safety Manager
- iv. Project Executives
- v. Project Site Managers
- vi. Project Superintendents

The Corporate Safety Manager will review all enforcement and discipline cases to determine if a safety infraction has occurred and what level of discipline is to be recommended. If the Corporate Safety Manager is not the originator of the enforcement actions, he will meet with the person responsible for originating the discipline to review the case and the associated facts.

The Human Resources Department will be sent a copy of the Corporate Safety Manager's report for review and comment.

The Principals and/or the Director of Construction Operations will implement these recommendations and decide on the final action to be taken.

# Administrative Procedures

## **Implementation at the Worksite**

It is important that all noted safety infractions be immediately addressed with the employee and/or contractor/vendor concerned. By immediately addressing the situation, a serious incident may be prevented and all employees on site understand that safety infractions are very serious and that they must be addressed.

There are 2 basic types of hazards that you may encounter:

- i. Unsafe actions on the part of an employee / contractor / vendor
- ii. Unsafe Condition, Equipment, Tools, Facilities, etc.

## **Unsafe Acts**

Unsafe acts can be defined as something that an employee does and/or fails to do that causes an accident potential such as but not limited to:

- i. Insubordination
- ii. Falsification of safety related documentation
- iii. Use of and/or under the influence of drugs or alcohol while at work
- iv. Possession of a dangerous weapon on the premises
- v. Not wearing a hard hat or other personal protective equipment when required
- vi. Improperly using a workplace tool etc. such as power tools, ladders etc.
- vii. Not following written safety procedures
- viii. Disregarding posted safety signs
- ix. Removing lock-out tag-out equipment when not authorized
- x. Horseplay
- xi. Exposing themselves to fall or other hazards without being protected by guardrails, fall arrest system etc.
- xii. Smoking in a no-smoking area
- xiii. Knowingly using equipment that is damaged, missing required guards and/or is not designed for the specific task
- xiv. Etc.

## **Unsafe Conditions**

Unsafe conditions represent hazards that may be beyond the control of an individual employee and not cause for enforcement actions to be taken. An exception to this is an employee who KNOWINGLY uses equipment etc. that is damaged, missing protective guards and/or not designed for the specific task.

# Administrative Procedures

## Enforcement and Discipline Considerations

In order to administer fair and consistent safety enforcement and discipline at the worksite, several factors must be considered when deciding on the correct course of action.

- i. Assigned Responsibility level
  - a. Supervisor
    - i. ie: A supervisor responsible for setting the example and enforcing safety standards who knowingly commits or allows safety infractions
      - a. Shift worker
- ii. Has the employee been trained?
  - a. O.S.H.A. 10 Hour
  - b. O.S.H.A. 30 Hour
  - c. Specific topic training etc.
- iii. Experience level
- iv. The nature of the violation
  - a. Imminent danger vs. minor hazard etc.
- v. Past violations of a similar nature
- vi. Past violations of a separate nature
- vii. Employee attitude towards safety
  - a. This is an objective observation but can be very important in deciding how to handle the situation.

## Levels of Enforcement

The enforcement and discipline policy is designed as a progressive program however, JDL Warm Construction, LLC

management reserves the right to implement the policy at any level of enforcement up to and including termination on the first offense, according to the nature and seriousness of the violation.

In addition to the above enforcement and discipline actions, the affected employee may need to undergo remedial training. The nature of the training to be required will be at the discretion of management.

The progressive enforcement levels are as follows:

- 1st Offense Verbal Warning
- 2nd Offense Written Warning
- 3rd Offense Written Warning with Suspension

(Note: Serious or repeat infractions will remain "Active" Files. Employees will be notified at time of discipline of any records that will remain active. Suspension length to be determined by management)

- 4th Offense Dismissal

Example situations where the enforcement level may go to a higher level on the first offense include but are not limited to:

- i. Insubordination
- ii. Blatant disregard for safety
- iii. Imminent danger type situations



# Administrative Procedures

## Records Retention

Proper recordkeeping is essential for any safety program to be effective, including enforcement and discipline actions.

- i. All enforcement and discipline actions will be recorded and maintained on file.
- ii. Enforcement and discipline records will consist of two (2) types:
  - a. Active  
Active enforcement and discipline records are defined as being less than six (6) months old and can be considered when determining the level of enforcement or discipline to be administered.
  - b. Inactive  
Inactive enforcement and discipline records are defined as being greater than six (6) months old and can not be considered when determining the level of enforcement or discipline to be administered. Serious or repeat type safety violations will not be assigned an inactive status unless reviewed by the Corporate Safety Manager.

# Administrative Procedures

## 2.6 Safety Committee

### **Purpose**

To allow input from all affected levels of management and employees.

To maximize the effectiveness of the Safety & Health Program by investigating all points of view.

To increase employee “buy-in” of the Safety & Health Program.

### **Scope**

This procedure applies to all JDL Warm Construction, LLC projects, offices and employees.

### **Safety Committee Membership**

The Safety Committee is to be made up of the following regular members:

- i. Management Representative
- ii. Corporate Safety Manager
- iii. Project Management Representative
- iv. Site Superintendent Representative
- v. Safety Consultant Representative (if utilized)

The meeting chairperson may rotate between the groups unless otherwise determined at the first Safety Committee Meeting. In addition to the regular members of the committee, each meeting will be open to up to four additional persons on a guest basis. The additional persons will not have voting rights.

In addition to guest employees, the committee may invite other guests to the meeting such as vendors, safety professionals, O.S.H.A. representatives etc.

### **Safety Committee Meeting Frequency**

The group at the first committee meeting shall determine the frequency of meetings but in no case shall it exceed a quarterly basis. It is recommended that the first six meetings take place on a monthly basis and subsequent meetings be held on at least a bi-monthly basis.

# Administrative Procedures

## **Meeting Agenda**

The meeting agenda must consist of at least the following topics but may be expanded to include additional topics:

- i. Review of past meeting, implemented items etc.
- ii. Safety Equipment Needs
- iii. Training Needs
- iv. Safety Inspection Findings
- v. Safety Procedures Review / Discussion
- vi. Hazard Identification / Awareness
- vii. Safety Suggestions

## **Safety Committee Reports and Follow-up**

The Corporate Safety Manager will be responsible to ensure that notes are taken during the meeting and copies distributed to all attendees as soon as possible. The Corporate Safety Manager shall be responsible for implementing those items that the committee agreed to implement. The Corporate Safety Manager may delegate implementation to the bestqualified person on the committee but will be ultimately responsible for its implementation.

## **Roster**

All Safety Committee meetings shall have a roster prepared with all participants signing-in for recordkeeping reasons.





# Administrative Procedures

## 2.7 Safety Suggestion Program

### **Purpose**

To increase the effectiveness of the Safety & Health Program by reviewing and possibly implementing employee suggestions.

To increase the level of safety for employees by implementing new safety ideas.

### **Procedure**

Employees will be encouraged to submit Safety-related suggestions to the Corporate Safety Manager and/or a designated Affiliate representative.

Suggestions are to be reviewed by the Corporate Safety Manager and/or the designated Affiliate representative for validity and feasibility. In all cases, the employee submitting the suggestion will be provided with documented follow-up describing follow-up actions if any.

All adopted suggestions will be recorded and the submitting employee provided with a letter of recognition for his/her efforts and concern towards furthering the safety program. A copy of the letter will be placed in the employee's personnel file.

Employees will have the option of submitting an anonymous suggestion should he/she feel this is appropriate.

Anonymous suggestions can be forwarded to the Corporate Safety Manager via interdepartment mail or through hand-delivery by a third party.

# Administrative Procedures

## Safety Suggestion Submittal

Date \_\_\_\_\_ Time \_\_\_\_\_

Facility \_\_\_\_\_

Submitted by \_\_\_\_\_

Telephone Number \_\_\_\_\_

Supervisor Name \_\_\_\_\_

Safety Suggestion \_\_\_\_\_

\_\_\_\_\_

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\_\_\_\_\_

\_\_\_\_\_

Date Received by Corporate Safety Manager or Designee \_\_\_\_\_

Date reply given to employee \_\_\_\_\_

Was suggestion implemented Yes No

Please fax, hand carry or give to your supervisor a copy of this report.

# Administrative Procedures

## 2.8 Management and Distribution of Safety Manuals

### **Purpose**

To ensure the proper distribution of all safety related manuals to designated personnel.

To ensure that all persons holding a safety manual have the most up-to-date copy and that they receive updates to the manual as needed.

### **Scope**

This procedure applies to the JDL Warm Construction, LLC Safety & Health Program.

### **Procedure**

The Corporate Safety Manager and Director of Corporate Services shall maintain a master copy of all manuals produced as part of the Safety & Health Program. A hard copy and computer file copy will be maintained.

Updates to all safety-related manuals are to be made only by the Corporate Safety Manager to ensure consistent, accurate information and the ability to maintain the master file of all manuals.

Digital Safety Manuals will be distributed at the direction of the Corporate Safety Manager and will be placed on the desktop of all field personnel. The digital Safety Manuals will be coordinated with the network and will automatically upload any updates when connecting to the network.

The Corporate Safety Manager shall determine which manuals are placed on the company network for access by designated persons.

The Corporate Safety Manager will distribute updates to any safety manual to the appropriate persons.

Should employees holding a copy of any Safety Manual determine the need for an update to the manual, they shall contact the Corporate Safety Manager to discuss.



# Administrative Procedures

## 2.9 Annual Reports

### Purpose

To ensure an accurate review of the past year's safety activities.

To document all preceding year safety program activities.

To allow senior management the ability to access the effectiveness of the Safety & Health Program.

To allow senior management the ability to determine budgetary concerns for the coming year.

### Scope

This procedure applies to the JDL Warm Construction, LLC Safety & Health Program.

### Procedure

The Corporate Safety Manager is to compile a comprehensive Annual Report due on or before January 15th for the previous year.

At a minimum, the report is to address the following items:

- i. Employee Training Statistics
- ii. Evacuation Drill Statistics
- iii. Accident Statistics
- iv. Programs Implemented
- v. Equipment Purchase Summary
- vi. Safety Inspection Summary
- vii. Affiliate Activity

### Distribution

Copies of the annual report are to be submitted to:

- i. Principals
- ii. Director of Construction Operations
- iii. Director of Corporate Services
- iv. Corporate Safety Manager

# Administrative Procedures

## 2.10 Posting of Safety Information

### Purpose

To ensure the availability of safety-related information to designated persons in a timely and effective manner.

To ensure the availability of facility emergency plans and disaster recovery plans to all locations, specifically those that may have been affected by a disaster and have lost their local data storage systems.

To reduce the cost of preparing copies of newsletters etc.

### Scope

This procedure applies to the JDL Warm Construction, LLC Safety & Health Program.

### Procedure

- i. The Corporate Safety Manager shall be responsible for maintaining the Safety information on the company's network.
- ii. The Corporate Safety Manager shall determine which manuals and/or information will be posted and accessible on the network.
- iii. The posted manuals will not be available to the general employee population but will be available to those in safety-related functions such as maintenance supervisors, affiliate contacts etc.

# Administrative Procedures

## 2.11 JSA “Job Safety Analysis” Program

### **Purpose**

To help control identified hazards by analyzing the steps employees take in their job duties and to identify means to minimize or eliminate the identified hazards. The information gathered from these job safety analyses (JSA) may also be used in employee training, to identify reasonable accommodations under the Americans with Disabilities Act (ADA), to help in writing job descriptions and procedures, to help with return-to-work programs and safety audits, and perhaps to help with Total Quality Management (TQM) activities.

JSAs communicate to employees the safe and efficient procedures to follow during their job tasks. Under this plan, our employees will be informed of the plan’s purpose, administrative duties, job selection, the separation of jobs into steps, hazard identification and control, and the development of JSAs.

### **Scope**

This procedure applies to the JDL Warm Construction, LLC Safety & Health Program.

### **Procedure**

The Corporate Safety Manager or his designee is the administrator of, and has overall responsibility for, this plan. This responsibility includes such elements as the following:

- i. Selecting who will conduct job safety analyses
- ii. Selecting jobs for analysis
- iii. Documenting the steps of each selected job
- iv. Identifying hazards
- v. Minimizing or eliminating hazards
- vi. Generating job safety analyses
- vii. Managing the JSA information
- viii. Recordkeeping

The plan is available for review, is kept at JDL Warm Construction’s office, and will be available on the network.

JDL Warm Construction, LLC will perform regular Job Safety Analyses. They are an effective way to identify the hazards involved in each job, and protect employees from those identified hazards.

# Administrative Procedures

Hazards can change with every job process change; therefore, we perform a JSA of a job whenever the scope of the job changes, when job processes change, and before an employee initially performs the job.

## **Selecting Participants**

The job safety analyses at JDL Warm Construction, LLC are done with the involvement of people who have valuable input. Others may be involved as well, depending upon the job being analyzed, but for every JSA, the following individuals will be involved:

- i. Employees performing work
- ii. Director of Construction Operations
- iii. Corporate Safety Manager

## **Selecting Jobs**

JSAs are applied first to high-risk jobs, such as those that have a history of accidents or those that expose employees to excessive amounts of energy or hazardous material. Past accident records may be used to indicate jobs that qualify for a JSA, along with new jobs for which the hazards are not yet identified, and jobs that have changed.

Once the jobs have been chosen, the Supervisor will identify those employees who will be involved in the individual JSAs.

## **Separating Jobs into Basic Steps**

During the development of a JSA, the chosen job will be broken into steps. Each step indicates generally what must be done. The job steps are natural parts of the operation and the work is clearly advanced upon completion of each step.

JSAs usually involve observing a worker while he or she is performing a task, asking the worker questions pertaining to the task, and recording the steps, including movements, taken to complete the task.

JSAs at JDL Warm Construction, LLC involve the following:

- i. Observing workers
- ii. Breakdown of the job into separate steps, movements etc.
- iii. Asking questions ( worker is interviewed during the process and asked pertinent questions)
- iv. Documentation

After the task is complete, the information is reviewed and revised if necessary. The steps are listed. A common job safety analysis rule of thumb indicates that most jobs will separate into 10-15 basic steps.

## **Identifying Hazards**

After the basic steps of the job have been determined, each step is carefully examined to identify hazards or potential hazards. This is done by carefully observing each step

# Administrative Procedures

and identifying all existing and potential hazards that may exist for each step and documenting the same.

When the hazards are identified they are ranked according to their severity. The most severe hazards are given priority.

## **Hazard Control**

Once hazards are identified for each job step, they are reviewed, and solutions are developed to minimize or eliminate the hazards.

For every known hazard associated with a job step, there should be a solution that offsets that hazard. The most serious hazards are the first ones to have solutions developed.

The hazards are reviewed with the employee(s) performing the tasks, and solutions are sought. Some of the ways we minimize or eliminate hazards include the following:

- i. Re-design
- ii. Engineering the hazard out
- iii. Substitution
- iv. Personal Protective Equipment

The solution that provides the highest level of protection is given priority. Every solution is recorded, and this record is maintained. The choice is also based on effectiveness, timeliness, and employee acceptance.

Effectiveness can be evaluated on a scale. Administrative controls may be implemented while a more effective solution is designed. Before implementing a solution, we evaluate or test it to verify that it is effective and identify any additional enhancements.

A follow-up evaluation is conducted to ensure that the implemented solution successfully controlled the hazard and did not create new hazards.

# O.S.H.A. Inspections

## **Purpose**

To ensure that all O.S.H.A. inspections are given immediate priority.

To ensure that the Corporate Safety Manager is notified and consulted on all matters pertaining to O.S.H.A. inspections.

## **Scope**

This procedure applies to the JDL Warm Construction, LLC Safety & Health Program.

## 3.1 Handling the Inspection / Hazard Mitigation

Upon arrival of the O.S.H.A. inspector and notification that the site has been selected for an inspection, the following guidelines must be followed:

- i. Obtain the following information at the opening conference:
  - a. Reason for inspection
  - b. Areas of interest
  - c. Name of inspector
  - d. Name, address, telephone, and fax number of the area O.S.H.A. office responsible for the inspection
  - e. Name of Area Director
- ii. Inform the O.S.H.A. inspector(s) that it is company policy that the Corporate Safety Manager must be notified and that you are requesting the inspector to wait in your office until that notification has been made. If possible, the Corporate Safety Manager and/or his designee shall respond to the site. Note: The inspector(s) will wait only a reasonable time for this notification and potential response. A reasonable time is defined as one hour.
- iii. Upon consultation with the Corporate Safety Manager and/or his designee, notify the O.S.H.A. inspector(s) that you are requesting a "FOCUSED" inspection.
- iv. If possible, notify others in the facility that an O.S.H.A. Inspector is on site and that an inspection will be taking place.
- v. During the inspection, the following guidelines must be adhered to:
  - a. Always accompany the inspector. They are not to be given access to any area unless accompanied by a JDL Warm Construction, LLC representative.

# O.S.H.A. Inspections

- b. Secure a camera and take photographs of anything photographed by the inspector(s). Also take photographs of any items of interest pointed out by the inspector(s).
- c. Immediately correct or otherwise secure / barricade any noted violations. Document what the hazard was and how you corrected and/or barricaded it.
- d. Note all questions asked by the inspector(s) and what answers were given. If details are not known about a situation, inform the inspector(s) that you will obtain the needed information and forward it as soon as possible.
- e. Note any employees who are interviewed.
- f. Follow any directions as noted by the Corporate Safety Manager and/or his designee.

## 3.2 Informal Conferences

Upon review of the O.S.H.A. Inspection Report by the facility manager, the Corporate Safety Manager will request an "Informal Conference" with the applicable area O.S.H.A. office as soon as possible noting that all requests and the meeting date must take place within 15 working days of receiving the formal citation documentation.

This request can be made via telephone call to the local area O.S.H.A. office, but should be followed up with a certified letter with return receipt. The Corporate Safety Manager shall attend all informal conferences with O.S.H.A. The facility receiving the citation should designate a responsible person to attend the informal conference as well.

## 3.3 Contesting Citations

Upon receipt of a formal O.S.H.A. Citation, the Corporate Safety Manager has 15 working days to contest the citation if the decision is made to do so. The notification to contest can be made via phone to the applicable area O.S.H.A. office but must be immediately followed up with a certified letter with return receipt. Until the decision is made to contest an O.S.H.A. Citation, do not mention the possibility of doing so with the O.S.H.A. representative at the informal conference.

Prior to contesting any O.S.H.A. violation, the Corporate Safety Manager will consult with the Principals, Director of Construction Operations, and appropriate JDL Warm Construction, LLC legal counsel.

Once the decision is made to contest an O.S.H.A. citation, the Corporate Safety Manager shall be responsible for preparing the case in conjunction with the appropriate JDL Warm Construction, LLC staff members.

# O.S.H.A. Inspections

## 3.4 O.S.H.A. Inspection Requests

Individual JDL Warm Construction, LLC facilities may wish to request an O.S.H.A. Inspection for a variety of reasons. Prior to making any request to O.S.H.A., the Corporate Safety Manager must be consulted with the facts leading up to the decision for such a request. Facility Managers will be guided by the Corporate Safety Manager and he and/or his designee shall attend all requested O.S.H.A. Inspections.

## 3.5 O.S.H.A. Reporting Requirements

All reports to O.S.H.A. must be submitted by the Corporate Safety Manager. All facilities are to immediately report to the Corporate Safety Manager, the items listed in this procedure.

- i. Within eight (8) hours after the death of any employee from a work-related incident or the inpatient hospitalization of three or more employees as a result of a work-related incident, you must orally report the fatality/multiple hospitalization by telephone or in person to the Area Office of the Occupational Safety and Health Administration (OSHA), U.S. Department of Labor, that is nearest to the site of the incident. You may also use the OSHA toll-free central telephone number, 1-800-321-OSHA (1-800-321-6742).
- ii. Implementation.
  - a. If the Area Office is closed, the incident must be reported using the 800 number.
- iii. The following information needs to be reported to the Corporate Safety Manager.
  - a. The facility name
  - b. The location of the incident
  - c. The time of the incident
  - d. The number of fatalities or hospitalized employees
  - e. The names of any injured employees
  - f. Your contact person and his or her phone number
  - g. A brief description of the incident

## 3.6 O.S.H.A. Posting Requirements

- i. JDL Warm Construction, LLC shall post and keep posted a notice or notices, to be furnished by the Occupational Safety and Health Administration, U.S. Department of Labor, informing employees of the protections and obligations provided for in the Act, and that for assistance and information, including copies of the Act and of specific safety and health standards, employees should contact their supervisor or the nearest office of the Department of Labor. Such notice or notices shall be posted in each establishment in a conspicuous place or places where notices to employees are customarily posted. Each employer shall take steps to insure that such notices are not altered, defaced, or covered by other material.
- ii. Where a State has an approved poster informing employees of their protections and obligations, such poster, when posted by employers covered by the State plan, shall constitute compliance with the posting requirements of section 8(c)(1) of the O.S.H.A. Act.
- iii. Reproductions or facsimiles of such Federal or State posters shall constitute compliance with the posting requirements of section 8(c)(1) of the Act where such reproductions or facsimiles are at least 8 ½ inches by 14 inches, and the printing size is at least 10 pt. Whenever the size of the poster increases, the size of the print shall also increase accordingly. The caption or heading on the poster shall be in large type, generally not less than 36 pt.



