September 19, 2008

TO:     All Contractors, Subcontractors, Suppliers and Affected Employees of Volkswagen

RE:     Volkswagen Assembly Plant – Project Safety

Safety in all Volkswagen operations is not just a corporate goal, it is a requirement!

To this end, we have formulated this written policy to govern all construction safety operations of the Volkswagen Assembly Plant project.

It is a condition of employment with Volkswagen that employees adhere faithfully to the requirements of this policy, as well as the safety rules, instructions and procedures issued in conjunction with it. Failure to do so will result in disciplinary action as outlined in the attached policy.

It is a condition of all contracts / subcontracts that this policy and the safety rules, instructions and procedures issued in conjunction with it, as well as all applicable state, federal and local codes and regulations be adhered to. Failure to comply is a breach of contract terms.

All visitors to the Volkswagen project site, including but not limited to contractors, subcontractors, suppliers, owner representatives, agents of the architect or engineer, regulatory authorities and insurance company representatives shall be required to follow all safety rules and regulations in effect during their visit.

Volkswagen will make every effort to ensure that the operations of contractors under our control do not endanger the safety of any site employee. To this end, all employees are required to report hazardous activities of other employees to appropriate site management personnel.

The Construction Manager’s Site Safety Director and his / her Staff have the full support of Volkswagen in enforcing the provisions of this policy as it relates to contractual responsibilities issued to them.

Sincerely,

VOLKSWAGEN GROUP OF AMERICA

[Signature]
Reid Albert
Head of Safety and Security

[Signature]
Richard G. Vassar, CPCU, ARM
General Manager, Risk Management
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Section 1: Introduction

1. Volkswagen Project Safety Statement

VOLKSWAGEN
GROUP OF AMERICA

September 19, 2008

TO: All Contractors, Subcontractors, Suppliers and Affected Employees of Volkswagen

RE: Volkswagen Assembly Plant – Project Safety

Safety in all Volkswagen operations is not just a corporate goal, it is a requirement!

To this end, we have formulated this written policy to govern all construction safety operations of the Volkswagen Assembly Plant project.

It is a condition of employment with Volkswagen that employees adhere faithfully to the requirements of this policy, as well as the safety rules, instructions and procedures issued in conjunction with it. Failure to do so will result in disciplinary action as outlined in the attached policy.

It is a condition of all contracts / subcontracts that this policy and the safety rules, instructions and procedures issued in conjunction with it, as well as all applicable state, federal and local codes and regulations be adhered to. Failure to comply is a breach of contract terms.

All visitors to the Volkswagen project site, including but not limited to contractors, subcontractors, suppliers, owner representatives, agents of the architect or engineer, regulatory authorities and insurance company representatives shall be required to follow all safety rules and regulations in effect during their visit.

Volkswagen will make every effort to ensure that the operations of contractors under our control do not endanger the safety of any site employee. To this end, all employees are required to report hazardous activities of other employees to appropriate site management personnel.

The Construction Manager’s Site Safety Director and his / her Staff have the full support of Volkswagen in enforcing the provisions of this policy as it relates to contractual responsibilities issued to them.

Sincerely,

VOLKSWAGEN GROUP OF AMERICA

[Signatures]

Rued Alger
Head of Safety and Security

Richard C. Vassar, CPCU, ARM
General Manager, Risk Management
2. Safety Manual Purpose and Scope

2.1 This *Master Project Safety Manual* contains policies and procedures applicable to all contractors and contract employees regarding safety, health, and environmental responsibilities on the Volkswagen (VW) project site and for work performed for VW.

2.2 The purpose of this manual is to summarize basic safety and health standards and to establish minimum standards that promote safety, and control hazards and risks associated with the project. The safety provisions set forth in this manual are not to be considered as "all inclusive." Where any portion of this manual is in conflict with, or less stringent than, any applicable state or federal or local statutory safety regulations, the more stringent regulation shall take precedence.

2.3 The minimum standards set forth in this manual are applicable to all activities required of contractors (including subcontractors of any tier) and all other people authorized to be on the project site.

2.4 Contractors should review with their employees the sections of this manual that are appropriate to the work to be performed.

2.5 Compliance with the requirements of this manual shall not relieve contractors of the obligations, duties and responsibilities assumed under the contract documents or as required for safety, health, and environmental compliance under law, code, ordinance, or statute. Contractors are expected to take all reasonable measures to promote and ensure a safe working environment.

2.6 The site safety director and his/her staff are not responsible for determining the “means and methods” of solving, resolving or planning the daily safety requirements of each contractor’s work. Any field conversations between the contractor and the site safety director / site safety staff / Volkswagen representatives will not constitute “means and methods”.
3. General Information

3.1 Non-compliance with safety or environmental requirements is treated the same as non-compliance with the contract documents, and may result in work stoppage or employee removal from the project site. Willful or repeated non-compliance may result in contractor dismissal and contract termination.

3.2 This manual is an important part of the Volkswagen Safety and Health Program relating to the project. Contractors must ensure that their employees, subcontractors, consultants, vendors, suppliers, and visitors comply with the provisions of this manual while on the project site.

3.3 Compliance with federal, state, and local codes or regulations is required by law. This manual is a supplementary document to governmental rules, codes, and regulations having jurisdiction, and does not negate, abrogate, or minimize any provisions of these rules, codes and regulations. It is intended to supplement and enforce the individual program of the contractor and to coordinate the overall safety effort relating to the project.

3.4 Contractors must be aware that there are significant additional requirements above and beyond OSHA, local, state and federal guidelines that must be adhered to on this project.

3.5 Contracts signed with contractors and the provisions of this manual are intended to complement each other; however, in the event of a conflict between the provisions of this manual and the terms of a specific contract, notify the VW representative immediately of any such conflict.

3.6 Contractors ultimately are responsible for the safety and health of their employees, subcontractors, consultants, vendors, suppliers, and visitors while on the project site, and for the protection of the public and all others who may come in contact with, or be exposed to, the project.

3.7 Safety is considered an integral part of quality control, cost reduction and job efficiency. Managers and
supervisors are accountable for the safety performance demonstrated by their employees.

3.8 VW reserves the right to add to or modify this manual and to implement additional safety rules and procedures. This manual is updated using addenda to the current revision. The manual is revised and reprinted when necessary.

3.9 Contractors shall not receive additional payments or reimbursement for compliance with the safety items and procedures required by this manual, the contract documents or applicable federal or state laws, regulations and orders, whether now existing or hereafter arising.

4. Safety Policy

4.1 It is the policy of VW to provide a safe place to work. Contractors working at the project site must conduct their work using good safety practices.

4.2 Contractor's management is responsible for preventing incidents or conditions that could lead to incidents, injuries, illness, or fatalities. The ultimate success of the Volkswagen Project Safety and Health Program depends on the cooperation of every employee. The contractor's management must ensure that safety rules and procedures are adequate and enforced, and that effective training and education programs are employed.

4.3 Volkswagen requires that a consistent construction safety, health, environmental and fire prevention program be employed during all activities of its contractors’ employees, agents, vendors and suppliers.

4.4 Safety shall take precedence over schedule and production to eliminate personal injuries, occupational illnesses, and damage to equipment and property as well as protecting the general public whenever they may be affected by the contractor’s work.

4.5 In performing all work, the contractor shall comply with all laws, statutes, ordinances, rules, regulations, requirements and guidelines including, but not limited to those of the OSHA regulations, ANSI standards,

4.6 This program is managed under an Owner Controlled Insurance Program (OCIP), and contractors are responsible to ensure that their subcontractors of all tiers adhere to the OCIP rules for work on the site.

4.7 Training is required for all personnel who come onto the project site, and the program must be created to address personal responsibility for safety and the belief that all accidents are preventable.

5. **Goals and Objectives**

5.1 The goals of the Volkswagen Project Safety and Health Program are listed below:

- eliminate accidents and work related illnesses at the project site.
- achieve zero fatalities, zero permanent disabling injuries, and zero lost work day cases
- achieve zero Occupational Safety and Health Administration (OSHA) recordable injuries and illnesses
- eliminate releases to the environment and prevent environmental harm

5.2 The main objective of the Volkswagen Project Safety and Health Program is to support and assist contractors with their responsibility to control the exposures and prevent the incidents that may cause injuries, illness, fatalities, equipment damage, fire, and damage or destruction of property at the project site.

[The remainder of this page is intentionally left blank.]
Section 2: Definitions and Acronyms

1. General Information

1.1 The defined terms listed below, whether or not capitalized, are terms used throughout this manual and are in addition to definitions that appear elsewhere in this manual. Unless otherwise noted, definitions that appear in a specific section of the manual are limited to that section.

1.2 The acronyms listed below are used throughout the manual and listed here for reference.

2. Definitions

assembly area A pre-determined location in which to assemble and conduct a roll call in case of an emergency evacuation.

competent person As defined by OSHA, an individual who is capable of identifying existing and predictable hazards in the work area that are unsanitary or dangerous to employees and who has the authority to correct or eliminate the hazards.

contract or contract documents A written agreement by and between Volkswagen and a contractor, by and between a contractor and a subcontractor, or by and between subcontractors of different tiers.

contract employee An employee of a contractor, the employees of subcontractors, consultants, vendors, and suppliers.

contractor A firm contracted to Volkswagen to perform specified work on the project site. For purposes of this manual, references to "contractor" mean each contractor, and each of their subcontractors, consultants, vendors, and suppliers.
<table>
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<th>Term</th>
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<tr>
<td>contractor's management</td>
<td>Personnel employed by a contractor who are responsible for managing, supervising, or directing contract activities and non-VW employees on the project site.</td>
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<td>contractor's safety manager or safety manager</td>
<td>An approved, competent safety professional employed by and assigned by the contractor to manage its safety program and the Volkswagen Project Safety and Health Program.</td>
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<td>employee</td>
<td>An employee of a contractor and the employees of subcontractors, consultants, vendors, and suppliers.</td>
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<td>hazard communication program</td>
<td>A comprehensive program to ensure that hazards from chemicals, biologicals, or radiation are evaluated and that information pertaining to these hazards are communicated to contractors and their employees.</td>
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<td>hazardous material</td>
<td>A substance or mixture of substances that may produce adverse effects on the health or safety of a human being, due to characteristics such as being explosive, flammable, poisonous, irritating, or corrosive.</td>
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<td>hazardous waste</td>
<td>A biological, chemical, or radioactive waste which may pose a hazard to people or the environment.</td>
</tr>
<tr>
<td>manual</td>
<td>This <em>Master Project Safety Manual</em>.</td>
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<td>medical review officer or MRO</td>
<td>A licensed physician responsible for receiving laboratory results generated by a drug testing program, who has knowledge of substance abuse disorders and has been trained to interpret and evaluate an individual's positive test result with his or her medical history and other biomedical information.</td>
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<tr>
<td>project site</td>
<td>The project site described in the contract and located in Chattanooga, Tennessee.</td>
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qualified person  An individual who has a recognized degree, certificate, or professional standing or extensive knowledge, training, and experience and who has successfully demonstrated the ability to resolve problems related to the work.

recordables  Occupational injuries or illnesses as defined in OSHA 1904.12.

security  The project site security staff or organization.

site safety director  A person designated and under the control of the construction manager for the project. The site safety director will report to the project manager designated by and under the control of the construction manager. The project manager has overall responsibility for implementation of the Volkswagen Project Safety and Health Program.

VW representative  An authorized VW employee with respect to the project. In some cases authority may be formally delegated to a responsible representative that is not a VW employee.

work  Activities necessary to provide service, labor, materials, and equipment required by a contract.

work area  Specific site or location where work is performed.

3.  **Acronyms**

- ANSI  American National Standards Institute
- CFR  Code of Federal Regulations
- DOT  Department Of Transportation
- EPA  Environmental Protection Agency
- FAC  First-Aid Case
- LWC  Lost Workday Case
- MRO  Medical Review Officer
- MSDS  Material Safety Data Sheet
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<td>MSHA</td>
<td>Mine Safety and Health Administration</td>
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<tr>
<td>NFPA</td>
<td>National Fire Prevention Association</td>
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<td>TOSHA</td>
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<td>OSHA</td>
<td>Occupational Safety and Health Administration</td>
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<tr>
<td>UL</td>
<td>Underwriters Laboratories Inc.</td>
</tr>
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<td>VW</td>
<td>Volkswagen</td>
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Section 3: Safety and Health Program

1. General Information

1.1 The purpose of the Volkswagen Project Safety and Health Program is to establish, implement, and execute a practical and effective method for preventing accidents, illnesses, and injuries and protecting the environment.

1.2 This manual defines how the Volkswagen Project Safety and Health Program will be administered, identifies responsibilities, and ensures control of work area safety.

2. Safety and Health Program Administration

2.1 The effectiveness of the Volkswagen Project Safety and Health Program depends on establishing and maintaining a safety culture through the participation and cooperation of employees and coordination of their efforts in carrying out the following basic responsibilities:

A. Planning and coordinating work to avoid personal injury, property damage, environmental risk, and the loss of production

B. Establishing and maintaining a system for early detection and correction of unsafe practices and conditions

C. Providing adequate protection of public and private properties and the environment and ensuring the safety of the public

D. Establishing and conducting safety education programs designed to stimulate and maintain the interest and participation of employees through use of the following:

E. Safety meetings and communication

F. Proper work procedures, personal protective equipment, and mechanical guards
G. Safety instructions for individual employees and group safety training programs

H. Accident, illness, and potential safety incident investigation and reporting to determine causes and corrective actions

I. Records of accidents and losses and accident/loss experience summaries

J. Proper waste disposal and emission control procedures

K. Incentive and recognition programs

L. Developing an emergency plan for the work

2.2 Volkswagen Project Safety and Health Program Implementation

A. Contractors will establish and implement a safety program for their employees. This program will include maintaining and auditing safety performance for compliance with applicable federal, state, and local regulations and with established safety and environmental requirements, including but not limited to, the contractor's safety and hazard communication programs.

B. Contractors will conduct regularly scheduled safety inspections of the work being conducted by their employees. The scope or duration of work may regulate the frequency of these inspections.

C. Contractors will take immediate corrective action when a violation of job safety, fire, or environmental safety hazard is observed.

D. Contractors will regularly review their safety performance. Failure to correct a problem may result in work stoppage in the related work area, and work will not be permitted to resume until the problem is corrected.

E. If a contractor fails to correct the problem within a reasonable timeframe, VW will provide written notification and then take corrective action, and the cost will be the responsibility of the contractor.
F. Contractors will administer their own safety activities and are responsible for the safety of their employees. If requested by the site safety director or the VW representative, contractors will submit a written copy or description of their company's safety program.

G. The contractor's safety program will meet federal, state, and local regulatory requirements and be equivalent to or more stringent than Volkswagen Project Safety and Health Program.

H. Where the programs are in conflict or the contractor’s program does not address an issue, the Volkswagen Project Safety and Health Program, as defined in this manual, will govern.

I. The safety manager or safety representative for each contractor will attend a pre-work safety conference with the site safety director prior to beginning work at the project site. The purpose of the conference is to review the contractor’s existing safety program, their scope of work, procedures, forms, record keeping and reporting, and to ensure a clear understanding of the Volkswagen Project Safety and Health Program relevant to the work to be performed.

J. Documentation requirements and responsibilities of each Contractor’s safety manager or safety representative are included as APPENDIX A.

K. The safety manager or safety representative for each contractor will be a member of the safety committee that will meet at periodic intervals but not less than once a week. Attendance at meetings of the safety committee is required unless excused by the site safety director.

3. Contractor Duties and Responsibilities

3.1 Contractors will be responsible for ensuring that their employees adhere to the directives of the Volkswagen Project Safety and Health Program. The contractor will submit a list of individuals on the project site and their respective responsibilities.

3.2 Contractors will be responsible for developing and implementing a comprehensive safety and health program.
3.3 Contractor’s responsibility cannot be delegated to subcontractors, suppliers or others.

3.4 Each contractor is required to designate a safety manager or safety representative for the project who shall have the responsibilities set forth in this manual and who shall be authorized to act on the contractor’s behalf in matters of safety on the project site as directed by the site safety director. A safety manager may have other responsibilities unless the contractor has “high employment” as described below.

3.5 If at any time a contractor is performing one or more contracts and has thirty (30) or more employees on the project site, including subcontracted employees, for a period of twenty (20) consecutive work days or more, cumulative, under all contracts (“high employment”), the position of safety manager shall be a full-time position, and the contractor shall have a full-time safety manager on the project site for each shift under the contract during the entire period of such high employment. The safety manager shall be knowledgeable of all applicable safety, health and environmental codes, statutes and ordinances, as well as best safety practices recognized in the construction industry. In addition, Contractor will provide one full-time safety manager for every 100 employees above 30. A full-time safety manager shall not be the project manager, project engineer or superintendent, and shall have no other duties than those related to safety on the project site.

3.6 Contractors will submit to the site safety director for prior approval in his or her sole discretion a history of experience and qualifications for the person who is designated as a safety manager prior to commencement of work.

3.7 Safety violations by employees constitute non-compliance with provisions of the contract and may result in immediate removal from the project site. Lost time and lost productivity associated with a safety violation will be at the sole cost of the contractor without additional compensation.

3.8 Contractor shall notify the site safety director promptly if a charge of non-compliance has been filed against contractor or a subcontractor of any tier in connection
with its work. Contractor will be responsible for payment of all fines and/or claims for damages levied against it for safety or environmental deficiencies relating to the conduct of its employees or condition of its work.

3.9 Contractors will train their employees on the safety, health, environmental, and fire prevention requirements for the work they are to perform and enforce adherence to safe work practices and procedures.

3.10 Contractors will be required to maintain a safety training program designed for employees. At minimum, such programs are to provide employees with information on the following topics:

A. Hazards present in their work assignment and surrounding area
B. Personnel protective equipment requirements
C. Proper procedures for safe work and for reporting unsafe job conditions
D. Waste disposal and environmental release requirements

3.11 Contractors will be responsible for planning and executing work according to the stated objectives of the Volkswagen Project Safety and Health Program.

3.12 Contractors will be responsible for the proper use, maintenance, and repair of work equipment.

3.13 The contractor's manager, supervisor, or other person in charge who directs or allows employees to perform unsafe acts or to work in or around unsafe conditions will be immediately removed from project site.

3.14 Volkswagen requires that the following functions are assigned. More than one function may be assigned to an individual.

A. Contractor's Project Manager is responsible for implementing and maintaining the contractor's safety program in compliance with the Volkswagen Project Safety and Health Program.
B. Contractor’s Project Manager and Project Supervisor are responsible for implementing and maintaining the contractor’s safety program in compliance with the Volkswagen Project Safety and Health Program for areas under the supervisor's control. Responsibilities include administration and coordination of the following activities:

C. Thoroughly reviewing accident investigations and initiating corrective action

D. In the event of an accident, preparing and submitting a written report, and assisting in the investigation according to requirements

E. Holding safety meetings

F. Reviewing safety performance and taking action as necessary within the areas of responsibility

G. Maintaining effective and prompt communication of safety matters

H. Monitoring compliance with established environmental and pollution control standards and regulations

I. Assigning duties to subcontractors, checking work areas, making housekeeping inspections (accompanied by a subcontractor supervisor), and keeping records of conditions found and corrective actions taken

J. Requiring employees to use personal protective equipment such as safety glasses, body harnesses, head and eyewear protection, and ventilation equipment

K. Maintaining effective communication of safety matters to employees

L. Instilling in personnel, by action, example, and training, an attitude toward safety so workers develop a better awareness of accident prevention

M. Assisting in the development and communication of safe work procedures for unusual or hazardous operations

N. Maintaining compliance with the requirements of federal, state, local, and other agencies, and with the
requirements of the general contractor's safety manual and this manual.

O. The contractor’s Safety Manager serves as a technical advisor to the contractor’s management on safety and health planning, training, and problem resolution. The responsibilities associated with this position include the following:

P. Applying policies, procedures, and work practices to promote and administer assigned functions to aid in this responsibility.

Q. Administering and coordinating medical and emergency first aid services and programs.

R. Monitoring compliance with mandatory safety and health laws, regulations, standards, and codes, and auditing and documenting the results in order to eliminate or control hazards which could contribute to or result in an occupational injury or illness.

S. Investigating work related injuries, illnesses, and incidents that involve or could involve actual or potential risk to personnel and property, maintaining adequate records of pertinent data, and compiling the required reports of occupational injuries and illness.

T. Administering and coordinating the contractor's alcohol and drug abuse program.

U. Responding to site safety audit findings with written corrective actions to address identified concerns.

V. The contractor’s Safety Manager or Safety Representative will have their history of experience and qualifications submitted to the site safety director who will review and approve all positions.

W. He or she will conduct the contractor’s site-specific/trade-specific orientations and maintain all records of training.

X. He or she will be a member of the site safety director’s safety committee and be responsible for the duties assigned to that committee by the site safety director. A partial list of the duties include participation in weekly safety committee meetings, weekly safety committee
site auditing and upkeep to the project safety bulletin board.

4. **Subcontractor Duties and Responsibilities**

Subcontractor management, supervisors, and safety personnel have the same duties and responsibilities as a contractor.

5. **Employee Duties and Responsibilities**

5.1 Contract employees must not knowingly work in unsafe surroundings or in an unsafe manner.

5.2 Contract employees are responsible for learning, understanding and following the rules and regulations applicable to the work and for reporting observed or anticipated hazards to their supervisor(s). If such hazards are not addressed, employees must report the conditions to the site safety director or a VW representative.

5.3 Contract employees shall not engage in any act that would endanger another employee.

5.4 Contract employees shall not work while under the influence of intoxicating beverages or substances which would impair his or her ability to perform a task in a safe manner.

5.5 Contract employees shall not remove a guard or other safety device from a machine or equipment.

6. **Disciplinary Action**

6.1 Volkswagen reserves the right and has sole discretion to control access to and remove any contractor or individual from the project site. The determination of whether to limit access to a particular contractor or individual will be based on a totality of the circumstances. VW will apply progressive steps in an attempt to address the problem before permanently removing a contractor or individual. The progression of action will be determined by the severity of the incident and other mitigating factors. Nevertheless, Volkswagen retains the right to immediately and permanently remove a contractor or individual from the project site.
for any reason. The purpose of progressive action is to promote safety through a cultural shift and not through enforcement activities. However, non-compliance with safety requirements may result in work stoppage if an immediate threat to safety exists.

6.2 There will be no penalty or retaliation for reporting any safety or environmental incident, but the reporting of an incident will not protect the individual from consequences related to the incident.

6.3 Discipline is categorized into two general areas; those having the potential to be life-threatening or cause serious injury, and those which are not likely to cause life-threatening or serious injury, but which violate a site rule or an OSHA regulation.

A. Serious or life-threatening violations are categorized into three separate classes

B. Class A – an offense which places a person or persons in immediate and extreme danger and is committed in disregard of the safety program and safety practices.

C. Class B – an offense violating “Zero Tolerance” rules within one’s scope of work. These include, but are not limited to failure to work with fall protection at heights greater than six (6) feet, failing to follow “Lock Out” protocols, failing to follow confined space entry rules and failing to follow established guidelines for entering trenches and excavations.

D. Class C – a violation with the potential of serious or life-threatening consequences, but committed due to provable miscommunication, misdirection, confusion, lack of training or lack of understanding which placed the employee in a dangerous situation.

6.4 Disciplinary actions will progress as follows, under ordinary circumstances. Certain safety violations will result in immediate dismissal from project site.

A. Written Verbal Warning with Corrective Action required (violating site rules or OSHA rules without life-threatening consequences)

B. Written Safety Violation Notification with minimum of three working days off project site (Serious or life-threatening – Class B or Class C)
C. Dismissal from project site (Serious or life-threatening – Class A)

D. Ban from working on project site and contract termination. (Serious or life-threatening – Class A)

E. Retraining (at the discretion of the site safety director) for serious or life-threatening, Class C violations

6.5 Temporary or permanent removal from the project site may occur if the contractor's manager, supervisor or person in charge of the work being performed requires, requests, allows, or condones employees to work in or around unsafe acts or conditions or violate environmental permits or regulations.