# O.S.H.A. Inspections

- a. "Establishment" means a single physical location where business is conducted or where services or industrial operations are performed. Where distinctly separate activities are performed at a single physical location (such as contract construction activities from the same physical location as a large facility), each activity shall be treated as a separate physical establishment, and a separate notice or notices shall be posted in each such establishment, to the extent that such notices have been furnished by the Occupational Safety and Health Administration, U.S. Department of Labor. Where employers are engaged in activities which are physically dispersed, such as agriculture, construction, transportation, communications, and electric, gas and sanitary services, the notice or notices required by this section shall be posted at the location to which employees report each day. Where employees do not usually work at, or report to, a single establishment, such notice or notices shall be posted at the location from which the employees operate to carry out their activities. In all cases, such notice or notices shall be posted in accordance with the requirements of paragraph (a) of this section.
- b. Copies of the Act, all regulations published in this chapter and all applicable standards will be available at all Area Offices of the Occupational Safety and Health Administration, U.S. Department of Labor. If an employer has obtained copies of these materials, they shall be made available upon request to any employee or his authorized representative for review in the establishment where the employee is employed on the same day the request is made or at the earliest time mutually convenient to the employee or his authorized representative and the employer.

## 3.7 O.S.H.A. 300 and 301 Record Keeping

The Corporate Safety Manager is responsible for the accuracy and data input of all injury / illness records. There will be two (2) copies of the O.S.H.A. 300 log maintained as follows:

Informal Copy, listing ALL injuries and illnesses, whether they are "Recordable" or not for the purposes of performing trend analysis reports etc.

Formal Copy, listing only those injury and illnesses that are required to be "Recorded". The purpose of this copy is to serve as the required database and to ensure an accurate T.I.R., (Total Incident Rate).

A Formal Copy is to be submitted to Human Resources on an annual basis and shall be posted in all required areas on an annual basis during the month of March. The posted copy shall have all employee names removed and/or otherwise blacked out.

# O.S.H.A. Inspections

## Report of OSHA Inspection

Date \_\_\_\_\_ Time \_\_\_\_\_

Facility \_\_\_\_\_

Report By \_\_\_\_\_

Reason For Inspection \_\_\_\_\_

Inspector Name(s) \_\_\_\_\_

Office Address \_\_\_\_\_

Telephone Number \_\_\_\_\_ Fax Number \_\_\_\_\_

Area Director Name \_\_\_\_\_

Noted Hazards \_\_\_\_\_

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\_\_\_\_\_

Indication of Possible Citations                      YES                      NO

# Facility Emergency Plans

## 4.1 JDL Warm Construction, LLC Facility Emergency Plans

### **Purpose**

To ensure the readiness of all JDL Warm Construction, LLC employees in the event of an emergency which may cause evacuation and/or shelter in place.

To reduce the chance of mass casualties with a major emergency event.

To ensure the proper operation and evaluation of facility emergency alarm and reporting systems.

### **Scope**

This procedure applies to all JDL Warm Construction, LLC owned facilities.

### **Large Facilities (Office Buildings etc.)**

Each large facility will have a "Facility Emergency Plan" prepared and documented. Each Facility Emergency Plan will have the following sections:

- i. Reporting an incident (Fire, EMS etc.)
- ii. Facility evacuations (procedures and locations)
- iii. Evacuation of the disabled
- iv. Bomb threats, suspicious packages and biological threats
- v. EMS emergencies

Each Facility Emergency Plan will be specific to the building in question, but will follow the standard format as designed by the Corporate Safety Manager. The Corporate Safety Manager prior to its implementation shall approve all Facility Emergency Plans. Training shall be held with the appropriate persons working at the facility, i.e.: building managers, human resource personnel. Once training has been completed, an emergency drill will be held, affecting all parts of the facility, a minimum of 1 time per year. Additional emergency drills will be scheduled at the discretion of the Corporate Safety Manager.

In addition to the Facility Emergency Plan, each facility will be provided with "Evacuation Route" signs, to be posted at strategic points within the facility. For facilities having large numbers of persons and/or multiple evacuation points, signs will be posted on the outside of the facility which demarks the evacuation points.

# Facility Emergency Plans

## 4.2 Evacuation Drills

### Purpose

To provide a means to train and evaluate employees on the Facility Emergency Plan.  
To increase the level of effectiveness provided by the Facility Emergency Plan.

### Scope

This procedure applies to all JDL Warm Construction, LLC owned facilities.

### Procedure

- i. Each facility covered by a Facility Emergency Plan will hold an employee emergency evacuation drill at least annually.
- ii. The Corporate Safety Manager is to be notified in advance of any facility planning an evacuation drill. The Corporate Safety Manager and/or his designee will be in attendance at all evacuation drills.
- iii. Prior to conducting an evacuation drill, the Building Manager must be contacted to assess the impact on HVAC systems etc.
- iv. Prior to conducting an evacuation drill, the appropriate JDL Warm Construction, LLC Manager must be contacted to assess the impact on company operations.
- v. Drill announcements must be posted in the lobby of each affected building on the morning of the scheduled drill.
- vi. For high-rise buildings that have an evacuation procedure consisting of moving affected employees down 3 floors, the evacuation drills can consist of several drills with at least 3 floors participating in each drill.

# First Aid / CPR / AED Procedures

**Purpose**

To ensure a proper level of emergency medical treatment is available at selected JDL Warm Construction, LLC Facilities.

To ensure compliance to applicable Federal, State and Local codes.

**Scope**

This procedure applies to all JDL Warm Construction, LLC owned facilities.

# First Aid / CPR / AED Procedures

## 5.1 First Aid Requirements

### Purpose

To ensure a proper level of emergency medical treatment is available at selected JDL Warm Construction, LLC Facilities.

### Scope

This procedure applies to all JDL Warm Construction, LLC owned facilities.

### Procedure

First aid equipment and trained personnel are required at various times and locations during our projects. The Corporate Safety Manager shall be responsible to assign those areas and/or functions that require on site equipment and trained personnel. Typical areas that will require the placement of a first aid kit include:

- i. All workshops
- ii. All maintenance shops
- iii. All boiler rooms
- iv. All mechanical rooms
- v. All construction sites
- vi. Loading docks
- vii. Security offices
- viii. Maintenance vans / vehicles

### Inspection of Equipment

In order to ensure proper readiness, all 1st aid kits are to be inspected on a monthly basis.

### Training

First Aid training delivered to comply with this procedure shall follow the OSHA publication entitled: "Basic Elements of a First Aid Training Program (Non-mandatory)–1918 App V".

Persons to be trained in First Aid include at least the following:

- i. Maintenance Personnel
- ii. Electricians
- iii. Security Officers

# First Aid / CPR / AED Procedures

## 5.2 CPR Requirements

### Purpose

To ensure a proper level of emergency medical treatment is available at selected JDL Warm Construction, LLC Facilities.

### Scope

This procedure applies to all JDL Warm Construction, LLC owned facilities.

### Procedure

CPR equipment and trained personnel are required at various times and locations during all projects. The Corporate Safety Manager shall be responsible to assign those areas and/or functions that require on site equipment and trained personnel. Typical areas that will require the placement of CPR equipment include and should be placed with the first aid equipment:

- i. Jobsite trailers
- ii. All maintenance shops
- iii. All construction sites
- iv. Main Offices
- v. Maintenance vans / vehicles

### Inspection of Equipment

In order to ensure proper readiness, all CPR equipment is to be inspected on a monthly basis.

### Training

First Aid training delivered to comply with this procedure shall follow the OSHA publication entitled: "Basic Elements of a First Aid Training Program (Non-mandatory)—1918 App V".

Persons to be trained in CPR include at least the following:

- i. Maintenance Personnel
- ii. Electricians
- iii. Security Officers

# First Aid / CPR / AED Procedures

## 5.3 AED Requirements

### Purpose

To ensure consistent and effective use of Automatic External Defibrillators used within any JDL Warm Construction, LLC facility.

### Scope

This procedure applies to all JDL Warm Construction, LLC facilities that have AED's on site.

### 5.3.1 Management Oversight

The JDL Warm Construction, LLC Corporate Safety Manager shall be responsible to implement and maintain the AED program. The Corporate Safety Manager shall be responsible for the following:

- i. Review facility needs concerning AED
  - a. Numbers of Occupants
  - b. Type of Occupancy / Size / Configuration
  - c. Local 1st Responder capabilities
  - d. Local 1st Responder equipment types / compatibility
- ii. Evaluate AED equipment types and functionality
  - a. Automatic vs. Semi-Automatic
  - b. Mono-phasic vs. Bi-phasic
  - c. Voice prompting
  - d. Battery life
  - e. Charge sequencing / stepping
  - f. Compatibility with local responder equipment
- iii. Evaluate availability of local distributor personnel for assistance, warranty issues etc.
- iv. Negotiating best prices
- v. Negotiating add-on items / accessories such as trainer units
- vi. Reviewing State / Local AED protocols / requirements
- vii. Obtaining medical authorization
- viii. Obtaining and tracking of all units
- ix. Personnel training
- x. AED placement and security
- xi. Preparing and updating AED procedures
- xii. Maintenance and inspections
- xiii. Replacement and/or repair of defective units
- xiv. Quality Assurance / Assessment of each AED use
- xv. Reporting all AED uses



# First Aid / CPR / AED Procedures

## 5.3.2 Evaluations

Any Facility wishing to evaluate the need for AED's must contact the Corporate Safety Manager for consultation. No Facility is to purchase or place in service any AED without the prior written approval of the Corporate Safety Manager. Once notified, the Corporate Safety Manager shall assist with the process until complete.

## 5.3.3 Medical Authorization

No AED unit is to be placed in service until the proper medical authorization is received and reviewed by the Corporate Safety Manager. The Corporate Safety Manager shall approve and keep on file all Medical Authorization documents.

The Corporate Safety Manager shall be responsible to obtain the needed Medical Authorization.

## 5.3.4 Equipment Tracking / Inventory

Immediately upon receipt of any AED units, the following information must be forwarded to the Corporate Safety Manager for tracking and quality control:

- i. Type of Unit
  - a. Manufacturer
  - b. Automatic vs. Semi-Automatic
  - c. Serial Number
- ii. Location to be placed
- iii. Date of purchase
- iv. AED documentation page that comes with unit

Should any unit be moved and/or taken out of service, the Corporate Safety Manager must be notified as soon as possible.

## 5.3.5 Initial Set-up

AED's come with a variety of functional possibilities such as voice prompts, data logging etc. Prior to placing any unit in service, the supplier representative is to be placed in contact with the Corporate Safety Manager for consultation. All functionality choices must be documented and forwarded to the Corporate Safety Manager for his approval prior to placing any unit in service.

## 5.3.6 Placement of AED Units

All AED units must be placed either in a secure cabinet and/or in a secure office. The following minimum requirements must be met:

- i. Cabinets
  - a. Must have latch to ensure cabinet stays closed
  - b. Must be alarmed to indicate to security monitoring station that the cabinet has been opened and the AED possibly removed
  - c. Must have inspection tag in cabinet to easily verify the inspection status of the AED

# First Aid / CPR / AED Procedures

- d. Must be easily identified as an AED cabinet
- ii. Security or other facility office:
  - a. Must be either secured and/or staffed to ensure the security of the AED
  - b. Unit must have inspection tag attached for easy verification of the AED inspection status

## 5.3.7 Inspection Requirements

All AED units must be inspected on a minimum of a monthly basis. The inspection should include at least the following:

- i. Location security
- ii. Ease of location identification
- iii. Battery status
- iv. Accessory status, Defibrillation pads, CPR mouthpieces etc.
- v. Alarm functionality
- vi. Cleanliness and overall condition of unit

Each inspection is to be documented and the attached inspection tag initialed and dated. All inspection sheets are to be maintained on file for inspection by the Corporate Safety Manager as needed.

## 5.3.8 Maintenance

The facility manager must review all required maintenance procedures for the AED units purchased and set up the appropriate maintenance schedule as applicable. This is in addition to the above inspection schedule.

Note: Most AED units require very little maintenance however; there are certain maintenance requirements that the manufacturer recommends.

## 5.3.9 Training

AED training must be completed and/or a substantial number of persons trained prior to the placement of AED units. Training must adhere to the following:

- i. Be completed by a certified trainer using protocols from one of the following agencies:
  - a. American Safety & Health Institute
  - b. American Red Cross
  - c. American Heart Association
- ii. All training must include at least the following:
  - a. Classroom session
  - b. Hands-on session
  - c. Quiz

All training is to be documented and maintained on file at the facility for review as needed by the Corporate Safety Manager. All other requirements as outlined in procedure number 2.3 must be adhered to.

# First Aid / CPR / AED Procedures

## 5.3.10 Reporting

Anytime an AED unit is taken to the scene of an EMS and/or Accident situation, a report must be generated and forwarded to the Corporate Safety Manager. This report should be completed as soon as possible including all information as required on the reporting form. (The reporting form can be found immediately following this procedure.)

Several "Report of AED Use" forms should be placed in AED storage cabinets to ensure they are completed and submitted to the Corporate Safety Manager.

## 5.3.11 Post Use Inspection and Assessment

Immediately upon use, the AED must be taken out of service for a complete inspection, restocking of accessories such as defibrillator pads etc. and an evaluation of the battery strength made according to manufacturer recommendations.

Once evaluated, restocked and recharged if needed, the unit can be placed back into service.

## 5.3.12 AED Use Procedures

AED's shall be used according to the usage protocol found in procedure number 7.4

## 5.3.13 AED Use Protocol

### Purpose

To ensure consistent and effective use of all AED equipment.

To ensure the best possible AED availability to all persons in JDL Warm Construction, LLC Facilities having an AED on site.

### Scope

This procedure applies to all JDL Warm Construction, LLC Facilities having an AED unit on site.

### AED Use Protocol

AED units are to be taken to the following type situations at a minimum. Note: This procedure is in no way prohibitory in nature. Should an AED trained person feel the need to respond with an AED, he/she should do so.

#### i. Medical

- a. Report of person having chest pain
- b. Report of person having shortness of breath
- c. Report of person having both chest pain and shortness of breath
- d. Person with report of decreased level of consciousness, i.e.; confusion etc.
- e. Report of person who is unconscious
- f. Report of person who is in respiratory arrest
- g. Report of person who is in full cardiac arrest

# First Aid / CPR / AED Procedures

- ii. Injury
  - a. Reported Electrical shock
  - b. Report of person having any associated medical complaints above
- iii. Contraindications for use include
  - a. Patient is eight (8) years old or younger
  - b. Patient is lying in water
- iv. Contraindications for use unless the following are adhered to
  - a. Nitroglycerin patch is on chest (remove patch carefully, wipe area clean); or,
  - b. Pacemaker (do not place electrodes over the pacemaker)

When reaching the scene, the following actions should be taken:

- i. Place victim on a safe area making sure victim and rescuer are in a safe area.  
Some examples are:
  - a. Chemical (hazardous gases, liquids or solids, smoke, etc.)
  - b. Harmful people (anyone that could potentially harm you)
  - c. Traffic (make sure you are not in the path of traffic)
  - d. Fire or flammable gases such medical oxygen, cooking gas, etc.
  - e. Water dangers (wet clothing, pools, or puddle of water)
  - f. Electrical dangers (downed power lines, electrical cords, etc.)
- ii. Determine if patient is unconscious, not breathing, shows no signs of life (has no pulse)
- iii. Call 9-1-1, Apply AED Device and Follow Voice Prompts:
  - a. Apply Electrodes
  - b. Analyzing Rhythm - "Do not touch patient. Analyzing rhythm."
  - c. Charging - "Charging"
  - d. Delivers Defibrillation Pulse - "Stand clear. Push to Shock."

The rescuer will say "clear" and make a visual check of the area around the victim making sure that he/she and any other rescuers are not in contact with the victim.

  - e. Analyze/Charge/Pulse - After the first defibrillation, the AED will re-analyze the patient's heart rhythm. If another shock is necessary, the AED will advise.
    - a) If at any time during this cycle the AED detects a heart rhythm that does not require defibrillation, the voice prompt will say, "Check pulse. If no pulse, give CPR."
    - b) Remember that the AED will not advise to defibrillate all pulseless patients. Some cardiac rhythms do not respond to defibrillation.
    - c) Call "9-1-1" or the local emergency access phone number at this time, if not already done.
- iv. Rescuer Gives CPR for One Minute - After the third defibrillation, AED says: "Check pulse. If no pulse, give CPR."

# First Aid / CPR / AED Procedures

- v. Repeat Analyze - After one minute of CPR the AED will analyze the heart rhythm, indicate whether another shock is necessary.
- vi. Victim Recovers into a Rhythm with a Pulse - If at some point during the rescue the victim converts to a heart rhythm with a pulse, no shock will be advised. Reassure victim that help is on the way, and DO NOT remove electrode pads. Victim may go back into a pulseless rhythm that requires defibrillation.
- vii. Remove AED from service and follow procedure number 7.3.11
- viii. Complete and submit a "Report of AED Use" form and submit.

# First Aid / CPR / AED Procedures

## Report of A.E.D. Use

Date \_\_\_\_\_ Time \_\_\_\_\_

Affiliate \_\_\_\_\_

Facility \_\_\_\_\_

Location AED Used \_\_\_\_\_

Report By \_\_\_\_\_

AED Applied By \_\_\_\_\_

Name of person AED Applied To \_\_\_\_\_

Age \_\_\_\_\_ Sex \_\_\_\_\_ Did AED shock Yes No If yes, how many \_\_\_\_\_

Nature of Incident / Description of Symptoms \_\_\_\_\_

\_\_\_\_\_

Outcome \_\_\_\_\_

\_\_\_\_\_

If Transported by EMS, Name of Hospital \_\_\_\_\_

AED Unit Information \_\_\_\_\_

Serial Number \_\_\_\_\_

Storage Location \_\_\_\_\_

Approximate time needed to get AED to point of use \_\_\_\_\_

Taken out of service for restock and evaluation                      Yes                      No

Placed back in service                      Yes                      No

# Construction/Maintenance Safety

## 6.1 First Aid Equipment for Construction Sites

### Purpose

To ensure a proper level of emergency medical treatment is available at selected JDL Warm Construction, LLC Facilities.

### Scope

This procedure applies to all JDL Warm Construction, LLC owned facilities.

### Requirements

- i. The employer shall ensure the ready availability of medical personnel for advice and consultation on matters of health.
- ii. In the absence of an infirmary, clinic, or hospital in near proximity to the workplace, which is used for the treatment of all injured employees, a person or persons shall be adequately trained to render first aid. Adequate first aid supplies shall be readily available.
- iii. Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use.
- iv. First aid supplies are required to be readily available. When larger operations or multiple operations are being conducted at the same location, employers should determine the need for additional first aid kits at the worksite, additional types of first aid equipment and supplies and additional quantities and types of supplies and equipment in the first aid kits.
- v. By assessing the specific needs of their workplace, employers can ensure that reasonably anticipated supplies are available. Employers should assess the specific needs of their worksite periodically and augment the first aid kit appropriately.
- vi. If it is reasonably anticipated that employees will be exposed to blood or other potentially infectious materials while using first aid supplies, employers are required to provide appropriate personal protective equipment (PPE) in compliance with the provisions of the Occupational Exposure to Blood borne Pathogens Standard, § 1910.1030(d)(3). This standard lists appropriate PPE for this type of exposure, such as gloves, gowns, face shields, masks, and eye protection.

# Construction/Maintenance Safety

## 6.2 Housekeeping

### Purpose

To reduce the amount of debris / trash buildup on all construction / maintenance sites in order to assist in reducing accident and fire potentials.

### Scope

This procedure applies to the JDL Warm Construction, LLC Safety & Health Program.

### Procedure

A neat and orderly job is fundamental to efficient, accident-free performances and each job superintendent must establish a sound program of housekeeping for his/her work area(s). Good housekeeping shall be planned at the beginning of the job and be carefully supervised and followed to the final clean up. Housekeeping shall be the responsibility of each and every employee and contractor. Confusion will be reduced and operations will be more efficient when the work area is neat and orderly at all times. Listed below are general guidelines to maintain a safe and efficient jobsite.

- i. Rubbish, debris, waste and useless material constitute fire and accident hazards and shall be removed from the work area as fast as they accumulate, but no less often than daily.
- ii. Special instructions shall be given concerning the hazard of projecting nails. All boards, planks, blocks, debris and other material having projecting nails shall be immediately removed from the jobsite or be placed in orderly piles where Employees will not be likely to stumble or fall on them. Employees removing such material should always wear heavy gloves and hard-soled shoes.
- iii. All stairways, corridors, ladders, catwalks, ramps, passageways and work platforms shall be kept clear of loose material and trash.
- iv. Hoses, welding leads, electrical cords, etc. shall be placed overhead or out of walkways in such a manner as to eliminate tripping hazards.
- v. Oily rags, flammable liquids and other similar materials subject to spontaneous ignition shall be placed in fire resistant covered containers and disposed of daily.
- vi. Materials and supplies shall be kept away from edges of hoist ways, stairways, floor openings and when exterior walls are being built away from the perimeter of the building.



# Construction/Maintenance Safety

vii. Tools shall not be strewn about where they may cause tripping or falling hazards and shall at the end of each workday be collected and stored in the tool room or craft gang box.

viii. Upon completion of each work area, thorough clean up shall be done prior to relocating to another work area.

ix. Access areas and work surfaces are to be maintained in a mud/rut free condition by use of stones or other aggregate material to eliminate the possibility of slips, trips or falls.

x. Each employee shall be instructed to practice required housekeeping as part of his or her assigned duties.

xi. Subcontractors shall maintain an orderly worksite free from accumulations of construction debris. Clean up shall be performed on an ongoing basis. Failure to maintain cleanliness will result in cleanup by others with subsequent back charge to the responsible subcontractor.

# Construction/Maintenance Safety

## 6.3 Lighting

### Purpose

To ensure a proper level of lighting at JDL Warm Construction, LLC owned facilities and sites.

### Scope

This procedure applies to all JDL Warm Construction, LLC owned facilities.

### Requirements

- i. Construction areas, ramps, runways, corridors, offices, shops and storage areas shall be lighted to not less than the following requirements:

|              |   |
|--------------|---|
| Foot-Candles | Area of Operation   |
| 5            | General construction area lighting  |
| 3            | General construction areas, concrete placement, excavation and waste areas, access ways, active storage areas, loading platforms, refueling and field maintenance areas |
| 5            | Indoors: warehouses, corridors, hallways and exit-ways  |
| 5            | Tunnels, shafts and general underground work areas  |
| 10           | General construction plant and shops  |
| 30           | First aid stations, infirmaries and offices   |

# Construction/Maintenance Safety

## 6.4 Sanitation

### Purpose

To ensure readily available, clean sanitation facilities at all construction / maintenance sites.

### Scope

This procedure applies to all JDL Warm Construction, LLC owned facilities.

### Requirements

#### Potable Water:

- i. An adequate supply of potable water will be provided in all areas where employees are working.
- ii. Containers used for potable/drinking water will have the ability to close tightly and have a tap for dispersing of water or other drink. At no time should water be dipped from the container.
- iii. Potable water containers will be clearly marked as to the intended use and should not be used for anything else.
- iv. Single use drinking cups will be provided. Waste receptacle will be close to drinking container for disposal of cups.

#### Non-potable Water:

- i. Outlets for non-potable water will be marked as unsuitable for drinking, washing or cooking and will be used for industrial or firefighting purposes.
- ii. System (potable and non-potable) connections will be kept separate.

#### Toilets at construction jobsites:

- i. Toilet facilities will be provided as follows:  
Number of Employees Minimum Number of Facilities  
20 or less employees = 1 facility  
20 or more employees = 1 toilet seat and 1 urinal per 40 workers  
200 or more employees = 1 toilet seat and 1 urinal per 50 workers
- ii. No less than one toilet facility will be available at all times.

# Construction/Maintenance Safety

## Washing facilities:

- i. Wash facilities will have hot and cold running water, hand soap or other cleansing agent, individual towels (cloth or paper).
- ii. When employees are exposed to any of the following, washing facilities will be provided.
  - a. Paints, coatings, herbicides or insecticides, lead, asbestos.
- iii. Wash facilities will be near to worksite and equipped to enable employees to remove such substances.
- iv. There will be 1 shower per every 10 employees for each sex.

## Change rooms:

- i. Where employees will be required to change into protective clothing due to the nature of their work activities, change rooms with storage areas for their street clothes will be provided.

## Eating, drinking and smoking areas:

- i. Employees will not eat, drink or smoke except in approved areas.

## Vermin control:

- i. A continued and effective extermination program will be instituted to keep the work area free of rodents, insects and other vermin.

# Construction/Maintenance Safety

## 6.5 Means of Egress

### Purpose

To ensure safe and easily identifiable exits at all JDL Warm Construction, LLC owned facilities.

### Scope

This procedure applies to all JDL Warm Construction, LLC owned facilities.

### Requirements

#### General:

- i. Exits apply to any stairway, hallway, ladder, door, etc., all leading to outside access.
- ii. Exits will be arranged and maintained to provide free and unobstructed egress for all parts of the building at all times when the building is occupied.
- iii. No lock or fastening device will be installed that will prohibit escape from the inside of the building.

#### Exit Marking:

- i. Exit signs and exit pathways will be illuminated or by other means made visible to occupants.

#### Housekeeping:

- i. Exits, exit pathways and other egress routes will be free of all obstructions or impediments.

# Construction/Maintenance Safety

## 6.6 Lasers / Non-Ionizing Radiation

### Purpose

To ensure that all lasers are properly used and personnel using them are properly trained.

### Scope

This procedure applies to all JDL Warm Construction, LLC owned facilities.

### Requirements

- i. Only qualified and trained employees will operate laser equipment. Qualification certificate will be kept with the operator at all times.
- ii. Employees who are working in an area with the potential of exposure to laser light greater than .005 watts will be provided with anti-laser eye protection devices.
- iii. Warning signs will be posted in the area where lasers are being used.
- iv. No horseplay. Do not point the laser at other employees.
- v. Laser unit will be:
  - a. Labeled as to maximum output.
  - b. Set-up above employees head whenever possible.
  - c. Prohibited in rain, snow or when dust or fog is in the air.

# Construction/Maintenance Safety

## 6.7 Lead

### Purpose

To ensure safety to employees working in the area(s) where abatement is being conducted and to raise awareness of lead, the hazards of exposure, and the procedures to follow when suspect material is found.

### Scope

This procedure applies to all JDL Warm Construction, LLC owned facilities and job sites.

### Requirements

The following minimum safety standards must be met when working in the area where lead abatement is being performed.

- i. Users must wear at least the following safety equipment:
  - a. Respirator
  - b. Hard Hat
  - c. Safety Glasses
  - d. Proper Work Shoes
  - e. Gloves

Lead abatement will only be conducted by a trained, certified contractor.

- i. Permissible exposure limit:
  - a. Employees will not be exposed to lead in concentrations greater than fifty
  - b. Micrograms per cubic meter of air averaged over an 8 hour period, (50  $\mu\text{g}/\text{m}^3$ )
  - c. Employees exposed to lead for more than 8 hours will use the time weighted average (TWA) using the formula, (in  $\mu\text{g}/\text{m}^3$ )=400 divided by hours worked in the day.
- ii. Warning signs will be posted in the area where lead abatement is being conducted.
- iii. Access will be limited to authorized employees.
- iv. Employees should receive lead awareness training that includes:
  - a. The hazards of exposure to lead.
  - b. How to recognize possible hazards.
  - c. Procedures to follow when a hazard is encountered.
- v. Employees should practice good personal hygiene when working in areas with potential lead exposure. Wash hands, exposed parts of arms and face before eating, drinking or smoking.

# Construction/Maintenance Safety

## 6.8 Asbestos

### Purpose

To ensure safety to employees working in the area(s) where abatement is being conducted and to raise awareness of asbestos, the hazards of exposure, and the procedures to follow when suspect material is found.

### Scope

This procedure applies to all JDL Warm Construction, LLC owned facilities and job sites.

### Requirements

The following minimum safety standards must be met when working in the area where asbestos abatement is being performed.

- i. Users must wear at least the following safety equipment:
  - a. Respirator
  - b. Coveralls
  - c. Hard Hat
  - d. Safety Glasses
  - e. Proper Work Shoes
  - f. Gloves
- ii. A qualified contractor will perform asbestos abatement.
- iii. Warning signs will be posted in the area notifying all employees in the general area that abatement activities are being conducted.
- iv. Area will be monitored to ensure others in the area are safe from exposure to asbestos. Engineering controls and work practices will be used to limit hazards for all aspects of abatement activities.
- v. Access to regulated areas shall be limited to authorized persons.
- vi. Training in Asbestos Awareness will be given to employees working in the area of abatement who may be exposed to asbestos fibers. Awareness training will cover the following:
  - a. Methods to recognize asbestos
  - b. The health effects associated with asbestos exposure
  - c. The relationship between smoking and asbestos in producing lung cancer
  - d. The nature of operations that could result in exposure to asbestos and protective controls to minimize exposure



# Construction/Maintenance Safety

- e. The purpose, proper use, fitting instructions and limitation of respirators
- vii. Employees should practice good personal hygiene when working in areas where there is a potential of exposure to asbestos fibers. Wash hands, exposed parts of arms and face before eating, drinking or smoking. Remove coveralls before going on break.

# Construction/Maintenance Safety

## 6.9 Personal Protective Equipment

### Purpose

To reduce employee exposure to workplace hazards.  
To reduce employee injury rates.  
To minimize the extent of injury should an injury take place.

### Scope

This procedure applies to all JDL Warm Construction, LLC employees.

### Training

Before using any Personal Protective Equipment (PPE), employees will be trained in the proper use, donning and doffing procedures, the limitations of PPE, maintenance and how to recognize when PPE is required.

### Requirements

- i. An assessment of the workplace will be conducted to determine if hazards that require personal protective equipment (PPE) are present. Examples of PPE include: head, eye, face, respiratory, hearing, hand and foot protection.
- ii. If hazards are found, appropriate PPE will be made available.
- iii. PPE is inspected before each use to ensure it is proper working order, no holes, tears and is maintained in a sanitary condition, ready for use.

# Construction/Maintenance Safety

## 6.9.1 Foot Protection

### Purpose

To reduce employee exposure to workplace hazards.  
To reduce employee injury rates.  
To minimize the extent of injury should an injury take place.

### Scope

This procedure applies to the JDL Warm Construction, LLC employees.

### Requirements

- i. All employees must wear appropriate work shoes while on the job. Appropriate work shoes are defined as:
  - a. Leather or similar type soles that offer penetration protection.
  - b. Leather or similar type uppers.
- ii. Gym shoes, sandals or other open type shoes are strictly prohibited.
- iii. For situations requiring Safety-Toe, (Steel Toed Shoes), Safety-toe footwear for employees shall meet the requirements and specifications in American National Standard for Men's Safety-Toe Footwear, Z41.1-1967. [58 FR 35152; June 30, 1993].

# Construction/Maintenance Safety

## 6.9.2 Head Protection

### Purpose

To reduce employee exposure to workplace hazards.  
To reduce employee injury rates.  
To minimize the extent of injury should an injury take place.

### Scope

This procedure applies to the JDL Warm Construction, LLC employees.

### Head Protection

All employees who are or may potentially be exposed to head injuries must be protected by wearing the appropriate ANSI Approved hard hat.

Potential hazards that must be protected against include but are not limited to the following:

- i. Overhead work taking place
- ii. Aerial lift operations
- iii. Objects hanging down that a person could strike their head on
- iv. Potential for electrical contact to the head
- v. Potential for falling or flying objects

In addition to assessing the hazard potential, floor renovation projects etc. will be posted with the appropriate warning signs indicating a minimum level of personal protective equipment to be worn while on that floor, regardless of the stage of work. i.e.: "Hard Hat and Safety Glasses Required". When this sign is posted, the listed PPE is required at all times.

Any of the following persons will be responsible for having this sign posted and removed:

- i. Corporate Safety Manager
- ii. Building Manager
- iii. Project Manager

Management will be responsible for obtaining and supplying the appropriate head protective gear.

# Construction/Maintenance Safety

## Hard hats are classified as:

- i. Type I - Helmets with a full brim.
- ii. Type 2 - Brimless helmets with a peak extending forward from the crown.
- iii. Class A - General service, limited voltage. Intended for protection against impact hazards. Used in mining, construction, and manufacturing.
- iv. Class B - Utility service, high voltage. Used by electrical workers.
- v. Class C - Special service, no voltage protection. Designed for lightweight comfort and impact protection. Used in certain construction, manufacturing, refineries, and where there is a possibility of bumping the head against a fixed object. All hard hats purchased must meet the appropriate ANSI standard. Hard Hats for the protection of employees against impact and penetration of falling and flying objects shall meet the specifications contained in American National Standards Institute, Z89.1-1969, Safety Requirements for Industrial Head Protection. Hard Hats for the head protection of employees exposed to high voltage electrical shock and burns shall meet the specifications contained in American National Standards Institute, Z89.2-1971

# Construction/Maintenance Safety

## 6.9.3 Hearing Protection

### Purpose

- To reduce employee exposure to workplace hazards.
- To reduce employee injury rates.
- To minimize the extent of injury should an injury take place.

### Scope

This procedure applies to the JDL Warm Construction, LLC employees.

### Hearing Protection

Exposure to high noise levels can cause hearing loss or impairment. It can create physical and psychological stress. There is no cure for noise-induced hearing loss, so the prevention of excessive noise exposure is the only way to avoid hearing damage.

Wherever it is not feasible to reduce the noise levels or duration of exposures to those specified in Table D-2 of 29 CFR 1926.52, Permissible Noise Exposures, ear protective devices shall be provided and used.

Table D-2 - Permissible Noise Exposures

| Duration per day, hours | Sound level dBA slow response |
|-------------------------|-------------------------------|
| 8                       | 90                            |
| 6                       | 92                            |
| 4                       | 95                            |
| 3                       | 97                            |
| 2                       | 100                           |
| 1 1/2                   | 102                           |
| 1                       | 105                           |
| 1/2                     | 110                           |
| 1/4 or less             | 115                           |

### Sound Level Monitoring

All work areas having an increased noise levels such as mechanical rooms, boiler rooms etc. must have an evaluation made by a competent person to determine the expected level of noise and the appropriate hearing protection to be provided. All sound level monitoring results must be documented and maintained on file.

# Construction/Maintenance Safety

Areas identified as needing hearing protection, must be identified by posting a warning sign.

Hearing protection must be provided in these areas for employee use.

Hearing protective devices that may be used include but are not limited to:

- i. Pre-formed or Molded ear plugs
- ii. Disposable foam ear plugs
- iii. Hearing protective ear muffs

# Construction/Maintenance Safety

## 6.9.4 Eye and Face Protection

### Purpose

- To reduce employee exposure to workplace hazards.
- To reduce employee injury rates.
- To minimize the extent of injury should an injury take place.

### Scope

This procedure applies to the JDL Warm Construction, LLC employees.

### Eye and Face Protection

A BLS study found that about 60 percent of workers who suffered eye injuries were not wearing eye protective equipment.

Suitable eye protectors must be provided where there is a potential for injury to the eyes or face from the following type example hazards:

- Flying particles
- Molten metal
- Liquid chemicals
- Acids or caustic liquids
- Chemical gases or vapors
- Potentially injurious light radiation or a combination of the above

Employee work functions that present these hazard types in which eye protection is mandatory include but are not limited to:

- Using powered hand tools, table saws etc.
- Using power operated tools
- Grinding, chipping or sanding
- Working in an aerial lift
- Spray painting
- When using chemicals
- When working with concrete
- Mechanical demolition of walls, ceilings or other structures

In addition to assessing the hazard potential, floor renovation projects etc. will be posted with the appropriate warning signs indicating a minimum level of personal protective equipment to be worn while on that floor, regardless of the stage of work. I.e.: "Hard Hat and Safety Glasses Required". When this sign is posted, the listed PPE is required at all times.



# Construction/Maintenance Safety

Any of the following persons will be responsible for having this sign posted and removed:

- i. Corporate Safety Manager
- ii. Building Manager
- iii. Project Manager

Protectors must meet the following minimum requirements:

- i. Provide adequate protection against the particular hazards for which they are designed
- ii. Be reasonably comfortable when worn under the designated conditions
- iii. Fit snugly without interfering with the movements or vision of the wearer
- iv. Be durable
- v. Be capable of being disinfected
- vi. Be easily cleanable
- vii. Be kept clean and in good repair
- viii. Must meet ANSI Z-87 standards

Every protector shall be distinctly marked to facilitate identification of the manufacturer. Each affected employee shall use equipment with filter lenses that have a shade number appropriate for the work being performed for protection from injurious light radiation. The following table lists the appropriate shade numbers for various work operations.

## **Prescription Safety Eyewear**

O.S.H.A. regulations require that each affected employee who wears prescription lenses while engaged in operations that involve eye hazards shall wear eye protection that incorporates the prescription in its design, or shall wear eye protection that can be worn over the prescription lenses (goggles, face shields) without disturbing the proper position of the prescription lenses or the protective lenses. Personnel requiring prescription safety glasses must contact the Office of Health and Safety to have their request for prescription safety glasses processed.

# Construction/Maintenance Safety

## Eye and Face Protection Selection Chart

### Source

IMPACT - Chipping, grinding, machining, drilling, chiseling, riveting, sanding, etc.

CHEMICALS - Acid and chemicals handling

DUST - Woodworking, buffing,

### LIGHT and/or RADIATION

Welding - electric arc

Welding - gas

Cutting, torch brazing, torch soldering

Glare

### Assessment of Hazard

Flying fragments, objects, large chips, particles, sand, dirt, etc.

Splash  
Irritating mists

Nuisance dust

Optical radiation

Optical radiation

Optical radiation

Poor vision

### Protection

Spectacles with side protection, goggles, face shields.

Goggles, eyecup and cover types.

For severe exposure, use face shield over primary eye protection.

Special-purpose goggles.

Goggles, eyecup and cover general dusty conditions types.

Welding helmets or welding shields. Typical shades: 10-14

Welding goggles or welding face shield. Typical shades:

gas welding 4-8, cutting 3-6, brazing 3-4 Spectacles or

welding face shield. Typical shades: 1.5-3 Spectacles with

shaded or special-purpose lenses, as suitable.

# Construction/Maintenance Safety

## 6.9.5 Hand Protection

### Purpose

- To reduce employee exposure to workplace hazards.
- To reduce employee injury rates.
- To minimize the extent of injury should one take place.

### Scope

This procedure applies to the JDL Warm Construction, LLC employees.

### Hand Protection

When the possibility for injury or chemical contact to the hand exists, employees must utilize appropriate hand protection in the form of gloves.

The following is a guide to the most common types of protective work gloves and the types of hazards they can guard against:

- Disposable Gloves.** Disposable gloves, usually made of light-weight plastic, can help guard against mild irritants.
- Fabric Gloves.** Made of cotton or fabric blends are generally used to improve grip when handling slippery objects. They also help insulate hands from mild heat or cold.
- Leather Gloves.** These gloves are used to guard against injuries from sparks or scraping against rough surfaces. They are also used in combination with an insulated liner when working with electricity.
- Metal Mesh Gloves.** These gloves are used to protect hands from accidental cuts and scratches. Persons working with cutting tools or other sharp instruments use them most commonly.
- Aluminized Gloves.** Gloves made of aluminized fabric are designed to insulate hands from intense heat. Persons working molten materials most commonly use these gloves.
- Chemical Resistance Gloves.** These gloves may be made of rubber, neoprene, polyvinyl alcohol or vinyl, etc. The gloves protect hands from corrosives, oils, and solvents. The following table is provided as a guide to the different types of glove materials and the chemicals they can be used against. When selecting chemical resistance gloves, be sure to consult the manufacturers' recommendations, especially if the gloved hand will be immersed in the chemical.

# Construction/Maintenance Safety

## 6.9.6 Respiratory Protection

### **Purpose**

To reduce employee exposure to workplace hazards.  
To reduce employee injury rates.  
To minimize the extent of injury should an injury take place.

### **Scope**

This procedure applies to the JDL Warm Construction, LLC employees

### **Respiratory Protection**

There may be times when employees perform work activities that require the use of respiratory protection. The following procedure has been established to ensure respirators are properly selected, used, and maintained.

The selection of appropriate respiratory equipment shall involve three steps:

- i. Identification of the hazards
- ii. Evaluating the hazards
- iii. Providing proper respiratory protection

Respirators used shall be selected from those approved by the National Institute for Occupational Safety and Health (NIOSH) for use in atmospheres identified in the hazard evaluation phase. Single-use disposable dust masks are not acceptable.

Management shall provide a continuing effort to stay abreast of changes and innovations in respirator products and shall provide high quality products to employees.

### **Medical Approval**

Before issuance of respiratory equipment, each employee designated to wear a respirator shall be medically evaluated in accordance with O.S.H.A. standards.

# Construction/Maintenance Safety

## 1910.134: O.S.H.A. Respirator Medical Evaluation Questionnaire

Today's Date: \_\_\_\_\_

Name: \_\_\_\_\_ SS#: \_\_\_\_\_

Job Title: \_\_\_\_\_ Facility: \_\_\_\_\_

Age (to nearest year): \_\_\_\_\_ Sex: Male/Female

Height: \_\_\_\_\_ Weight: \_\_\_\_\_

1. A phone number where you can be reached by the health care professional who reviews this questionnaire (include the area code): \_\_\_\_\_

2. The best time to phone you at this number: \_\_\_\_\_

3. Has your employer told you how to contact the health care professional who will review this questionnaire (circle one): Yes No

4. Check the type of respirator you will use (you can check more than one category):

a. \_\_\_\_\_ N, R, or P disposable respirator (filter-mask, non-cartridge type only)

b. \_\_\_\_\_ other type (for example: half-or-full-facepiece type, powered-air purifying, supplied-air, self contained breathing apparatus)

5. Have you worn a respirator (circle one): ..... Yes No

If "yes" what type(s): \_\_\_\_\_

Part A. Section 2. (Mandatory) Questions 1 through 9 below must be answered by every employee who has been selected to use any type of respirator (please circle "yes" or "no").