6.6 Immediate and permanent removal from the project site may occur if a contractor's manager, supervisor, or employee engages in any of the following activities:

A. Openly exhibits disregard, defiance, or disrespect for the Volkswagen Project Safety and Health Program

B. Knowingly falsifies investigative documents or testimony involving an investigation

C. Participates in fighting, violence, threats of violence, theft, or destruction of property

D. Violates established safety rules, regulations, or codes that endanger themselves or others

E. Violates established environmental rules, regulations, or procedures that endanger the environment

F. Violations of the Substance Abuse Prevention Program

G. Violation of the Firearms and Weapons Ban Policy

H. Violation of the Harassment Prevention Policy

7. **Reservation of Rights**

7.1 Volkswagen reserves the right to interpret, to revise, or to depart from safety policies and procedures, including but not limited to amending this manual, at any time without notice.
7.2 Compliance with this manual or VW’s policies, procedures, and standards does not confer or entitle contractors or their employees to any benefits, rights, or privileges that go to VW employees by virtue of their status as employees of VW.

7.3 Nothing in this manual alters contractor or contract employee status or infringes upon the rights of either.

8. **VW Representative's Responsibilities**

8.1 The VW representative’s primary responsibilities are listed below:

- Be familiar with this manual and understand the requirements established in it
- Issue approvals and resolve problems as needed

8.2 The VW representative is to emphasize that the manual is:

- applicable to all work at the project site
- a consolidated approach to safety
- an expectation of minimum safety performance by all contractors

8.3 The VW representative is to provide internal feedback within VW for clarification and update.

8.4 The VW representative is to oversee compliance with the manual.

8.5 The VW representative is to emphasize the following contractor responsibilities, as applicable:

- ensuring safety of all contractor activities and contract employees
- establishing and implementing a safety program
- conducting safety inspections
• ensuring that contract employees comply with the Volkswagen Project Safety and Health Program
• designating a qualified safety manager
• providing adequate safety training
• transferring or providing for these same duties and responsibilities to subcontractor management, supervisors, and safety personnel

9. Project Safety Rules

THE FOLLOWING SAFETY AND HEALTH RULES ARE A PARTIAL LIST OF GENERAL REGULATIONS THAT SHALL APPLY TO ALL CONSTRUCTION EMPLOYEES, VENDORS, DELIVERY PERSONNEL, AND VISITORS ON THE VOLKSWAGEN SITE. ANY PERSONS WHO CARELESSLY DISREGARDS THESE OR ANY APPLICABLE SAFETY AND HEALTH REGULATIONS SHALL BE SUBJECT TO DISCIPLINARY ACTION UP TO AND INCLUDING REMOVAL FROM THE JOB SITE.

1. At a minimum, the following Personal Protective Equipment (PPE) is required to be worn by all persons, at all times while on the construction site:
   1.1. Approved safety glasses with side shields or mono-goggles.
   1.2. Nonconductive hard hats.
   1.3. Safety footwear.

2. Smoking is prohibited in areas where flammable liquids are stored or being used and other designated areas.

3. All occupational injuries and illnesses, no matter how slight, shall be reported to your supervisor immediately. If you are injured on the job and do not report the occurrence to your supervisor, the company shall not be responsible for medical expense incurred by you.

4. Submitting false or fraudulent information, when reporting an accident or injury, shall be cause for removal from the job site.
5. Fighting, gambling, horseplay and other misconduct are not permitted, nor will threatening or attacks upon another employee be tolerated and shall be cause for immediate removal from the job site.

6. The use or possession of intoxicants or drugs on the job is prohibited. Any employee reporting for work intoxicated or under the influence of intoxicating liquor or drugs shall not be allowed to work and shall be administered disciplinary action, which could result in immediate removal from the job.

7. Keep clear of all equipment. Avoid pinch points and the blind areas. Be alert to avoid swinging or suspended loads.

8. Be alert for and heed all information and warning signs at all times.

9. Do not use compressed air to dust-off yourself or clean about any area.

10. Unless authorized, do not attempt to repair or tamper with equipment that is not functioning properly. Report malfunctions to your supervisor.

11. Whenever anyone is required to work on or in close proximity to electrical equipment or electrical circuitry, appropriate tagging shall be placed to identify all controls deactivating the circuit, and the circuit shall be locked out, when possible.

12. Jumping on or off equipment or vehicles, either moving or stationary is prohibited.

13. Misuse of tools and equipment or circumventing safety devices can result in injury to yourself or others. Do not use make-shift or "jerry-rigged" tools or equipment to perform your job.

14. Unless specifically authorized by Volkswagen, firearms, weapons and explosives are prohibited on the job site.

15. Report all unsafe and unhealthy practices and conditions to your supervisor at once.

16. All fire protection and emergency equipment are to be plainly marked and shall be kept free of obstruction at all times.

17. Only authorized and properly trained and supervised personnel are permitted to operate equipment, vehicles, valves, electrical switches and similar machinery.

18. Ride only on vehicles designated and designed for transporting personnel.
19. Store and use gas cylinders in a secure, upright position, with their valve caps secure and the cylinders shielded from the sunlight.

20. Maintain good housekeeping at all times. Keep waste, debris, and rubbish cleaned up. Place all lunch papers, cups, cans and other litter in trash receptacles.

21. Discard and/or store all oily rags, waste and similar combustible materials in metal containers provided for that purpose.

22. Riding loads, slings, the ball, crane hook or other materials hoisting equipment is prohibited, except in a life-threatening emergency.

23. Keep all machinery guards, guardrails and other protective devices in place and in good operating order.

24. Be alert at all times to conditions and work processes in your area and surrounding area and with the presence of other workers and equipment so that you can foresee and avoid potential dangers.

25. Work area guidelines and regulations for environmental protection shall be strictly followed. All hazardous material shall be properly handled, stored and disposed of.

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Section 4: Reporting an Emergency

1. General Information

1.1 This section establishes the requirements, responsibilities, and methods of notification and response to emergency situations.

1.2 Where a specific procedure has not been established, use good judgment in determining what actions to take.

1.3 Contractors must identify evacuation routes, assembly areas, and tornado safe areas to all personnel at the time of orientation and before they begin work on the project site.

2. Definitions

2.1 All Clear - When an emergency is over, the site safety director will notify contractors to authorize employees to return to normal work activities.

2.2 Call List - This is an approved list of individuals appointed to be the designated coordinators of emergency response for each contractor.

2.3 Emergency - Any unplanned event that adversely affects personnel, the environment, or the project is considered an emergency.

3. Contractor Responsibilities

3.1 Contractors must identify to the site safety director their personnel who are trained in First Aid/CPR. Each contractor must have at least one first aid responder per shift.

3.2 Contractors must establish a blood borne pathogen awareness and training program for their employees who may have exposure to blood or body fluids during the course of their work.

3.3 Each contractor must have a small first aid kit consisting of appropriate items in a weatherproof container in each gang box to service the needs of workers who may require a Band-Aid or other minor first aid item. The first aid kits must be checked weekly to ensure that
expended items are replaced and to assess the types of incidents which are occurring that do not require attended first aid.

3.4 Contractors will provide a larger kit which is to be used by their first aid responder as needed. This kit must also be checked weekly for outdated items or used items which need replacement. Non-Mandatory Appendix A of 1910.151 (or the latest revision) addresses minimum contents of a generic first aid kit. An example is provided below, and in general, are sized for 25 employees:

<table>
<thead>
<tr>
<th>Item Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Economy Pain Relief Tablets, 100/Box</td>
</tr>
<tr>
<td>1 Tweezers, Sterile Disposable</td>
</tr>
<tr>
<td>1 Antiseptic Spray, 3-oz. Pump Sprayer</td>
</tr>
<tr>
<td>1 First-Aid Guide</td>
</tr>
<tr>
<td>1 Ice Pack, Disposable, x-small</td>
</tr>
<tr>
<td>1 Bandage, Triangular Nonsterile 40-inch</td>
</tr>
<tr>
<td>1 3-in-1 Antibiotic Ointment, 1.5 Oz.</td>
</tr>
<tr>
<td>1 Antibacterial Wipes, 10/Box</td>
</tr>
<tr>
<td>1 Bandage, Fingertip Fabric, 10/Box</td>
</tr>
<tr>
<td>1 Gauze Pads, 3-inch x 3-inch, 4/Box</td>
</tr>
<tr>
<td>1 Bandage, Knuckle Fabric, 10/Box</td>
</tr>
<tr>
<td>1 Compression Dressing, 7.5-inch x 8-inch, 1/Box</td>
</tr>
<tr>
<td>1 Water-Jel, 6/Box</td>
</tr>
<tr>
<td>1 Eye Pads With Adhesive, 2/Box</td>
</tr>
<tr>
<td>5 Clean Wipes, Individual</td>
</tr>
<tr>
<td>1 Tape, 5-inch x 5-Yards</td>
</tr>
<tr>
<td>1 Medium Nitrile Gloves, 2 Pair</td>
</tr>
<tr>
<td>1 CPR Microshield Single Use</td>
</tr>
<tr>
<td>1 Eye Wash, 4-ounce Bottle</td>
</tr>
<tr>
<td>1 Bandage, Sheer strip 1-inch, Plastic, 100/Box</td>
</tr>
<tr>
<td>1 Biohazards Bag, 10-Gallon, Individual</td>
</tr>
<tr>
<td>1 Gauze, Elastic 2-inch x 4.5 Yards, Non-Sterile</td>
</tr>
</tbody>
</table>

USE CAUTION WHEN FIRST AID KITS CONTAIN MEDICATION, INCLUDING OINTMENTS & CREAMS. MEDICATIONS HAVE EXPIRATION DATES AND EMPLOYEES HAVE ALLERGIES. LAY PERSONNEL WHO ARE FIRST AID/CPR
TRAINED SHOULD NOT ADMINISTER MEDICATIONS OR APPLY OINTMENTS. ALWAYS CHECK BEFORE THE EMPLOYEE USES OR TAKES ANY MEDICATION.

UNDER NO CIRCUMSTANCES SHOULD THE FIRST AID KIT CONTAIN LATEX GLOVES BECAUSE OF THE VERY GRAVE NATURE OF LATEX SENSITIVITIES AND ALLERGIC REACTIONS.

4. Emergency Reporting Procedures

4.1 The site safety director must be notified immediately of any emergency, accident or incident on the project site by telephone, radio, or messenger.

4.2 With the exception of life-threatening emergency, all injuries are to be initially evaluated by the project site’s medical staff. If the treatment of the injury or illness is beyond the capabilities of the site medical staff, the injured party will be sent or transported to the predetermined off-site clinic or hospital for additional care and treatment.

4.3 Place emergency phone numbers in conspicuous places throughout the work area and on telephones.

4.4 Photographs of emergency situations are prohibited unless the site safety director or security director gives written approval.

4.5 Do not make comments regarding emergencies to a media representative. Refer media inquiries to a VW representative or the site safety director if a VW representative is not yet on the scene.

4.6 If there is an evacuation, immediately report to the appropriate assembly area.

4.7 Any event from a near miss to a serious injury or fatality must be reported to the site safety director and a VW representative within 24 hours of the occurrence.

5. Accidents Involving Serious Injury

5.1 In the case of a serious accident, call the designated emergency telephone number for immediate assistance and to obtain necessary first aid.
5.2 Volkswagen safety, security and medical personnel will assist in any serious or life-threatening emergency situation.

5.3 Clear the area and keep away non-essential personnel.

5.4 Provide assistance to rescue personnel, if requested.

5.5 After proper evacuation of the injured employee, do not disturb or remove anything in the immediate area of an accident scene without permission from the site safety director or a VW representative.

5.6 The responsible contractor must make a full investigation and submit a report in an approved format to the site safety director, with a copy to the VW representative, within 24 hours of the occurrence.

5.7 The contractor must comply with all applicable laws and regulations regarding the reporting of serious injuries or death.

6. Fire or Smoke

6.1 All employees must comply with the fire safety requirements of this site safety plan.

6.2 Fire extinguishers must be periodically inspected and maintained in operating conditions. All extinguishers must be checked at least monthly for serviceability, with the documented reports available for review by the site safety director.

6.3 The travel distance from any point of the contractor’s work area to a fire extinguisher shall not exceed 100 feet.

6.4 In the event of an uncontrolled fire, evacuate the area immediately. Call the designated emergency telephone number from any mobile phone or the nearest phone located in a safe area.

NOTE: Security or the site safety director will contact the fire department and escort them to the scene.

6.5 Any contractors attempting to extinguish a fire should have documented training within the past 12 months in the safe use of fire extinguishers.
6.6 Keep non-essential personnel away from the fire.

6.7 If explosive materials or compressed gases are involved or other hazards may exist, ensure that affected personnel are immediately evacuated to a safe distance.

6.8 Alarm signals will be as follows:

A. **TAKE SHELTER/WEATHER EMERGENCY** – five (5) short blasts, pause, five (5) short blasts. *Proceed immediately in an orderly manner to your designated shelter location.*

B. **BUILDING EVACUATION** – one (1) long 15-second blast. Proceed immediately in an orderly manner to the Trailer City and meet at your company’s trailer. Contractors without trailers will meet at their Prime Contractor’s trailer.

C. **SITE EVACUATION** – three (3) short blasts, pause, three (3) short blasts. Report to contact person, then proceed as directed by their contact & Site Security to leave the site in an orderly fashion.

D. **ALL CLEAR** – Broadcast by Volkswagen – Site Safety – Site Security by phone or Nextel and relayed by project safety personnel.

6.9 Contract employees are to evacuate to assigned assembly areas. Once evacuation is complete, contractors must account for everyone for whom they are responsible. If an employee is missing, notify the site safety director or emergency personnel immediately.

6.10 Responsible or affected contractors must make a full investigation of the incident and submit a written report to the site safety director, with a copy to the VW representative, within 24 hours of the occurrence.

### 7. Chemical or Hazardous Material Spill

7.1 In case of a spill, call the designated emergency telephone numbers immediately. Isolate and contain the spill if it is safe to do so, as determined by a competent person.
7.2 Comply with the requirements of this manual relating to environmental issues.

7.3 Responsible or affected contractors must make a full investigation and submit a report in an approved format to the site safety director, with a copy to the VW representative, within 24 hours of the occurrence.

8. **Property Damage**

8.1 Notify the site safety director immediately.

8.2 Protect against further damage where possible.

8.3 Keep non-essential personnel away from the area.

8.4 The responsible contractor must make a full investigation and submit a report in an approved format to the site safety director, with a copy to the VW representative, within 24 hours of the occurrence.

9. **Severe Weather**

9.1 Site Security, Site Management, local civil defense signals, NOAA weather radios and internet radar maps will determine if a specific weather emergency exists and also determine the respective protective measures to be followed. If necessary, Volkswagen site management will make the determination for shelter and/or evacuation if necessary. Contractors should follow the plan outlined below.

9.2 Lightning – In the event lightning is sighted, all exterior work will cease and personnel will report to their change shack(s), if grounded, or shelter locations indicated below. No exterior work will resume for at least 30 minutes following the last lightning strike observed, or radar indicates an “all clear”. Personnel will be notified of “all clear” by site safety director or security personnel.

9.3 Severe Weather – **TAKE SHELTER SIGNAL** is five (5) short blasts, a five (5) second pause, then five (5) short blasts repeated continuously.

9.4 All personnel working in any enclosed building will proceed with their crew to the nearest designated Bathroom/Shower Shelter. Foremen are responsible for
keeping their crew together, assuring a proper head count and reporting to their site safety manager.

9.5 Personnel working in any other area will proceed to the closest shelter and report head count to their site safety manager. Trailer City staff should proceed to the shelter closest to where their personnel are working.

9.6 Remain in the shelter until the “All Clear” is issued through Volkswagen Security.

9.7 Upon notification of a tornado warning or other severe weather affecting the project site, the site safety director will issue an alert (e.g., by public address announcement or other means).

9.8 Take the following actions during warning conditions.

A. Secure loose materials that can become displaced.

B. Seek shelter in designated tornado safe areas, if possible. If not, seek shelter in the center of a building or near the strongest supported section of the lower levels of a building.

10. **Bomb Threat**

10.1 While on the phone, follow Bomb Threat Checklist on following page. If you receive a bomb threat, call 9-1-1 immediately. A uniformed officer will be mobilized and will assess whether or not additional help should be summoned. The officer will not be familiar with your site so you will be asked to perform a visual search, starting with public access areas. Use your best judgment on how you implement the following information.

10.2 Bomb threats can be made by pranksters, political terrorists, cranks, criminal extortionists, disgruntled employees or even an employee looking for a few hours off work. The threat can arrive over the telephone, in the mail, or on a written message. *All threats must be taken seriously.* If the threat comes on a piece of paper, do not handle it any more than necessary and use gloves, a handkerchief, tongs, etc. to avoid ruining fingerprints.

A. **Search public access areas first.** Do not turn on the lights, throw any switches or use the telephone in a search area because a bomb could be attached. Turn
off radio transmitters in the area because some bombs can be triggered by radio waves. An ample number of flashlights should be available to aid with the search.

B. The police, fire department or other officials normally will **not** help in the initial search for a bomb on private property. The most senior person on-site will determine which personnel will be asked to initiate a search.

C. Visually search a room in sections starting at floor level and going around the room in one direction. Then search at waist level around the room again, and finally, search the upper walls and ceiling areas around the room. Listen for any unusual noises.

D. If an object is found, have all personnel evacuate the area. If an evacuation is ordered, employees should stay a minimum of 300 feet from the building and be prepared to find cover immediately.

E. Immediately notify the authorities giving the location, size and shape of the object. Do not touch or move the item. Never place anything directly on the item and do not immerse it in water.

10.3 The receiver of a bomb threat telephone call should attempt to transfer the call to the site safety director or security. The site safety director or security will notify local police, fire department, or bomb disposal authorities.

10.4 When a bomb threat is received, the site safety director, in consultation with law enforcement officials, will determine if an evacuation of the project site is required. Once evacuation is complete, each contractor will account for its employees.

[The remainder of this page is intentionally left blank.]
BOMB THREAT CHECKLIST:

Bomb Threat Checklist

Keep the caller on the line for as long as possible. If possible, ask the following questions:

When will the bomb go off?

Where is the bomb located?

What does the bomb look like?

What type of bomb is it?

How is the bomb activated?

Did you place the bomb?

Why are you doing this?

What is your name?

What is your address?

Exact wording of the threat:

_______ ________________ ________________ ________________ ________________ ________________ ________________ ________________

Take note of the following:

Time _______ Date _______

Sex of caller: _______ Race: _______

Age: _______

Number at which call is received:

_______

Number/Name on caller ID:

Length of call: _______

Caller’s Voice:

_______ Calm _______ Nasal
_______ Angry _______ Stutter
_______ Excited _______ Lisp
_______ Slow _______ Raspy
_______ Rapid _______ Deep
_______ Soft _______ Ragged
_______ Loud _______ Clearing throat
_______ Laughing _______ Deep breathing
_______ Crying _______ Cracking voice
_______ Normal _______ Disguised
_______ Distinct _______ Accent
_______ Slurred _______ Familiar

If the voice is familiar, who did it sound like?

Background sounds:

_______ Street noises _______ Factory
_______ Animal noises _______ Voices
_______ Clear _______ PA system
_______ Static _______ Music
_______ Local _______ Long Distance
_______ House noises _______ Motor
_______ Office _______ Phone Booth
_______ _______ _______ Other

Threat Language:

_______ Well spoken _______ Incoherent
_______ Foul _______ Taped
_______ Irrational _______ Reading

Remarks:

__________________________________________

__________________________________________

__________________________________________

Report call immediately to:
Site Safety Director
11. Evacuation

11.1 The site safety director and site security director and Volkswagen representative(s) will determine if evacuation of project site is required.

11.2 Leave the affected location by the designated evacuation route and proceed calmly to the designated assembly location.

11.3 Security and/or safety personnel will stay in the affected area as long as it is safe to ensure that all personnel have evacuated.

11.4 After arriving at the assembly area, contractors must report to the site safety director any problems relating to the emergency.

11.5 When evacuation is complete, contractors must account for their employees.

THE SITE EMERGENCY ACTION MANUAL SHOULD BEREFERRED TO FOR MORE DETAILED INFORMATION

12. Transportation

12.1 It is the policy of Volkswagen that first aid, medical, and emergency transportation is to be provided by the contractor for employees who sustain occupational injuries or illness.

12.2 Injured workers are not to transport themselves to the clinic or hospital for their initial visit. Subsequent or follow up care transportation is at the discretion of the contractor.

12.3 Volkswagen personnel will assist with transportation needs when injuries are serious or life threatening and ambulance service is indicated.

12.4 Contractors must contact the site safety director or security director to request and escort an emergency vehicle onto the project site.

12.5 Contractors must provide non-emergency transportation for their employees from the project site to the specified doctor's office or clinic.
13. **Reporting of Non-Referred Medical Treatment**

Contractors must notify the site safety director of employees who have obtained outside medical treatment for an alleged project site-related injury or illness. The responsible contractor must submit a report in an approved format to the site safety director, with a copy to the VW representative, within 24 hours of the occurrence.

14. **Reporting of Incidents**

14.1 All incidents must be reported immediately to the site safety director

14.2 An initial report must be documented and submitted within 4 hours of the incident

14.3 A final report must be documented and submitted within 24 hours of the incident

14.4 All final reports must include a root cause analysis and a Lessons Learned which may be used by other contractors as a means to prevent future incidents of the same type.

**APPENDIX C - INITIAL INCIDENT REPORT**

**APPENDIX D – FINAL INCIDENT REPORT**

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Section 5: Investigation and Reporting of Accidents

1. General Information

1.1 Accident and incident investigation and reporting promote accident prevention by detecting the causes of accidents. This allows steps to be taken to remove the causes and eliminate future accidents, thus, reducing the number and severity of occupational illnesses and injuries.

1.2 Accident investigation and reporting also helps to reduce worker compensation, public liability, and property damage insurance premiums.

2. Accident and Incident Investigation

2.1 An accident or incident resulting in an injury or illness, fatality, environmental release, damage to property or equipment, or a "near miss" must be reported and investigated. The following categories are recognized by Volkswagen.

A. Near Miss - An event or occurrence that had or has a high probability of compromising the safety or health of employees

B. Incident - An event that interrupts operations or damages property or equipment

C. First Aid Case (FAC)

D. Recordable Injury or Illness

E. Lost Workday Case (LWC)

NOTE: Categories C through E above are defined in the OSHA publication OSHA 3169, Recordkeeping – it’s new, it’s improved, and it’s easier. A full description of recordkeeping requirements may be found in the OSHA Recordkeeping Handbook, which may be downloaded from www.osha.gov.

2.2 The site safety director and the VW representative must be notified immediately of any fatalities, serious injuries or illnesses, and significant property damage. The site
safety director will lead the investigation of any of these events on the project site.

2.3 The contractor or designee responsible for the work area or trade involved in the accident or injury will conduct investigations of events not deemed serious and insignificant injuries or property damage. The site safety director and the VW representative will participate if he or she deems it appropriate.

2.4 Investigation will begin promptly after the accident or incident. The contractor must report accidents that result in fatalities and/or three or more injuries requiring over-night hospitalization within eight (8) hours of occurrence to the state and federal regulatory agency having oversight of work at the project site.

2.5 All accidents or incidents will be documented on a form approved for use by the site safety director. The initial notification of injury must be documented and submitted within 4 hours of the incident. The final report must be submitted within 24 hours of the occurrence of the accident or incident to the site safety director, with a copy to the VW representative.

2.6 The investigation and report must be made immediately; however, if applicable, distribution of the report will not be made until similar investigations and reports required by applicable regulatory agencies are complete. Lessons Learned must be developed from the root cause of the accident investigation.

2.7 The site safety director will take photographs in conjunction with investigations of accidents involving serious personal injury, non-project personnel injuries, substantial property damage, and equipment or material failure.

2.8 Information provided to the media is the responsibility of Volkswagen. Do not give information to the media without written approval from the VW representative or, if the VW representative is not available, the site safety director.

3. **Transitional Work Program**

3.1 Contractors must have a return-to-work program developed for the project to assist employees who are
temporarily disabled due to an injury or illness. The program shall include timely reporting of injuries to the site safety director, compliance with the medical treatment protocol for the project, aggressive claims management, and full compliance with the American with Disabilities Act, the Family Medical Leave Act and all other applicable federal and state laws.

3.2 Modified duty positions may be offered at any location of the project or on any shift, or at another location where the contractor is engaged if approved by the site safety director. Contractor shall coordinate and cooperate with the site safety director, the VW representative and insurance carriers as requested for claims management purposes.

4. Reporting Safety Performance

4.1 Prior to the start of work Contractors will submit a Contractor Safety Performance Report or Contractor Qualification Questionnaire to the site safety director.

4.2 The report will contain the following information for the previous three years:

A. The Experience Modification Rating (EMR) for the firm

B. The total number of incidents that occurred on the job during the reporting period

C. The total number of recordable injuries or illnesses (recorded on the OSHA 300 Log) that occurred on the job during the reporting period

D. The total number of injuries or illnesses resulting in a lost workday case that occurred on the job during the reporting period

E. Additionally, the contractor will provide their written environmental health and project safety and health program and the contractor's project safety program for review by the site safety director prior to the start of work.
Section 6: Safety Orientation and Training

1. General Information

1.1 This section establishes basic training and instruction activities to ensure that employees are trained in hazard recognition and are informed of their responsibilities in carrying out their assignments in an efficient and accident-free manner.

1.2 The provisions in this section also will help employees comply with specific OSHA, state, and local safety requirements, as well as the requirements of this manual.

1.3 It is the contractor’s responsibility to provide training in a language that their employees can understand.

1.4 The contractor’s supervisor must instruct employees on the safest way to perform each task of the work assignment prior to starting work.

2. Safety Meetings, Records, and Minutes

Contractors will hold regularly scheduled safety meetings (daily pre-start meetings and twice weekly tool box talks) and require attendance by employees. These meetings will provide an opportunity to point out hazardous conditions or unsafe work practices, and discuss safety and environmental rules and regulations, safe working procedures, analysis of accidents, and potential hazards. Records and minutes of safety meetings are required, including recording dates, attendees and subjects covered.

3. Specific Training and Instruction

3.1 Contractors are required to provide regular and continuing training for their employees, including all training required by applicable regulations. They will also monitor the training activities of subcontractors and others under their direction.

3.2 The following are examples, but not a complete list, of the areas of training required.

A. Recognizing and avoiding unsafe conditions and acts, specific regulations applicable to the work environment and the safe handling and use of poisons, caustics, and
harmful substances when the employee is exposed to or required to handle or use them

B. The potential dangers of exposure to harmful plants or animals, how to avoid injury, and the first-aid procedures to be used in the event of injury

C. Awareness of potential hazards, personal hygiene, and personal protective measures

D. Handling and use of flammable gases, liquids, or toxic materials, if applicable to work

E. Entering a confined or enclosed space, the hazards involved, the necessary precautions, and the use of protective and emergency equipment required, if applicable to the work

F. Environmental training

G. Hazard recognition, emergency procedures, and the use of tools and equipment

H. Electrical safety and lockout/tagging

I. Handling and use of fire extinguishers

J. Ladder safety and fall protection

K. Using a respirator, if applicable to the work

L. Working in a roadway, if applicable to the work

M. The proper method of flagging, if applicable to the work (This training must be documented and include selection of proper clothing and equipment.)

N. The proper method of giving signals for operators of cranes, backhoes, and helicopters, as applicable to the work (This training must be documented.)

3.3 Contractor is required to maintain records of training, including, but not limited to, the names of attendees, the dates of training and the subject of the training.

4. Promotional Material

4.1 A project bulletin board will be maintained at the main entry to the work site, and at the orientation trailer.
Updating the materials on the bulletin board(s) is the responsibility of the site safety committee. At a minimum, OSHA safety requirements and additional safety promotional material must be posted.

APPENDIX E – MINIMUM REQUIREMENTS FOR PROJECT BULLETIN BOARD

4.2 Contractors using temporary offices should make use of bulletin boards to post safety requirements. Other postings are as required by OSHA.

5. Job Hazard Analysis

5.1 Job hazard analysis is the process of carefully studying and recording each step of a job to identify existing and potential safety and health hazards, then evaluating the hazards to determine the best way to perform the job while avoiding the hazards. Working safely reduces costs resulting from employee injuries and worker compensation.

5.2 Contractors must conduct a careful study and record each step of the job being assigned to each employee. The purpose of this study is to identify existing or potential safety and health hazards and to determine the safest way to perform the job by eliminating or significantly reducing and controlling any hazards. The study will focus on identifying the following:

- potential hazardous tasks or conditions
- toxic or hazardous materials
- hazard control methods
- personal protective equipment and training procedures required to perform each task, duty, or work assignment safely

5.3 Contractors will develop guidelines and controls to implement a job hazard analysis program that enables their management and employees to anticipate hazards that may cause injuries, near misses, or death and to take corrective action. This allows everyone to anticipate what tools, safety equipment, and procedures they will need to do a job.

APPENDIX F – JOB HAZARD ANALYSIS TEMPLATE
6. Orientation and Refresher Training

6.1 Contractors must instruct newly employed, promoted, or transferred personnel in the safety practices required by their assignments. The initial safety orientation for new employees will be a site specific safety review led by the site safety director or his/her designee. This procedure does not supersede contractor requirements. Contractors also conduct a company and trade-specific orientation for their workers which must include a discussion of the basic safety and environmental regulations at the project site.

6.2 Employees are required to attend safety orientation before going unescorted into the work area.

6.3 Other work specific training requirements must be met in addition to this safety orientation before employees are permitted to perform work.

7. Safety Sticker / Badge Requirements

7.1 Safety stickers and orientation badges will be issued to employees after they have attended Volkswagen and contractor safety orientation.

7.2 Employees must bring the following to new hire orientation:

A. Two forms of valid identification (or a passport)

B. One form of identification must be a local, state or federal issued form of photo identification

C. Union labor force must provide a union referral slip

D. Proof of valid urinalysis test which was conducted within 30 days of the orientation. Pre-employment urine drug testing is not the function or responsibility of the on-site medical staff. Contractors will be responsible for ensuring that all personnel who are working on site are current with their drug testing status.

E. No person will be allowed to work on site until proof of drug testing is provided. There are no provisions for “probationary personnel”.
7.3 Employees must have a valid safety sticker on their hard hats and site badges in their possession when on a project site. The sticker must be readily visible and located on the rear center of the employee’s hard hat.

7.4 Additional stickers may be issued through the site safety director and will be applied to the hard hat as directed.

7.5 Employees must attend periodic refresher safety training. A new sticker will be issued following completion of the training. Refresher training is required annually, or whenever there is a gap of time of more than one month in employment at the VW site.

7.6 Visitors to the project site will participate in an abbreviated site orientation, and must be escorted at all times while on the project site.

8. Documentation Requirements

APPENDIX G – ORIENTATION AFFIDAVIT FORM

8.1 Employees are required to sign and complete an orientation affidavit and return it to the instructor.

8.2 The orientation affidavit number will correspond to the badge number issued and must contain an emergency contact name and number.

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Section 7: Inspection and Auditing

1. General Information

1.1 The inspection and audit program will be based on documented observations of worker acts and site conditions. Contractor employees will be observed performing their work and evaluated on whether or not they are performing that work in a safe or an at-risk manner.

1.2 The focus of the worker observations will be based on highest risk activities, including activities where pinch points are hazards, where there are line of fire or potential of struck by activities, hazardous housekeeping, storage or sloppy working environments, risks of overextending/overreaching and ascending or descending on ladders and scaffolds where three-point contact is essential.

1.3 Additionally, personnel who are at risk will be assessed for any at-risk work activities. These persons include those who are new to the project, new to the company they are working for, new to the trade (ALL APPRENTICES) and anyone using tools and equipment they may be unfamiliar with.

1.4 Where at-risk actions are taking place, it is the responsibility of the observer to stop the work and intervene. Workers must be made aware of the observation and corrective actions are to be a collaborative effort with the observer.

1.5 If a worker is observed performing his or her work activity safely, notation must be made and the employee should be aware that he/she is recognized as a safe worker.

1.6 Contractors are responsible for conducting observations as directed by the site safety director.

2. Inspection and Audit Program

2.1 Each contractor will establish an inspection and audit program to help eliminate unsafe practices by its employees, establish a hazard-free workplace, and protect the environment. In addition to daily work site audits conducted by each contractor, the site safety
director will coordinate and oversee the inspection and audit program as part of the weekly safety committee functions.

2.2 The inspection and audit program reaffirms the contractor's responsibility for the actions of its employees as originally assigned under the General Duty Clause Provision of the Occupational Safety and Health Act of 1970 (revised). The exercise of these responsibilities by contractors is an effective deterrent to accidents arising from unsafe acts or conditions.

3. **Inspection and Auditing Procedures**

3.1 Control of workplace safety is achieved only when each contractor fulfills contractual and statutory responsibilities by implementing practical steps to maintain safe, healthy, and environmentally sound work practices and conditions.

3.2 Contractors will be responsible for conducting continuous monitoring of their operations to ensure that they are aware of the probable sources of potential injury, illness, or loss due to unsafe acts or conditions.

3.3 Contractors will continually monitor and audit the performance of subcontractors and their supervisors. Contractors will notify subcontractors if unsafe practices are observed. Contractors will be responsible for the appropriate and timely corrective action.

3.4 Contractors must appropriately plan the procedures to be followed for each operation. Personnel chosen to perform a planned operation must be trained in all aspects of the procedure, including emergency actions to be taken in the event of a mishap.

3.5 In addition to inspections conducted by the contractor, the site safety director, insurers and VW representatives may conduct inspections and audits. Weekly site safety audits will be led by the site safety director as part of the site safety committee functions. Contract activities are also subject to periodic inspection by OSHA compliance officers. Contractors shall respond in writing to the site safety director, with a copy to the VW representative, on actions taken on all safety audit findings.
4. OSHA Inspections and Audits

4.1 ADD INFORMATION FROM ACI SAFETY MANUAL

4.2 If OSHA compliance officers visit the project site, they will be escorted by the site safety director or a VW representative. The appropriate contractors will then be notified so that an opening conference may be conducted. If the inspection is to occur on the project site, the site safety director or a VW representative will organize the inspection in accordance with OSHA regulations. Contractors must forward copies of OSHA inspection reports and citations received by the contractor to the site safety director and the VW representative. The contractor must post citations as required by OSHA.

5. Additional Inspection Requirements and Information

5.1 Contractors will notify the site safety director immediately in person, and subsequently in writing of the existence of hazardous conditions, property, or equipment in work areas that are not under the contractor's control. It is the contractor's responsibility to take necessary precautions against injury to their workers until such hazards are removed.

5.2 The contractor's equipment will be used, inspected, and maintained as directed by this manual, the manufacturer's instructions, and by applicable federal and state safety, health, and environmental regulations. If a conflict exists, the more stringent requirement takes precedence.

5.3 Documented equipment inspection reports must be made available to the site safety director if required.

5.4 The contractor’s safety program and documentation will be audited on a regular basis. This periodic review will be conducted on a monthly basis and notification will be given in due course.
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Section 8: OSHA Regulations

1. General Information

1.1 In all instances except where specifically referenced, TOSHA (Tennessee Occupational Safety and Health Administration) standards are adopted by reference to OSHA standards. Any references to OSHA standards will incorporate TOSHA rules.

1.2 Contractors will know and understand their responsibility for compliance with OSHA regulations, and will have a copy of the applicable OSHA standards on site for proper reference.

1.3 The OSH Act of 1970 has specific requirements including this requirement known as the “General Duty” clause:

A. Occupational Safety and Health Act of 1970: 1903.1

B. “Each employer shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his or her employees.”

C. In situations where there are not specific standards, compliance officers can issue citations based on this clause.

1.4 There may be instances in this site-specific safety program that fall under standards other than Construction Standards found in 29CFR 1926. References will be indicated as applicable.

2. OSHA Publications

2.1 OSHA Part 1926 - This portion of OSHA is applicable specifically to construction work. A helpful publication for job supervisors is OSHA 3252, Worker Safety Series – Pocket Guide (Construction) which is a digest of basic applicable standards and is referenced as APPENDIX K.

2.2 OSHA Part 1910 - Areas of safety not dealt with in the Construction Standards (Part 1926) may be covered in the General Industry portion of OSHA Part 1910.
3. **OSHA Regulations**

3.1 Contractors will know, understand, and comply with the Occupational Safety and Health Act of 1970 as it pertains to their work responsibility. This act is administered by the US Department of Labor in conjunction with various state OSHA (or OSHA-approved) programs.

3.2 OSHA Poster - Part 1903 of OSHA requires posting the "Safety and Health Protection on the Job" poster in a prominent location. The poster briefly states the intent and coverage of OSHA. Failure to post this document is a citable offense.

A. Contractors may obtain information regarding additional required postings from the Tennessee Department of Labor and Workforce Development (www.state.tn.us/labor-wfd)

3.3 Recordkeeping requirements include OSHA Form 300, Log of Occupational Injuries and Illnesses and the First Report of Injury Form.

3.4 The contractor must report fatality cases and accidents in which three or more people are hospitalized over-night in one incident to OSHA within eight (8) hours of the occurrence as required by law.

3.5 Copies of the Occupational Safety and Health Act of 1970 and related information on state plans, standards, education, and training programs may be obtained from the state regulatory agency having oversight of work at the project site.

3.6 Should the OSHA regulations not address a specific procedure or hazard, contractors are still responsible for their employees' general safety. A contractor's failure to accept this responsibility can still be cited by OSHA under the General Duty clause.

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Section 9: Hazard Communication Program

1. General Information

1.1 This standard is referenced as 29CFR 1910.1200 and 29CFR 1926.59.

1.2 Contractors must establish and maintain a written, comprehensive hazard communication program that complies with applicable state and federal law and includes:

A. A list of hazardous materials in the workplace
B. Material Safety Data Sheets (MSDS)
C. Provisions for container labeling
D. An employee training program

1.3 Refer to the DOT Emergency Response Guidebook for information about hazardous material spills.

The entire Emergency Response Guide may be downloaded from the DOT website - www.hazmat.dot.gov/pubs/erg/guidebook.

2. Hazardous Materials List

2.1 Contractors must prepare a hazardous materials list before the materials arrive on the project site.

2.2 The hazardous materials list must contain:

2.3 The chemical name or the common name used on the MSDS or container label

2.4 The quantity usually stored on the project site in the following ranges:

A. Class A for quantities of less than 55 gallons or 500 pounds
B. Class B for quantities between 55 and 550 gallons or 500 and 5,000 pounds
C. Class C for quantities between 550 and 5,500 gallons or 5,000 and 50,000 pounds

D. Class D for quantities greater than 5,500 gallons or 50,000 pounds

APPENDIX L – HAZARDOUS MATERIALS SPREAD SHEET

2.5 The area where the hazardous material is stored and to what extent it may be stored at altered temperature or pressure

2.6 The hazardous materials list will be prepared for each work area, reviewed and updated every 30 days or when there is an addition or removal of a hazardous material, or when the quantity stored changes enough for it to be listed in a different class. A written affidavit of assurance will be provided to the site safety director by the fifth day of every month. The entire hazardous materials list must be updated annually.

APPENDIX M – AFFIDAVIT OF ASSURANCE (HAZARDOUS MATERIALS)

2.7 Contractors may be requested to submit electronic or hard copies of the hazardous materials list and material safety data sheets to the site safety director, with a copy to the VW representative, before the hazardous materials are brought on project site.

2.8 Receipt of this information by the site safety director or a VW representative does not imply acceptance of responsibility or guarantee completeness or accuracy of contractor submittals.

2.9 The use of hazardous materials at the project site requires consultation with, and approval by, the site safety director.

2.10 Hazardous materials may not be stored on the project site without written consent from the site safety director.

3. Material Safety Data Sheets

3.1 Contractors must maintain the most current material safety data sheets provided by manufacturers and distributors of the material. If the contractor does not receive an MSDS from the manufacturer or distributor,
the contractor should submit a written request for one. An MSDS dated three years earlier than the submission date should not be submitted to the site safety director without verification that it is the latest version of the document.

3.2 Beyond the identity information, the MSDS must provide information in the areas required by OSHA in 1910.1200(g)(2).

3.3 A copy of each MSDS must be maintained at the project site. The copy must be readily accessible to contractors, employees, and emergency personnel. Other contractor’s employees also have the right to review any MSDS to determine protective measures that may be applicable to them.

3.4 The State of TENNESSEE has additional requirements to this Standard, and may be referenced at www.state.tn.us/labor-wfd/standardproc; Tennessee Hazardous Chemical Right-To-Know Law, Rule 800-01-09.

3.5 Any personal protective equipment identified in the MSDS for employee protection is the responsibility of the contractor and the contractor must bear all associated costs with any additional PPE.

4. **Container Labels**

4.1 Contractors must ensure that labels on incoming containers are not removed or defaced, and that containers are clearly marked.

4.2 Each container must be labeled, logged, or marked with the identity of the hazardous chemical it contains, and it must show appropriate hazard warnings for employee protection. The hazard warning can be messages, words, pictures, or symbols used to convey the hazard. Labels must be legible, in English (plus any other language required), prominently displayed, and meet OSHA and DOT requirements.

4.3 Chemicals transferred into secondary containers must be labeled as to their contents, unless the chemical transferred is for one worker (individual) use during one work shift. The chemical must remain in the control of the individual using the product.
5. **Hazard Communications**

5.1 Contractors must have a means of informing employees of the hazardous materials associated with the work they perform, and communicating information on hazards at the project site.

5.2 Contractors will train employees to recognize and avoid hazards and train them in the use of personal protective equipment to be used when working with hazardous materials.

5.3 Employee Information and Training

A. Contractors will establish a training and information program for employees potentially exposed to hazardous materials in their work area at the time of initial assignment, and whenever a new hazard is introduced to their work area. The discussion topics must include at a minimum:

B. Existence of the hazard communication standard and its requirements

C. Operations in the work area where hazardous materials are present

D. Where the contractor will keep the written hazard evaluation procedures, communications program, hazardous materials list, and the required MSDS’s

E. Training must comply with OSHA standards and, at a minimum, focus on the following:

F. How the hazard communication program is implemented on site, how to read and interpret information on labels and MSDSs, and how employees can obtain and use the available hazard information

G. Hazards of the materials in the workplace

H. Measures employees can take to protect themselves from hazards

I. Specific procedures put into effect by the contractor to provide protection, such as work practices and using personal protective equipment
J. Methods and observations, such as appearance or smell, workers can use to detect the presence of a hazardous material to which they may be exposed.

K. Contractors who are not familiar with the state’s hazard communication program should contact the state regulatory agency with oversight of hazardous materials at the project site. Their address is as follows:

L. TOSHA - 220 French Landing Drive - Nashville, Tennessee 37243 Toll Free Number: 1-800-249-8510

M. Contractors must report to the site safety director and the VW representative any illness or injury known or suspected to be associated with hazardous material use or potential exposure while on project site.

5.4 Hazardous Materials

A. Contractors are responsible for the safe use, storage, transportation, and disposal, in accordance with applicable laws, of chemicals or hazardous materials used in the performance of their work.

B. Contractors must have available for the site safety director a list of chemicals or materials used in the performance of their work and a copy of the MSDS for each material. The receipt of the list or MSDS by the site safety director does not relieve the contractor from requiring employees and other persons performing work to assume responsibility for the safe use, storage, and disposal of hazardous materials.

C. Contractors must require their suppliers, agents, and employees of other persons performing work to use an approved substitute chemical or material in the place of a chemical or material that the site safety director indicates may not be used for the work.

D. Chemicals or materials brought on project site by employees and other persons performing work must bear a label stating the identity of the chemical or material, hazards associated with it, and the name of responsible party bringing the chemical or material onto the project site.

E. Waste resulting from the work must be properly disposed of by the responsible contractor in accordance with local, state and federal regulations. If uncertain
about proper waste disposal, contact the site safety director. Do not dispose of waste in dumpsters at the project site used for general purposes.

F. The contractor must immediately notify the site safety director and the VW representative if hazardous substances, pollutants, and contaminants are encountered at the project site.

G. Contractors are required to keep accurate records of the types and quantities of waste, including hazardous waste, and the facilities in which the wastes are treated, incinerated, or disposed. The contractor must provide the site safety director with copies of these records. Liquids (including muddy water) or chemicals should not be pumped or allowed to flow into a sewer. Do not clean equipment or change lubrication or pneumatic fluids in areas that are not equipped with spill contaminant and control facilities.

H. CHEMICALS THAT ARE PROHIBITED ON AUTO ASSEMBLY PLANT CONSTRUCTION SITES ARE INCLUDED AS APPENDIX N.

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Section 10: Alcohol and Drug Abuse

1. Alcohol and Drug Abuse Policy

1.1 Contractors will develop and enforce a policy that prohibits the possession, distribution, promotion, manufacture, sale, use, and abuse of illegal drugs, drug paraphernalia, controlled substances, and alcoholic beverages by employees while on project site. Contractors must comply with the Drug Free Workplace Act of 1988.

1.2 Contractors will require and fund drug testing and alcohol screening as outlined below. Contract employees are prohibited from reporting to the project site under the influence of alcohol or drugs which affect their working ability or safety, including but not limited to their alertness and coordination.

1.3 The policy applies to all contractors, contractor’s management, and employees.

1.4 Employees may possess a prescription medication in its original container to be administered only to the person for whom it is prescribed.

2. Drug Testing

2.1 Volkswagen requires the following regarding drug testing. Contractors are responsible for all costs associated with the substance abuse prevention program:

A. Contractors must have a program that includes pre-employment, annual, post-accident, random and reasonable suspicion drug testing.

B. The site safety director or the VW representative may request additional drug testing for work with exposure to high risk.

2.2 Contractors will require that each employee produce a urine sample to be tested at a minimum for marijuana metabolites (cannabinoids), barbiturates, benzodiazepine, methadone, propoxyphene, cocaine metabolites, opiate metabolites, phencyclidine, and amphetamines. Contractors will provide certification to the site safety director that the results of the urine
sample is confirmed prior to allowing employees to work at the Volkswagen construction site.

2.3 At a minimum, contractors must comply with SAMSHA or AHCA guidelines. Contractors may assign more stringent screening or confirmation values at their discretion except when regulated by applicable state or federal laws.

2.4 Testing methods must conform to applicable state and federal laws, and results must be reviewed by a licensed physician with knowledge of substance abuse disorders.

2.5 Certification in the form of the test results or a letter from the laboratory performing the testing must be provided to the site safety director for review prior to the employee's orientation. The test that is the basis for the certification and must have been performed within the 30-day period preceding the employee's orientation. The cost of all pre-work testing will be the responsibility of the contractor. Contractors will retain the certification in their files. The site safety director may request the certification for archiving with the contract files.

2.6 “Instant Tests” must be submitted to an authorized laboratory for confirmatory results. A negative instant test result may be submitted to the site safety director as evidence of pre-employment drug testing.

2.7 The site safety director or a VW representative has the right to request that the contractor perform additional testing under the following circumstances.

A. Accidents or Safety Violations
   Following an occupational injury requiring treatment by a physician, an accident or incident involving safety rule violation, damage to equipment or property, careless acts, or in instances where the accident or incident was due to a failure to wear prescribed protective equipment while working on project site. All involved parties will be drug tested and a breath alcohol test will be conducted.

B. Reasonable Suspicion of Illegal Drug Use
When reasonable suspicion exists that an employee exhibits signs of intoxication, drug influence, or other behavior causing a prudent and reasonable person to have concern for the safety of the employee, other employees, or the public, the suspected individual will be drug tested and a breath alcohol test will be conducted.