1. Do you currently smoke tobacco, or have you smoked tobacco in the last month: ..... Yes No

2. Have you ever had any of the following conditions?

a. Seizures (fits): ..... Yes No

b. Diabetes (sugar disease) ..... Yes No

c. Allergic reactions that interfere with your breathing: ..... Yes No

d. Claustrophobia (fear of closed in places): ..... Yes No

e. Trouble smelling odors: ..... Yes No

3. Have you ever had any of the following pulmonary or lung problems?

a. Asbestosis: ..... Yes No

b. Asthma ..... Yes No

c. Chronic bronchitis: ..... Yes No

d. Emphysema: ..... Yes No

e. Pneumonia: ..... Yes No

f. Tuberculosis: ..... Yes No

g. Silicosis: ..... Yes No

h. Pneumothorax (collapsed lung) ..... Yes No

i. Lung cancer ..... Yes No

j. Broken ribs: ..... Yes No

k. Any chest injuries or surgeries: ..... Yes No

l. Any other lung problem that you've been told about: ..... Yes No

4. Do you currently have any of the following symptoms of pulmonary or lung illness?

a. Shortness of breath ..... Yes No

b. Shortness of breath when walking fast on level ground Or walking up a slight hill or incline: ..... Yes No

# Construction/Maintenance Safety

- c. Shortness of breath when walking with other people at an ordinary pace on level ground: ..... Yes No
- d. Have to stop for breath when walking at your own pace on level ground: ..... Yes No
- e. Shortness of breath when washing or dressing yourself ..... Yes No
- f. Shortness of breath that interferes with your job: ..... Yes No
- g. Coughing that produces phlegm (thick sputum): ..... Yes No
- h. Coughing that wakes you early in the morning: ..... Yes No
- i. Coughing that occurs mostly when you are lying down ..... Yes No
- j. Coughing up blood in the last month: ..... Yes No
- k. Wheezing: ..... Yes No
- l. Wheezing that interferes with your job: ..... Yes No
- m. Chest pain when you breathe deeply: ..... Yes No
- n. Any other symptoms that you think may be related to lung problems: ..... Yes No
- 5. Have you ever had any of the following cardiovascular or heart problems?
  - a. Heart attack ..... Yes No
  - b. Stroke ..... Yes No
  - c. Angina ..... Yes No
  - d. Heart failure ..... Yes No
  - e. Swelling in your legs or feet (not caused by walking) ..... Yes No
  - f. Heart arrhythmia (heart beating irregularly): ..... Yes No
  - g. High blood pressure ..... Yes No
  - h. Any other heart problem that you've been told about: ..... Yes No
- 6. Have you ever had any of the following cardiovascular or heart symptoms?
  - a. Frequent pain or tightness in your chest: ..... Yes No
  - b. Pain or tightness in your chest: ..... Yes No
  - c. Pain or tightness in your chest that interferes with your job: ..... Yes No
  - d. In the past two years, have you noticed your heart skipping or missing a beat: ..... Yes No
  - e. Heartburn or indigestion that is not related to eating: ..... Yes No
  - f. Any other symptoms that you think may be related to heart or circulation problems: ..... Yes No
- 7. Do you currently take medication for the following problems?
  - a. Breathing or lung problems: ..... Yes No
  - b. Heart trouble: ..... Yes No
  - c. Blood pressure: ..... Yes No
  - d. Seizures (fits): ..... Yes No
- 8. If you've used a respirator, have you ever had any of the following problems? (If you've never used a respirator, check the following space and go to question 9. \_\_\_\_\_)
  - a. Eye irritation: ..... Yes No
  - b. Skin allergies or rashes: ..... Yes No
  - c. Anxiety: ..... Yes No
  - d. General weakness or fatigue: ..... Yes No
  - e. Any other problem that interferes with your use of a respirator: ..... Yes No
- 9. Would you like to talk to the health care professional who will review this questionnaire about your answers to this questionnaire: ..... Yes No

Questions 10 to 15 below must be answered by every employee who has been selected to use either a full-facepiece respirator or a self-contained breathing apparatus (SCBA). For employees who have been selected to use other types of respirators, answering these questions is voluntary.

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10. Have you ever lost vision in either eye (temporarily or permanently): ..... Yes No
11. Do you currently have any of the following vision problems:
- a. wear contact lenses: ..... Yes No
  - b. Wear glasses: ..... Yes No
  - c. Color blind: ..... Yes No
  - d. Any other eye or vision problem: ..... Yes No
12. Have you ever had an injury to your ears, including a broken Ear drum: ..... Yes No
13. Do you currently have any of the following hearing problems?
- a. Difficulty hearing: ..... Yes No
  - b. Wear a hearing aid: ..... Yes No
  - c. Any other hearing or ear problem: ..... Yes No
14. Have you ever had a back injury: ..... Yes No
- 15 Do you currently have any of the following musculoskeletal problems?
- a. Weakness in any of your arms, hands, legs or feet: ..... Yes No
  - b. Back pain: ..... Yes No
  - c. Difficulty fully moving your arms and legs: ..... Yes No
  - d. Pain or stiffness when you lean forward or backward at the waist: ..... Yes No
  - e. Difficulty fully moving your head up or down: ..... Yes No
  - f. Difficulty fully moving your head side to side: ..... Yes No
  - g. Difficulty bending at your knees: ..... Yes No
  - h. Difficulty squatting to the ground:..... Yes No
  - i. Climbing a flight of stairs or a ladder carrying more than 25 lbs. .... Yes No
  - j. Any other muscle or skeletal problem that interferes with using a respirator ..... Yes No
- Part B. Any of the following questions, and other questions not listed, may be added to the questionnaire at the discretion of the health care professional who will review the questionnaire.
1. In your present job, are you working at high altitudes (over 5,000 feet) or in a place that has lower than normal amount of oxygen: ..... Yes No  
If "yes" do you have feelings of dizziness, shortness of breath, pounding in your chest, or other symptoms when you're working under these conditions: ..... Yes No
2. At work or at home, have you ever been exposed to hazardous solvents, hazardous airborne chemicals (e.g. gases, fumes, or dust), or have you come into skin contact with hazardous chemicals: ..... Yes No  
If "yes" name the chemicals if you know them: \_\_\_\_\_
3. Have you ever worked with any of the materials, or under any of the conditions, listed below:
- a. Asbestos:..... Yes No
  - b. Silica (e.g. in sandblasting): ..... Yes No
  - c. Tungsten/cobalt (e.g. grinding or welding this material) ..... Yes No
  - d. Beryllium: ..... Yes No
  - e. Aluminum: ..... Yes No
  - f. Coal (for example mining)..... Yes No
  - g. Iron: ..... Yes No
  - h. Tin: ..... Yes No
  - i. Dusty environments: ..... Yes No
  - j. Any other hazardous exposures: ..... Yes No
4. List any second jobs or side businesses you have: \_\_\_\_\_

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5. List your previous occupations: \_\_\_\_\_
6. List your current or previous hobbies: \_\_\_\_\_
7. Have you been in the military services? ..... Yes No  
If "yes" were you exposed to biological or chemical agents  
If "yes" describe these exposures: \_\_\_\_\_  
(either in training or combat): ..... Yes No
8. Have you ever worked on a HazMat team: ..... Yes No
9. Other than medications for breathing and lung problems, heart trouble, blood pressure, and seizures mentioned earlier in this questionnaire, are you taking any other medications for any reason (including over-the-counter medications): ..... Yes No  
If "yes" name the medications if you know them: \_\_\_\_\_
10. Will you be using any of the following items with your respirator(s)?
- a. HEPA filters: ..... Yes No
- b. Canisters (for example, gas masks): ..... Yes No
- c. Cartridges: ..... Yes No
11. How often are you expected to use the respirator(s) (circle yes or no for all answers that apply to you)?:
- a. Escape only (no rescue): ..... Yes No
- b. Emergency rescue only: ..... Yes No
- c. Less than 5 hours per week: ..... Yes No
- d. Less than 2 hour per day: ..... Yes No
- e. 2 to 4 hours per day: ..... Yes No
- f. Over 4 hours per day: ..... Yes No
12. During the period you are using the respirator(s) is your work effort:
- a. Light (less than 200 kcal per hour) ..... Yes No  
If "yes" how long does this period last: shift: \_\_\_\_\_ hrs., \_\_\_\_\_ min.  
Examples of a light work effort are sitting while writing, typing, drafting or performing light assembly work, or standing while operating a drill press (1-3 lbs) or controlling machines)
- b. Moderate (200 to 350 kcal per hour) ..... Yes No  
If "yes" how long does this period last during the average: Shift: \_\_\_\_\_ hrs. \_\_\_\_\_ min.  
Examples of moderate work effort are sitting while nailing or filing; driving a truck or bus in urban traffic; standing while drilling, nailing, performing assembly work or transferring a moderate load (about 35 lbs) at trunk level; walking on a level surface about 2 mph or down a 5-degree grade about 3 mph; or pushing a wheel barrow with a heavy load (about 100 lbs) on a level surface.
- c. Heavy (above 350 kcal per hour) ..... Yes No  
If "yes" how long does this period last during the average: shift: \_\_\_\_\_ hrs., \_\_\_\_\_ min.  
Examples of heavy work are lifting a heavy load (about 50 lbs) from the floor to your waist or shoulder; working on a loading dock; shoveling, standing while bricklaying or chipping castings; walking up an 8-degree grade about 2 mph; climbing stairs with a heavy load (about 50 lbs)
13. Will you be wearing protective clothing and/or equipment (other than the respirator) when you're using your respirator: ..... Yes No  
If "yes" describe this protective clothing and/or equipment: \_\_\_\_\_
14. Will you be working under hot conditions (temperature exceeding 77°F) ..... Yes No



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15. Will you working under humid conditions: ..... Yes No

16. Describe the work you'll be doing while you're using your respirator(s):

\_\_\_\_\_

17. Describe any special or hazardous conditions you might encounter when you're using your respirator(s) (for example, confined spaces, life-threatening gases):

\_\_\_\_\_

18. Provide the following information, if you know it, for each toxic substance that you'll be exposed to when you're using your respirator(s)

Name the first toxic substance: \_\_\_\_\_

Estimated maximum exposure level per shift: \_\_\_\_\_

Duration of exposure per shift: \_\_\_\_\_

Name of second toxic substance: \_\_\_\_\_

Estimated maximum exposure level per shift: \_\_\_\_\_

Duration of exposure per shift: \_\_\_\_\_

Name of the third toxic substance: \_\_\_\_\_

Estimated maximum exposure level per shift: \_\_\_\_\_

Duration of exposure per shift: \_\_\_\_\_

19. The name of any other toxic substances that you'll have while using your respirator(s) that may affect the safety and well-being of others (for example, rescue, security)

NOTES: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Selecting and Testing Respiratory Equipment

Only tight fitting respirators that have been selected for anticipated contaminants shall be tested. Test subjects shall be clean-shaven. Subject shall don several different sizes to determine best fit. The mask shall be properly adjusted on the face to be "snug". The tester shall then connect the test subject to the quantitative fit testing equipment and proceed through the testing format outlined in O.S.H.A. 29 CFR 1926.1101 Appendix C or 29 CFR 1926.62 Appendix D.

## Training Requirements

All employees subject to wear a respirator shall be trained in the proper use of respirators and their limitations before starting work on any project. The Safety/Training Director, or his/her designated representative, shall provide training. At a minimum, the training program shall include the following items:

- i. Purpose of respirator
- ii. Proper use of respirator
- iii. Fitting instructions and sealing tests
- iv. Limitations of a respirator

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- v. Cleaning and disinfecting respirators
- vi. Inspection of respirator
- vii. Fit testing bi-annually

## **Selection and Use of Respiratory Protective Equipment**

Before the commencement of a project, a Competent Person shall evaluate the workplace to determine the potential for respiratory hazards (identification of hazards). The respiratory exposure hazards may include, but are not limited to, asbestos, lead, solvents, bird droppings, dust, or other such materials. Upon completion of the identification process, the Competent Person shall attempt to determine the anticipated concentrations of the identified materials (hazard evaluation). Objective data or previous monitoring information may be used to help in the evaluation process. If personnel do not have previous experience with anticipated exposure, outside assistance is acquired to help in determining exposures and protection options. Special attention shall be paid to multiple hazard worksites.

Once the hazard identification and evaluation process is complete, a determination can be made as to the option to protect employees from the hazards. Engineering controls and work practices are the primary and preferred methods of reducing employee exposures. When feasible controls do not reduce exposures to below acceptable levels (PELs, RELs, and TLVs) or an O.S.H.A. standard specifically requires the use of respirators regardless of exposure (i.e., 1926.1101 Class I work), respiratory protection shall be selected to adequately protect employees. O.S.H.A. standards, NIOSH publications, and manufacturer information can be used to determine the proper respiratory equipment.

For exposures to Asbestos or Lead, the O.S.H.A. Standards 29 CFR 1926.1101 (Asbestos) and 29 CFR 1926.62 (Lead) shall be referenced to determine adequate respiratory protection.

When an exposure assessment cannot be produced before the commencement of the project (i.e., no previous experience), the highest level of respiratory protection shall be provided until exposure data can be obtained.

## **Respirator Selection**

- i. The employee shall be allowed to pick the most comfortable respirator from a selection including respirators of various sizes from different manufacturers.
- ii. Prior to the selection process, the company Safety Director shall instruct employees how to put on a respirator, how it should be positioned on the face, how to set strap tension and how to determine a “comfortable” respirator.
- iii. Once the employee has selected the “comfortable respirator”; the employee shall wear the respirator for at least five minutes to assess the comfort.
- iv. In making the assessment of “comfortable fit”, the Training Director shall review the following points with the employee(s) to allow adequate time to determine the comfort of the respirator:
  - a. Positioning of mask on nose
  - b. Room for eye protection
  - c. Room to talk
  - d. Positioning of mask on face and cheeks

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- v. The following criteria will be used to help determine the adequacy of the respirator fit:
  - a. Chin properly placed
  - b. Strap tension
  - c. Fit across nose bridge
  - d. Distance from nose to chin
  - e. Tendency to slip
- vi. After the employee has selected the respirator in which he/she intends to wear, the training director shall instruct the employee to don respirator and perform the following movements to “seat” the respirator:
  - a. Rapidly move head from side to side
  - b. Rapidly move head up and down
  - c. Take deep breaths while performing steps 1 & 2
  - d. Once these steps are complete, the employee is ready for fit testing.

## **Respirator Fit Testing**

It is preferred that respirator fit tests be conducted using the TSI Portacount quantitative fit tester to determine accurate and appropriate fit factors. Quantitative and qualitative testing shall be administered in full accordance with applicable O.S.H.A. standards.

## **Respirator Fit Test Procedures**

The employee(s) shall perform the following exercises, in the order given, for each independent test:

- i. Normal Breathing (NB) - In the normal standing position, without talking, the subject shall breathe normally for at least one minute.
- ii. Deep Breathing (DB) - Subject shall perform deep breathing, pausing so not to hyperventilate.
- iii. Turning Head Side to Side (SS) - subject shall slowly turn head side to side pausing at each extreme for approximately five seconds before turning to the other side.
- iv. Moving Head Up and Down (UD) - Subject shall move head slowly up and down pausing at each extreme for five seconds.
- v. Reading (R) - Subject shall read aloud the prescribed passage or count out loud:
  - a. When sunlight strikes raindrops in the air, they act like a prism to form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach, his friends say that he is looking for a pot of gold at the end of the rainbow.
- vi. Grimace (G) - Subject shall grimace, smile, frown and generally contort his/her face for approximately fifteen seconds. [To be done for quantitative test only].

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- vii. Bend Over and Touch Toes (B) - Subject shall bend at the waist, touch toes, and return to upright position. Repeat for at least thirty seconds.
- viii. Jogging in Place (J) - Subject shall jog in place for thirty seconds.
- ix. Normal Breathing (NB) - Same as exercise one.

## **Respirator Protection Factors**

The quantitative fit testing equipment shall calculate a respirator fit factor. A fit factor is the means of gauging the fit of the respirator facepiece. O.S.H.A. requires that a fit factor of at least 100 for a half face and 1,000 for a full-face respirator be achieved to pass a quantitative fit test. These figures are 10 times the recommended protection factor set forth by O.S.H.A. standards.

## **Seal Checks**

After issuance of respiratory equipment and each time a respirator is worn, employees are trained to take initial steps before entering work areas to ensure a proper seal:

## **Negative Pressure Check**

Cover inlet of the filters with the palms of the hands so that air cannot pass through. Inhale so that the facepiece collapses slightly and hold breath for about 10 seconds. If the facepiece remains collapsed and no inward air leakage is detected, the respirator passes the check.

## **Positive Pressure Check**

Close off exhale valve to the respirator with palm of hand and gently exhale. Positive pressure should build up without leakage to the outside around the facepiece.

## **Cleaning and Disinfecting of Respirators**

Respirators shall be reserved for the exclusive use of a single individual. Following each use, the respirator shall be cleaned and disinfected using the following procedures:

- i. Wash with a detergent or a detergent/disinfectant combination using warm water.
- ii. Rinse in clean water or disinfectant. A clean rinse is particularly important because traces of detergent left on the mask could cause skin irritation.
- iii. Air-dry by hanging so as not to distort face piece.

## **Routine Inspections**

The Corporate Safety Manager and/or his designee shall conduct routine inspections of the respirators. The following items shall be checked:

- i. Rubber face piece shall be checked for:
  - a. Excessive dirt
  - b. Cracks, tears or holes
  - c. Distortion from improper storage
  - d. Cracked, scratched or loose fitting lens (Full-face respirator)
  - e. Broken or missing attachments

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- ii. Head-straps shall be checked for:
  - a. Breaks or tears
  - b. Loss of elasticity
  - c. Broken or malfunctioning buckles, attachments
- iii. Inhalation, exhalation valves:
  - a. Detergent or dirt residue on valve seat
  - b. Cracks, tears or distortion in valve or seat
  - c. Missing or defective valve covers
- iv. Filter cartridges
  - a. Proper filter for the hazard
  - b. NIOSH approval
  - c. Missing or worn gaskets
  - d. Worn threads
  - e. Cracks or dents in filter housing

## **Storage of Respirators**

Respiratory equipment shall be stored in a designated clean, sanitary and uncontaminated location. When respirators are not in use, they shall be stored in a sealed plastic bag.

## **Respirator Program Evaluation and Record keeping**

The respirator program shall be evaluated at least annually with program adjustments, as appropriate, made to reflect air sampling or other evaluation results. Compliance to the aforementioned points of the program shall be reviewed; respirator selection, purchase of approved equipment, medical screening of employees, fit testing, issuance of equipment and associated maintenance, storage, repair and inspection, appropriate inspection of work area conditions.

Records shall be kept and include: names of employees trained and using respiratory equipment, documentation of care and maintenance of respiratory equipment, medical reports of each respirator user, possible and documented airborne concentrations of asbestos fibers during work activities, and any problems encountered.

## **Special Considerations**

- i. Facial Hair - Facial hair, including beards, sideburns or even a few days growth of stubble is not permitted. Facial hair between the skin and the sealing surface of the respirator will prevent a good seal allowing contaminated air to enter.
- ii. Eye Glasses - Ordinary eyeglasses shall not be used with full-face respirators. Specially designed corrective lenses shall be mounted inside the respirator to not effect respirator face seal.
- iii. Contact Lenses - Workers shall not wear contact lenses while wearing a respirator.

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## 6.9.7 Eye Washes

### **Purpose**

To reduce employee exposure to workplace hazards.  
To reduce employee injury rates.  
To minimize the extent of injury should an injury take place.

### **Scope**

This procedure applies to the JDL Warm Construction, LLC employees.

### **Training**

Employees will be trained in the locations and proper use of eye wash stations.

### **Requirements**

- i. Eye wash station will be located in areas where a possible hazard exists of employees splashing chemicals or other toxins in their eyes.
- ii. Eye wash stations will be inspected and maintained in a sanitary, fully charged manner.
- iii. Temporary or portable eyewash stations must be inspected and the water replaced or reconditioned according the eye wash manufacturer recommendations.
- iv. Signage above eye wash stations, indicating location, will be visible throughout the area.
- v. When an incident occurs, proceed to eye wash station immediately. A co-worker will notify the superintendent. Affected employee may need assistance in flushing the chemical out of his/her eye. Follow instructions on the eye wash station completely. Superintendent will notify emergency response.

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## 6.9.8 Electrical Arc Flash Protection

### Purpose

- To reduce employee exposure to workplace hazards.
- To reduce employee injury rates.
- To minimize the extent of injury should an injury take place.

### Scope

This procedure applies to the JDL Warm Construction, LLC employees.

### General Requirements

- Employees designated to operate arc welding equipment shall have been properly instructed and qualified to operate such equipment
- All welding and cutting cables will be completely insulated, flexible and capable of handling the maximum current requirements.
- Cables in need of repair should not be used. When it's necessary to make repairs or splice cable together, substantial insulated connectors, at least of the capacity of the cable, will be used. Make sure a minimum distance of 10 feet from where the electrode holder is connected is free from repairs and splicing.
- Machine hook up. Before starting operations all connections to the machine shall be checked to make certain they are properly made. The work lead shall be firmly attached to the work; magnetic work clamps shall be freed from adherent metal particles of spatter on contact surfaces. Coiled welding cable shall be spread out before use to avoid serious overheating and damage to insulation.
- Machine will be grounded. Pipelines containing gases or flammable liquids, or conduit with electrical wiring will not be used as a ground return.
- All ground connections will be inspected regularly.
- When possible shielding made of a non-flammable non-combustible material will be erected to protect employees in the vicinity from direct rays of the arc.