C. Suspicious Incidents and Occurrences

When there is suspicion (based on demonstrable information such as an unusual number of post-accident positive test results, incidents of theft, lost productivity, unexplained personal behavior or other facts) that specific employees or other designated work groups (including but not limited to entire crews, work sites, shifts, or sensitive job classifications) are under the influence of drugs.

D. Discovery of Illegal Drugs or Drug Paraphernalia

Where an employee is found to be in possession of illegal drugs or drug paraphernalia, that employee will be terminated. When these items are found in an area controlled or used exclusively by employees, those employees will be drug tested.

E. Random Testing

Will be conducted in accordance with NIDA/DOT/SAMSHA standards and will not target specific individuals or groups.

3. Alcohol Screening

3.1 If the contractor has just cause to believe an employee is abusing alcohol, and it is affecting his or her work performance, or the contractor has just cause to believe an employee has consumed alcohol prior to, or during the course of the workday, the employee must be evaluated and a urine or breath alcohol screening test will be performed.

3.2 An employee is considered "under the influence" by meeting the legal definition based on breath alcohol content, or if he/she is unable to perform his/her job in
an acceptable manner because of impaired judgment or physical abilities following the use of alcohol.

3.3 The consumption or possession of alcohol on the job site or during working hours is prohibited.

A. This includes in any trailer, parking area, or roadway prior to, or after the workday.

4. Consequences

4.1 An employee who produces a confirmed positive drug test after MRO review or is determined to be under the influence of alcohol will be prohibited from working at or entering the project site.

4.2 Employees may be barred from project site for the following:

A. Refusing to submit to a search or inspection of their person, vehicle or possessions, or refusing to submit to a urine, drug, or breath analysis test when requested by the contractor.

B. Degrading, diluting, switching, altering, or tampering with a test sample

C. Using, manufacturing, distributing, or dispensing illegal drugs while on the project site

4.3 The site safety director will be immediately informed of the name of any person that is barred or removed from project site for violation of the alcohol and drug abuse policy.

5. Enforcement

5.1 Contractors will remove employees from the project site if they are on the project site while under the influence of alcohol or drugs.

5.2 Contractors will obtain the appropriate permission so that employees entering, departing, or on the project site will, upon the contractor’s request, undergo a search of their person, locker, desk, or any property under their control for illegal drugs. This includes the employee’s personal effects and automobile if it is located on the project site. Such searches may be conducted when there is a reasonable basis to suspect
that the employee's work performance or on-the-job behavior may have been affected by drug use or that the employee has sold, purchased, used, or possessed illegal drugs on the project site.

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Section 11: Security Program

1. General Information

1.1 Contractors will establish a security program for their company owned equipment and coordinate their security actions with the site security director and site safety director.

1.2 Volkswagen is not responsible for lost or stolen property at the project site.

2. Use of Volkswagen Property

2.1 Volkswagen property is not to be used by contractors, contract employees, subcontractors, vendors, or suppliers without prior authorization. Violation of this policy may result in immediate removal from project site.

2.2 Workers, management supervision, support staff and material delivery personnel will use only designated parking areas, laydown areas, roads, gates, and doors for entry or exit. These areas are noted on the attached site plan layout and trailer city / construction parking layout.

APPENDIX O - LAYOUT DRAWINGS

2.3 All workers and support staff are to park in designated areas only.

A. Security reserves the right to tow vehicles that are parked in areas other than those assigned. Persons authorized to bring their vehicles on site on into trailer city will be issued an authorization pass. Vehicle damage, towing, and storage charges are the vehicle owner's responsibility.

B. Vehicles parked or operated on project site are subject to search without prior notice. Failure to allow a search may result in the vehicle and employee being barred from project site.

2.4 Reckless or irresponsible vehicle or machinery operations will result in immediate removal from project site.
2.5 Visitors must be escorted while on project site.

3. Harassment Prevention

3.1 Harassment creates a hostile work environment.

3.2 All forms of harassment, including sexual harassment, will not be tolerated. Violation of this policy will result in immediate removal from project site.

3.3 Because there may be varying understanding of what constitutes harassment and a hostile work environment, contractors are responsible for training their workforce regarding unlawful harassment. Documentation of training will be kept at the project site, and must be made available to site security director, site safety director or VW representative upon request.

A. Materials which may be offensive or inappropriate may be audible, written or printed in nature. Photographs, calendars, shirts, hats, stickers or decals which are offensive or inappropriate are prohibited at the Volkswagen site.

B. The above list is not conclusive and contractors are responsible to remove such materials as listed above. Failure to do so will result in the offending individual’s removal from the project site.

APPENDIX P – Recommended Harassment Training

4. Contractor Identification Badges

4.1 Contractors must wear an identification badge in plain sight while on the project site. Personnel without a proper badge will be questioned regarding their presence and may be asked to leave the project site. Do not enter or attempt to enter the project site without proper authorization and identification.

A. Replacement costs of any lost or stolen identification badges is the responsibility of the contractor or their employee(s).

4.2 Visitors to the project site will be admitted through the security office, where they will sign in and be issued a visitor pass. Any visitor to the project site must participate in an abbreviated site-specific orientation
conducted by the site safety director prior to entering the construction area outside of trailer City for the first time. The contractor is to provide visitors with any required personal protective equipment before they enter a work area. Visitors must follow the same procedure as other personnel when entering or exiting the work area through a designated security post.

A. Visitors may not perform or direct any work activities.

4.3 Visitors must be escorted at all times.

4.4 Dismissal of an employee from the project site requires that the contractor’s supervisor escort the employee to the designated exit; obtain the dismissed person’s identification badge (if any), documents, keys, and equipment; ensure that the person immediately leave project site; and notify the site safety director and security. The supervisor will note the termination date and time and immediately return the dismissed employee’s identification badge and sticker to security.

4.5 The contractor is responsible for collecting and returning all identification badges at the end of work, the resignation or termination of an employee, or when requested by the site safety director or VW.

4.6 Contractors or their employee(s) are responsible for all costs incurred to initially badge workers and reissuance of badges if lost or stolen.

5. Deliveries

5.1 Delivery drivers for contractors, subcontractors, vendors, and suppliers must report to a designated security post upon arrival at the work area. A security officer will contact the appropriate contractor to arrange for an escort to the designated work area.

5.2 The driver will sign-in, receive a visitor pass, and be escorted by the appropriate contractor to the designated area for receiving and unloading. Upon completion of the delivery, the driver must return to the same gate entered, sign out, and leave the visitor pass with the security officer. Drivers must remain in the delivery or receiving dock area until they are ready to leave the project site.
5.3 Delivery drivers may not be outside their rigs unless properly clothed (long pants, t-shirt, boots or closed shoes, hard hat, high visibility vest and safety glasses.

5.4 Delivery drivers must remain in the area of their truck and may not interfere with the construction operations including loading or unloading materials. They may strap/secure loads only when the area has cleared and it is safe to do so.

5.5 Contractors are responsible for assuring their trucking/delivery/OTR providers are aware of these rules as well as rules prohibiting children and pets within the perimeter of the Volkswagen site.

A. Drivers are also prohibited from bringing firearms and weapons on the project site. (see section 8, below)

6. Site Security

Security is provided at the project site 24 hours per day, seven days per week. This service does not, however, relieve contractors of their duty, obligation, and responsibility to ensure that their trailers, vans, vehicles, equipment, tools, and storage areas are properly secured at the end of each workday.

7. Contractor Responsibilities

7.1 Contractors will provide or direct the following as appropriate:

A. Employees will park in designated parking areas as noted in Section 11 of this manual.

B. Employees will have a method of personal identification, such as hard hat decals, signage or hard hat color as outlined in Section 14 of this manual.

C. Contractors will provide perimeter security and safety fencing for construction areas that are not maintained by Volkswagen

D. Contractors will provide adequate site lighting for night security and construction activities.

E. Contractors will provide potable water for their employees during construction activities.
F. Contractors will provide portable bathrooms and hand washing facilities for their employees during construction activities.

7.2 Contractors will maintain potable water, portable bathrooms and hand washing facilities in a clean and sanitary manner. Failure to do so will result in costs which will be borne out by the contractor.

A. Contractors will provide barricades, signs and signals as required for their construction activities.

B. Contractors will provide separate smoking areas that have been approved by the site safety director.

C. Smoking and tobacco use will be allowed until the building is enclosed and the floor is poured. After that point, there will be no smoking or tobacco use within the footprint of the building.

7.3 Contractors will provide a site access plan for approval by the site safety director and site security personnel.

7.4 Contractors are responsible for any additional field office security beyond that provided.

A. If additional security measures are instituted, advise the site safety director and security of installed audible or visible alarm devices.

B. Provide a list of supervisory personnel (name and telephone number) who will be available during non-work periods to assist in the event of a security breach or other problem.

C. Advise employees, subcontractors, and suppliers of site speed limits and security measures.

7.5 Speed limit on the project site is 15 MPH unless otherwise indicated.

7.6 Contractors are responsible to ensure that all posted speed limits, stop signs, yield signs and other roadway directional information is followed by their employees.

A. Provide identification of all equipment and machinery by either paint scheme, ID tag or contractor name painted in a prominent location.
B. Disable and store motorized machinery in designated and approved areas during non-work hours to prevent unauthorized operation.

C. Per the OCIP Program, provide proof of required insurance for vehicles to be used on the project site prior to vehicle use.

7.7 Employees are responsible for:

A. Safe operation of vehicles while on site and when leaving the project site

B. Locking or securing personal vehicles against theft

**NOTE:** Volkswagen does not assume responsibility for damage, fire, or theft to a contractor's vehicle.

C. Parking in designated areas only

D. Displaying an identification badge while on site

E. Ensuring the security of personal tools and equipment

F. Reporting accidents or incidents to the contractor's management, the site safety director and to security personnel at the project site

8. **Firearms and Weapons**

8.1 Firearms (shot guns and rifles) pistols, handguns, bows and arrows and other weapons, including hunting knives are prohibited on the project site regardless of permit. This includes firearms and weapons stored in vehicles while parked on the project site.

8.2 Fireworks or other exploding devises are prohibited.

8.3 Hunting, fishing and trapping are prohibited on Volkswagen property.

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Section 12: Safety Procedures and Permits

1. General Information

1.1 The remainder of this manual contains specific technical safety procedures that will be followed by all contractors and their employees.

1.2 The technical safety procedures are not intended to be "all inclusive." If certain provisions of these safety procedures are less stringent than applicable federal, state, or local statutory safety regulations, the statutory regulations take precedence. Where standards set forth in this manual are more stringent than federal, state, or local regulations, the more stringent standards take precedence.

2. Safety Procedures

2.1 Contractors and employees must review the applicable safety procedures described in these sections to determine their roles and responsibilities as they relate to the work.

2.2 The site safety director will enforce the provisions of these safety procedures.

2.3 Contractors are responsible for administering and controlling the activities of the work area.

3. Project Site Procedures and Permits

3.1 The project site has permit requirements, medical clearance and surveillance requirements with which contractors must fully comply. Examples include, but are not limited to the following: permit to work, hazardous energy control, hot work permit, excavation permit, confined space permit, crane use notification, hazardous roof access permit, respiratory clearance, and hearing conservation. These requirements and the requirements in this manual must be met, with the most stringent requirements taking precedence.

3.2 Permits are required for certain work activities, including the following:
A. Construction and demolition
B. Hot work
C. Excavation and trenching
D. Lockout/Tagout and high voltage electrical work
E. Hazardous exhaust ventilation
F. Confined space entry
G. Life safety systems
H. Roof access and Hazardous roof access
I. Line break and tapping pressurized lines
J. Asbestos, lead or radiation work
K. Paint, aerosols, dust, vapors or gasses use or generation
L. Cranes or heavy lift equipment

3.3 Permits must be requested with as much lead time as possible to allow coordination of the various groups involved in the process.

3.4 In the absence of a permit to work, the contractor will develop, implement, and enforce a site permit procedure if requested by the site safety director.

APPENDIX Q – HOT WORK PERMIT
APPENDIX R – EXCAVATION & TRENCHING PERMIT
APPENDIX S – CONFINED SPACE ENTRY PERMIT
APPENDIX T – ROOF ACCESS PERMIT
APPENDIX U – CRITICAL LIFT PERMIT

4. Request for Variance

4.1 If working conditions dictate that current safety procedures are inadequate or unusable, the safety procedures defined in this manual may be modified. (example – Ladder Use at Heights > 6 feet)
4.2 The modified procedure must conform to the following rules:

A. It must be specific to an activity, a location and a time period.

B. It must be proposed on an approved form and signed by the individual responsible for the area in which the work is being done and the contractor's safety manager.

APPENDIX V – VARIANCE REQUEST

C. It must be submitted to site safety director for approval and signature.

Variances to TOSHA / OSHA must be applied for following Part Number 1905.10 Applications for Variances, Limitations, Variations, Tolerances: Variances and Other Relief under Section 6(b)(6)(A).
Section 13: Housekeeping

1. General Information

   1.1 Portions of this section may be referenced in OSHA 1926 – Subpart H (1926.250).

   1.2 Housekeeping is mandatory. Contractors will keep their work area neat, clean, and orderly.

   1.3 If a contractor’s work area is not kept clean, the site safety director will have the area cleaned and charge the cost to the contractor. The site safety director will also stop work until the area has been cleaned.

2. Definitions

   2.1 A barricade is a physical device used to direct and protect pedestrians and vehicles from a work area.

   2.2 Barrier Tape is a warning system.

   A. DANGER tape is red in color and indicates that no one may enter into the area unless they are authorized to perform work in the area. It is used for high-risk activities such as steel erection and overhead work.

   B. CAUTION tape is yellow in color and indicates that personnel may enter or cross the barrier after assessing the area and determining that it is safe to do so. It is used to designate a work zone.

   C. If any type of barrier tape is used, it must be flagged or identified with the name of the contractor, the person responsible for the installation of the tape, the reason for the barrier, and the anticipated length of time the tape is estimated to be in place.

   D. Contractors are responsible for maintaining tape while it is up, and removing it when no longer in use.

   APPENDIX W – BARRIER TAPE TAG SYSTEM

   E. A trash chute is a controlled means of conveying debris from an elevated location to the ground.
3. **Housekeeping Procedures**

3.1 Keep work areas, passageways, fire exits, fire lanes, and stairs in and around the buildings and structures clear of debris at all times.

3.2 Store materials, equipment, and tools in an orderly manner.

3.3 Keep storage areas and walkways free of dangerous depressions, obstructions, and debris.

3.4 Clean the work area daily and dispose of debris in dumpsters, or off site in accordance with the environmental requirements of VW, the EPA, and other regulatory agencies.

3.5 Separate dumpsters will be required for individual components as outlined in the LEED™ portion of the contract documents.

3.6 **Dumpsters**

A. Do not allow dumpsters to block fire exits, fire lanes, fire hydrants, or traffic areas (personnel or vehicular).

B. Keep dumpsters that are not part of a trash chute a minimum of 50 feet from structures.

C. Barricade the areas around dumpsters that are part of a trash chute.

D. Dumpsters will be marshalled in a location approved by the site construction manager and site safety director.

E. If dumpsters are used in combination with trash chutes, employees are not allowed inside the barricaded area or dumpster unless trash chute loading locations have a door and lock, which ensures that no material can be placed in the chute while work is being performed inside the barricaded area or dumpster.

F. Contractors who remove trash and debris from upper levels of the structure or the roof by opening perimeter protection will require 100% fall protection for personnel involved in the operation and are responsible to reinstall the perimeter protection when complete.
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Section 14: Personal Protective Equipment

1. General Information

1.1 Portions of this section may be referenced in OSHA 1926 – Subpart E

1.2 This section defines the requirements for the use of personal protective equipment to control or eliminate hazards or exposure to illness or injury.

1.3 Unless otherwise noted, contractors will provide the required and needed personal protective equipment, medical clearance, and the training described in this section and are responsible for the compliance of their employees. The contractor's safety manager will make regular field inspections to verify compliance.

1.4 The contractor's designated safety manager will review personal protective equipment to ensure that only equipment complying with OSHA, ANSI, NIOSH, and MSHA regulations or this manual is used.

1.5 A contract employee who refuses to use the prescribed personal protective equipment or willfully damages this equipment will be subject to the disciplinary procedures outlined in this manual.

1.6 Contract employees must be trained on the use, inspection, care, and storage of all personal protective equipment.

2. Definitions

2.1 A combination hard hat is a hard hat with a welding helmet attached.

2.2 A lanyard is a flexible line of rope, wire rope, or strap which generally has a connector at each end for connecting the body belt or body harness to a deceleration device, lifeline, or anchorage.

2.3 A body harness is comprised of straps that help distribute fall arrest forces over at least the thighs, pelvis, waist, chest, and shoulders and that can be attached to other components of a fall arrest system.
2.4 Safety shoes or protective footwear is footwear that contains a protective toe box specially designed and manufactured to meet the requirements established in the ASTM F2413 – 05 standard (Standard Specification for Performance Requirements for Foot Protection). However, protective footwear (safety shoes) may also include other types of protection, including metatarsal guards and anti-static protection.

3. **Head, Eye, and Face Protection**

3.1 Wearing an approved, non-conductive safety hat is mandatory in construction areas and designated areas at all times. Refer to ANSI Z89.1, *Safety Requirements for Industrial Head Protection*, and NIOSH standards.

3.2 Each general contractor and their sub contractors must wear the same color of safety hard hat with their company’s identification on the front of their helmet. Hard hat colors will be selected randomly at time of award.

3.3 No “Cowboy” style hard hats will be allowed on site.

3.4 Operators are required to wear hard hat and safety glasses at all times, unless operating equipment in a fully enclosed cab.

3.5 Construction areas and designated areas require eye protection at all times. Minimum eye protection includes approved safety glasses with side shields or mono-goggles that meet the standards specified in ANSI Z87.1, *Practice for Occupational and Educational Eye and Face Protection*. Dark safety glasses are prohibited when working indoors.

A. Personnel who wear prescription eyewear must wear over-the-glasses protective eyewear unless their prescription eyewear meet the requirements of the most current ANSI Z87.1 standard

3.6 Without limiting the generality of the foregoing, eye protection is required by OSHA to protect against flying particles, molten metal, hazardous material, gases, vapors, and light radiation. Employees must wear appropriate eye and face protection during certain tasks, including but not limited to:
• Welding, burning, or cutting with torches
• Using abrasive wheels, grinders, circular saws, or files
• Chipping concrete, stone, or metal
• Working with materials subject to scaling, flaking, or chipping
• Drilling
• Working under dusty conditions
• Waterproofing
• Using powder-actuated or pneumatic tools
• Working with compressed air or gases
• Working with chemicals or hazardous materials
• Using chop saws, chain saws, masonry saws, or similar equipment
• Working in the immediate area of operations listed above
• Working in laboratories

4. Respiratory Protection

4.1 Respiratory protection devices approved by NIOSH must be worn by employees exposed to hazardous concentrations of dust, fumes, mists, gases, smoke, sprays, vapors or other hazards as required by OSHA.

4.2 Contractors are required to assure employees are not exposed to hazardous concentrations of respirable dust, fumes, mists, gases, smoke, sprays, vapors or other hazards. Industrial hygiene monitoring may be required to prove or disprove the concentration levels. All costs associated with the IH monitoring will be absorbed by the contractor.

4.3 A respiratory protection program must be established that includes medical surveillance; training; equipment
selection, storage, and maintenance; fitness testing; and recordkeeping.

4.4 Contractors who issue respirators for comfort measures must assure that employees are trained to Appendix D of the Respiratory Protection Standard (1910.134 – Adopted by Reference).

APPENDIX X – 1910.134 – Appendix D

5. Hearing Protection

5.1 A hearing conservation program must be established when workers are exposed to noise levels greater than 85 dBA (time weighted average - TWA).

A. Approved hearing protection must be offered to employees exposed to noise levels above 85 decibels (TWA) in designated areas. Hearing protection must attenuate noise levels to less than 85 decibels.

B. Employees must wear approved hearing protection when noise levels exceed 90 dBA (TWA). Double hearing protection may be required to reduce noise levels to below 85 dBA.

5.2 Contractors are responsible for all expenses related to noise monitoring.

6. Fall Protection

6.1 Fall protection is required for work performed at heights. This includes work at heights greater than six feet in construction areas.

A. 100% fall protection is required on this project site for all work greater than six feet, including steel erection and scaffold use.

6.2 One or a combination of the following fall protection systems can be used on the project site:

- a personal fall arrest system (PFAS) consisting of a full body harness, shock absorbent lanyard(s), or a self-retracting lifeline that meets OSHA standards (Certain work that mandates fall protection requires
two shock absorbent lanyards or a double lanyard.)

- guardrail systems
- safety nets

Usage of “warning line,” “monitor” and/or “controlled access zone” systems as a sole means of fall protection is not allowed.

6.3 Body harnesses, shock absorbent lanyards, and self-retracting lifelines, regardless of configuration, must be subjected to a documented monthly inspection by the contractor. Inspection records are to be maintained by the contractor so that they are available upon request to the site safety director.

6.4 An acceptable method of inspection includes taped marking for harness and lanyard monthly inspections. The tape must be placed around the "D" ring located in the middle of the back on the harness and the shock absorber ends of lanyards.

6.5 In addition to monthly inspections, the contractor is expected to conduct additional inspections in accordance with regulatory requirements. According to OSHA standard 1926.502(d)(21), personal fall arrest systems shall be inspected prior to each use for wear, damage, and other deterioration, and defective components shall be removed from service.

7. Footwear

7.1 Employees must wear sturdy high top leather work boots. Sandals, open-toe shoes, high heels and bare feet are prohibited.

7.2 Contractors must ensure that the appropriate protective footwear is worn by employees in areas where safety shoes signs are posted and in areas where workers are exposed to foot injuries due to falling or rolling objects, objects piercing the sole, or where workers' feet are exposed to electrical hazards. Appropriate foot protection must be worn for operating tamping equipment and when handling and carrying heavy tools or objects. This may require the wearing of steel toed / toe cap work boots. Contractors are
8. **Hand and Skin Protection**

8.1 Wear appropriate hand protection when handling objects or substances that could cut, burn, injure the hand, or be absorbed into the skin, and when exposed to harmful temperature extremes.

8.2 Certain areas may require protection in the form of coveralls or air suits. Do not enter these areas without appropriate clearance, training, and protection.

8.3 Shirts with sleeves must be worn at all times. (T-shirt length or longer)

8.4 Shirts with sleeves must be worn by all personnel including delivery personnel.

8.5 Shorts are prohibited for all workers on the project site, Trailer City and in non-public areas.

8.6 Shorts are prohibited for all personnel including delivery personnel.

8.7 Long pants must be worn. The pants may not be frayed or contain holes. The pants and other attire may not be nylon or “athletic” wear.

8.8 Reflective high visibility safety vests, shirts or jackets are required for all workers, visitors, staff and delivery personnel while on the project site.

A. All personnel working in or near roadways will wear high visibility vests, shirts or jackets at all times.

B. Contractors are responsible for assuring that high visibility clothing that no longer meets appropriate high visibility or reflectivity criteria worn by their employees is replaced.

8.9 When burning, cutting or welding, workers may wear high visibility orange welding jackets in lieu of fire retardant high visibility vests.
9. **Welding, Cutting, and Burning**

9.1 Employees will wear a welding helmet with welding hood (combination hard hat) when welding. Soft caps for welding are prohibited.

9.2 Face shields that fit on hard hats must be worn along with approved safety glasses during grinding operations or operations which create flying debris.

9.3 For overhead work, wear hard hats and fire-retardant jackets or clothing.

9.4 Workers will keep clothing free of oil, grease, and flammable material. Button collars and cuffs, and tuck pant cuffs inside boots. Pockets must be covered with flaps and buttoned, or removed from the front of vests, shirts, and aprons.

9.5 Welders and their helpers must wear leather gloves and proper infrared/ultraviolet eye protection in addition to safety glasses.

9.6 Workers engaged in oxy-acetylene welding or cutting must wear a welding helmet or safety goggles that are equipped with suitable filter lenses.

9.7 Workers who are engaged in electric arc welding must use shields or helmets that are equipped with suitable filter lenses that fit on a hard hat.

9.8 Workers will wear approved safety glasses or goggles under a combination hard hat or welding hood.

9.9 Workers will not perform welding, burning, or open flame work on staging suspended by fiber or synthetic rope.

10. **Additional Personal Protective Equipment**

The contractor must furnish any additional equipment required by unusual circumstances (such as high temperature work or handling corrosive liquids) and not specifically covered in this section. (Muck boots used during concrete pouring is an example.) Use of such must be reviewed with the site safety director.
11. **Safe Lift Program**

11.1 Contractors should have a program that identifies which occupations and activities have routinely occurring lifting hazards.

11.2 At a minimum, contractors should train employees identified above on the following topics: recognizing lifting hazards, proper lifting techniques, back safety, and ergonomics.

11.3 When planning work which involves manual material handling, contractors should familiarize themselves with the ANSI publication *A10.40-2007 – Reducing Musculoskeletal Problems in Construction.*

APPENDIX Y – NIOSH *Simple Solutions for Construction Workers* DHHS (NIOSH) publication No. 2007-122

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Section 15: Environmental Issues

1. **Hazardous Waste Management**

1.1 Portions of this section may be referenced in OSHA 1926 Subpart D.

1.2 Contractors are responsible for the safe use and disposal of chemicals, petroleum products (gas and diesel) and other hazardous materials brought onto the project site in compliance with applicable laws and regulations, and for complying with the applicable requirements for generators of hazardous waste.

1.3 Contractors are responsible for storing hazardous materials in an area that is approved by the site safety director.

1.4 Contractors are responsible for supplying a proper storage area that has secondary containment which is approved by the site safety director.

1.5 Contractors that generate hazardous waste must comply with local, state and federal regulations.

1.6 Waste containers must be clearly labeled as to their contents. Do not dispose of hazardous and chemical waste in dumpsters on the project site.

1.7 Contractors that meet the qualifications of a conditionally exempt small quantity generator of hazardous waste as defined in Part 261.5, Title 40, Code of Federal Regulations (40 CFR 261.5), must coordinate with the site safety director the transfer of potentially hazardous waste for disposal. Contractors that do not meet the qualifications of a conditionally exempt small quantity generator are responsible for obtaining an EPA Identification Number and managing hazardous waste generated in accordance with applicable state and federal regulations. Contractors are subject to periodic inspections by the site safety director to ensure proper management, storage, and documentation practices are being followed.

1.8 The disposal of waste materials such as asbestos, lead paint, hazardous construction debris, or contaminated soil resulting from demolition, excavation, or maintenance activities that are not the result of
hazardous materials or petroleum products brought on site by a contractor must be approved by the site safety director.

1.9 Contractors are responsible for properly segregating recyclable materials into appropriate dumpsters as outlined in the LEED™ Technical Program.

A. Contractors who do not follow LEED™ Technical Program guidelines will be responsible for costs associated with compliance.

2. **Spill Prevention and Control**

2.1 To minimize the risk of spills or releases to the environment, contractors must employ appropriate protective procedures such as double containment, employee training, overflow protection, and other measures as part of activities involving the use, storage, or handling of petroleum products or hazardous materials on the project site.

2.2 Containers of hazardous materials and petroleum products should be stored in order to prevent releases to the environment. This requires selecting locations and methods to minimize exposure to rainfall, surface water, and the ground. Enclosures, shelters, and secondary containment should be used where appropriate. Containment pans should be placed under equipment where there is the potential for a leak or discharge. In the event that secondary containment is used in an area that is exposed to rainfall, the following requirements apply.

A. Prior to discharge of a containment system to the storm water system, inspect the primary container for signs of leakage, and inspect the containment system by visual observation for color, foam, outfall staining, visible sheens, and dry weather flow. The discharge of a containment system that has evidence of contamination is prohibited.

B. The responsible contractor must maintain a log indicating the individual making the observations, description of accumulated storm water, and the date and time of release.
C. Submit a copy of the log to the site safety director.

APPENDIX Z – SPILL LOG

3. Notification of a Spill or Release to the Environment

3.1 Volkswagen is subject to government notification and reporting requirements when a petroleum product or hazardous material is spilled or released to the environment, including releases to the ground, surface water, sanitary sewer system, or air that are not specifically authorized by the company’s environmental permits. A spill or release of a hazardous chemical or petroleum product must be cleaned up immediately.

3.2 The responsible contractor must notify the site safety director, site security director, site environmental representative and the VW representative immediately by telephone followed by a written incident report within 24 hours that includes the following information:

- Description of the spill or release event
- Names of individuals involved
- Date and time of spill or release
- Copy of the MSDS for the material spilled or released
- Estimated quantity and type of material spilled or released
- Duration of the release
- Steps taken or planned to reduce, eliminate, and prevent recurrence of the spill or release

4. Discharges to Storm Water Conveyance Systems

4.1 A discharge to a storm water conveyance system refers to any discharge to a storm water drain, parking lot, ditch, loading dock, or ground that is not connected to a sanitary sewer. The following types of non-storm water discharges may be discharged to the project site’s storm water conveyance systems.

- Uncontaminated groundwater
• Water from foundation drains and footing drains
• Air conditioner condensate without added chemicals
• Springs
• Uncontaminated potable water
• Waterline, sprinkler system, and fire hydrant flushes
• Discharges resulting from fire fighting

4.2 No other non-storm water discharges are permitted unless approved by the site safety director. Examples of prohibited activities include:
• Discharging of rinse water from vehicle or equipment washing
• Discharging of rinse water from concrete wash station
• Discharging of treated water systems such as water fountains, cooling tower water, and water used to passivate piping

4.3 An unauthorized or unpermitted non-storm water discharge is considered a release and must be reported and documented in accordance with the notification procedures described in the preceding section.

5. Erosion Control

5.1 Settling basins and/or straw barricading around storm sewers is required for ground breaking or any condition that could cause silt to enter a storm sewer.

5.2 If a construction activity involves one or more acres, contractors must obtain a storm water discharge permit before starting the work.

5.3 Contractors are responsible to establish an erosion control program which will be submitted to the site safety director prior to the start of work.
A. Contractors must identify a storm water operator who is responsible for assessing Best Management Practices (BMP) for the prevention of soil erosion and storm water discharge from the project site.

5.4 At a minimum, the storm water operator must perform a weekly assessment of the work site and also perform an evaluation following any significant rainfall (> one inch).

APPENDIX AA - STORM WATER DISCHARGE PERMIT

APPENDIX BB – STORM WATER WEEKLY ASSESSMENT

6. Excavation Activities in Environmentally Restricted Areas

In areas outlined in the general site drawings as environmentally restricted, excavations are prohibited unless approved in writing by the site safety director.

7. Open Burning

Open burning of debris on the project site is prohibited.

8. Disposal of Waste in Sanitary Sewers

No hazardous materials, chemicals, or petroleum products may be disposed in sanitary sewers.

9. Training

Contractors are responsible for training their employees on these procedures, and for maintaining training documentation.

10. Recycling

Volkswagen encourages and supports recycling of materials.

10.1 Contractors will be responsible for understanding and implementing the components of the site LEED™ Program, which are applicable to their work.

10.2 Prior to the start of the work, contractors should prepare a recycling plan and submit it to the site safety director and the VW representative.

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Section 16: Electrical Safety

1. General Information

1.1 Portions of this section may be referenced in OSHA 1926, Subpart I, K and V.

1.2 This procedure applies to the installation of temporary and permanent electrical work and the use of electrical power to operate equipment and electrical power tools.

1.3 Approved, site-specific procedures must be followed for work on electrically charged components.

2. Definitions

2.1 **Grounding** is a conducting connection between an electrical circuit or equipment and earth, or to a conducting body that serves as earth.

2.2 A **ground fault circuit interrupter** is a device for the protection of personnel that de-energizes a circuit or portion of a circuit.

2.3 **Outage approval** is authorization from the appropriate maintenance organization to shut down electrical service to a facility or equipment.

3. Electrical Safety Procedures

3.1 Temporary and permanent electrical work, installation, and wire capacities must conform to the National Electrical Code, applicable federal, state, and local codes and the electrical guidelines or requirements provided by project managers.

3.2 Only qualified electricians familiar with code requirements are allowed to perform electrical work, including repairs to electrical power cords.

3.3 Employees are not permitted to work near an unprotected electrical power circuit unless they are protected against electrical shock by de-energizing the circuit and grounding it, or are protected by effective insulation or other means, and are wearing required personal protective equipment. Work around energized systems must reference and comply with the most current NFPA 70E requirements.
3.4 Do not operate electrical tools or equipment in wet areas or areas where potentially flammable dusts, vapors, or liquids are present, unless specifically approved for the location.

3.5 Switches must be enclosed and grounded. Panel boards must have provisions for closing and locking the main switch and fuse box compartment.

3.6 Wearing rings, necklaces, or other conductive apparel around energized electrical components is prohibited.

3.7 The use of household radios, fans and other devices which have flat 2-wire cords is prohibited.

3.8 Extension Cords.

A. Limit the use of extension cords as much as possible.

B. Extension cords used with portable electric tools and appliances must be extra hard usage as defined in ANSI/NFPA 70 Article 400 (Table 400-4), heavy duty (no less than 12 gauge conductors for construction work) and of the three-wire grounding type conforming to the type and configuration required by OSHA standards. Acceptable types of flexible cords include hard service cord (types S, ST, SO, and STO) and junior hard service cord (types SJ, SJO, SJT, and SJTO).

C. Flat electrical extension cords are prohibited.

D. Elevate (at least 7 feet) or otherwise protect from damage electrical cords and trailing cables that could create a hazard to people in the area. Electricians may repair electrical cords with heat shrink tape only. Do not splice damaged electrical cords. The date and time of the repair must be initialed on a tag that is securely fastened with a zip tie to the affected area.

E. Protect portable electric tools and cords by a ground fault circuit interrupter (GFCI) throughout each phase of the work. GFCI protection for temporary wiring is mandated on construction sites at all times.

3.9 In areas where water or moisture is present or likely to be present, always use ground fault circuit interrupters on power circuits. If permanent power circuits are not GFCI, use a portable GFCI box with electrical tools and equipment. Test interrupters on a weekly basis.
3.10 Should a circuit breaker or other protective device "trip," ensure that a qualified electrician checks the circuit and equipment and corrects problems before resetting the breaker.

3.11 Provide suitable means for identifying electrical equipment and circuits, especially when two or more voltages are used on the same job. Mark circuits for the voltage and the area of service they provide.

3.12 OSHA regulations governing the operation of heavy equipment in proximity to high-voltage power lines are very specific.

A. Wide loads over 10 feet require a specified escort.

B. An outage approval must be obtained from the site safety director before heavy equipment, which can reach within arcing distance and is to be located within 50 feet of high-voltage lines or equipment, may be brought on site.

3.13 Electrical boxes, switch gear, cabinets, and electrical rooms which are left open when not directly attended will result in the worker being removed from the project site.

A. Insulate energized parts when covers have been removed or doors are ajar. Do not use cardboard, plywood, or other flammable material to cover energized circuits.

3.14 The contractor should perform documented monthly inspections on drop cords, GFCI, electrical tools and equipment.

3.15 A contractor may not use assured grounding conductor programs as a substitute for GFCI control.

3.16 Contractors will not add power cables or cords, which will over power the demand and rating of the power panels or power control boards.

3.17 Contractors will be responsible for having GFCI circuits on temporary generators that will be used for construction and site support power.
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Section 17: Control of Hazardous Energy - Lockout and Tag Out

1. General Information

1.1 Portions of this section may be referenced in OSHA 1910.147, Subpart J.

1.2 This section provides standard procedures for rendering inactive any electrical equipment or operating systems (stored energy systems) when equipment is down for repair, removal, replacement, or installation of new equipment.

1.3 Approved, site-specific procedures must be followed when working on existing systems.

1.4 "Danger - Do Not Operate" tags must be used with locks.

2. Lockout and Tagging Procedures

2.1 Do not work on equipment until it is de-energized and tested using this procedure.

2.2 Lockout and tagging must include the following elements:

A. Use only standard construction danger tags and single-key locks.

B. Tag must be filled out and include the following items: Description of the equipment, circuit number involved, date, employee name (printed), company name and contact number. Attach tags securely.

C. Do not use tags without locks

D. Never alter tags. Destroy dedicated tags immediately upon removal.

E. Do not operate equipment with a tag or lock attached regardless of the circumstances.

F. Operating a valve or switch to which danger tags are attached, or removing a lock without authorization will result in removal from the project site.
G. If the tag originator is off the site, the originator’s supervisor and the site safety director or designee may remove the lock and tag, or authorize removal after verifying the system or device is safe and clearing it with the appropriate trade(s). The authorization to remove the lock must be in writing.

APPENDIX CC – LOCKOUT TAG EXAMPLE

APPENDIX DD – REMOVAL OF LOCK PERMIT

H. A minimum two-tier lockout and tagging system is required.

I. Personnel responsible for facility operations at the project site must place the first lock on any circuit that is being locked-out. After ensuring that all parties have completed their work and removed their locks, the party who placed the first lock will remove the lock.

J. Each employee working in the area affected by the lock-out must place an additional lock on. When each employee completes work in the area, the person who placed the lock will remove it. (Every individual working in the affected area has the right to place a lock.)

K. No work requiring lockout or tagging should be conducted without the approved work permit.

L. Tags required beyond one shift will be replaced by the oncoming shift, or by the site safety director if no work is scheduled and the system remains shut down. Engineers or superintendents may be designated by the site safety director to act in this capacity. Long term lockouts may not require shift replacement, if so determined by the site safety director.

3. Construction Equipment Facilities

3.1 Electrically Operated Systems

A. Each contractor will place a multi-lock device or lock box when other crafts are involved in the electrical shutdown.

B. The electrician authorized by the site safety director will open the switch, pull power and control fuses, place the first lock and tag, and test the equipment to verify it is inactive.
C. Personnel from other crafts performing work place their locks and tags on the representative's multi-lock device. Where several crafts persons of one craft are involved, the foreman may place one lock on the multi-lock device, and then the crafts persons may place their locks and tags on the multi-lock device after witnessing a proper test.

D. Upon completion of work, personnel from other crafts remove their locks and tags.

E. The designated electrician authorized by the site safety director is the last person to remove his/her lock and tag. After ensuring everyone is clear, the electrician removes the lock and tag and notifies the site safety director.

F. New work is inspected and tested.

3.2 Piping Systems

A. The piping contractor places multi-lock devices when other crafts are involved in the mechanical shutdown.

B. The piping contractor de-energizes, locks, tags, and tests the system.

C. Personnel from other crafts performing work place their locks and tags on the piping contractor's multi-lock device. Where several crafts persons of one craft are involved, the foreman may place one lock on the multi-lock device, and then the crafts persons may place their locks and tags on the multi-lock device.

D. Upon completion of work, personnel from other crafts remove their locks and tags.

E. The piping contractor's lock and tag is the last to be removed. After ensuring everyone is clear, the piping contractor removes the lock and tag and notifies the site safety director.

4. Shop Equipment

4.1 Authorized operators of shop equipment must lock out their equipment to change tools, chucks, blades, and perform similar tasks.
4.2 Do not use pushbutton controls or butterfly valves for lockout.

4.3 Do not use a tag without a lock without coordinating with the site safety director.

5. **Locks and Multi-Lock Devices**

5.1 Use only single-key locks. The key must remain in the possession of the person placing the lock.

5.2 The prime craft directly related to the item to be locked out will provide and install multi-lock devices.

**APENDIX EE – LOCK OUT LOG**

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Section 18: Protecting Employees and the Public

1. Exterior Protection Procedures

1.1 All work should be isolated from the public to the extent possible. Work should not be performed in any area occupied or in use by the public unless permitted by contract or authorized by the site safety director.

1.2 When it is necessary to maintain employee or public use of work areas involving sidewalks, access from parking lots to construction work areas, entrances to buildings, lobbies, corridors, aisles, stairways, and vehicular roadways, contractors are responsible to protect the public with appropriate guardrails, barricades, temporary fences, overhead protection, temporary partitions, shields, nets and adequate visibility. The work should be done in accordance with approved work permits, the state's building code and other applicable regulations.

1.3 Contractors are responsible to keep sidewalks, entrances to buildings, lobbies, corridors, aisles, doors, and exits clear of obstructions to permit safe entrance and exit at all times.

A. Contractors are responsible for snow or ice removal to and from their work areas as well as in their work area.

1.4 Contractors are responsible to conspicuously post appropriate warnings and instructional safety signs. In addition, the contractor will assign a signal person to control the movement of motorized equipment in areas where personnel/pedestrians or traffic might be endangered.

1.5 Contractors are responsible to provide sidewalks, sheds, canopies, catch-platforms, and appropriate fences when it is necessary to maintain public pedestrian traffic adjacent to the erection, demolition, or alteration of outside walls on a structure.

1.6 Barricades meeting local requirements must be provided where sidewalk, shed, bridge fences, or guardrails are not required between work areas and pedestrian walkways, roadways, or occupied buildings.
Secure barricades to prevent accidental displacement and maintain them except where temporary removal is necessary to perform work. Barricade the area where work is being done overhead.

1.7 Contractors are responsible for barricades to protect employees and the public from open pits, excavations, trenches, overhead work, confined spaces, helicopter lifts, crane lifts and perimeters around steel / siding / roofing installations.

A. The above list may not be all inclusive, and contractors are responsible to evaluate when barricades are required.

1.8 Contractors are responsible to provide temporary sidewalks when a permanent sidewalk is obstructed by work. Install temporary sidewalks in accordance with the requirements listed above.

1.9 Contractors are responsible to maintain warning lights from dusk to sunrise around excavations, barricades, or obstructions in designated areas.

1.10 Contractors will provide illumination from dusk to sunrise for temporary walkways, parking areas and work zones.

1.11 When exit routes or assembly areas are affected by work, contractors are responsible to notify the site safety director in writing of the effect and proposed alternatives.

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Section 19: Hand and Portable Power Tools

1. General Information

1.1 Portions of this section may be referenced in OSHA 1926, Subpart P.

1.2 Contractors must follow approved procedures for using small tools.

2. Power, Air, and Hand Tools

2.1 Power, air, and hand tools must be operated in accordance with the manufacturer's recommendations.

2.2 Keep hand tools in good condition, inspected, cleaned, sharpened, oiled, and not abused.

A. Tag and remove from service if damaged or defective.

B. Replace worn tools immediately.

2.3 Inspect tools for damage and worn parts before use.

A. Remove damaged or frayed cords from service.

B. Do not hoist or lower tools by the cord or hose; use hand lines.

2.4 A qualified person must inspect power tools before use and document the inspection at least once per month.

2.5 Do not force tools beyond their capacity by using "cheater bars" or other shortcuts.

2.6 Do not use power tools if safety equipment such as shields, tool rests, hoods, and guards have been removed or rendered inoperative.

2.7 Employees must wear the required personal protective equipment when using tools under conditions that expose them to flying objects or harmful dust.

2.8 Ground electrically powered tools. Protect outlets used for 110-volt tools by ground-fault-circuit-interruption devices throughout each phase of the work.
2.9 Do not use diesel or gasoline-powered tools in unventilated areas, enclosed spaces, or outside of enclosed spaces. Dispense gasoline and other flammable liquids only from UL approved safety cans or equivalent.

A. Contractors are responsible to have fire extinguishers in the work area when this type of work is being conducted.

2.10 Use portable grinders or cutting wheels with hood-type guards and side enclosures that cover the spindle and at least 50% of the wheel. Inspect wheels regularly for signs of fracture.

2.11 Grinders and cutting wheel tools must be used with manufacturer’s handle.

2.12 Equip bench grinders with deflector shields and side-cover guards. Tool rests must have a maximum clearance of 1/8 inch from the wheel.

2.13 Secure couplings to hoses supplying pneumatic tools to prevent accidental disconnection.

2.14 Protect air-supply lines, inspect lines regularly, and maintain lines in good condition. Provide excess flow valves on supplying hoses exceeding 1/2 inch in diameter.

2.15 Reduce the operating pressure of compressed air used for cleaning purposes to 30 psi or less (except for cleaning of forms, etc.). Avoid operating pressure in excess of 30 psi.

A. Air wands must have a spring loaded on/off handle.

2.16 Contractors are responsible to ensure that employee’s personal tools are not damaged, defective or altered.

3. Powder-Actuated Tools

3.1 Contractors will submit documentation from their insurance company certifying that the use of powder-actuated tools is under the liability provisions of the insurance policy and under the specific circumstances of the work. In addition, the contractor will submit documentation certifying that the type and use of
powder-actuated tools are in accordance with applicable laws.

3.2 Powder-actuated tools must meet applicable requirements of ANSI-A10.3-1970 as stipulated by OSHA, and be UL listed or FM approved.

3.3 Post signs throughout the area warning of the use of powder-actuated tools.

3.4 Powder-actuated tools must be .22 or .25 caliber cushioned pistol grip design.

3.5 Loads, studs, and nails used in powder-actuated tools must be specifically approved by the manufacturer for use in that tool.

3.6 Do not use loads, studs, and nails in powder-actuated tools for any purpose other than recommended by the manufacturer.

3.7 Powder-actuated tools must be designed so that discharging the powering load can only be accomplished when the barrel of the tool is firmly depressed against the work surface.

3.8 Powder-actuated tools must be piston-driven and designed so that the pistons always remain captive within the tool.

3.9 Employees must not operate powder-actuated tools until they have satisfactorily completed the manufacturer's sponsored training for the tool and have evidence of this training readily available. Contractors are responsible to have documentation of this training readily available.

3.10 Do not use powder-actuated tools in areas where hazardous accumulations of ignitable dust, gases, or liquids could be present or collect until the area has been proven free from such hazards with appropriate instrumentation. Store loads that are not being used in a location and manner specifically approved for that purpose.

3.11 Goggles or face shields with safety glass eye protection and hearing protection must be worn by each person within 50 feet of the point of discharge.
3.12 Personnel not directly involved with the operation of powder-actuated tools must stay a minimum of 50 feet clear of the operation unless granted specific written permission by the contractor, and applicable provisions of the procedure regarding personal protective equipment have been met.

3.13 Do not leave powder-actuated tools or loads unattended at any time. Powder-actuated tools, loads, studs, and nails must be stored in a locked box or otherwise secured when not in use. Do not load the tool until ready for use.

3.14 Handle misfires in accordance with manufacturer's training.

A. Dispose of misfired loads safely in a manner approved by the site safety director. Dropping misfired loads into a bucket of water is the manufacturer’s recommended method to deenergize the live ammunition.

B. Misfired loads are considered ammunition.

3.15 Powder-actuated tools must be regularly inspected and maintained. Maintenance work must be performed by competent technicians as directed by the manufacturer's literature. Parts used in maintenance or repair of powder-actuated tools must be exact replacement parts.

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Section 20: Welding, Cutting, and Burning

1. General Information

1.1 Portions of this section may be referenced in OSHA 1926, Subpart L, M and Q.

1.2 Contractors must follow approved procedures for welding, cutting, and burning, brazing and other spark-producing and hot work.

2. Permits

2.1 Burning, welding, cutting, or spark-producing work is prohibited until the proper permits have been received.

APPENDIX Q – HOT WORK PERMIT

2.2 Within areas with sprinkler protection, the sprinkler system shall be operational at all times during the performance of open flame work — unless the site safety director or security director has issued special permission. Under no circumstance are hot-work permits to be issued for areas in which the sprinkler system is impaired or malfunctions.

3. Handling and Storage of Cylinders

3.1 A suitable cylinder truck or push cart with chain or other secure form of fastening must be used to keep cylinders from being knocked over while in use or in storage. An acceptable cylinder wrench must be installed on each cylinder truck or push cart.

3.2 Cylinders must be returned to the storage area “when it is reasonably anticipated that gas will not be drawn from the cylinder within 24 hours (overnight hours included)”.