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- viii. When left unattended, the electrodes will be removed and the holders will be placed in such a way to prevent accidental contact with employees, conducting objects, fuel or compressed gas tanks.
- ix. When leaving the equipment for long periods of time turn off power supply.
- x. The operator should report any equipment defect or safety hazard to his supervisor and the use of the equipment shall be discontinued until its safety has been assured. Repairs shall be made only by qualified personnel



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## 6.10 Fire Protection / Fire Prevention

### **Purpose**

To reduce the possibility of fire on construction / maintenance and renovation sites.  
To ensure proper portable firefighting equipment is supplied and in a ready condition.  
To reduce the possibility of employee injury due to fire.

### **Scope**

This procedure applies to the JDL Warm Construction, LLC.

### 6.10.1 Definitions

#### **Combustible Liquid**

Any liquid having a flash point at or above 140° F. and below 200° F.

#### **Flammable Liquid**

Any liquid having a flashpoint below 140° F. and having a vapor pressure not exceeding 40 pounds psi at 100° F.

#### **Flash Point**

The minimum temperature at which a liquid gives off enough vapors that will ignite and flashover but will not continue to burn without the addition of more heat.

#### **Vapor Pressure**

The pressure exerted by the vapor within the container against the sides of a container. The pressure and temperature are directly proportional.

### 6.10.2 Fire Prevention Practices

It is of utmost importance on all jobs; new construction, or within an existing facility, that we are aware of and comply with the established JDL Warm Construction, LLC Fire Prevention and Protection Procedures.

- i. The Project Supervisor is responsible for ensuring implementation and enforcement of this procedure.
- ii. The JDL Warm Construction, LLC Fire Prevention and Protection Procedure will be communicated to all Management and Employees and will be adhered to on all construction projects. This procedure will include the following:

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- a. A suitable alarm system that can be clearly heard by all Employees for emergencies. This could include verbal communication, audible devices such as air horns or existing plant alarm systems.
- b. A procedure for securing outside assistance in emergencies.
- c. Smoking will be prohibited at or in the vicinity of operations that constitute a fire hazard, and those areas will be conspicuously posted “No Smoking or Open Flame.”
- d. The use of “salamanders” is prohibited. Temporary heating units in buildings must be equipped with approved safety devices such as switches; cut offs, vents, etc., and located away from flammables and combustibles.

## 6.10.3 Portable Firefighting Equipment

- i. A fire extinguisher, rated not less than 2A, will be provided for each 3,000 square feet of building. Extinguishers should be of ABC type, dry chemical preferably 20-pound unit and located in order that travel distance from any point of the protected area to the nearest extinguisher does not exceed 100 feet.
- ii. Extinguishers subject to freezing will be protected against freezing.
- iii. At least one 10 or 20 pound ABC type fire extinguisher will be located on each floor of a multi-storied building regardless of floor space. This must be mounted in plain view of working stairway where the majority of Employees pass.
- iv. Each welder will be required to have a 10 pound, or larger, ABC fire extinguisher as a part of his/her tools any time welding operations are in progress.
- v. All fire extinguishers will be maintained in a ready condition. Any fire extinguisher used will be immediately replaced with a charged unit. The Project Superintendent and/or Site Safety Supervisor will see that fire extinguishers are returned for servicing promptly after use.
- vi. Only 10 and 20 pound ABC dry chemical fire extinguishers may be used on construction sites with carbon dioxide and halon allowed for use on electrical fires.
- vii. To enable Employees to identify the various types of fire extinguishers and the class of fires to use them on, a breakdown of types is listed below:
  - a. Fire extinguishers are identified as Type A, Type B, Type C, and Type D, or as a combination.
  - b. Classes of fires are identified as Class A, Class B, Class C, and Class D.
  - c. Type A extinguishers are to be used on Class A fires. Class A fires are wood, cloth, paper, lumber, or rubbish fires. Use water or combination of Type ABC extinguisher.
  - d. Type B extinguishers are to be used on Class B fires. Class B fires are oil, gasoline, solvents, or paint fires. Use CO<sup>2</sup>, Halon, or Dry Chemical extinguishers.
  - e. Type C extinguishers are to be used on Class C fires. Class C fires are electrical motors or appliances. Use CO<sup>2</sup>, Halon, or Dry Chemical extinguishers.

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- f. Type D extinguishers are to be used on Class D fires. Class D fires are combustible metals. Use a special dry powder.
- g. Type “ABC Combination” to be used on all classes of fires except combustible metals (Dry Powder).

## 6.10.4 Flammable & Combustible Liquids

- i. No more than 25 gallons of flammable or combustible liquids will be stored in a room outside of an approved metal storage cabinet. Not more than 60 gallons of flammable or 120 gallons of combustible liquids will be stored in any one storage cabinet. Cabinets will be labeled “Flammable--Keep Fire Away.”
- ii. Only UL approved metal safety containers (no plastic containers) and portable tanks can be used for storage and handling of flammable and combustible liquids, and they must be labeled as to content.
- iii. Flammable or combustible liquids will not be stored in areas used for exits, stairways, or normally used for the safe passage of personnel.
- iv. Hand carried or held containers will:
  - a. Not exceed five gallons in capacity.
  - b. Be the non-explosive type with spring-actuated lid as controlled by one hand during any pouring or filling operation.
  - c. Be equipped with a spark arrester.
  - d. Be equipped with a flexible spout or a funnel for pouring operations.
  - e. Be labeled as to contents.
- v. Smoking is prohibited wherever there is fueling of equipment or storage of flammable materials.
- vi. All solvents will be stored in approved containers and marked as to contents.
- vii. Solvents for use in a work area will be stored in no greater quantity than would be reasonably expected for the day’s use.

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## 6.11 Accident Prevention Signs

### Purpose

To ensure all hazards are properly marked.  
To reduce the chances of accidents / injury / illness at the workplace.

### Scope

This procedure applies to all JDL Warm Construction, LLC owned facilities.

### Requirements

Signs and symbols must be posted conspicuously, so as to be visible at all times. These will be of industry standard designs and colors according to 29 CFR 1926.200.

- i. DANGER Signs:
  - a. Will be used only when an immediate hazard exists.
  - b. Will be removed as soon as the hazard has been removed.
  - c. Specific hazard warning will be clear and concise. (ex. Confined Space, Laser in Use)
- ii. CAUTION Signs:
  - a. Will be used to warn of a potential hazard or to caution against unsafe practices.
  - b. Wording will be clear and concise. (ex. Tripping Hazards)
- iii. Accident prevention tags:
  - a. Will be placed on tools / equipment when a defect has been found. The tool or piece of equipment will be removed from the area.
- iv. Other Signs:
  - a. Warning signs will be posted at point of entry where hazard exists.
  - b. Wording will be clear and concise as to what is required to comply with safety rules. (ex. Eye Protection Required, Do Not Enter – One Way)

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## 6.12 Barricades

### Purpose

To ensure that all hazards are properly barricaded to prevent unauthorized or accidental interaction.

To reduce the chances of accidents / injury / illness at the workplace.

### Scope

This procedure applies to all JDL Warm Construction, LLC owned facilities.

### Requirements

- i. Barricades are used as a means to limit access to hazardous work areas, such as overhead work, holes in floors, etc.
- ii. Barricades will be at least 36 inches high, clearly visible and safe guard the entire work area from unauthorized workers walking through.
- iii. Barricades that are around areas where a fall hazard exists will be constructed in such a way that it will withstand a force of 500 pounds placed on it.
- iv. Barricades that are establish to prevent unauthorized workers from walking through can be of the construction tape type. It will be supported in such a way that the low point between posts will not be lower than 36 inches.

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## 6.13 Material Handling

### Purpose

To ensure that all materials are handled in the proper manner.  
To reduce the chance of employee injury.  
To reduce the chances of blocking exits etc.

### Scope

This procedure applies to all JDL Warm Construction, LLC owned facilities.

### Requirements

- i. Where mechanical handling equipment is used, sufficient safe clearances must be allowed for aisles, at loading docks, through doorways and wherever turns or passage must be made.
- ii. Clearance signs to warn of clearance limits must be provided.
- iii. Aisles and passageways shall be kept clear and in good repair, with no obstruction across or in aisles that could create a hazard.
- iv. Stored materials cannot create a hazard. Storage areas must be kept orderly.
- v. Prior to unloading steel, poles, cross arms and similar material, the load shall be thoroughly examined to ascertain if the load has shifted, binders or stakes have broken or the load is otherwise hazardous to employees.
- vi. During pole hauling operations, all loads shall be secured to prevent displacement and a red flag shall be displayed at the trailing end of the longest pole.
- vii. When hauling poles during the hours of darkness, illuminated warning devices shall be attached to the trailing end of the longest pole
- viii. No materials or equipment shall be stored under energized bus, energized lines, or near energized equipment, if it is practical to store them elsewhere.
- ix. Where hazards to employees exist, tag lines or other suitable devices shall be used to control loads being handled by hoisting equipment.
- x. Oil filled equipment. During construction or repair of oil filled equipment the oil may be stored in temporary containers other than those required in 1926.152, such as pillow tanks.

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xi. Framing. During framing operations, employees shall not work under a pole or a structure suspended by a crane, A-frame or similar equipment unless the pole or structure is adequately supported.

# Construction/Maintenance Safety

## 6.14 Hand and Power Tools

### Purpose

To ensure that all hand and power tools are in good condition, properly used and that employees are properly trained.

### Scope

This procedure applies to all JDL Warm Construction, LLC owned facilities.

### Requirements

- i. The following minimum safety standards must be met when using any hand or power tool.
- ii. Users must wear at least the following safety equipment:
  - a. Hard Hat
  - b. Safety Glasses
  - c. Proper work shoes
- iii. All hand and power tools will be kept in proper working order and maintained in a safe condition (cords are not worn or torn; handles, knobs, switches are not broken; casing is intact, no cracks or splinters).
- iv. Guarding is in place to prevent any contact with moving, rotating parts.
- v. Tool is properly insulated to prevent electrical shock.
- vi. Tools will only be used for the purpose they are intended.
- vii. Tools, such as chisels and punches, do not have mushroomed heads. If they do the tool is replaced.
- viii. Employees are aware of the hazards caused by faulty or improperly used hand tools and use the proper PPE.
- ix. Cutting edges are kept sharp so tools will move smoothly without binding or skipping.
- x. Tools are stored in a dry, secure place.



# Construction/Maintenance Safety

## 6.15 Welding / Cutting

### Purpose

To reduce the chances of employee injury and fires.

### Scope

This procedure applies to all JDL Warm Construction, LLC owned facilities.

### Requirements

- i. Valve protection caps shall be in place and secured.
- ii. If cylinders are hoisted, they shall be secured on a cradle, slingboard, or pallet. They shall not be hoisted or transported by means of magnets or choker slings.
- iii. Cylinders can be moved by tilting and rolling them on their bottom edges. Do not drop, hit, or permit the cylinders to strike each other violently.
- iv. When powered vehicles transport cylinders, they will be secured in a vertical position.
- v. Valve protection caps will not be used for lifting cylinders from one vertical position to another. Bars shall not be used under valves or valve protection caps to pry cylinders loose when frozen. Warm, not boiling, water shall be used to thaw cylinders loose.
- vi. Unless cylinders are firmly secured on a special carrier intended for this purpose, regulators shall be removed and valve protection caps put in place before cylinders are moved.
- vii. A suitable cylinder truck, chain, or other steadying device shall be used to keep cylinders from being knocked over while in use.
- viii. Close the cylinder valve when work is finished, when cylinders are empty, or when cylinders are moved at any time.
- ix. Compressed gas cylinders shall be secured in an upright position at all times except, if necessary, for short periods while cylinders are actually being hoisted or carried.
- x. Oxygen cylinders in storage shall be separated from fuel-gas cylinders or combustible materials (especially oil or grease), a minimum distance of 20 feet or by a noncombustible barrier at least 5 feet high having a fire-resistance rating of at least one-half hour.

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- xi. Inside of buildings, cylinders shall be stored in a well-protected, well-ventilated, dry location, at least 20 feet from highly combustible materials such as oil or excelsior. Cylinders should be stored in definitely assigned places away from elevators, stairs, or gangways. Assigned storage places shall be located where cylinders will not be knocked over or damaged by passing or falling objects, or subject to tampering by unauthorized persons. Cylinders shall not be kept in unventilated enclosures such as lockers and cupboards.
- xii. Cylinders shall be kept far enough away from the actual welding or cutting operation so that sparks, hot slag, or flame will not reach them. When this is impractical, fire resistant shields shall be provided.
- xiii. Cylinders shall be placed where they cannot become part of an electrical circuit. Electrodes shall not be struck against a cylinder to strike an arc.
- xiv. Fuel gas cylinders shall be placed with valve end up whenever they are in use. They shall not be placed in a location where they would be subject to open flame, hot metal, or other sources of artificial heat.
- xv. Cylinders containing oxygen or acetylene or other fuel gas shall not be taken into confined spaces.
- xvi. No damaged or defective cylinder shall be used.
- xvii. Before a regulator to a cylinder valve is connected, crack the valve this is intended to clear the valve of dust or dirt that might otherwise enter the regulator. The person cracking the valve shall stand to one side of the outlet, not in front of it. The valve of a fuel gas cylinder shall not be cracked where the gas would reach welding work, sparks, flame, or other possible sources of ignition.
- xviii. The cylinder valve shall always be opened slowly to prevent damage to the regulator. For quick closing, valves on fuel gas cylinders shall not be opened more than 1 1/2 turns. When a special wrench is required, it shall be left in position on the stem of the valve while the cylinder is in use so that the fuel gas flow can be shut off quickly in case of an emergency. In the case of manifold or coupled cylinders, at least one such wrench shall always be available for immediate use. Nothing shall be placed on top of a fuel gas cylinder, when in use which may damage the safety device or interfere with the quick closing of the valve.
- xix. Fuel gas shall not be used from cylinders through torches or other devices that are equipped with shutoff valves without reducing the pressure through a suitable regulator attached to the cylinder valve or manifold.
- xx. Before a regulator is removed from a cylinder valve, the cylinder valve shall always be closed and the gas released from the regulator.

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xxi. If, when the valve on a fuel gas cylinder is opened, there is found to be a leak around the valve stem, the valve shall be closed and the gland nut tightened. If this action does not stop the leak, the use of the cylinder shall be discontinued, and it shall be properly tagged and removed from the work area. In the event that fuel gas should leak from the cylinder valve, rather than from the valve stem, and the gas cannot be shut off, the cylinder shall be properly tagged and removed from the work area. If a regulator attached to a cylinder valve will effectively stop a leak through the valve seat, the cylinder need not be removed from the work area.

xxii. If a leak should develop at a fuse plug or other safety device, the cylinder shall be removed from the work area.

xxiii. Fuel gas and oxygen manifolds shall bear the name of the substance they contain in letters at least 1-inch high which shall be either painted on the manifold or on a sign permanently attached to it.

xxiv. Fuel gas and oxygen manifolds shall be placed in safe, well ventilated, and accessible locations. They shall not be located within enclosed spaces.

xxv. Manifold hose connections, including both ends of the supply hose that lead to the manifold, shall be such that the hose cannot be interchanged between fuel gas and oxygen manifolds and supply header connections. Adapters shall not be used to permit the interchange of hose. Hose connections shall be kept free of grease and oil.

xxvi. When not in use, manifold and header hose connections shall be capped.

xxvii. Nothing shall be placed on top of a manifold, when in use, which will damage the manifold or interfere with the quick closing of the valves.

xxviii. Fuel gas hose and oxygen hose shall be easily distinguishable from each other. The contrast may be made by different colors or by surface characteristics readily distinguishable by the sense of touch. Oxygen and fuel gas hoses shall not be interchangeable. A single hose having more than one gas passage shall not be used.

xxix. When parallel sections of oxygen and fuel gas hose are taped together, not more than 4 inches out of 12 inches shall be covered by tape.

xxx. All hose in use, carrying acetylene, oxygen, natural or manufactured fuel gas, or any gas or substance which may ignite or enter into combustion, or be in any way harmful to employees, shall be inspected at the beginning of each working shift. Defective hose shall be removed from service.

xxxi. Hose which has been subject to flashback, or which shows evidence of severe wear or damage, shall be tested to twice the normal pressure to which it is subject, but in no case less than 300 p.s.i. Defective hose, or hose in doubtful condition, shall not be used.

xxxii. Hose couplings shall be of the type that cannot be unlocked or disconnected by means of a straight pull without rotary motion.

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xxiii. Boxes used for the storage of gas hose shall be ventilated.

xxiv. Hoses, cables, and other equipment shall be kept clear of passageways, ladders and stairs.

xxv. Clogged torch tip openings shall be cleaned with suitable cleaning wires, drills, or other devices designed for such purpose.

xxvi. Torches in use shall be inspected at the beginning of each working shift for leaking shutoff valves, hose couplings, and tip connections. Defective torches shall not be used.

xxvii. Torches shall be lighted by friction lighters or other approved devices, and not by matches or from hot work.

xxviii. Regulators and gauges. Oxygen and fuel gas pressure regulators, including their related gauges, shall be in proper working order while in use.

xxix. Oil and grease hazards. Oxygen cylinders and fittings shall be kept away from oil or grease. Cylinders, cylinder caps and valves, couplings, regulators, hose, and apparatus shall be kept free from oil or greasy substances and shall not be handled with oily hands or gloves. Oxygen shall not be directed at oily surfaces, greasy clothes, or within a fuel oil or other storage tank or vessel.

# Construction/Maintenance Safety

## 6.16 Compressed Gas Cylinders

### **Purpose**

To ensure that all compressed gas cylinders are properly used, stored and moved.  
To reduce the chance of employee injury and/or facility damage.

### **Scope**

This procedure applies to all JDL Warm Construction, LLC owned facilities.

### **Purpose**

There are several hazards associated with compressed gases, including oxygen displacement, fires, explosions, toxic effects from certain gases, as well as the physical hazards associated with pressurized systems. Special storage, use, and handling precautions are necessary in order to control these hazards.

- i. Visual and other inspections shall be conducted to determine that the compressed gas cylinders are maintained in a safe condition.
- ii. Compressed gas cylinders, portable tanks, and cargo tanks shall have pressure relief devices installed and maintained.
- iii. Cylinders will be stored in an upright position in racks.
- iv. Cylinders will not be stored in exits, hallways or near flammable / combustible materials.

# Construction/Maintenance Safety

## 6.17 Control of Hazardous Energy / Lock-Out Tag-Out

### Purpose

To describe the procedure to be utilized when isolating hazardous energy sources, when routinely removing locks and tags and when it becomes necessary to remove a lock or tag other than your own.

### Scope

This procedure applies to all of JDL Warm Construction , LLC.

### Normal Procedures - JDL Warm Construction, LLC Personnel Only

All energy sources associated with the work function being performed, must be isolated, locked and tagged out. Once isolated and locked and tagged out, any stored energy must be released or otherwise rendered safe such as applying support cribbing etc. The energy source must then be verified as to its status prior to performing work.

The proper procedure for achieving effective lock-out tag-out is as follows:

- i. All individuals working on a particular piece of equipment etc. must apply his/her own lock to the switch, or if more than one person, to the appropriate lock-out hasp. Each individual will be issued (2) locks and several tags for their personal use.
- ii. Note: if additional locks or specialized locks are needed, they can be found in the complete kits that have been issued to various work areas such as maintenance shops etc. These locks should be returned to these kits when work has been completed. If these locks are used, they are to be placed and removed only by the supervisor in charge of the project.
- iii. All individuals working on a particular piece of equipment etc. must apply his/her own tag to the switch, or if more than one person, to the appropriate lock-out hasp.
- iv. No one is to remove another person's lock and/or tag for any reason.
- v. For work functions extending to the next shift, the supervisor of the off-going shift is to ensure that all personnel have removed their locks and tags. The on-coming supervisor is to verify that all personnel have placed their locks and tags as needed.
- vi. Equipment that has been isolated and locked and tagged out cannot be re-energized until the following conditions have been met:
  - a. All tools etc. have been removed from the work area.
  - b. All persons are clear of the area as verified by the supervisor in charge.
  - c. Any other operations that may be affected by the start-up have been notified.
  - d. All locks and tags have been removed by the person who placed them.

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## **Normal Procedures - JDL Warm Construction, LLC Personnel and Contractors Working Together**

All energy sources associated with the work function being performed, must be isolated, locked and tagged out. Once isolated and locked and tagged out, any stored energy must be released or otherwise rendered safe such as applying support cribbing etc. The energy source must then be verified as to its status prior to performing work.

The proper procedure for achieving effective lock-out tag-out is as follows:

- i. All personnel and contractor personnel must both follow the above standard and apply locks / hasps etc. as normal. This effort must be coordinated between the supervisor and the contractor supervisor. The supervisor has ultimate authority over the operation.
- ii. All individuals working on a particular piece of equipment etc. must apply his/her own lock to the switch, or if more than one person, to the appropriate lock-out hasp. Each individual will be issued (2) locks and several tags for their personal use.
- iii. Note: if additional locks or specialized locks are needed, they can be found in the complete kits that have been issued to various work areas such as maintenance shops etc. These locks should be returned to these kits when work has been completed. If these locks are used, they are to be placed and removed only by the supervisor in charge of the project.
- iv. All individuals working on a particular piece of equipment etc. must apply his/her own tag to the switch, or if more than one person, to the appropriate lock-out hasp.
- v. For work functions extending into the next shift of work, the supervisor of the off-going shift is to ensure that all personnel have removed their locks and tags. The oncoming supervisor is to verify that all personnel have placed their locks and tags as needed.
- vi. No one is to remove another person's lock and/or tag for any reason.
- vii. Equipment that has been isolated and locked and tagged out cannot be re-energized until the following conditions have been met:
  - a. All tools etc. have been removed from the work area.
  - b. All persons are clear of the area as verified by the supervisor in charge.
  - c. Any other operations that may be affected by the start-up have been notified.
  - d. All locks and tags have been removed by the person who placed them.

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## **Placement of Long-Term Locks**

There will be occasions when locks and/or tags will be placed and left in service for extended periods of time such as machine shutdowns etc. In this case, the following procedure should be followed:

- i. The supervisor in charge of the project shall place a lock from one of the available kits on the applicable lock-out point.
- ii. The supervisor in charge of the project shall place a tag along with the lock indicating his/her name, the date of the lock-out and the works “long term” on the tag.
- iii. If possible, in addition to the lock and tag, the power source should be physically separated from the equipment being locked out.

## **Removal of Locks, Other than Your Own**

Under normal circumstances, locks and/or tags should not be removed by any person other than the person who originally placed it. However, there are circumstances where this may be necessary. This must be reserved for only very serious situations and used as a last resort only.

Example situations would include:

- i. Employee no longer on site due to illness etc.
- ii. True Emergency situations requiring start-up of equipment.
- iii. Start-up of long term project and employee on vacation, no longer with company etc.

If a lock and/or tag or both must be removed by other than the person who applied it, the following procedure must be followed:

- i. The supervisor in charge must verify that the employee who applied the lock is no longer available.
- ii. The supervisor in charge must verify that it is safe to remove the lock.
- iii. The supervisor in charge is the only person permitted to remove another individual's lock. If the supervisor is the person who is not available, the next senior person in charge should remove the lock.
- iv. Note: It may be necessary to cut the lock off if a key is not available.
- v. Once the lock is removed, it shall be kept by the supervisor and returned to the person it was issued to.
- vi. Within 24 hours, a Report of Lock-out Removal must be completed and submitted to the Corporate Safety Manager for his review. The Corporate Safety Manager will review the circumstances surrounding the situation and report back to the supervisor in charge with comments, instructions etc. for future such situations.



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vii. The person whose lock was removed must be notified as soon as he/she returns to work and the lock re-issued if still usable.

## **Energy Control Associated with Electrical Panels**

It will be necessary for electrical panel covers to be removed while performing new installations and/or modifications. During the time that the panel cover is off, the panel must be protected from unauthorized persons to prevent accidental contact.

In order to ensure proper protection, the following guidelines must be adhered to at all times:

- i. Keep panel cover in place when not working on panel.
- ii. If panel cover needs to stay off, the panel must be secured by locking the electrical closet door and posting a sign stating, "Electrical Hazard, Authorized Persons Only" or an equivalent sign.
- iii. If the panel is not in an area that can be locked, it must be barricaded to prevent accidental contact and a warning sign posted, "Danger, Electrical Hazard" or an equivalent sign.
- iv. Only authorized persons are to have the key to locked electrical panels.

At no time should an energized electrical panel be left uncovered and unprotected.



# Construction/Maintenance Safety

## 6.18 Electrical Extension & Flexible Cords

### Purpose

To reduce the electrical shock hazard when using electrical extension cords.

To ensure that properly rated and maintained extension cords are used on all construction / renovation sites.

### Scope

This procedure applies to all JDL Warm Construction, LLC employees and facilities.

### Extension Cord Types

Extension cord sets used with portable electric tools and appliances shall be of three-wire type and shall be designed for hard or extra-hard usage. Flexible cords used with temporary and portable lights shall be designed for hard or extra-hard usage.

NOTE: The National Electrical Code, ANSI/NFPA 70, in Article 400, Table 400-4, lists various types of flexible cords, some of which are noted as being designed for hard or extra-hard usage. Examples of these types of flexible cords include hard service cord (types S, ST, SO, STO) and junior hard service cord (types SJ, SJO, SJT, SJTO).

### Usage

Extension cords may be used for:

- i. Temporary for use with power tools and equipment.
- ii. Temporary use for portable lighting, heating equipment.
- iii. Temporary use for stationary equipment during construction etc.

Flexible cords and cables –

- i. Use of flexible cords and cables -
  - a. Permitted uses. Flexible cords and cables shall be suitable for conditions of use and location. Flexible cords and cables shall be used only for:
    - a) Pendants
    - b) Wiring of fixtures
    - c) Connection of portable lamps or appliances

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- d) Elevator cables
  - e) Wiring of cranes and hoists
  - f) Connection of stationary equipment to facilitate their frequent interchange;
  - g) Prevention of the transmission of noise or vibration
  - h) Appliances where the fastening means and mechanical connections are designed to permit removal for maintenance and repair.
- b. Prohibited uses. Flexible cords and cables shall not be used:
- a) As a substitute for the fixed wiring of a structure
  - b) Where run through holes in walls, ceilings, or floors
  - c) Where run through doorways, windows, or similar openings, except as permitted in paragraph (a)(2)(ii)(1) of this section
  - d) Where attached to building surfaces
  - e) Where concealed behind building walls, ceilings, or floors

## Repairs

Splices. Flexible and extension cords shall be used only in continuous lengths without splice or tap. Hard service flexible cords No. 12 or larger may be repaired if spliced so that the splice retains the insulation, outer sheath properties, and usage characteristics of the cord being spliced.

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## 6.19 Ground Fault Circuit Interrupters (GFCI)

### Purpose

To reduce the chance of accidental shock hazards to employees on construction and/or renovation sites.

### Scope

This procedure applies to all JDL Warm Construction, LLC employees and facilities.

### Usage

All 120 V electrical circuits utilized by employees when powering hand tools etc. must be protected by a GFCI. This can be accomplished by one of two methods:

- i. Ensuring that existing outlets are protected by a GFCI at the panel or the outlet itself.
- ii. Utilization of a portable GFCI placed at the source.

### Inspection

- i. All GCCI outlets and/or portable GFCI units must be tested on at least a monthly basis. This test is to be performed by activating the trip button on the GFCI. All units found to be defective must be immediately repaired or replaced and/or tagged out of service.
- ii. Construction sites and/or maintenance shops where GFCI equipment is routinely used will be provided with an inspection sheet for purposes of recording the routine inspections.

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## 6.20 Scaffolds

### Purpose

To ensure that the proper type scaffold is used for a particular function.  
To ensure that the scaffold is properly erected, used and dismantled.  
To provide protection for persons in the near vicinity of a scaffold.

### Scope

This procedure applies to all JDL Warm Construction, LLC owned facilities.

### Employee Training

For employees who perform work while on scaffold:

- i. A qualified person who is experienced and can recognize the hazards associated and how to control or minimize those hazards will conduct training in the following areas:
  - a. The nature of electrical hazards, fall hazards and falling object hazards in the work area.
  - b. Correct procedures for dealing with these hazards and for the erection, maintaining and disassembling of fall protection equipment.
  - c. Proper use of the scaffold and proper handling of equipment/material while on the scaffold.
  - d. Maximum load limits and capabilities of the scaffold.
- ii. Re-training will take place if at any time one of the following occur:
  - a. Changes in workplace create a new/different hazard.
  - b. Different type of scaffold, fall protection or other equipment is used.
  - c. Inadequacies in job performance of employee(s) indicate re-training is needed.

### Procedures and Safety

The following minimum safety standards must be met when using any crane or hoisting equipment.

- i. Users must wear at least the following safety equipment:
  - a. Hard Hat
  - b. Safety Glasses
  - c. Proper work shoes
  - d. Fall Protection if working 6' or higher

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- ii. The scaffold will be erected by a representative of the vendor that the scaffold is being rented from. The erection of scaffold will be performed by a qualified person that the vendor has ensured is properly trained.
- iii. All procedures pertaining to Fall Protection, Lock-Out/Tag-Out, etc. will be in effect during scaffold work.
- iv. Access to area around scaffold will be limited to only those employees working on the scaffold.
- v. A barricade will be established along with signage warning others in the area.
- vi. An inspection, by a competent person, of the scaffold will be done before each work shift and after any occurrence what could affect the structural integrity of the scaffold.
- vii. If defects are found remove employees from the scaffold, notify vendor and arrange for repairs.
- viii. Do not move scaffold while employees are on them, unless they are designed to do so.
- ix. Scaffold will be kept clear of snow, ice, or other slippery material. Employees can have access to the scaffold to remove the hazards, but until this is complete no other work can be performed.
- x. Material/equipment can be hoisted on to the scaffold by use of a tag line to ensure contact from a swinging load with the scaffold is minimal.
- xi. Employees working on scaffold at a height of 6 feet or greater will wear fall protection.

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## 6.21 Aerial Lifts

### Purpose

To describe the procedure and safety precautions to be used when working from an aerial lift of any kind. Aerial lifts are defined as:

- i. Extensible boom platforms
- ii. Aerial ladders
- iii. Articulating boom platforms
- iv. Vertical towers
- v. A combination of any such devices. Aerial equipment may be made of metal, wood, fiberglass reinforced plastic (FRP), or other material; may be powered or manually operated; and are deemed to be aerial lifts whether or not they are capable of rotating about a substantially vertical axis.

### Scope

This procedure applies to all JDL Warm Construction, LLC employees.

### Employee Training

Employees who are expected and/or assigned to operate an aerial lift shall be properly trained prior to that assignment. Training must consist of at least the following:

- i. Classroom training with applicable quiz;
- ii. Hands-on practical training

A second employee may be in the lift that has not had the above specific training as long as the operator has completed the training.

### Procedures and Safety

The following minimum safety standards must be met when using any aerial lift.

- i. Users must wear at least the following safety equipment:
  - a. Full body harness and lanyard. Lanyard must be connected to a supplied eye-hook or other anchor point on the floor of the basket if supplied or to the lowest point possible on a basket railing.
  - b. Hard Hat
  - c. Safety Glasses
  - d. Proper work shoes



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- ii. Lift controls shall be tested each day prior to use to determine that such controls are in safe working condition.
- iii. Only authorized persons shall operate an aerial lift.
- iv. Belting off to an adjacent pole, structure, or equipment while working from an aerial lift shall not be permitted.
- v. Employees shall always stand firmly on the floor of the basket, and shall not sit or climb on the edge of the basket or use planks, ladders, or other devices for a work position.
- vi. Boom and basket load limits specified by the manufacturer shall not be exceeded.
- vii. The brakes shall be set and when outriggers are used, they shall be positioned on pads or a solid surface. Wheel chocks shall be installed before using an aerial lift on an incline provided they can be safely installed.
- viii. An aerial lift truck shall not be moved when the boom is elevated in a working position with men in the basket, except for equipment which is specifically designed for this type of operation in accordance with the provisions of paragraphs (a)(1) and (2) of this section.
- ix. Articulating boom and extensible boom platforms, primarily designed as personnel carriers, shall have both platform (upper) and lower controls. Upper controls shall be in or beside the platform within easy reach of the operator. Lower controls shall provide for overriding the upper controls. Controls shall be plainly marked as to their function. Lower level controls shall not be operated unless permission has been obtained from the employee in the lift, except in case of emergency.
- x. The insulated portion of an aerial lift shall not be altered in any manner that might reduce its insulating value.
- xi. Before moving an aerial lift for travel, the boom(s) shall be inspected to see that it is properly cradled and outriggers are in stowed position except as provided in paragraph (b)(2)(viii) of this section.
- xii. The area below and around the aerial lift operating range must be barricaded to keep unauthorized persons from walking in an area where they can be struck by objects falling from the aerial lift etc.
- xiii. Extension cords, welding hoses etc. must be positioned so that they cannot become caught in moving and/or pinch points of the aerial lift while operating.
- xiv. Rental aerial lifts must be inspected prior to use. Any defective aerial lift must be returned immediately and/or have the rental agency make on-site repairs.

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## Aerial Platform Inspections

The following can be used as a general guideline when inspecting aerial lifts such as scissors lifts, boom trucks etc.

### Controls:

Are all controls operable at the time of inspection? Yes \_\_\_ No \_\_\_

May need to check both platform and ground based controls depending on model type.

Are all controls identified as to function? Yes \_\_\_ No \_\_\_

### Electrical:

Are all electrical connections intact, free of Evidence indicating arcing etc.? Yes \_\_\_ No \_\_\_

Are all electrical cords free of damage? Yes \_\_\_ No \_\_\_

Are all electrical cords secured and clear of pinch points. Yes \_\_\_ No \_\_\_

Note: When using extension cords etc, ensure they are kept clear of pinch points.

Are batteries free of corrosion and in good condition? Yes \_\_\_ No \_\_\_

### Hydraulic:

Are all hydraulic hoses free of leaks / damage? Yes \_\_\_ No \_\_\_

Hydraulic reservoir full? Yes \_\_\_ No \_\_\_

### Mechanical:

Are tires free of damage? Yes \_\_\_ No \_\_\_

Are all structural components free of damage? Yes \_\_\_ No \_\_\_

### Fall Protection:

Are all guardrails in place, free of damage? Yes \_\_\_ No \_\_\_

Are full body harnesses and lanyards available for use? Yes \_\_\_ No \_\_\_

Is entry point chain in place if so equipped? Yes \_\_\_ No \_\_\_

# Construction/Maintenance Safety

## 6.22 Fall Protection

### Purpose

To identify procedures and safety precautions of fall protection systems.

### Scope

This procedure applies to all JDL Warm Construction, LLC owned facilities.

### Employee Training

- i. The employer shall provide a training program for all employees who are exposed to fall hazards. Training will be conducted by a competent person to ensure the following criterion has been satisfied.
- ii. The nature of fall hazards.
- iii. Correct procedures for erecting, maintaining, disassembling and inspection the fall protection systems.
- iv. Use and operation of guardrail systems, personal fall arrest systems, safety net systems, safety monitoring systems, controlled access zones and other protection used.
- v. Roles of all employees in the controlled area where fall protection systems are in use and in fall protection plans.
- vi. Correct procedures for use, maintenance and storage of equipment along with the limitations of the equipment.
- vii. The role of employees in fall protection plans.
- viii. The standards governing this type of activity: 29 CFR 1926.503 Subpart M.
- ix. Retraining will be conducted if/when:
  - a. Changes are made in the work place that made previous training obsolete
  - b. Changes are made in the type of equipment used
  - c. Inadequacies in the proper use of equipment, indicating retraining is necessary

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## Procedures and Safety

The following minimum safety standards must be met when performing overhead work at a height of 6 feet or more.

Users *must* wear at least the following safety equipment:

- i. Full body harness and lanyard. Lanyard must be connected to a stationary point, which allows access to work area without causing a tripping hazard.
- ii. Hard Hat
- iii. Safety Glasses
- iv. Proper work shoes
- v. Employees working on surfaces that are unprotected on at least one side that is 6 feet or more above lower levels or working near or around holes will need to be protected from falling by use of a: guardrail system, safety net system or personal fall arrest system.
- vi. Fall protection equipment is the property of JDL Warm Construction, LLC, however it will be assigned to employees who have the responsibility to maintain it in proper working condition.
- vii. Inspections of all fall protection equipment will be conducted prior to use for strength, damage, wear, tears, missing or defective parts. Any equipment found to be defective would be taken out of service and removed from site.
- viii. Installation of fall protection equipment:
  - a. Safety Nets: used to protect employees from falling and from objects falling down onto them.
    - a) Will be installed as close to the working surface as possible, allowing for the shortest distance of fall space but at no time will the drop be more than 30 feet.
    - b) Shall be installed in such a way that when an object or employee falls into it that it does not come in contact with lower surfaces or structures.
  - b. Personal Fall Arrest Systems:
    - a) Shall be installed and used under the supervision of a qualified person.
    - b) Lifelines and lanyards will need to be protected from being cut or abraded.
    - c) Anchorages shall be capable of supporting 5,000 pounds per employee attached and be independent of other anchorage supporting platforms.
    - d) When stopping a fall will limit the force on employee to 1,800 pounds.
    - e) Will be rigged to limit the fall to an employee to 6 feet or from coming in contact with a lower surface.
- ix. Controlled Access Zones:
  - a. Will be erected not less than 6 feet or more than 25 feet from leading edge, and will extend along the entire length of the work site with a height of not less than 39 inches and not higher than 45 inches.

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- b. Warning signs will be posted and only employees performing work in the zone will be granted access.
- x. Protection from falling objects:
  - a. Toeboards will be installed along the edges of overhead surfaces and be at least 3.5 inches high. If tools/equipment are piled higher than 3.5 inches panels will be needed to ensure falling objects do not cause a safety hazards to employees working below.
- xi. Fall Protection Plan:
  - a. Is developed by a qualified person, maintained up-to-date and developed specifically for the site.
  - b. Will be maintained at the site.
  - c. The plan will outline the work being done, reasons why or why not fall protection equipment will/will not be used.
  - d. Will be made available to employees working in the area.

# Construction/Maintenance Safety

## 6.23 Cranes / Hoisting Equipment

### Purpose

To ensure that all cranes and/or hoisting equipment is properly used.  
To ensure that all cranes and/or hoisting equipment is rated for the intended use.

### Scope

This procedure applies to all JDL Warm Construction, LLC owned facilities.

### Employee Training

Employees who are expected and/or assigned to operate a crane, material or personnel hoists shall be properly trained and certified prior to that assignment.

Training must consist of at least the following:

- i. Classroom training with applicable quiz
- ii. Hands-on practical training

### Procedures and Safety

The following minimum safety standards must be met when using any crane or hoisting equipment.

- i. Users must wear at least the following safety equipment:
  - a. Hard Hat
  - b. Safety Glasses
  - c. Proper work shoes
- ii. A competent person will inspect the equipment to ensure a safe working condition.
- iii. Only authorized persons shall operate the equipment.
- iv. Boom and basket load limits specified by the manufacturer shall not be exceeded.
- v. The brakes shall be set and when outriggers are used, they shall be positioned on pads or a solid surface. Wheel chocks shall be installed before using an aerial lift on an incline provided they can be safely installed.
- vi. Equipment shall not be moved when the boom is elevated in a working position, except for equipment which is specifically designed for this type of operation.

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- vii. Before moving a crane for travel, the boom(s) shall be inspected to see that it is properly cradled and outriggers are in stowed.
- viii. The area below and around the crane operating range must be barricaded to keep unauthorized persons from walking in an area where they can be struck or trapped.
- ix. Employees should not walk under a load. During a lift operator should avoid areas where employees are working. When this is unavoidable, instruct workers in the area affected and notify them with each lift.
- x. Hand signals to the operator should be in accordance with ANSI standards.
- xi. Slings, rope, shackles, rings, links and other rigging hardware will be inspected prior to use. If defects are found, hardware will be tagged, cut or otherwise rendered useless and removed from site.

# Construction/Maintenance Safety

## 6.24 Excavations

### Purpose

To address safety regulations, required protective systems on all open excavation, including trenches.

### Scope

This procedure applies to all JDL Warm Construction, LLC owned facilities.

### Employee Training

Employees who are expected and/or assigned to enter and work in or near an excavation site shall be properly trained to the hazards of that type of work prior to the assignment.

Training must consist of at least the following:

- i. Classroom training with applicable quiz; Covering Confined Space, Fall Protection, toxic atmosphere, engulfment, shoring, and soil classification.
- ii. Mock hands-on practical training.

### Procedures and Safety

The following minimum safety standards must be met when using any crane or hoisting equipment.

- i. Users must wear at least the following safety equipment:
  - a. Hard Hat
  - b. Safety Glasses
  - c. Proper work shoes
- ii. Potential hazards in the area shall be removed or secured in such a way to remove hazard to safeguard employees
  - a. Utility lines shall be identified prior to start of work. During work activities, utilities shall be protected, supported or removed as necessary to safeguard employees;
- iii. Structural ramps for the use of employees as a means of access and egress. Structural ramps for the access and egress of equipment must meet structural design criteria. Cleats or other appropriate means are used to connect structural members and to secure bottom of the ramps.
  - a. Ramps, ladders, stairway or other safe means of access/egress in excavation of 4' or more in depth, will be located in such a way to require no more than 25' of lateral travel for employees.
- iv. Employees shall wear reflective vests when working in areas where vehicular traffic may be encountered.



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- v. During lifting or digging operations, employees are not permitted under the load. Employees are required to stand back till operations are complete and area is secured.
- vi. Testing and controls for identification of hazardous atmospheres shall be conducted during work activities to ensure acceptable work conditions. Hazards in the excavated work site should be monitored for the following:
  - a. Oxygen deficiency (<19.5%) – may require respiratory protection or ventilation;
  - b. Flammable gas in excess of 20% - area must ventilated;
  - c. Site must be continually monitored for hazards. If conditions change employees must evacuate the area till conditions can be evaluated.
  - d. Emergency rescue equipment (breathing apparatus, safety harness and line or a basket stretcher) should be readily accessible.
- vii. Other Hazardous Conditions:
  - a. If water has accumulated in the excavations, employees will not enter or must leave the excavated area, unless proper precautions have been taken (i.e. water pump);
  - b. Unstable structures in the area must be identified and properly shored or braced. Avoid working below the base or footing of any foundations or retaining wall unless proper underpinning is provided, excavation is in stable rock, a PE has approved the excavated area;
  - c. Excavations under sidewalks, pavements and appurtenant structure will not be performed unless proper support systems are in place.
  - d. Employee protection from overhead falling objects such as loose rock, soil will be provided. Scaling of surface area and installation of protective barricades on the face of excavation to stop and contain falling material.
  - e. Equipment and material will not be staged within 2' of opening to excavation.
- viii. Inspections:
  - a. Daily inspections are to be performed on the excavated area, the adjacent area and the protective equipment (including safety equipment, emergency equipment, barricades, shoring, monitoring equipment)
  - b. If discrepancies are found, the effective material/equipment will be removed from the area and replaced with properly working material/equipment before employees are permitted to start work.
- ix. Fall Protection:
  - a. Walkways where permitted or required to cross over excavations for employees or equipment will be erected. Guardrails will be required where walkways are 6' or more above lower levels.
  - b. Safety nets and/or barricades should be installed to prevent injury from falling objects.
- x. Protective Systems

# Construction/Maintenance Safety

## 6.25 Concrete and Masonry

### Purpose

To identify hazards associated with concrete and masonry work and establish guidelines to protect workers.