APPENDIX FF – LETTER OF INTERPRETATION (storage of compressed gas cylinders)

3.3 Cylinders must be legibly marked to identify content.

3.4 Do not store cylinders of oxygen near cylinders of acetylene or other fuel gas. Separate cylinders by a
minimum of 20 feet, or with a five-foot non-combustible barrier with at least a one-hour fire rating. Do not place cylinders where they can contact an electrical circuit.

3.5 Keep oxygen cylinders, cylinder valves, couplings, regulators, hoses, and apparatus free from oil and grease. Do not handle oxygen cylinders or apparatus with oily hands or gloves.

3.6 Keep cylinders in storage away from sources of heat, flame, and direct sunlight. Remove combustibles from the storage area.

3.7 Close valves on empty cylinders. Keep valve protection caps in place except when cylinders are in use or connected for use.

3.8 Provide a suitable platform when moving cylinders by crane or derrick.

A. Lifting platforms, racks or cages must be manufactured to specifications. Contractors may not fabricate devices to raise compressed gas cylinders unless the device has been certified by a professional engineer (PE).

3.9 Do not use slings, hooks, or electric magnets. Cylinder caps should remain installed on the cylinder until connected to equipment. Keep the cylinder cap near the cylinder when in use.

3.10 Chain or secure compressed gas cylinders in an upright position at all times. Empty cylinders must be labeled "Empty." Do not invert empty LPG cylinders.

A. If a cylinder is not equipped with a valve wheel, keep a key or cylinder wrench on the valve stem while in use. Acetylene cylinders should be protected in a cradle while being transported by crane or derrick.

3.11 Do not store or take compressed gas cylinders into closed or confined areas, or near elevators or stairs.

3.12 Store compressed gas cylinders in well-ventilated, proper construction storage racks that are labeled for the type of gases to be stored.

A. No smoking is allowed within 50 feet of a compressed gas storage area. Fire extinguishers of a minimum 20 BC
rating must be located between 25 and 75 feet of the storage location.

3.13 If a leak develops in a cylinder and it cannot be immediately corrected, move the cylinder to a safe location away from the storage area.

A. Contractor is responsible to immediately notify the cylinder supplier to have the leaking cylinder removed from the site.

3.14 Visually inspect cylinders to ensure they are safe before use.

4. **Welding, Cutting, and Other Hot Work Operations**

4.1 Each welding, cutting, or spark-producing operation requires a fire watch.

A. A fire watch consists of a properly trained person standing by with an approved fire extinguisher provided by the contractor.

B. The fire extinguisher must be of a size and type (minimum 10 lb. ABC) that will extinguish a fire that may ignite on materials being welded or cut or on materials immediately adjacent to welding and cutting operations.

C. The fire-watch person must remain in the area for a minimum of 30 minutes after the hot work is completed to ensure the site is safe.

4.2 Frequently inspect hoses, lines, and leads for leaks, worn areas, and loose connections.

4.3 Remove combustible materials from the area prior to beginning work.

4.4 Any combustible material within 35 feet that cannot be removed must be protected with fire resistant blankets or coverings.

4.5 Provide flash arresters fitted to the regulators at both the fuel and oxygen cylinders. Additional flashback arresters may be fitted to the torch for oxygen and acetylene hoses.
4.6 Welding return current must not pass through any of the following:

A. Acetylene, fuel gas, oxygen, or compressed gas cylinders

B. Tanks or containers used for gasoline, oil, or flammable/combustible material

C. Pipes carrying compressed air, steam, gases, or flammable/combustible liquids

D. Conduits carrying electrical conductors

E. Chains, wire ropes, metal hand railings, ladders, machines, shafts, bearings, or weighing scales

F. Critical instrumentation

4.7 Shield arc welding and cutting operations by using non-combustible or flame-proof screens.

4.8 Provide mechanically strong and electrically adequate ground for the service required.

4.9 Support and elevate welding cables to allow the safe passage of workers and equipment.

4.10 Keep welding cables away from ladders and stairways. Prevent doors from damaging welding cables.

4.11 Use insulated cable connectors to couple or uncouple several lengths of cable for a welding circuit. Use insulated cable connectors on the ground line and the electrode holder line.

4.12 Use an electrode holder of adequately rated current capacity, insulated to protect the operator against possible shock, and to prevent a short or flash when laid on grounded material.

4.13 Do not use cables with worn or damaged insulation. Repairs may not be made on welding leads within 10 feet of the electrode holder.

4.14 Insulate connection lugs on welding machines.

4.15 Wear suitable eye protection and other personal protective equipment.
4.16 Ensure adequate ventilation.

4.17 When welding overhead, take precautions to prevent sparks from falling on other workers.

4.18 Do not use regulators, leads, torches or other associated equipment that are damaged or defective.

4.19 Do not wrap or lay welding leads or clamps on top of compressed gas tanks.

4.20 Contractors are responsible for air monitoring welding activities to determine if PPE is required.

A. Contractors are responsible to follow requirements of the OSHA Hexavalent Chromium standard if they weld, cut or burn on any materials containing Chromium 6.

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Section 21: Ladders

1. General Information

1.1 Portions of this section may be referenced in OSHA 1926, Subpart X and X

2. Manufactured Ladders

2.1 Manufactured ladders, ladder maintenance and use must comply with OSHA, ANSI, manufacturer’s specifications, and job procedures.

2.2 Only fiberglass ladders are allowed.

2.3 Manufactured wood and metal ladders are prohibited. Wood JOB-BUILT ladders made in accordance with ANSI standards may be used. A variance approved by the Site Safety Director is needed.

2.4 Do not use ladders with broken or missing rungs, broken or split side-rails, or damaged components. Damaged ladders must be immediately tagged and removed from the work area or destroyed.

2.5 Equip portable ladders with non-skid safety feet and place on a stable base. Keep the access areas at the top and bottom of ladders clear. There must be a minimum of three foot clearance surrounding access and egress from ladders. Stepladders must be fully opened when in use. Safety latches on extension ladders must be fully engaged.

2.6 Always face the ladder when climbing or descending. When working, face the ladder with both feet securely on the rungs. Never stand on the top step or sit on the top of the ladder, straddle the ladder, fold up, lean stepladders, or work two people from the same ladder.

2.7 Post warning signs, barrier tape or traffic cones when working from ladders in traffic areas or near doorways.

2.8 Protection from falls is a key consideration when working from ladders above 6 feet.

2.9 Keep body centered on ladder while working. Employees will use the “belt buckle” rule to determine
if they are overreaching while ascending, descending or working from ladders.

2.10 Keep ladders free of lines, ropes, hoses, wires, cables, oil, grease, and debris. Do not leave objects on ladders.

2.11 Do not use single portable ladders over 30 feet in length. Use separate ladders with intermediate landing platforms to reach heights above 30 feet.

2.12 Extend side rails of extension ladders a minimum of 36 inches above the landing destination. When this is not practical, install a grab rail. Ladders in use must be tied, blocked, or otherwise secured.

2.13 Extension ladders should be set up so that the pitch of the ladder is at a ratio of one foot horizontal to four feet vertical.

2.14 Ladders must be inspected before use and the inspection must be documented at least once per month.

3. **Job Built Ladders**

3.1 Job built ladders may be constructed under special circumstances where manufactured ladders may not meet the requirements of the task.

3.2 The request to use job built ladders must be submitted to the site safety director along with the plans for their construction. No job built ladders will be allowed without this review.

4. **Ladder Training Requirements**

4.1 Contractors must provide a training program and related documentation for employees using ladders. The training program will provide the procedures necessary for employees to recognize the hazards associated with ladder use.

4.2 Contractors must ensure that a competent person has trained each employee in the following topics:

- Nature of fall hazards in the work area
Correct procedures for erecting, maintaining, and disassembling a fall protection system on a ladder

Proper construction, use, and placement of ladders and care in handling ladders

Maximum intended load-carrying capacities of ladders

APPENDIX GG – LADDER SAFETY TRAINING EXAMPLE

4.3 Contractors must ensure that employees maintain the required understanding and knowledge of ladder safety, and retrain employees as necessary.

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Section 22: Scaffolds

1. Definitions

1.1 A cleat is a cross-piece positioned on edge upon which a person may step to ascend or descend a ladder. It is also a structural block used at the end of a platform to prevent the platform from slipping off its supports.

1.2 An outrigger is a structural member of a supported scaffold used to increase the base width of the scaffold to provide increased stability.

2. Scaffold Design and Erection

2.1 Scaffolds must be designed, built, inspected, and tagged by trained, competent persons in accordance with the latest OSHA requirements. Refer to 29 CFR 1926, Safety and Health Regulations for Construction, Subpart P, Scaffolds.

2.2 Contractors will plan each application to ensure that scaffolds are used where required and that scaffolds conform to the applicable scaffold erection requirements.

2.3 Lean-to scaffolds and make-shift platforms are prohibited.

2.4 Do not use scaffolds for storing material except material being used while on the scaffold. Place material over cross members.

2.5 Contractors will not allow tools, material, or debris to accumulate on scaffolds or to be stored on scaffolds overnight.

2.6 Adequately design scaffolds to carry, without failure, four times the maximum intended load in addition to the weight of the scaffold. Never overload a scaffold.

2.7 Immediately replace weakened or damaged scaffolds.

2.8 Scaffold or staging more than six feet above the ground or floor, suspended from an overhead support, or erected with stationary supports, must have standard guardrails and toe boards properly attached.
2.9 Guardrails must be two inches by four inches, approximately 42 inches high, with a mid rail. Do not use diagonal braces as guardrails. Supports must be at intervals not to exceed eight feet.

2.10 Toe boards must be a minimum of three and one half inches high. Cleat or secure planking to prevent displacement. Platforms must be the complete width of the scaffold being erected. Secure the scaffold horizontally and vertically at intervals specified in the applicable regulations.

2.11 Scaffolds with any dimension of less than 45 inches must be equipped with outriggers and standard guard rails when the working platform is at a height of four feet or higher.

2.12 Equip mobile scaffolds with outriggers and lock casters. Guard mobile scaffolds with standard railing, regardless of height. Mobile scaffolds must not be constructed or used where there is a change of elevation in the floor level.

2.13 Moving a mobile scaffold with personnel on it must be performed in accordance with the latest OSHA requirements. Failure to follow the requirements will result in disciplinary action.

3. Use of Scaffolds

3.1 Follow the fall protection requirements described in Section 14 when working on, erecting, and dismantling scaffolds, or on scaffolds not meeting guarding requirements.

3.2 A competent person must inspect scaffolds before work begins.

3.3 Prior to use, a competent person must inspect scaffolds on which weakened or damaged weight bearing parts have been replaced.

4. Scaffold Tags

4.1 The contractor erecting the scaffold must attach a standard industry tag to a completed scaffold at all points of access to signify the scaffold was designed and
erected by trained, competent persons and is safe for use.

4.2 The tag must state the intended purpose of the scaffold and indicate the level of personal protective equipment required to use the scaffold. The tag and the handwriting on it must be capable of withstanding extended periods of inclement weather.

APPENDIX HH – SCAFFOLD TAGS EXAMPLE

5. Scissors Lifts and Man Lifts

5.1 Operate scissors lifts and man lifts in accordance with the manufacturer’s recommendations and the latest OSHA requirements. Operators should be trained in the safe operation of the equipment prior to use.

5.2 100% fall protection will be required while operating any type of elevated work platform. The fall protection system must be secured to an approved anchorage point in the lift prior to movement of the equipment.

5.3 Equipment must be equipped with strobe lights/back up alarms.

5.4 Only authorized persons shall operate an aerial or scissor lift. A list must be provided to the Site Safety Director or his/her designee.

5.5 All lifts should be equipped with operator’s manual and / or checklist. All operators should become familiar with and fully comply with all manufacturers’ safety instructions.

5.6 A placard or sign identifying the lift’s load capacities must be visibly displayed somewhere on the lift. Maximum weight capacities of the lifts should never be exceeded under any circumstances.

5.7 Lift operators should never ignore, disable or alter an installed safety device, switch or alarm.

5.8 Lift operators must be conscious of their surroundings, with respect to pedestrian traffic and nearby activities on the ground near the base of the lift.

5.9 Lift controls shall be tested each day prior to use to determine that such controls are in safe working
Documented, daily inspections of the aerial/scissor lift must be conducted by the operator prior to operation of the equipment.

5.10 All materials, tools or components being elevated in the lift, must remain on the floor and not so positioned that they are protruding through the handrails, or could fall from the lift. Rails of the aerial/scissors lift may not be used to support material being transported.

5.11 Lifts should only be operated on flat, level surfaces.

5.12 Employees working from scissor-lifts / aerial lifts must remain on the floor of the basket at all times and shall not sit or climb on the guardrails or edge of the basket or use planks, ladders or other devices for a work position.

5.13 In aerial lifts, personal fall arrest systems must be used and secured to the boom or basket during lift operation.

5.14 Never climb up the side of the lift to enter it. Always use the steps located at the base of the lift, or equivalent, to gain access to the platform.

5.15 Keep the end gate or chain secured at all times during use.

5.16 Fire extinguishers must be installed in the basket of a scissors/aerial lift if hot work is performed from the lift.

APPENDIX II – AERIAL LIFT INSPECTION FORM

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Section 23: Fire Prevention and Protection

1. Fire Prevention and Protection Procedures

   1.1 Portions of this section may be referenced in OSHA 1926, Subpart F.

   1.2 Temporary Heating Equipment

   A. Temporary heaters are prohibited unless approved by the site safety director.

   B. Contractor is responsible for the operation and maintenance of temporary heating equipment. Heaters must bear the UL label (or approved equal).

   C. Contractor is responsible to ensure that heaters are in working order and provide trained personnel to be in attendance at all times while heaters are in operation.

   D. Contractor is responsible to supply a tip over shut-off device that must be included for space heating equipment.

   E. Workers must not place clothing or flammable or combustible items on or near heaters.

   F. Contractors are responsible to ensure workers are trained for fire watch and use of fire extinguishers and the contractor must retain the training documentation.

   G. Contractor is responsible to provide adequate ventilation when using liquid fuels in an enclosed environment, and conduct atmospheric testing as needed. All costs associated with atmospheric testing are the responsibility of the contractor.

2. Flammable and Combustible Materials

   2.1 Definitions:

   A. *Combustible liquids* mean any liquid having a flash point at or above 140 deg. F. (60 deg. C.), and below 200 deg. F. (93.4 deg. C.).
B. *Flammable* means capable of being easily ignited, burning intensely, or having a rapid rate of flame spread.

C. *Flammable liquids* means any liquid having a flash point below 140 deg. F. and having a vapor pressure not exceeding 40 pounds per square inch (absolute) at 100 deg F.

D. Storage and use of flammable liquids is prohibited without the written approval of the site safety director.

E. Store and handle flammable and combustible materials with regard to their fire characteristics. Materials must be clearly labeled.

F. Store flammable liquids and gasses outdoors in an approved manner and dispense only in approved safety containers.

G. Separate and store combustible materials or equipment in non-combustible containers in a proper manner.

H. If approved for use, do not store more than a one-day supply of combustible materials or containers in one location within the building. Locate supplemental fire fighting equipment in the vicinity of these containers and materials.

2.2 Contractors must furnish fire protection for all phases of the work as required by law.

2.3 In protected (completed) areas, Contractors must furnish fire extinguishers no less than every one hundred feet of travel.

2.4 Fire extinguishers should only be used by employees who have received documented fire extinguisher training within the past 12 months. Training must be documented and on file.

2.5 Use fire resistant materials for temporary structures.

2.6 Provide access to the work area and around the perimeter. Maintain access in a serviceable condition suitable at all times for use by heavy fire fighting equipment.
2.7 Do not drive trucks and motor vehicles within the perimeter of buildings, unless they are designed for that purpose and approved by the site safety director.

2.8 Perform torch-cutting and welding operations in accordance with the applicable fire and safety regulations. Use fire resistant tarpaulins when torch-cutting or welding.

2.9 Contractors must ensure that all portions of the building are protected when performing hot work activities. Contractors must assess areas adjacent and below the hot work and provide fire protection and a fire watch below the hot work being performed overhead.

2.10 Remove combustible waste materials, rubbish, and debris daily.

2.11 Replace temporary fire fighting or fire protection equipment immediately after use, and remove when the work is complete.

2.12 Do not fuel equipment while the motor is running.

2.13 Provide proper safety waste cans with lids for disposing oily rags or combustible materials.

2.14 Sprinkler systems and fire alarm systems must be placed in service as early in the project as possible.

2.15 Once building is enclosed, the contractor must provide one 20 lb ABC extinguisher for every 3000 square feet of enclosure or no more than 100 feet of travel in any direction.

2.16 Gasoline or diesel powered portable generators must be approved by the site safety director and used only when a qualified operator is present.

2.17 Post "No Open Flame" signs and all other danger signs where applicable.

3. **Temporary Fuel Tanks**

3.1 Temporary fuel tanks (gasoline, diesel, and fuel oil) are only allowed when approved by the site safety director.

3.2 Tanks must meet construction and design criteria provided by the site safety director.
3.3 Temporary fuel tanks require a permit in accordance with local, state and federal regulations.

3.4 Temporary fuel tanks shall have required marking and signage. Contractor will provide secondary containment.

3.5 Post "No Open Flame" signs and all other danger signs where applicable.

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Section 24: Work Area Conditions

1. General Information
   1.1 Portions of this section may be referenced in 1926, Subpart D, G and M.
   1.2 Contractor employees must define and clearly identify work areas using tape, signs, or barricades to prevent unwarranted entry.
   1.3 The contractor is to provide the equipment needed to mark work areas.

2. Drinking Water
   2.1 Contractors must provide an adequate supply of drinking water where employees are working with individual cups or containers for personal use. The contractor must also provide a container for disposing of cups or containers.
   2.2 Clearly mark containers used for drinking water and do not use them for other purposes.

3. Toilets and Washing Facilities
   3.1 Contractors will provide toilets for their employees, including subcontracted employees according to applicable sanitary work standards and where required by state or federal law.
   3.2 Contractors will provide adequate washing facilities for employees.
   3.3 Contractors may refer to OSHA Standard 1926.51, Subpart D - Sanitation; however, additional toilet and washing facilities will be required depending on the maintenance and cleanliness of these components and the ratio of male to female employees. The site safety director, CM and/or Volkswagen Representative will assist in determining if toilet and hand washing facilities are adequate. Contractors are responsible for any additional costs.
4. **Lighting**

4.1 Light work areas, ramps, runways, corridors, offices, shops, and storage areas to at least the minimum illumination intensities listed below while work is in progress.

<table>
<thead>
<tr>
<th>Foot-Candles</th>
<th>Area of Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>General areas, ramps, warehouse</td>
</tr>
<tr>
<td>10</td>
<td>Operations involving machinery</td>
</tr>
</tbody>
</table>

5. **Material Use and Waste Management**

5.1 Contractor is responsible for placing receptacles and dumpsters around the work area for collection of waste materials.

5.2 Contractor is responsible for placing covered receptacles for food waste around the work and break areas.

5.3 Hazardous waste or potentially hazardous waste, as determined by the methods and definitions from environmental regulations, must be stored and collected in approved containers in special areas.

5.4 Do not abandon material in the work area. If material found in the work area is traced to a contractor, that contractor is responsible for expenses involved in collecting, moving, disposal of the material, and clean up.

5.5 Waste haulers, disposers, recyclers, and scavengers are not allowed in the work area without permission from the site safety director. It is the responsibility of the contractor to provide copies of licenses, permits, and authorization.

5.6 Do not remove hazardous waste from the work area without authorization from the site safety director. Do not bring waste into the work area and dispose of it using VW systems or facilities. Contractors must inspect dumpsters frequently and remove potentially hazardous material or waste and place it in the
appropriate storage area. The costs associated with dumpster inspections is the responsibility of the contractor.

5.7 Do not allow used oils, paint waste, or similar products to accumulate or be dumped in the work area. Spills must be immediately cleaned up by the creator of the spill to the satisfaction of the site safety director and disposed of in accordance with instructions from site safety director. Costs associated with clean up are the responsibility of the creating contractor.

5.8 Contractors are responsible to follow the LEED™ technical specifications as outlined in the contract documents for controlling, documenting and implementing the waste disposal plan.

5.9 LEED™ requires sorted recycling containers for (minimum) wood, metal and cardboard scrap.

5.10 Contractors are responsible for assuring that employees do not remove construction debris from the construction site without written approval of the site safety director and site security director.

6. **Dust and Erosion Control**

6.1 Creating uncontrolled dust by any means is not acceptable. It is the responsibility of the contractor to:

A. Prior to starting work, contractor is responsible for identifying / documenting the means and methods of dust control for work that is expected to produce dust.

B. Contractor is responsible for watering construction roadways, lay down areas and access points for dust control.

C. Contractor is responsible for flat grading and stone replacement on construction roadways, lay down areas and access points for erosion control.

D. Take immediate action to control or eliminate dust that may be inadvertently created.

6.2 Tree protection, erosion and sediment control must be provided and maintained where applicable.
A. Contractors that create or could create tree loss or erosion must take the steps necessary to control and guard against these situations.

B. Settling basins and/or straw barricading around existing storm sewers is required for work (excavation or disturbance of soil) that could cause silt to enter a storm sewer.

C. Contractors are responsible to have a storm water operator who is responsible for assessing erosion and maintaining erosion control methods. He or she will work with the Project Environmental Controls Manager.

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Section 25: Special Equipment

1. General Information

1.1 Portions of this section may be referenced in 1926, Subpart D and E.

2. Lasers

2.1 Laser operators must take the steps necessary to prevent unintentional laser beam exposure to workers and the public per OSHA 29 CFR 1926.54.

2.2 Contractors are responsible to provide only qualified and trained laser operators. Qualifications and training must be kept on file.

2.3 Contractors are responsible for posting signage and providing barriers around work where laser beam exposure may exist.

3. Radioactive Sources

3.1 Operators of industrial radiography sources and radioactive density/moisture gauges must comply with applicable state or federal regulations and must take the steps necessary to prevent unintentional radiation exposure to workers and the public.

3.2 Contractors must provide the following information to site safety director before bringing radioactive devices to the work area:

A. A copy of the applicable license for radioactive material

B. A copy of the licensee's most recent state inspection report

C. The kind of device to be used and the date, time, and location of its use

3.3 Microwave ovens for employee use

A. Must be in an enclosed area and may not be exposed to dramatic temperature or climate changes.

B. Employees are responsible for the proper use of the microwave oven.
Section 26: Motor Vehicles and Heavy Equipment

1. General Information

1.1 Portions of this section may be referenced in 1926, Subpart O.

2. Motor Vehicle and Heavy Equipment Procedures

2.1 Construction vehicles and heavy equipment brought on project site must be inspected, tested, and certified to be in safe operating condition. The certification documentation must be available for review by the site safety director prior to bringing the equipment on the project site.

A. Vehicle and equipment passes will be issued by the site security director.

B. Site vehicles (company trucks) must have ID’ed and insured prior to use – Company owned and logo’ed. Personal vehicles used by Supervisors or Managers on site must have company ID, and must meet the insurance requirements of the Owner Controlled Insurance Program (OCIP).

C. Equipment operators must be trained, licensed or certified to operate that equipment.

D. Certification is required for crane operations (CCO Designation), power industrial trucks, and others as required by OSHA.

E. Training documentation must be current and be provided to the site safety director prior to the start of work.

2.2 Use of motor vehicles to transport hazardous material must comply with DOT requirements and be carried out with the site safety director's approval.

2.3 Motor vehicles must be properly equipped and maintained in accordance with the manufacturer's recommendations.
2.4 Only authorized, licensed drivers are allowed to operate vehicles or equipment.

2.5 Drivers and/or operators will shut off the engine during fueling and maintenance, or when leaving a motor vehicle or equipment unattended.