### Scope

This procedure applies to all JDL Warm Construction, LLC owned facilities.

### Procedures and Safety

The following minimum safety standards must be met when using any crane or hoisting equipment.

- i. Users must wear at least the following safety equipment:
  - a. Respiratory Protection
  - b. Hard Hat
  - c. Safety Glasses
  - d. Proper work shoes
- ii. Strength of structure should be determined before any load is staged on the structure.
- iii. Reinforced steel protruding in such a way that employees could be impaled will be capped.
- iv. All non-essential employees will be removed from the area behind the jack during post-tensioning operations.
- v. At no time will employees ride the concrete bucket.
- vi. At no time will employees be allowed under the concrete bucket during operations. Bucket should be routed over areas where as few employees are working as possible.
- vii. All employees will wear proper PPE, which includes proper head and face protection, gloves and steel toe shoes.
- viii. No work, maintenance or repair will be performed on equipment unless all potentially hazardous energy sources have been locked out and tagged.

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- ix. Limited access zones will be:
  - a. Established whenever masonry work is conducted;
  - b. Established prior to start of work;
  - c. Equal to the height plus 4 feet and run the entire length of the work area;
  - d. Established on the un-scaffold side of the wall;
  - e. Restricted to entry only to employees actively working on job;
  - f. Remain limited access till adequate supports are in place.

# Construction/Maintenance Safety

## 6.26 Demolition, Tear Out

### Purpose

To ensure that all demolition activities are done safely and address the following:

- i. Lock-out Tag-Out
- ii. Lead
- iii. Asbestos
- iv. Dust Control
- v. Physical stability of structure

### Scope

This procedure applies to all JDL Warm Construction, LLC owned facilities.

### Procedures and Safety

The following minimum safety standards must be met when performing any demolition work:

- i. Users must wear at least the following safety equipment:
  - a. Hard Hat
  - b. Safety Glasses
  - c. Proper Work Shoes
- ii. Prior to demolition a competent person will perform an engineering survey to determine the condition of the structure. Also, adjacent structures where employees are will be checked to ensure that the work activities will not affect other areas. No employee shall be allowed in areas that could be adversely affected by demolition operations.
- iii. Utilities in the demolition area, including water, electric, gas and steam will be controlled by means of Lock Out/Tag Out procedures in accordance with 8.17 of this manual.
- iv. If it necessary to maintain any utility, those lines should relocated as necessary and protected against contact with employees and equipment.
- v. Protection from openings in walls and floors:
  - a. Openings in walls where there is a danger in employees falling through should be protected to a height of 42 inches.
  - b. Openings in floors not used for material drops will be secured and covered with material substantial enough to support the weight of any load imposed.
  - c. Openings in floors used to material drops will be completely enclosed with barricades at a height of 42 inches and back 6 feet from opening on both levels.Signs should be posted warning of activities being conducted.

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- d. Openings in floors shall have curbs around edge to prevent equipment from running over the edge.
- vi. Removal of walls:
  - a. Masonry walls should not be allowed to fall onto floors that could exceed the safe load limits of the floor.
  - b. Walls that are more than one story will not be allowed to stand along without lateral bracing unless wall was designed to do so.
  - c. Load supporting members will not be cut or removed until all floors above area have been removed.
  - d. Skeleton-steel framing may be left in place during masonry removal. Structural members should be cleaned of all loose masonry material.
- vii. Removal of floors:
  - a. Load supporting members will not be cut or removed until all floors above area have been removed.
  - b. Openings in floor will extend the full span of the arch between supports.
- viii. Good housekeeping practices should be maintained throughout the work activities to ensure a safe working environment.

# Construction/Maintenance Safety

## 6.27 Stairways

### Purpose

To identify the circumstances when stairways are required.

### Scope

This procedure applies to all JDL Warm Construction, LLC owned facilities.

### Procedure

- i. A stairway is provided anywhere there is a break in elevation of 19 inches or more, with no other means of access is provided (i.e. ramp, runway or personnel hoist).
- ii. The area around the stairway and on the stairway itself will be kept free of debris and any projections such as protruding nails.
- iii. Non-permanent stairways will have a landing of not less than 30 inches in length and extend at least 22 inches in width at every 12 feet or less of vertical rise.
- iv. Stairs shall be installed between a 30 deg. or 50 deg. from horizontal.
- v. Riser height and tread depth shall be uniform within each flight.
- vi. If doors or gates open on stairs a platform shall be provided. Doors shall not obstruct the width of the platform to less than 20 inches.
- vii. Treads shall be of a non-skid surface.
- viii. Stairways with four or more risers will have at least one handrail installed along an unprotected side. If both sides are unprotected handrails shall be installed on both sides. Handrails shall be able to withstand a weight of 200 pounds or more. Handrails shall not be less than 36 inches in height.
- ix. Midrails shall be installed at the mid-point between the top handrail and the riser.
- x. Screen or mesh will be installed to prevent an overhead hazard to workers working under the stairway. The screen or mesh will be installed from the top of the handrail to the riser. If stairs are open between treads than the screen or mesh shall be installed under the stair.

# Construction/Maintenance Safety

## Training

- i. A competent person shall perform training in the following areas:
  - a. Fall hazards
  - b. Procedures for erecting, maintaining and disassembling fall protection systems
  - c. How to recognize hazards and ways to minimize the risks
- ii. Re-training will be conducted as required.

# Construction/Maintenance Safety

## 6.28 Ladders

### Purpose

To ensure that all employees are using the proper type ladder in the proper manner.

### Scope

This procedure applies to all JDL Warm Construction, LLC owned facilities.

### Procedure

- i. Portable ladders will be capable of supporting at least four times the intended load.
- ii. Fixed ladders will be able to support on each rung 250 pounds.
- iii. Ladder rungs, cleats and steps will be parallels, level and uniformly spaced. Rungs will be not less than 10 inches and no more than 14 inches apart.
- iv. Rungs and steps will have a non-skid surface to prevent slips.
- v. Ladders will not be tied or otherwise fixed together to provide a longer ladder, unless they are designed to do so.
- vi. Fall protection shall be provided for climbs of 24 feet or greater: ladders, safety devices, Self-retracting lifelines, platforms (every 150 ft.) and cages.
- vii. Ladders will be free of projections and debris that could cause hazards. The area around the ladder will be kept clear; projections such as nails will be eliminated.
- viii. Ladders shall be placed in such a way that the top of the ladders extends 3 feet above the top of the wall. The ratio for distance from wall and height is 1 to 4. That is for every 4 feet in height the foot of the ladder will be 1 foot away from the wall.
- ix. Ladders shall not be moved or adjusted while an employee is on the ladder.
- x. Employee will use both hands on the side rails while climbing.
- xi. Ladders will be tied off at the top to prevent slipping.
- xii. When ladders are in a passageway, a barricade will be installed in the area surrounding the ladder, to prevent accidental contact.



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xiii. Ladders should be inspected before each use for defects. If defects are found the ladder will be tagged and removed from the site.

## **Training**

- i. A competent person shall perform training in the following areas:
  - a. Fall hazards
  - b. Procedures for erecting, maintaining and disassembling fall protection systems
  - c. How to recognize hazards and ways to minimize the risks
  - d. Correct procedure for the proper placement of ladders.
  - e. Maximum load carrying capacities of ladders.
- ii. Re-training will be conducted as required.

# Construction/Maintenance Safety

## 6.29 Confined Spaces

### Purpose

To ensure that all confined spaces are properly identified as outlined in 29 CFR 1910.146 (Permit Required Confined Spaces).

To ensure that all confined spaces are properly evaluated and the Confined Space Evaluation sheet has been completed.

To ensure that all persons interacting with confined spaces have been properly trained and equipped.

To ensure that an up to date database on all confined spaces is maintained.

To ensure that all contractors interacting with JDL Warm Construction, LLC confined spaces have been appropriately appraised of the actual and/or potential hazards and that they have been provided a copy of our evaluation sheet.

### Scope

This procedure applies to all JDL Warm Construction, LLC facilities.

### Identification

All confined spaces shall be appropriately identified with a permanent sign identifying it as a confined space. If applicable, the sign will identify the appropriate person and/or office to notify prior to any entry taking place.

### Evaluation

- i. All confined spaces are to be evaluated by a competent person, under the direction of the Corporate Safety Manager, and the Confined Space Evaluation sheet completed. All information on the Confined Space Evaluation sheet must be completed, including the phone number of the appropriate emergency contacts.
- ii. Photos shall be taken of the confined space and included in the Confined Space Evaluation Sheet.
- iii. Once complete, a copy of this evaluation sheet is to be forwarded to the Corporate Safety Manager for approval and input into the master confined space database.

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- iv. All confined spaces must be designated as one of the following:
  - a. Permit Required Confined Space
  - b. Non Permit Required Confined Space

## **Employee Training**

- i. No employee and/or contractor / vendor shall interact with a confined space for the purposes of making an entry without first attending and completing a “Confined Space Entry” training program. This program must meet, at a minimum, the criteria outlined in 29 CFR 1910.146 “Permit Required Confined Space”.
- ii. Annual refresher training will be required for all persons interacting with confined spaces for the purpose of making an entry. (Entry is defined as any part of your body entering and/or passing through the plane of the entry port on the confined space).
- iii. All necessary equipment needed for entry as outlined on the confined space evaluation sheet shall be made available to persons interacting with confined spaces for the purposes of making entry.

## **Database Entry**

- i. All confined spaces shall be added to the master confined space database to ensure proper accountability and record keeping. This database is to be maintained by the Corporate Safety Manager.

## **Contractor Coordination**

- i. All contractor companies that will be working on a JDL Warm Construction, LLC confined space must adhere to the requirements of 29 CFR 1910.146, (Permit Required Confined Space).
- ii. All contract documentation provided to contractors must contain this provision as well as a copy of the appropriate confined space evaluation sheet.

# Construction/Maintenance Safety

## 6.30 Atmospheric Monitors

### Purpose

The purpose of this procedure is to make sure that all JDL Warm Construction, LLC employees have the knowledge and skill to use atmospheric monitoring equipment for Confined Spaces and/or other uses.

Atmospheric monitors will be used to evaluate the quality of the atmosphere in a confined space prior to entry. The readings that you obtain shall be recorded on the Confined Space Permit form. There may be times when these monitors are used to evaluate areas other than confined spaces on a limited basis.

### Scope

This procedure applies to all JDL Warm Construction, LLC employees.

### Employee Training

Employees who are expected and/or assigned to operate an atmospheric monitor must have previous training on the care, maintenance and operation of the meter. Employees must also know and understand the reading units, ie: PPM, % etc.

Training must include at least the following:

- i. How to properly care, maintain, store and use the atmospheric monitor.
- ii. Review of the manufacturer's manual and/or training program if provided.
- iii. How to field calibrate the monitor.
- iv. An understanding of the warning codes etc. for the monitor in question.
- v. Monitoring requirements for the task at hand, ie: confined spaces.
  - a. An understanding of the materials to be monitored for such as but not limited to:
    - a) Oxygen
    - b) Carbon Monoxide
    - c) Flammable / combustible liquids
    - d) Hydrogen Sulfide
- vi. An understanding of monitoring methods, horizontal, vertical etc.

### Normal atmospheric limits

O.S.H.A. and NIOSH have set down limits on atmospheric readings that are acceptable for employee occupation of areas in question. These limits are the basis for this procedure.

# Construction/Maintenance Safety

## **Oxygen**

19.5% to 23.5%

Below 19.5% causes Oxygen insufficiency.

Above 23.5% causes Oxygen enrichment and possible

## **L.E.L or L.F.L**

Lower Explosive Limit or Lower Flammable Limit (These terms are interchangeable) - (Less than) < 10% L.E.L. or L.F.L.

NOTE: JDL Warm Construction, LLC policy requires a reading of 0% L.E.L. or L.F.L. for the area to be considered safe. Any reading greater than 0% indicates that there is a source of flammable material which could potentially cause an explosion hazard.

## **CO (Carbon Monoxide)**

The limit for CO is 35 PPM (Parts Per Million) Any reading over this limit is considered unsafe.

## **H2S (Hydrogen Sulfide)**

The limit for H2S is 10 PPM (Parts Per Million). Any reading over this limit is considered unsafe.

## **Calibration**

### **Field Calibration**

Each atmospheric monitor must be field calibrated according to manufacturer specifications at the time of use. Should this calibration be outside of set limits, the monitor must be taken out of service immediately and reviewed by a qualified person. Prior to re-use, the monitor must then pass a complete, comprehensive calibration according to manufacturer specifications.

### **Comprehensive Calibration**

At least annually, each atmospheric monitor must receive a comprehensive calibration according to manufacturer specifications. This calibration must be performed by a qualified individual agency and/or individual and documented.

The JDL Warm Construction, LLC Corporate Safety Manager must be notified of this calibration and provided with a copy of the calibration report.

### **Sensor Life and Replacement**

All atmospheric monitor sensors have a definitive use life as specified by the manufacturer. Sensors must be replaced when expired and the unit calibrated after sensor replacement. Sensors may also become defective for a variety of reasons prior to the expiration date. The monitor upon turning it on will indicate this. Any unit with a defective sensor must be taken out of service, even if the other sensors in the unit may be working properly.

If you need advice or assistance on obtaining replacement sensors, contact the Corporate Safety Manager. Upon replacing the sensor(s), a calibration report must be forwarded to the Corporate Safety Manager.

# Construction/Maintenance Safety

## **Field Use**

All atmospheric monitors must be used according to the manufacturer's usage manual that was supplied with the monitor. This manual should be included in the employee training sessions.

Key requirements for all atmospheric monitors are:

- i. You must be in a clean-air environment prior to removing this monitor from its protective case
- ii. Turn on and field calibrate the unit in a clean environment.
- iii. Maintain in clean condition.
- iv. DO NOT immerse unit, sensors and/or pickup tube or hose in any liquid. Doing so will destroy the sensors and other electronic equipment.

## **Contractor Use**

Should a contractor be working on a site project requiring atmospheric monitoring, they must supply and perform their own monitoring. JDL Warm Construction, LLC may take verification monitoring readings, but we will not allow the contractor to rely on our readings only.

JDL Warm Construction, LLC will not assume the liability employees with performing atmospheric monitoring for contractors on site.

# Construction/Maintenance Safety

## 6.31 Safety Inspections / Hazard Analysis

### Purpose

To ensure that all facilities and/or construction activities receive “Frequent and Regular” site safety inspections as outlined in 29 CFR 1926.20 (Accident Prevention).

To ensure that all possible hazards are identified and corrected in a timely manner to reduce the chance of employee injury and/or illness.

### Scope

This procedure applies to all JDL Warm Construction, LLC facilities.

### Frequency

The frequency of all safety inspections will be determined by the Corporate Safety Manager and will be dependent on the following type factors:

- i. Size and complexity of the facility.
- ii. Type of work / construction taking place at the facility.
- iii. History of past violations.
- iv. Number and type of incidents occurring at a facility.

### Documentation

- i. All safety inspections shall be documented and forwarded to the Corporate Safety Manager for review and issuance of safety related work orders.
- ii. All issued work orders shall be completed by the assigned person and returned to the Corporate Safety Manager for input into the master database.

# Construction/Maintenance Safety

## 6.32 New Equipment Evaluation

### Purpose

To ensure that all proposed new equipment purchases have been reviewed for the following:

- i. Applicability to the work function
- ii. Effectiveness
- iii. Worker acceptance
- iv. Training requirements
- v. Maintenance requirements
- vi. Cost

### Scope

This procedure applies to all JDL Warm Construction, LLC facilities.

### Procedure

- i. The Corporate Safety Manager will be responsible for the review and purchase of all safety equipment. Any new equipment must be reviewed by the Corporate Safety Manager prior to the initial order.
- ii. In addition, the Corporate Safety Manager shall be responsible to prepare Standard Operating Procedures for the equipment as well as a training program for employees expected to use the new equipment.



# Construction/Maintenance Safety

## 6.33 Non-Routine Tasks

### Purpose

To ensure proper measures are taken to provide an acceptable level of safety to all personnel performing “Non-Routine” tasks.

### Scope

This procedure applies to all JDL Warm Construction, LLC facilities.

### Example Non-Routine Tasks

Example tasks that would be considered non-routine would include but not be limited to:

- i. Cleaning of interior confined space areas such as tanks etc.
- ii. Maintenance on specialized equipment.
- iii. Any task not performed on a regular basis.
- iv. Any task that employees have safety concerns regarding the nature of the work.

### Procedure

- i. When a non-routine task is assigned, all personnel involved must meet to discuss the nature of the work and to perform an assessment of the safety needs. Should the work group and/or the immediate supervision have any questions or concerns that cannot be mitigated, the Corporate Safety Manager must be consulted prior to start of the project.
- ii. Any procedures etc. that arise and fall outside the scope of this manual must be documented and provided to the Corporate Safety Manager for approval.
- iii. Prior to the start of work, all employees involved must be apprised of the procedures through job box meetings and/or special training, either of which must be appropriate in nature to ensure a full understanding of the procedures.
- iv. Any such meetings shall be documented.

# Construction/Maintenance Safety

## 6.34 Job Box Meetings

### Purpose

To ensure open communication lines.  
Encourage employee participation.  
To cover topics of concern.

### Scope

This procedure applies to all JDL Warm Construction, LLC facilities.

### Requirements

- i. Job Box Meetings will be held weekly on the job site and should cover topics that are currently being or going to be faced in the field.
- ii. A sign-in sheet with the following information will document attendance: date, subject matter, presenter and names of persons attending.
- iii. Attendance is mandatory for all employees.

# Construction/Maintenance Safety

## 6.35 General Vehicle / Driving Safety

### Purpose

To ensure the safe operation of company vehicles at all times.

### Scope

This procedure applies to all JDL Warm Construction, LLC facilities.

### Requirements

The following safety equipment will be checked and maintained in good working condition:

- i. Occupant Restraints / Seatbelts will be of the unibelt (shoulder & lap) type. Everyone in a motor vehicle must be buckled up all the time.
- ii. Headlights, taillights, brake lights, turn signals and emergency flashers must be kept in working condition. Replace burnt out bulbs immediately.
- iii. Windshield wipers will be used when visibility is limited by inclement weather (rain, snow, fog, ice, etc.) or nightfall. Replace worn blades as soon as possible.
- iv. Check tire pressure weekly to ensure proper wear of tire and handling capabilities.
- v. Obey all traffic laws, speed limits, traffic signs, etc. Keep distractions under control; keep your mind on the task at hand.
- vi. Turn off engine and engage parking brake when stopped to load and unload.
- vii. At no time operate a vehicle while under the influence of alcohol and / or drugs
- viii. Drive defensively and courteously: respect the speed limit, follow all traffic signs and indicators, respect crosswalks, keep to the left allowing other to pass, use turn signals, don't tailgate, keep your cool – be polite.

# Construction/Maintenance Safety

## 6.36 Spill Control

### Purpose

To ensure the readiness of spill control equipment.  
To limit exposure to employees.  
To reduce the spread of chemical spills and the damage to facilities.

### Scope

This procedure applies to all JDL Warm Construction, LLC facilities.

### Procedure

Spill control equipment will be designed to handle small spills only, ones that do not place employees using the equipment in any danger.  
Highly hazardous chemical spills should NOT be handled by JDL Warm Construction, LLC employees and should result in the notification of emergency responders.

Spill control equipment to be used by employees will be designed to handle the following type chemicals. (Note: this list is not all inclusive)

- i. Cleaning agents
- ii. Water treatment chemicals
- iii. Oils
- iv. Paints
- v. Diesel Fuel
- vi. Gasoline (very small spills in well ventilated areas)

All spill control equipment will be strategically located to ensure quick and easy access during spill conditions. Locations needing spill control equipment include but are not limited to:

- i. HVAC / Mechanical rooms
- ii. Fuel storage locations
- iii. Loading Docks
- iv. Water treatment rooms

All chemical spills must be immediately reported to the building manager. For larger spills or spills of highly hazardous chemicals, the local emergency response agency must be contacted.

Only trained, authorized persons are to utilize the spill control equipment.

# Construction/Maintenance Safety

## 6.37 Safety Equipment Issue

### **Purpose**

To ensure that all employees receive required safety equipment and that it is properly issued.

### **Scope**

This procedure applies to all JDL Warm Construction, LLC facilities and maintenance employees, and to all contract personnel as determined by JDL Warm Construction, LLC.