2.6 Use wheel chocks during unloading and anytime the vehicle could possibly roll.

2.7 Do not use a motor vehicle or equipment having an obstructed view to the rear, unless the vehicle has a backup alarm audible above the surrounding noise level or an escort. Pickups and personal vehicles allowed on site are exempt from having back up alarms.

2.8 Heavy machinery, equipment, or their parts which are suspended or held aloft by slings, hoists, or jacks must be substantially blocked or cribbed to prevent falling or shifting.

A. Personnel are not allowed to work under or between suspended loads.

2.9 Bulldozer and scraper blades, end-loader buckets, dump bodies, hydraulic lifts, and similar equipment must be either fully lowered or blocked when being repaired or when not in use. Controls must be in neutral position, with motors stopped and brakes set, unless the work being performed requires otherwise.

2.10 Hauling vehicles for which the payload is loaded by cranes, power shovels, loaders, or similar equipment must have a cab shield and/or canopy adequate to protect the operator from shifting or falling materials.

2.11 Arrange and label control handles for tailgates, dump trucks, and heavy equipment for ease of identification when dumping.

2.12 Check vehicles at the beginning of each shift to ensure that equipment and accessories are in safe operating condition, and free of damage that could cause failure while in use.

2.13 Do not ride with arms or legs outside of the truck body, in a standing position, on running boards, seated on side fenders, tailgates, truck cans, cab shields, rear of truck, or on the load. Every passenger must be able to
sit on a equipment manufacturer’s supplied seat while on or in the vehicle.

2.14 If a piece of equipment has a seat belt, then the operator and passengers must wear the seat belt.

2.15 Do not drive above the posted speed. Weather, traffic, width and characteristics of the road, type of motor vehicle, and existing conditions may reduce the speed limit.

A. Drivers / Operators may not use phones or other mobile devices while operating the equipment, unless the mobile communication device is necessary for the safe performance of the specialized task.

2.16 If it is necessary to take or make a call while driving, the vehicle must be stopped or parked until the phone call is completed.

2.17 Conspicuously post rated load capacities, operating speeds, and special hazard warnings on equipment. Instructions or warnings must be visible to the operator while at the control station.

2.18 A competent person must document and inspect machinery and equipment prior to each use. Deficiencies must be corrected and defective parts replaced before continued use.

2.19 Belts, gears, shafts, pulleys, sprockets, spindles, drums, flywheels, chains, or other reciprocating, rotating, or moving parts of equipment must be guarded if parts are exposed or create a hazard.

2.20 An accessible fire extinguisher of 5BC rating or higher must be available at the operator stations or cabs of construction vehicles.

2.21 Rollover protection specified by OSHA is required for applicable equipment operated in the work area.

2.22 Operators of vehicles or equipment are to use seat belts or other restraint devices at all times during operation of vehicles or equipment.
3. Special Equipment – Golf Carts or “Gators”

3.1 Contractors must provide a list of personnel trained and authorized to operate golf carts or gators

A. Documentation of training must be made available to the site safety director.

3.2 Golf carts and gators must be equipped with the following:

A. Chevron Flag (high visible – minimum 6 foot high)
B. Strobe light
C. Head lights
D. Audible signal when in motion. Forward must differ from reverse, and both must be capable of being heard above ambient noises.
E. Horn
F. Inspection Tag (must be inspected for the above by the site safety director or his or her designee prior to use on site)

3.3 Use of phones

A. The use of phones, two way radios or other communication devises may not be used when equipment is in motion. If driving, the vehicle must be stopped/parked until the phone call is completed.

APPENDIX JJ – GOLF CART SAFETY TRAINING EXAMPLE

4. Loading Dock Vehicle Safety

4.1 Motor vehicles parked in a loading dock area must have the engine turned off (except for motors required for refrigeration).

4.2 When loading or unloading a motor vehicle at a dock, set the emergency brake and place wheel chocks under both sides of the rear wheels, and engage dock-locks if available, to prevent the vehicle from rolling.
4.3 Where chains or other dock fall protection are removed to allow safe unloading or loading, it must be replaced when the vehicle is moved or the space is open.

4.4 The contractor is responsible to assure that the driver has all applicable PPE and is dressed for the site.

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Section 27: Transporting Hazardous Materials

1. General Information

1.1 Portions of this section may be referenced in 1926, Subpart D, and in DOT regulations.

1.2 This section references regulatory requirements and corporate policies designed to protect employees, the public, and the environment; to promote safe transportation of chemical, biological, and radioactive materials; and to enhance compliance with state, and federal transportation laws and regulations.

1.3 The policies and procedures in this section apply to contractors, subcontractors, and vendors who transport or ship chemical, biological, and radioactive materials to, from, or within the project site. Deviation from these policies and procedures is not permitted without written approval from the site safety director, site security director and a VW representative.

2. Transportation Procedures

2.1 Contractor employees involved in transporting or shipping chemical, biological, and radioactive materials are responsible for regulatory compliance and for promoting the safe transportation of dangerous goods.

2.2 Only employees who have completed DOT training may package and prepare chemical, biological, and radioactive materials for transport.

2.3 Contractors that ship hazardous materials are responsible for complying with site-specific procedures and for ensuring that their employees complete the appropriate DOT training.

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Section 28: Confined Space Entry

1. Confined Space Entry Procedures

1.1 For the purpose of this section, all referenced materials may be found in 29 CFR 1910.146.

1.2 A confined space is an enclosed area that has a limited means of egress and is subject to the accumulation of toxic or flammable contaminants or has an oxygen-deficient atmosphere.

A. Confined spaces are also large enough to enter and perform work, and is not designed for continuous human occupancy

1.3 Entry into a confined space is not allowed unless applicable work permits are being used in accordance with site facility requirements.

APPENDIX S – CONFINED SPACE ENTRY PERMIT

1.4 Prior to entry, the entry contractor must provide a copy of the company's written confined space program and documentation of effective confined space entry training in accordance with OSHA requirements. This program and documentation will be reviewed before entries can be made.

A. Training for all contractors participating in the confined space entry permit must be within the previous 12-month period and will be provided to the site safety director prior to entry into confined spaces.

1.5 Personnel, equipment, and supplies needed for entry must be present at the confined space before beginning work.

1.6 The contractor must use the site permit, which must include all items required by OSHA. Contractors must abide by the provisions and restrictions of the site permit.

1.7 If space or work conditions change, the contractor must terminate the work and request a new permit.

1.8 Violation of these requirements may result in immediate removal from project site.
2. **Confined Space Monitoring**

2.1 The contractor is responsible for providing monitoring equipment and being qualified to use it. Prior to use, all monitoring equipment must be calibrated each day according to the manufacturer's guidelines.

2.2 If the confined space needs to be continuously monitored, the contractor must supply the required equipment and the required personnel to provide the monitoring.

A. Monitoring must be conducted by a trained or qualified worker. Monitoring must be documented on the confined space permit.

2.3 Contractors are responsible for the safety and health of their employees and must not allow them to enter a confined space that is unsafe or enter a confined space without a permit.

2.4 The contractor must pay the costs of additional inspection, evaluation, or consultation provided for the benefit of the contractor concerning the safety of the confined space. An employee, engineer, architect, visitor, or vendor who enters a controlled confined space must abide by site-specific confined space procedures.

2.5 Additional confined space entry equipment may be needed as determined by the site safety director.

A. Contractors must ensure that employees, visitors, vendors, consultants, or other persons under their direction or assisting them are thoroughly trained and understand these requirements before they are allowed to enter a confined space.

3. **Working in Confined Spaces**

3.1 The following rules apply to work performed in confined spaces:

A. All confined spaces, regardless if permit or non-permit, will be monitored initially for oxygen deficiency or enriched atmosphere, CO, toxic gasses and flammable gasses.
B. Contractors must provide ventilation, which must be of adequate volume to safely maintain the airflow within the confined space.

C. Employees or the person supervising the work must report unsafe conditions immediately.

D. Welding, cutting, brazing, and purging operations have restrictions on their use in confined spaces. Contractors must be aware of these specific requirements.

E. Chemicals used or transported inside the confined space have restrictions on their use in confined spaces. Contractors must be aware of these specific requirements.

F. Tools such as grinders, drills, and sanders have restrictions on their use in confined spaces. Contractors must be aware of these specific requirements.

G. Rescue and response plans and resources must be available, trained, and equipped as required by OSHA (1910.146).

3.2 The contractor will stop confined space entry during an emergency and not allow entry except as necessary to respond to the emergency.

3.3 Employees and the issuer of the permit will determine sources of power, fluids, gases, ventilation, and other means of disturbing the work area within the confined space. Potential disturbances must be locked, tagged, and secured prior to allowing entry in a manner consistent with the Lockout and Tagging section of this manual.

3.4 Employees must be able to identify any location of a purge gas release and where the gas is being vented. Purge gas must not be vented inside a building or in a confined space.

3.5 Wear hearing protection if the noise level inside the confined space is greater than 85 decibels.

3.6 Do not run equipment near the entry of confined spaces.

3.7 Do not take compressed gas cylinders into confined spaces.
[The remainder of this page is intentionally left blank.]
Section 29: Floor, Roof, and Wall Openings

1. Floor, Roof, and Wall Opening Procedures

1.1 Portions of this section may be referenced in 1926, Subpart M.

1.2 The use of double headed nails to construct guard rail, hand rail or stair rails is prohibited.

1.3 Contractor is responsible for protecting and controlling conditions where there is a danger of employees or materials falling through floor, roof, or wall openings, or from floor or roof perimeters.

1.4 Remove guarding and covers only after other means of fall protection are in place. Employees installing or removing guarding and covers must be protected by alternative fall protection throughout the process. The contractor responsible for the removal of guarding and covers is responsible for their replacement.

1.5 Perimeter, floor, roof, and wall opening protection must be maintained throughout all phases of the work. Notification of a violation that is not corrected immediately will result in implementation of the disciplinary procedures outlined in this manual.

1.6 In accordance with OSHA standards, installation of a standard railing is required for floor perimeter and wall opening protection.

A. A standard railing consists of a top rail, a midrail, toeboards, and four-foot vertical debris nets and posts.

B. Wire rope used as railing (as top rail and midrail) must be 1/2 inch in diameter with at least three J-type fist grip wire rope clamps at each connection and turn buckles every 100 feet, and thimbles must be used where the wire rope is connected.

C. Perimeter, floor and wall opening guarding must be flagged or identified during its construction or erection to prevent inadvertent use by others.
1.7 Maintenance activities would include routine maintenance such as inspection or minor repair of equipment or the roof.

1.8 For construction work or maintenance activities performed on low sloped roofs (less than 4:12 pitch), conventional fall protection systems (see Section 14, Part 6) or a combination of them is required whenever workers are within fifteen feet of unprotected sides or edges.

1.9 There is no exception to the fall protection requirements noted above for contractors performing roofing work.

2. **Stair Railings**

2.1 Stair railings must be constructed similar to a standard railing, but the vertical height must be 34 to 36 inches from the top rail to the surface tread in line with the face of the riser, at the forward edge of the riser.

2.2 Provide a minimum clearance of 3 inches between the handrail and other surfaces or objects.

2.3 Stair railings must be smoothed to remove burrs or splinters from injuring workers who are using them.

3. **Floor Opening Covers**

3.1 Floor opening covers must be used for any openings greater than 2 inches and must be capable of supporting the maximum intended load and installed to prevent accidental displacement.

3.2 Protect floor openings by a cover and/or standard railing and protect from movement. Clearly mark and anchor covers.

4. **Stairs**

4.1 Stairs consisting of four or more risers must have handrail or stair rail on any open side(s).

4.2 During construction, provide temporary stairs on structures that are two or more floors or more than 20 feet high until permanent stairways are in place.
4.3 Daily documented inspections of these temporary stairs must be done by a qualified person.

4.4 Temporary stairs must be erected by a qualified contractor approved by the site safety director.

4.5 Keep stairways free of hazardous objects. Do not allow debris and loose material to accumulate on stairways. Storage of combustibles under stairways is NOT allowed.

4.6 Permanent steel stairways having hollow pan-type treads and landings that are to be used prior to concrete placement must have the pans filled with solid material to the level of the nosing.

4.7 Temporary stairs must have a landing not less than 30 inches wide in the direction of travel for every 12 feet of vertical rise.

4.8 Provide uniform riser height and tread width throughout the flights of stairs.

5. Runways and Openings

5.1 Install standard guarding at wall openings from which there is a drop of more than 3 feet.

5.2 Chains and latches used to protect wall openings must be secured at all times. Wall opening guards may be temporarily removed to land materials or lower equipment/materials, etc. to the ground.

5.3 Personnel involved with the above procedures must be 100% fall protected during the task.

A. Wall opening protection must be reinstalled as soon as task is complete.

B. Guard runways using a standard railing, or the equivalent, on open sides above the floor or ground level. When tools, machine parts, or materials are likely to be used on the runway, provide a toe board on each exposed side.

5.4 Regardless of height, open-side floors, walkways, platforms, or runways above or adjacent to dangerous equipment and similar hazards must be guarded with a
standard railing.

[The remainder of this page is intentionally left blank.]
Section 30: Cranes and Rigging

1. General Information

1.1 Portions of this section may be referenced in 1926 Subpart H & N.

1.2 Contractors whose activities require the use of cranes are responsible for proper set up and operation. Evidence of up-to-date crane inspections (annual) must be provided to the site safety director prior to use. Cranes may be rejected for any defect, no matter how minor.

1.3 This procedure applies to the following types of cranes. Crawler cranes, locomotive cranes, wheel mounted cranes of both truck and self-propelled wheel type and any variations that have the same fundamental characteristics.

A. This procedure also applies to other powered vehicles that may be used to hoist or lift equipment or material that breaks the roof line. All Job Hazard Analyses and Lift Plans must contain a contingency section regarding handling emergencies should a crane collapse, turn over, or drop a load.

1.4 All lifts which require breaking a roof line, more than one piece of equipment, exceed 75 percent of the lifting capacity of the equipment, or involve the lifting of specialized equipment require a Job Hazard Analyses and Lift Plan. Job Hazard Analyses and Lift Plans must be approved by the site safety director. Job Hazard Analyses and Lift Plans must contain crane, rigging and load details as well as sketches or electronic drawings that include both a plan view showing swing direction and crane placement with respect to the facility and a crane elevation showing the boom angle and extension extremes of the lift.

1.5 If a material or equipment lift does not require a formal lift plan according to the above criteria, a Job Hazard Analysis of the lift must be performed prior to the lift. Evidence of the analysis may be demanded at any time by the site safety director.

1.6 For all lifts, a pre-lift meeting shall be conducted for all personnel involved with, or in the area of, the lift so
that all are aware of the planned activity and the potential hazards associated with the lift.

1.7 Cranes being delivered or erected on the project site must have a crane inspection conducted by a third party. This may be in addition to the annual crane inspection as required by OSHA. Contractors are responsible for any associated costs of the third party inspection. The annual inspection must be delivered to the site safety manager prior to the crane being put into use.

A. Prior to any lift, contractors will provide the site safety director with documented evidence of an annual inspection in accordance with OSHA requirements for all crane, hoisting, and associated rigging equipment brought onto the site. If the inspection record is not produced, if one year has elapsed since the last inspection, or if the crane or its associated rigging exhibits any damage or excessive wear, the crane cannot be used.

1.8 The crane operator or other competent person will perform a daily inspection of cranes. The person performing this inspection will document results in writing, and the documentation will be available for examination upon request. In addition to daily inspections, if a crane is moved or the process changes during operations it must be re-inspected prior to performing the lift in order to reflect the changes.

1.9 At the discretion of the Site Safety Director, a third-party crane inspection, which has been conducted within the previous 90 days, may be required for all critical lifts. A critical lift may include, but is not limited to:

A. any lift exceeding 75% of the crane's rated capacity at the required lifting configuration;

B. any lift that requires the use of more than one crane or is made in combination with other lifting equipment;

C. any lift located in an area where there is exposure to electrical hazards, overhead piping systems, vessels, operational buildings, etc.

1.10 A critical lift may also involve the lifting of specialized equipment which has been designed, engineered or
fabricated for a specific process or function, the loss of which would severely impact the Project. The determination of what constitutes a critical lift shall be made by the site safety director in consultation with the VW representative on the basis of the submitted lift plan.

1.11 At no time will any lift be made over occupied space, personnel, active roadways, or moving or parked vehicles.

2. **Recordkeeping**

2.1 Records pertaining to crane inspections will be kept on site with the crane or in the contractor's temporary office.

2.2 The crane operations and maintenance manual shall be available for inspection at each crane or hoisting equipment.

3. **Operator Qualifications and Operating Procedures**

3.1 Only designated crane operators who have been licensed by an approved agency and who meet the minimum DOT requirements as provided in DOT 391 may operate cranes and hoisting equipment.

3.2 Crane operators must be certified (CCO).

3.3 Rental cranes and other lifting equipment not subject to DOT requirements must have the operator approved by the site safety director.

3.4 No one other than the designated operator will be in or on the crane during operations. Exceptions are oilers or supervisors whose duties may require their presence.

3.5 Crane operating procedures must be in accordance with OSHA requirements. (1926.550) Subpart N.

3.6 Any crane service, repair or maintenance performed at heights greater than six feet require 100% fall protection.

3.7 No crane will be operated near overhead power lines, transmission boxes, etc. without pre-planning the activity.
4. Maintenance

4.1 Records indicating a preventative maintenance program based on the equipment manufacturer’s recommendations must be made available to the site safety director and be available for inspection if requested.

4.2 In addition to the annual inspection, cranes must be inspected according to their use. OSHA requires regular and periodic inspections. These are in accordance with manufacturer’s recommendations.

5. Rigging Requirements

5.1 A qualified rigger must inspect rigging equipment prior to each use and immediately remove from service and destroy any damaged or defective slings.

5.2 Contractor is responsible to provide a documented monthly inspection of all rigging equipment.

5.3 Rigging devices, including slings, must have permanently affixed identification stating size, grade, rated capacity, and manufacturer.

5.4 Remove rigging not in use from the immediate work area.

5.5 Hang rigging and slings on a rigging frame to eliminate bends and kinks.

5.6 Do not leave slings lying on the ground or exposed to dirt or the elements.

5.7 Do not shorten slings using bolts, knots, or other devices.

5.8 A licensed (professional) engineer or the manufacturer must certify lifting beams and spreader bars as to their configuration and lifting capacity.

6. Work Platforms Suspended from Cranes

6.1 Cranes used with work platforms to hoist, lower and suspend personnel is prohibited.
[The remainder of this page is intentionally left blank.]
Section 31: Excavation and Trenches

1. Definitions

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

1.2 Ramp means an inclined walking or working surface that is used to gain access to one point from another and is constructed from earth or structural materials such as steel or wood.

2. General Information

2.1 Portions of this section may be referenced in 1926, Subpart P.

2.2 This manual establishes requirements for trenching and excavation undertaken by contractors on the project site.

2.3 The contractor will provide to the site safety director a list of persons who are trained to serve as the "competent person" as well as a list of additional personnel that have received training on the basics of hazard recognition and safe work practices for excavation operations and will be working in or around excavations.

A. Training is required to be current within the previous 12 months.

B. In addition, the site safety director may request to review and evaluate standard practice instruction:

C. On an annual basis

D. When regulatory requirements change

E. When facility operational changes occur that require a revision of the manual

F. When there is an accident or near miss that relates to this section of the manual
2.4 Fall protection is required when working at the top edge of trenches or excavations which are greater than six feet deep.

3. **Training Requirements**

3.1 Contractors shall provide training to ensure the purpose and function of the trenching and excavation program is understood by their employees and subcontractors under their control and possess the knowledge and skills required for safe trenching and excavation operations on the project site.

3.2 The site safety director reserves the right to request employees be re-trained in the event of an incident, when periodic inspections reveal a need, or when the site safety director has reason to believe there are deviations from or inadequacies in the employee's knowledge or use of these procedures.

4. **Excavation Permit**

4.1 Excavation performed on the project site by any type of machine or tool requires an excavation permit prior to starting work. This would include using stakes (i.e., for concrete forms), erecting tents and putting up signs.

4.2 The contractor in charge of the work must perform the following tasks:

A. Complete the excavation permit and forward it to the site safety director for approval.

B. Ensure that the utility providers and other locating services are contacted and that the area impacted is free from utilities and other hazards prior to beginning work.

C. Ensure that approval signatures on the permit are obtained after the required personnel have reviewed the field drawings or sketches. Electronic approval is acceptable, such as fax or e-mail.

D. Present the completed permit to the operator

E. Protect the excavation area from unauthorized personnel by means of barricades or fencing.
4.3 Do not begin excavation until the permit is present at the excavation site and signed by the company safety representative, the operator and the site safety director.

4.4 The Excavation Permit must remain at the excavation site during the entire time of the excavation.

5. Protection Design

5.1 Excavations and trenches over four feet deep must be sloped, shored, benched, braced, or supported. When soil conditions are unstable, excavations less than four feet must be sloped, shored, or supported as required by regulations.

5.2 Each employee in an excavation will be protected from cave-ins by an adequately designed protective system. Protective systems shall have the capacity to resist without failure all loads that are intended or could reasonably be expected to be applied or transferred to the system.

5.3 Slopes and configurations of sloping and benching systems will be properly selected and constructed as follows:

A. Determination of slopes and configurations is made using 29 CFR 1926.652 Appendices A and B – "Maximum Allowable Slopes".

B. A sloping and benching system approved by a professional engineer registered in the state where the project site is located for excavations deeper than 20 feet.

6. Design and Construction of Protection Systems

6.1 Contractor will ensure shoring materials and equipment are in good condition. Materials and equipment used for protective systems shall be free from damage or defects that might impair their proper function.

6.2 Contractor will ensure that all manufactured materials and equipment used for protective systems shall be used and maintained in a manner that is consistent with all specifications, recommendations and limitations
6. Contractors will ensure that any deviation from the manufacturer's specifications, recommendations and limitations will only be allowed after the manufacturer issues specific written approval and it is accepted by the site safety director.

6.4 Timber shoring of any kind is unauthorized on project site.

7. Inspections

7.1 Daily inspections of excavations, the adjacent areas, and protective systems shall be made by a competent person for evidence of a situation that could result in possible cave-ins, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions.

7.2 An inspection shall be conducted by the competent person prior to the start of work and as needed throughout the shift. Inspections shall also be made after every rainstorm or other events that could appreciably increase the likelihood of a hazard when employee exposure can be reasonably anticipated. Water must not be allowed to accumulate in a trench or excavation.

7.3 Dewatering is required whenever there is a water accumulation in the excavation.

7.4 If dangerous ground movements such as tension cracking are apparent, stop work in the excavation until the problem has been corrected.

8. Egress

8.1 Egress means shall be provided from trenches and excavations. A stairway, ladder, ramp or other safe means of egress shall be located in trench excavations that are four feet (1.22 m) or more in depth so as to require no more than 25 feet (7.62 m) of lateral travel for employees.
8.2 Ladders must be in good condition, extend from the floor of the trench to three feet above the top of the excavation, and secured at the top.

9. **Completion of Work**

9.1 Support systems shall be installed and removed in a manner that protects employees from cave-ins, structural collapses, or from being struck by members of the support system.

9.2 Individual members of support systems shall not be subjected to loads exceeding those which those members were designed to withstand.

9.3 Before temporary removal of individual members begins, additional precautions shall be taken to ensure the safety of employees, such as installing other structural members to carry the loads imposed on the support system.

9.4 Removal shall begin at, and progress from, the bottom of the excavation. Members shall be released slowly so as to note any indication of possible failure of the remaining members of the structure or possible cave-in of the sides of the excavation.

9.5 Backfilling shall progress together with the removal of support systems from excavations.

10. **Drilling Operations**

10.1 An Excavation Permit is required for drilling operations.

10.2 Inspect the drilling area for hazards before starting the drilling operation. Utility lines must be located and marked prior to any drilling operations. OSHA mandated clearance from power lines is required.