### **Safety Equipment Issue**

- i. Employees will be issued specific safety equipment for their own personal use as needed and outlined in the appropriate O.S.H.A. standard.
- ii. Personal issued equipment remains the property of JDL Warm Construction, LLC, but will be the responsibility of the employee to use and maintain.

# Construction/Maintenance Safety

## 6.38 Hazard Communication

### Purpose

To outline what is expected from all contractors performing work on JDL Warm Construction, LLC Property.

### Scope

This procedure applies to the JDL Warm Construction, LLC Safety & Health Program.

### Requirements

- i. Contractors will develop, implement and maintain at each workplace a written hazard communication program that complies with 29 CFR 1910.1200 and which will at least specify:
  - a. The labeling system utilized and other forms of warning.
  - b. Location of material safety data sheets.
  - c. Employee training methods and records.
  - d. Methods used to inform employees of possible hazards in the area.
- ii. Multi-employer work sites: Each employer must keep MSDS's available to workers of other employer's working in the area, who may be exposed while working.

# Contract Worker Safety

**Purpose**

To ensure an acceptable level of safety by all contractors that meets the JDL Warm Construction, LLC Safety Program and all other applicable requirements such as 29 CFR 1926, Construction Safety Standards.

**Scope**

This procedure applies to the JDL Warm Construction, LLC Safety & Health Program.

# Contract Worker Safety

## 8.1 Safety and Health Program Requirements

### Purpose

To ensure that all contractors have the required written safety programs.

### Scope

This procedure applies to all contracted workers working on JDL Warm Construction, LLC property and sites.

### Procedure

- i. All contractors working on JDL Warm Construction, LLC property are required to have a comprehensive, written employee Safety & Health Program. The requirements of this program must be implemented on the project and employees held accountable to the provisions therein.
- ii. All contracted employees are required to follow all provisions of the JDL Warm Construction, LLC Safety & Health Program.
- iii. The Corporate Safety Manager may request to review the written Safety & Health Program prior to start of work and/or at any time thereafter. Although the Corporate Safety Manager does not approve the Safety & Health Program, he will ensure it is in place and that the provisions of that program are being met.



# Contract Worker Safety

## 8.2 Employee Training

### Purpose

To ensure that all contractors are properly trained.

### Scope

This procedure applies to all contracted workers working on JDL Warm Construction, LLC property and sites.

### Procedure

- i. The Corporate Safety Manager is NOT responsible to train contractor employees. He will however, periodically conduct audits of a contractor's training records to assess their employee training status.
- ii. Should the Corporate Safety Manager decide that certain training was not done due to lack of documentation etc., he may require the contractor to obtain training and provide proof of such training prior to allowing any further work.
- iii. The Corporate Safety Manager may allow contractor employees to attend training sponsored by JDL Warm Construction, LLC. JDL Warm Construction, LLC assumes no liability for this training and may back charge the contractor for all or a portion of the cost due to the contractor's presence.
- iv. Contract employees will be required to attend any training session that is specific to JDL Warm Construction, LLC and involves those employees.

# Contract Worker Safety

## 8.3 Personal Protective Equipment

### Purpose

To ensure that all contracted employees adhere to the applicable PPE standards.

### Scope

This procedure applies to all contracted workers working on JDL Warm Construction, LLC property.

### Procedures

All contractor employees must utilize Personal Protective Equipment appropriate to the job junction as outlined in the following standards:

- i. OSHA
- ii. JDL Warm Construction, LLC Safety & Health Program
- iii. National Electric Code
- iv. National Fire Protection Code
- v. Any other applicable safety code

Note that JDL Warm Construction, LLC reserves the right to require PPE that goes above and beyond standard safety requirements.

# Contract Worker Safety

## 8.4 Total Incident Rate Reporting

### Purpose

To allow the Corporate Safety Manager a method to evaluate the effectiveness of a contractor's safety program.

To preclude contractors with a poor safety record of working on JDL Warm Construction, LLC property.

### Scope

This procedure applies to all contracted workers working on JDL Warm Construction, LLC property.

### Procedure

- i. As part of any contract, the Corporate Safety Manager may request the current and past two years Total Incident Rate of any contractor.
- ii. The Corporate Safety Manager may request explanations for any noted entries associated with the T.I.R.
- iii. Contractors with a T.I.R. of 5 or more will be required to provide written evidence of corrective actions taken and/or still being implemented to reduce the chance of accidents / injuries on the job site.
- iv. Contract employees are required to report any and all accidents / injuries / illnesses to the appropriate JDL Warm Construction, LLC supervisor as soon as possible. A written accident report will be required to be submitted as soon as possible.

# Contract Worker Safety

## 8.5 On-Site Safety Requirements

### **Purpose**

To ensure the proper implementation of both the Contractor's and the JDL Warm Construction, LLC safety program

### **Scope**

This procedure applies to all contract workers working on JDL Warm Construction, LLC property.

### **Procedure**

All contracted employees must follow all provisions of the applicable safety codes as well as those stated in the JDL Warm Construction, LLC Safety & Health Program.

# Contract Worker Safety

## 8.6 Accident / Injury Reporting and Investigation

### Purpose

To ensure proper reporting of all accidents / injuries / illnesses.

To protect the liability of JDL Warm Construction, LLC.

To reduce the chance of additional incidents by obtaining pertinent information regarding the incident.

### Scope

This procedure applies to all contract workers working on JDL Warm Construction, LLC property.

### Procedure

- i. All contracted employees must report all incidents to the appropriate JDL Warm Construction, LLC supervisor immediately. The JDL Warm Construction, LLC incident report should be used to document the incident with a copy forwarded to the Corporate Safety Manager as soon as possible.

# Contract Worker Safety

## 8.7 Safety Enforcement / Employee Discipline

### Purpose

To ensure proper enforcement of the JDL Warm Construction, LLC Safety & Health Program.

### Scope

This procedure applies to all contract workers working on JDL Warm Construction, LLC property.

### Procedure

- i. The Corporate Safety Manager or applicable Supervisor cannot directly discipline a contractor employee; however, they can request employees in violation of the safety program to immediately stop their work function and/or leave the site.
- ii. A written report will be forwarded to the employee's company for review with instructions on remedial actions in order that the employee may return to work.
- iii. Remedial actions can include but are not limited to:
  - a. Provide evidence of re-training
  - b. Suspension from working on JDL Warm Construction, LLC property.
  - c. Termination from working on JDL Warm Construction, LLC property.
- iv. It will be up to the contract company to directly enforce the safety standards on the employee.

# Contract Worker Safety

## 8.8 Safety Review / Reporting

### Purpose

To ensure proper, periodic review of a contractor's Safety & Health Program.

### Scope

This procedure applies to all contract workers working on JDL Warm Construction, LLC property.

### Procedures

- i. The Corporate Safety Manager reserves the right to periodically request a contractor company provide any or all of the following for review:
  - a. OSHA 301 Log
  - b. T.I.R. records
  - c. Safety training records
  - d. Weekly safety meeting reports
  - e. Frequent and Regular site safety audit reports
  - f. Accident reports (Accidents that occurred on JDL Warm Construction, LLC property.)
- ii. Upon review, the Corporate Safety Manager may request a meeting with the company involved to discuss discrepancies etc. and to review remedial actions needed.

# Contract Worker Safety

## 8.9 Safety Inspections

### **Purpose**

To ensure a proper level of safety inspections on all sites where a contracted employee is working.

### **Scope**

This procedure applies to all contract workers working on JDL Warm Construction, LLC property.

### **Procedure**

- i. Each contract company working on JDL Warm Construction, LLC property will be required to perform frequent and regular documented safety inspections. All hazards must be recorded and corrected as soon as possible.
- ii. Imminent danger type hazards must be immediately corrected and/or barricaded.
- iii. In addition, all contracted company operations will be subject to safety inspections at any time from the Corporate Safety Manager and/or his designee.
- iv. The Corporate Safety Manager and/or his designee will have the authority to enforce all safety standards to their fullest.



# Contract Worker Safety

## 8.10 Safety Meetings

### **Purpose**

To ensure routine and documented safety meetings take place at all work sites.

### **Scope**

This procedure applies to all contract workers working on JDL Warm Construction, LLC property.

### **Procedure**

- i. Each contract company working on JDL Warm Construction, LLC property will be required to perform weekly, documented safety meetings. All meetings must be documented.
- ii. In addition, all contracted company operations will be subject to safety meetings scheduled by the Corporate Safety Manager and/or his designee.

# Contract Worker Safety

## 8.11 Hazard Communication

### Purpose

To ensure a proper level of chemical safety on the worksite.

### Scope

This procedure applies to all contract workers working on JDL Warm Construction, LLC property.

### Procedure

- i. Each contractor will be required to have a Written Employee Hazard Communication program and employee training records for hazardous chemicals.
- ii. All contractor employees are required to adhere to the JDL Warm Construction, LLC Hazard Communication program.
- iii. Contractors bringing chemicals to any JDL Warm Construction, LLC facility are required to supply the associated MSDS sheet for that material as well as any PPE specific for that chemical.
- iv. JDL Warm Construction, LLC reserves the right to ask that any chemical be removed from JDL Warm Construction, LLC property at any time.

# Contractor Safety

**Purpose**

To ensure an acceptable level of safety by all contractors that meets the JDL Warm Construction, LLC Safety Program and all other applicable requirements such as 29 CFR 1926, Construction Safety Standards.

**Scope**

This procedure applies to the JDL Warm Construction, LLC Safety & Health Program.

# Contractor Safety

## 9.1 Safety and Health Program Requirements

### Purpose

To ensure that all contractors have the required written safety programs.

### Scope

This procedure applies to all contract workers working on JDL Warm Construction, LLC property.

### Procedure

- i. All contractors working on JDL Warm Construction, LLC property are required to have a comprehensive, written employee Safety & Health Program. The requirements of this program must be implemented on the project and employees held accountable to the provisions therein.
- ii. All contract employees are also required to follow all provisions of the JDL Warm Construction, LLC Safety & Health Program.
- iii. The Corporate Safety Manager may request to review the written Safety & Health program prior to start of work and/or at any time thereafter. Although the Corporate Safety Manager does not approve the Safety & Health program, he will ensure it is in place and that the provisions of that program are being met.

# Contractor Safety

## 9.2 Employee Training

### Purpose

To ensure that all contractor employees are properly trained.

### Scope

This procedure applies to all contractor workers working on JDL Warm Construction, LLC property.

### Procedure

- i. The Corporate Safety Manager is NOT responsible to train contractor employees. He will however, periodically conduct audits of a contractor's training records to assess their employee training status.
- ii. Should the Corporate Safety Manager decide that certain training was not done due to lack of documentation etc., he may require the contractor to obtain training and provide proof of such training prior to allowing any further work.
- iii. The Corporate Safety Manager may allow contractor employees to attend training sponsored by JDL Warm Construction, LLC. JDL Warm Construction, LLC assumes no liability for this training and may back-charge the contractor for all or a portion of the cost due to the contractor's presence.
- iv. Contract employees will be required to attend any training session that is specific to JDL Warm Construction, LLC and involves those employees.

# Contractor Safety

## 9.3 Personal Protective Equipment

### Purpose

To ensure that all contractor employees adhere to the applicable PPE standards.

### Scope

This procedure applies to all contractor employees working on JDL Warm Construction, LLC property.

### Procedures

- i. All contractor employees must utilize Personal Protective Equipment appropriate to the job junction as outlined in the following standards:
  - a. OSHA
  - b. JDL Warm Construction, LLC Safety & Health Program
  - c. National Electric Code
  - d. National Fire Protection Code
  - e. Any other applicable safety code
- ii. Note that JDL Warm Construction, LLC reserves the right to require PPE that goes above and beyond standard safety requirements.

# Contractor Safety

## 9.4 Total Incident Rate Reporting

### Purpose

To allow the Corporate Safety Manager a method to evaluate the effectiveness of a contractor' safety program

To preclude contractors with a poor safety record of working on JDL Warm Construction, LLC property.

### Scope

This procedure applies to all contract workers working on JDL Warm Construction, LLC property.

### Procedure

- i. As part of any contract, the Corporate Safety Manager may request the current and past two years Total Incident Rate of any contractor.
- ii. The Corporate Safety Manager may request explanations for any noted entries associated with the T.I.R.
- iii. Contractors with a T.I.R. of 5 or more will be required to provide written evidence of corrective actions taken and/or still being implemented to reduce the chance of accidents / injuries on the job site.
- iv. Contractor employees are required to report any and all accidents / injuries / illnesses to the appropriate JDL Warm Construction, LLC supervisor as soon as possible. A written accident report will be required to be submitted as soon as possible.

# Contractor Safety

## 9.5 On-Site Safety Requirements

### **Purpose**

To ensure the proper implementation of both the Contractor's and the JDL Warm Construction, LLC Safety Program.

### **Scope**

This procedure applies to all contractor employees working on JDL Warm Construction, LLC property.

### **Procedure**

All contractor employees must follow all provisions of the applicable safety codes as well as those stated in the JDL Warm Construction, LLC Safety & Health Program.



## 9.6 Accident / Injury Reporting and Investigation

### **Purpose**

To ensure proper reporting of all accidents / injuries / illnesses.

To protect the liability of JDL Warm Construction, LLC.

To reduce the chance of additional incidents by obtaining pertinent information regarding the incident.

### **Scope**

This procedure applies to all contractor employees working on JDL Warm Construction, LLC property.

### **Procedure**

All contractor employees must report all incidents to the appropriate JDL Warm Construction, LLC supervisor immediately. The JDL Warm Construction, LLC incident report should be used to document the incident with a copy forwarded to the Corporate Safety Manager as soon as possible.

# Contractor Safety

## 9.7 Safety Enforcement / Employee Discipline

### Purpose

To ensure proper enforcement of the JDL Warm Construction, LLC Safety & Health Program.

### Scope

This procedure applies to all contractor employees working on JDL Warm Construction, LLC property.

### Procedure

- i. The Corporate Safety Manager or applicable Supervisor cannot directly discipline a contractor employee however, they can request employees in violation of the safety program immediately stop their work function and/or leave the site.
- ii. A written report will be forwarded to the employees company for review with instructions on remedial actions in order that the employee may return to work.
- iii. Remedial actions can include but are not limited to:
  - a. Provide evidence of re-training
  - b. Suspension from working on JDL Warm Construction, LLC property
  - c. Termination from working on JDL Warm Construction, LLC property
- iv. It will be up the contract company to directly enforce the safety standards on the employee.

# Contractor Safety

## 9.8 Safety Review / Reporting

### Purpose

To ensure proper, periodic review of a contractor's Safety & Health Program.

### Scope

This procedure applies to all contractor employees working on JDL Warm Construction, LLC property.

### Procedures

- i. The Corporate Safety Manager reserves the right to periodically request a contractor company provide any or all of the following for review:
  - a. OSHA 301 Log
  - b. T.I.R. records
  - c. Safety training records
  - d. Weekly safety meeting reports
  - e. Frequent and Regular site safety audit reports
  - f. Accident reports (Accidents that occurred on JDL Warm Construction, LLC property)
- ii. Upon review, the Corporate Safety Manager may request a meeting with the company involved to discuss discrepancies etc. and to review remedial actions needed.

# Contractor Safety

## 9.9 Safety Inspections

### **Purpose**

To ensure a proper level of safety inspections on all sites where a contractor employee is working.

### **Scope**

This procedure applies to all contractor employees working on JDL Warm Construction, LLC property.

### **Procedure**

- i. Each contract company working on JDL Warm Construction, LLC property will be required to perform frequent and regular, documented safety inspections. All hazards must be recorded and corrected as soon as possible.
- ii. Imminent danger type hazards must be immediately corrected and/or barricaded.
- iii. In addition, all contracted company operations will be subject to safety inspections at any time from the Corporate Safety Manager and/or his designee. The Corporate Safety Manager and/or his designed will have the authority to enforce all safety standards to their fullest.

# Contractor Safety

## 9.10 Safety Meetings

### **Purpose**

To ensure routine and documented safety meetings take place at all work sites.

### **Scope**

This procedure applies to all contractor employees working on JDL Warm Construction, LLC property.

### **Procedure**

- i. Each contractor working on JDL Warm Construction, LLC property will be required to perform weekly, documented safety meetings. All meetings must be documented.
- ii. In addition, all contractor operations will be subject to safety meetings scheduled by the Corporate Safety Manager and/or his designee.

# Contractor Safety

## 9.11 Hazard Communication

### Purpose

To ensure a proper level of chemical safety on the worksite.

### Scope

This procedure applies to all contractor employees working on JDL Warm Construction, LLC property.

### Procedure

- i. Each contractor will be required to have a Written Employee Hazard Communication Program and employee training records for hazardous chemicals.
- ii. All contractor employees are required to adhere to the JDL Warm Construction, LLC Hazard Communication Program.
- iii. Contractors bringing chemicals to any JDL Warm Construction, LLC facility are required to supply the associated MSDS sheet for that material as well as any PPE specific for that chemical.
- iv. JDL Warm Construction, LLC reserves the right to ask that any chemical be removed from JDL Warm Construction, LLC property at any time.

# Safety Forms Management and Numbering

**Purpose**

To ensure consistent and accurate use of all Safety related forms / documents.

**Scope**

This procedure applies to the JDL Warm Construction, LLC Safety & Health Program.

**Procedure**

- i. The Corporate Safety Manager will assign a numbering system to all forms and documents to ensure easy cross referencing and use of selected forms.
- ii. The numbering system is not to be changed by any other person than the Corporate Safety Manager and/or his designee.

# Safety Equipment Issue

**Purpose**

To ensure that all employees and contracted personnel are issued and use proper safety equipment.

**Scope**

This procedure applies to all JDL Warm Construction, LLC facilities and maintenance employees.

This procedure applies to all contractor personnel as determined by JDL Warm Construction, LLC.

**Safety Equipment Issue**

- i. Employees will be issued specific safety equipment for their own personal use as needed and outlined in the appropriate O.S.H.A. standard. Personal issued equipment remains the property of JDL Warm Construction, LLC, but will be the responsibility of the employee to use and maintain.



# Safety Equipment Issue

Safety Equipment Issue

Employee Name

Date

Company

Job Title

## EQUIPMENT ISSUED

Equipment

#

Notes

Ear Plugs, Foam

Ear Protection Headset

Energy Control Locks

Full Body Harness

Gloves, Chemical Prot.

Gloves, Leather Work

Hard Hat

Lanyard

Lock-out Hasp

Safety Glasses

Safety Goggles

Welding Gloves

Welding Hood

Welding Jacket

½ Mask APR

Size

Mfg #

Full Mask APR

Size

Mfg #

With the issue of this equipment, you are expected to properly use it when applicable as well as maintain it in good, clean, working order. Should this equipment become damaged, worn out or lost, notify your supervisor immediately.

# Glossary

**Purpose**

To ensure consistent use of terminology within all JDL Warm Construction, LLC Safety Related Manuals.

**Scope**

This procedure applies to all JDL Warm Construction, LLC Safety Manuals within the Department.

| Term               | Definition  |
|--------------------|---|
| A.E.D.             | Automatic External Defibrillator  |
| Combustible Liquid | Any liquid having a flash point at or above 140° F and below 200° F   |
| Disabled Person(s) | Any person having a physical disability such as being confined to a wheel chair, being blind and/or deaf etc.<br>Note: Persons may have a temporary disability such as after a knee operation etc. These persons should be added to your disable list during the time they are physically disabled. |
| Flammable Liquid   | Any liquid having a flashpoint below 140° F. and having a vapor pressure not exceeding 40 pounds psi at 100° F.   |
| Flash Point        | The minimum temperature at which a liquid gives off enough vapors that will ignite and flashover but will not continue to burn without the addition of more heat.   |

# Glossary

|  |  |
|--|--|
| O.S.H.A. Focused Inspection                      | An O.S.H.A. Inspection where the scope is limited to the following type of hazards:<br>Fall Protection<br>Electrical<br>Struck By<br>Crushing  |
| O.S.H.A. Recordable                              | Incident Any injury or illness that must be recorded on the O.S.H.A. 300 Log   |
| O.S.H.A. Reportable Incident                     | Any injury or illness that must be reported to O.S.H.A. within 8 hours.<br>(death of any employee from a work-related incident or the in-patient hospitalization of three or more employees as a result of a work-related incident, you must orally report the fatality/multiple hospitalization by telephone or in person to the Area Office of the Occupational Safety and Health Administration (OSHA), U.S. Department of Labor, that is nearest to the site of the incident. You may also use the OSHA toll-free central telephone number, 1-800-321-OSHA (1-800-321-6742). |
| Total Incident Rate (T.I.R.)                     | A calculated summary of all "Recordable Incidents" involving injuries and/or illnesses. The T.I.R. is calculated as follows:<br>$\frac{\# \text{ Recordable Incidents}}{\text{Total Employee Hrs Worked}} \times 200,000 = \text{T.I.R.}$  |
| Total Lost Work Day Incident Rate (T.L.W.D.I.R.) | A calculated summary of all "Recordable Lost Work Day Incidents" involving injury and/or illness. The T.L.W.D.I.R. is calculated as follows:<br>$\frac{\# \text{ Recordable Lost Work Day Incidents}}{\text{Total Employee Hrs Worked}} \times 200,000 = \text{T.L.W.D.I.R.}$  |
| Vapor Pressure                                   | The pressure exerted by the vapor within the container against the sides of a container. The pressure and temperature are directly proportional.   |