10.3 Drill crews and other employees must stay clear of augers or drill stems that are in motion.

10.4 Barricades must be installed around the auger or drill while it is in motion.

10.5 After augering or drilling is complete, the hole must be covered to protect workers from inadvertently falling into the hole.
10.6 When drill helpers assist the drill operator during installation or operation of a drilling rig, the helpers must be in sight of or in communication with the operator at all times.

10.7 Attend drilling rigs while in operation. Do not drill from positions that hinder access to the controls, or from insecure footing or staging.

10.8 A competent person must inspect drilling equipment and any associated rigging at the start of each shift, and defects must be corrected before the equipment is used.

10.9 Warn workers in the area around the drilling operation before each drilling cycle is started.

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Section 32: Concrete and Formwork

1. General Information

1.1 Portions of this section may be referenced in 1926, Subpart Q.

1.2 The following procedures apply to the erection of concrete formwork, placement of concrete for either cast-in-place or precast work and masonry work.

2. Concrete and Formwork Procedures

2.1 Equipment and materials used in concrete construction and masonry work must meet the applicable requirements as described in the ANSI publication A10.9 – 1997 (R2004) Safety Requirements for Concrete Construction and Masonry Work.

2.2 Employees working more than six feet above an adjacent work surface while placing reinforcing steel or setting/dismantling forms must use a personal fall arrest system (PFAS) with two lanyards. Positioning devices may be used with the PFAS, but not by themselves unless the work performed is less than 6 feet from the adjacent surface below.

A. Follow 100 percent tie-off and fall protection practices.

2.3 Contractors must ensure that no work is performed near power lines per OSHA requirements

2.4 Mixers must be locked out prior to maintenance or repair work

2.5 Cover protruding reinforcing steel with a minimum of 2-inch thick material or standard caps where employees may be required to work above or pass through.

2.6 Do not work above vertically protruding reinforcing steel unless the steel has been protected to eliminate the hazard.

2.7 Affix impalement caps on reinforcing steel that is less than six feet high.

2.8 Riding concrete buckets or operate concrete buckets over occupied areas is prohibited.
2.9 Cover reinforcing mats used as walkways with plywood for safe footing.

2.10 Wear NIOSH-approved, supplied-air respirators and hoods when sandblasting.

2.11 All concrete cutting (saw cutting) must be performed wet, and slurry is to be cleared as necessary to maintain safe walking and working surfaces around the work area.

2.12 Hearing protection must be worn when sandblasting or saw cutting as indicated.

2.13 The contractor is responsible for the cost associated with any air monitoring required to determine permissible exposure levels of hazardous materials.

2.14 Concrete workers must wear appropriate shirts, boots, and gloves to reduce the danger of concrete burns.

A. Contractors must provide additional PPE as indicated for the work performed. Costs associated with additional PPE are the responsibility of the contractor.

2.15 Remove excess materials from the work area.

2.16 Concrete mixer drivers must have and wear all applicable PPE when on site.

2.17 Washout of mixer trucks will take place in designated areas only.

2.18 Concrete mixer truck drivers must use 100% fall protection when performing washout. Contractors are responsible for informing their suppliers of the site-specific 100% fall protection requirements when work is performed over six feet from the ground.

3. Masonry

3.1 Masonry contractors must establish a limited access zone surrounding wall formations prior to the start of construction to protect other (non-authorized) workers.

3.2 Walls greater than 8 feet tall which are under construction must be braced and secured to adequately protect it from overturning or collapsing until
permanent supporting elements of the structure are in place.

3.3 Scaffolds used during masonry work must not be overloaded, and excess materials must be removed from any scaffold at the end of the work day.

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Section 33: Steel Erection

1. Definitions

1.1 A barricade is a device used to direct or protect pedestrian or vehicular traffic from a work activity.

1.2 Christmas treeing is the practice of suspending multiple structural steel members from one another horizontally and hoisting them in a single lift.

1.3 Controlling Contractor is the contractor responsible for steel erection. The controlling contractor will manage steel erection with the Construction Manager.

1.4 An outrigger is a structural member of a supported scaffold used to increase the base width of the scaffold to provide increased stability.

1.5 A tag line is a rope that is tied to a structural member and used to control the movement of the member during placement.

2. Training

2.1 Portions of this section may be referenced in 1926, Subpart M & R

2.2 A qualified person is required to train exposed workers in fall protection and workers engaged in special, high risk activities.

2.3 Inspection also requires a qualified person.

3. Hoisting and Rigging

3.1 All steel erection work requires a Job Hazard Analysis detailing specific components of the work activities. Inspection of the work area and equipment must be carried out at the beginning of each shift by a qualified person. A qualified rigger must also inspect the rigging prior to each shift.

3.2 For crane operations, safety latches on hooks may not be deactivated unless a qualified rigger determines it is safer to place purlins and joists without them, or equivalent protection is provided in a site-specific erection plan.
3.3 The standard allows employees engaged in initial steel erection or hooking/unhooking to work under loads in some specific instances. The load must be rigged by a qualified rigger.

3.4 Crane operators are responsible for operations under their control and have the authority to stop and refuse to handle loads until safety has been assured.

3.5 This project prohibits the use of cranes to hoist personnel.

A. When employees work under loads (allowed in specified instances with variance request to Site Safety Director) requirements in OSHA 1926.753(d) must be followed.

B. Multiple lift rigging (with a maximum of 5 "Christmas Treeing" of steel members in one load) is permitted as long as the requirements of OSHA 1926.753(e) are met.

4. Permanent Floors

4.1 Install permanent floors as soon as practical following the erection of structural members. Do not allow more than two floors (24 feet) of unfinished bolting or welding above the foundation or the uppermost secured floor.

5. Temporary Floor

5.1 Solidly plank the erection floor over its entire surface except for access openings. Use planking that is fully able to bear the loads, full size, undressed, laid tight, and secured against movement. Guard access openings with standard guard rail.

5.2 A guarding system must be installed and include the following.

A. A standard railing consists of a top rail, intermediate rail (mid rail), toe board, four-foot (4 ') vertical debris nets, and posts.

B. The top rail must be approximately 42 inches from the upper surface of the rail to the floor, platform, or ramp level. The top rail, if using wire rope, must be half-inch (1/2") wire rope with at least three J-type fist grip wire
rope clamps at each connection, and turn buckles every 100 feet. Use thimbles where wire rope is connected.

C. The mid rail is located halfway between the top rail and the floor, runway, platform, or ramp. The mid rail must be half-inch (1/2") wire rope with three J-type fist grip wire rope clamps at each connection and turn buckles every 100 feet. Use thimbles where wire rope is connected.

D. The toe board must be at least four inches (4") in height, securely fastened, and not have more than a quarter inch (¼") gap between it and the floor level where vertical debris nets cannot be installed.

6. **Steel Work**

6.1 Prior to the start of steel erection, decking and other associated tasks, the steel erector (controlling contractor) will establish the site layout for steel erection, the laydown areas for steel erection and the construction sequence.

A. This plan will be submitted to the CM, site safety director and Volkswagen representative for review and approval prior to the start of steel erection.

6.2 When setting structural steel, secure each connection with at least two wrench-tightened bolts before the load is released.

6.3 Do not hoist material to a structure unless it is ready to be put in place and secured.

6.4 Comply with the site fall protection requirement (see Section 14 - Personal Protective Equipment) for work performed over six feet. *(One hundred percent fall protection is required for steel erection work.)*

6.5 When loads are being hoisted, walking under the lift or permitting an employee to be exposed to the swing of the lift is prohibited.

6.6 Use a tag line to control loads.

6.7 Post barricades and "Danger Men Working Overhead" signs around the erection area.
6.8 All persons working below steel erection must be protected from falling objects using any and all applicable methods.

7. **Fall Protection**

7.1 Deckers, connectors, and all others engaged in steel erection must be protected at heights of 6 feet or more with fall protection. Connectors must wear fall arrest or restraint equipment and be able to be tied off or they must be provided with another means of fall protection that is compliant with applicable laws and regulations.

7.2 Contractors installing perimeter cable for fall protection are responsible for maintaining the perimeter cable until relieved of responsibility by the site safety director.

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Section 34: Roadway Work

1. General Information

1.1 The following procedures apply to roadway work.

2. Roadway Work Procedures

2.1 Work on or adjacent to existing public and work site roadways must be performed in accordance with the requirements of the most current version of the Manual on Uniform Traffic Control Devices for Streets and Highways (available through Federal Highway Administration), and portions of this section may be referenced in 1926, Subpart G.

2.2 Contractors are to obtain any permits required by local, state, or federal law.

2.3 Unless otherwise specified, the contractor performing this work is responsible for furnishing, setting-up, and maintaining traffic control signs, devices, barricades, arrow boards, and flag-persons. The site safety director must approve traffic control provisions.

2.4 The contractor must ensure that:

A. Roadways, walkways, and other means of access and egress are free of trash, rubbish, mud, sand, and loose material.

B. Where required, a wheel wash station is provided.

C. Vehicles and equipment are clean prior to leaving the site. The contractor is responsible for immediate cleanup and public liability.

2.5 Retroreflective vests are to be worn at all times during performance of roadway work, including unloading of trailers and delivery trucks.

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Section 35: Blasting

1. General Information

1.1 The following procedures apply to blasting.

1.2 Portions of this section may be referenced in 1926, Subpart U.

2. Blasting Procedures

2.1 All blasting must be in accordance with federal, state and local requirements.

2.2 Contractors shall permit only authorized personnel to handle and use explosives.

2.3 The contractor must prepare a blasting plan and submit the plan to the site safety director.

2.4 The blasting plan must include a description of the signage and warning devices to be used to notify employees of the blast.

2.5 Blasting is not allowed on the project site without the written approval of the site safety director.

2.6 Blasting is allowed only during the hours specified by the site safety director.

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Section 36: Security

1. General Information

1.1 Volkswagen will supply a security team that is responsible for controlling access to the construction site.

1.2 Volkswagen will supply a security team that will monitor the access to the site twenty four hours per day, seven days per week.

1.3 Volkswagen will supply a security team that will issue burning and welding permits during construction work periods.

1.4 Volkswagen will supply a security team that will issue truck delivery passes, evaluate and check the material that is being delivered or removed and monitor their entry and exit time.

1.5 Volkswagen will supply a security team that will issue employee badges that will include photo identification, employee name, Volkswagen site employee number and contractor name.

1.6 Volkswagen will supply a security team that will issue temporary badges with expiration dates that will be used until the photo badges are ready.

1.7 Volkswagen will supply a security team that will issue construction truck passes as approved by the site security manager.

1.8 Volkswagen will supply a security team that will issue trailer city parking passes as approved by the site security manager.

1.9 Volkswagen will supply a security team that in conjunction with the site safety director will review and approve any special condition construction activities, i.e. helicopter lifts, critical pick crane lifts etc.
1.10 Volkswagen will supply a security team that in conjunction with the site safety director will be in control of monitoring weather and notifying employees of extreme weather conditions.

1.11 Volkswagen will supply a security team that will be the central control point for all emergency notifications.

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Section 37: Medical

1. General Information

1.1 Portions of this section may be referenced in 1926, Subpart D

1.2 Volkswagen will provide an on-site medical clinic for first aid cases and minor injury cases.

1.3 The medical clinic will be staffed by licensed practical nurses, registered nurse clinicians and/or EMT’s working under the direction of a physician.

1.4 The physician will provide clinical direction and standing orders for the care and treatment of injuries.

1.5 The clinic may also perform routine screenings for blood pressure, blood sugar, etc.

1.6 Employees of the clinic will not provide medical advice or treatment without direction from the treating/attending physician or clinic.

1.7 The clinic is designed for emergency treatment of injured workers and is not intended to replace medical care and treatment normally provided by a specialist or family care physician.

1.8 The local fire and emergency response team will be on call to provide assistance in confined space rescue and high bay rescue. If these services are needed, the contractor is responsible for all associated costs.

1.9 The medical care providers are trained in first aid/CPR and the use of AED’s.

1.10 There will be at least one AED on site.

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Section 38: Signs, Signals and Barricades

1. General Information

1.1 Portions of this section may be referenced in 1926, Subpart G

1.2 Contractors will ensure that the components in the subpart are incorporated into their site-specific safety program, and into any applicable job hazard analysis for their scope of work.

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Section 39: Material Handling, Storage, Use and Disposal

1. General Information

1.1 Portions of this section may be referenced in 1926, Subpart H

1.2 Any material that has the potential to roll must be chocked, blocked or secured to prevent inadvertent movement

1.3 Materials must be cleared from work areas daily

1.4 Materials may not be stacked more than two pallets high

1.5 If employees are required to work on stacked or stored materials, contractors are required to provide fall protection as outlined in Subpart M

1.6 Materials may not be stored under stairways, or within six feet of any door or wall opening.

1.7 Materials may not be stored/leaned against a column unless they can be protected from accidental/inadvertent fall over.

1.8 Dunnage, cribbing, banding and other materials used for transportation of materials to the site must be cleared from work areas on a regular basis to prevent hazards in the work area. Lumber must have nails pulled or bent over before disposing.

1.9 Scrap and debris for disposal must be sorted to assure compliance with local recycling rules and contents of the LEED™ technical specification.

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Section 40: Fall Protection

1. General Information

1.1 Portions of this section may be referenced in 1926, Subpart M

1.2 Fall protection is required on this site whenever work is performed at a height of six feet or more above existing grade.

1.3 Contractors must develop their own site specific safety plan to reflect the requirements of the Volkswagen site, and must train all affected personnel to the standards of this site.

1.4 Wherever possible, provisions should be in place for self-rescue in the event of a fall from heights of six feet or greater.

1.5 Contractors must assess their elevated work to determine the need for supplemental fall protection such as self-retracting lanyards, beam clamps, attachment points on roofs, or decks and other similar methods of fall protection.

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Section 41: Helicopters

1. General Information

1.1 Portions of this section may be referenced in 1926, Subpart N

1.2 Any and all helicopter lifts require a Job Hazard Analysis detailing the scope of work and the requirements of the helicopter lift

1.3 Prior to any helicopter lift, a planning meeting must be held at least 2 weeks prior to the planned lift.

A. The contractor is responsible for detailing the flight plan

1.4 The plan must include detailed work activities of all personnel, MSDS for the chemicals used during the lift, insurance coverage by the helicopter company (including any “additional Insured”) training for their employees who are participating in the helicopter lift, coordination with site safety, medical and security, signage, etc.

A. Helicopter operations must comply with all applicable regulations of the Federal Aviation Administration.

B. No unauthorized person will be allowed to approach within fifty (50) feet of the helicopter when the rotor blades are rotating, all employees will remain in full view of the pilot and keep in a crouched position.

C. Employees will avoid the area from the cockpit or cabin rearward unless authorized by the helicopter operator to work there.

D. Whenever approaching or leaving a helicopter with blades rotating, all employees will remain in full view of the pilot and keep in a crouched position.

E. Employees will avoid the area from the cockpit or cabin rearward unless authorized by the helicopter operator to work there.
F. Every practical precaution will be taken to provide for the protection for the employees from flying objects in the rotor downwash.

G. All loose gear within one hundred (100) feet of the place of lifting the load, depositing the load and all other areas susceptible to rotor downwash will be secured or removed.

H. Good housekeeping will be maintained in all helicopter loading and unloading areas.

I. Loads will be properly slung. Tag lines will be of a length that will not permit their being drawn up into rotors. Pressed sleeve, wedge eyes or equivalent means will be used for all freely open or cable clamps from loosening.

J. When visibility is reduced by dust or other conditions, ground personnel will exercise special caution to keep clear of main and stabilizing rotors. Precautions will also be taken by the employer to eliminate, as fast as practical, reduce visibility.

K. Signal systems between aircrew and ground personnel will be understood and checked in advance of hoisting the load. This applies to either radio or hand signal system.

L. There will be a constant reliable communicative between the pilot and the designated employee of the ground crew who acts as a signal person during the period of loading and unloading.

M. This signal person will be distinctly recognizable from other ground personnel.

N. The helicopter operator will be responsible for the size, weight and manner in which loads are connected to the helicopter.

O. If, for any reason, the helicopter operator believes the lift cannot be made safely, the lift will not be made.

P. When employees are required to perform work under hovering craft, a safe means of access will be provided for employees to reach the hoist line hook and engage or disengage cargo slings. Employees will not perform
work under hovering craft except when necessary to hook or unhook loads.

1.5 Hearing protection shall be required for all personnel working within 100 feet of the helicopter.

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Section 42: Emergency Action Plan

1. General Information

   1.1 The contents of this section will be found in the site-specific emergency action plan

   1.2 The Emergency Action Plan will be distributed as an addendum to this site-specific safety manual

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SECTION 43 - APPENDICES
Contractor Paperwork Requirements

Each contractor shall provide to the Site Safety Director the following documents / reports:

**Safety Submittal Item to Site Safety Director**
- Letter designating Safety Representative (see “Safety Staffing” below)
- Letter designating Safety Manager(s) (see “Safety Staffing” below)
- Written Safety Program, including Pre-Task Plan(s) for scope of work, Contractor’s specific safety training outline (trade-specific orientation/training)
- Hazard Communication Program
- Material Safety Data Sheets
- Toolbox Safety Meeting Reports (2 per week required)
- Accident Reports
- Weekly Safety Audit Reports

**Daily Jobsite Inspections (conditions and behavioral)**
- Special Hazard Programs / Assessment Reports
- Total Labor Hours Worked
- Total Labor Hours Worked by Craft
- Additional Safety Information / Data
- Storm Water Operator Report

- Affidavit of Assurance re: Chemicals on Site
- Injury Log
- Safety Violations/Discipline Log
- Completed CSE Permits
- Fire Extinguisher Inspections
- Completed Trench/Excavation Permits
- Completed Lock Out Logs
- Safety Violation Notification
- Incident/Injury Notification

- Steel Erection Plan
- Storm Water Report

- Incident/Injury review w/ OCIP Provider

**Due**
- Before Start Of Work
- When Required
- Before Start Of Work

- Before Start Of Work
- Before Start Of Work
- Weekly (by 10 am Monday )
- Immediately
- Following Week (by 10 am Monday )
- Following Week (by 10 am Monday )
- As Needed
- Weekly (by 10 am Monday )
- Weekly (by 10 am Monday )
- As Requested
- Following Week (by 10 am Monday )
- Monthly (by 5th business day of month)
- Monthly (by 5th business day of month)
- Monthly (by 5th business day of month)
- Monthly (by 5th business day of month)
- Monthly (by 5th business day of month)
- Monthly (by 5th business day of month)
- Monthly (by 5th business day of month)
- Monthly (by 5th business day of month)
- Monthly (by 5th business day of month)
- As Needed
- As Needed (first written notice within 4 hours – final report within 24 hours
- As Needed
- Within 24 hours of significant rainfall event (1 inch or more)
- Quarterly or As Needed
Bomb Threat Checklist

Keep the caller on the line for as long as possible. If possible, ask the following questions:

- When will the bomb go off?
- Where is the bomb located?
- What does the bomb look like?
- What type of bomb is it?
- How is the bomb activated?
- Did you place the bomb?
- Why are you doing this?
- What is your name?
- What is your address?

Exact wording of the threat:

Take note of the following:

- Time
- Date
- Sex of caller
- Race
- Age
- Number at which call is received:
- Number/Name on caller ID:
- Length of call:

Caller's Voice:

- Calm
- Angry
- Excited
- Slow
- Rapid
- Soft
- Loud
- Laughing
- Crying
- Normal
- Distinct
- Slurred

- Nasal
- Stutter
- Lisp
- Raspy
- Deep
- Ragged
- Clearing throat
- Deep breathing
- Cracking voice
- Disguised
- Accent
- Familiar

If the voice is familiar, who did it sound like?

Background sounds:

- Street noises
- Factory
- Animal noises
- Voices
- Clear
- PA system
- Static
- Music
- Local
- Long Distance
- House noises
- Motor
- Office
- Phone Booth
- Other

Threat Language:

- Well spoken
- Incoherent
- Foul
- Taped
- Irrational
- Reading

Remarks:

- Report Bomb Threat immediately to the Site Safety Director and Security Director
INCIDENT NOTIFICATION

PLEASE PRINT CLEARLY
AND SUBMIT TO SITE SAFETY DIRECTOR WITHIN 4 HOURS
OF ACCIDENT/INJURY

Date: _______________  Time: _______________

Contract No.: _______________  Contractor Name: _______________

Name: _______________  Job Title/Trade: _______________

Brief Description of Incident/Injury: __________________________________________
__________________________________________
__________________________________________
__________________________________________

Potential Lost Time  ☐ Potential Recordable  ☐
Property Damage  ☐
Final Injury/Incident Report
Root Cause Injury & Accident Investigation

Name of Injured ___________________________ Home Telephone _______________ Date ____________

Address/City/State/Zip __________________________

Title/Trade ___________________________ Last 4 Digits SS # __________________________
DOB ___________________________ Male ☐ Female ☐ Marital Status __________________________

Employee Date of Hire ___________________________ Root Cause Investigation Date __________________________

Information Only ☐ First Aid ☐ Doctors Case ☐ Project # ___________ Sub Project # ___________

Date of Injury ___________________________ Time of Injury ___________________________ AM ☐ PM ☐

Time Shift Started _______ AM _______ PM Shift: 8 HR ☐ 10 HR ☐ 12 HR ☐
Was Regular Work Being Performed? Yes ☐ No ☐

Weather conditions/temperature at time of incident: __________________________

Describe Employee Injury: __________________________

______________________________

Is a substance screening required? Yes ☐ No ☐

Date and Time of Post Injury Substance Test: __________________________

Name all persons involved in incident: __________________________

______________________________

What task was employee doing when this incident, injury, accident occurred? __________________________

______________________________

Plan
1. Was this activity identified in a JHA? Yes ☐ No ☐ N/A ☐
2. Were the specific safety requirements identified in a JHA? Yes ☐ No ☐ N/A ☐
3. Were the safety requirements followed? Yes ☐ No ☐ N/A ☐
4. Should the JHA be modified to address the hazard/safe practice? Yes ☐ No ☐ N/A ☐
5. Was the JHA reviewed and signed off by the crew? Yes ☐ No ☐ N/A ☐
Communicate:
1. Did this employee complete the site-specific new hire orientation? Yes □ No □ N/A □
2. How long has this employee been on the project?   ___ Years  ___ months  ___ days
3. How long has employee been in this trade?       ___ Years  ___ months  ___ days
4. Was this employee considered At-Risk because he/she is (circle all that apply):
   a. New to the company   c. New to the trade
   b. New to the project    d. New to the task
5. Did the Pre-Start Meeting Card (SafeCard) identify the employee as an At-Risk employee? Yes □ No □ N/A □
6. Was this employee teamed with a worker that is not an At-Risk employee? Yes □ No □ N/A □
7. How long has this employee been doing this task? ________________________________
8. Were the hazards and safe work expectations of this task identified in a SafeCard, or Tool Box Talk meeting before the task began? Yes □ No □ N/A □
9. Did the employee attend the SafeStart meeting and sign the SafeCard? Yes □ No □ N/A □
10. Was this the first task of the day? Yes □ No □ N/A □
   a. If not, was a subsequent SafeCard held to discuss the task? Yes □ No □ N/A □
11. Did this employee knowingly violate a communicated safe work requirement? Yes □ No □ N/A □
12. Has this type of injury/accident occurred previously on this project? Yes □ No □ N/A □
13. Has a stand-down been conducted to review the cause of the injury/accident with project crews? Yes □ No □ N/A □

Observe:
1. Was this activity identified in an on-site behavior observation? Yes □ No □ N/A □
2. Were observations recorded for this activity? Yes □ No □ N/A □
3. Did an At-Risk Behavior contribute to or cause this injury/accident? Circle all that apply

   Line of Fire
   Yes □ No □ N/A □               Yes □ No □ N/A □
   Eyes on Path
   Yes □ No □ N/A □               Yes □ No □ N/A □
   Overextended
   Yes □ No □ N/A □               Yes □ No □ N/A □
   Pinch Points
   Yes □ No □ N/A □               Yes □ No □ N/A □
   3 Point Contact
   Yes □ No □ N/A □               Yes □ No □ N/A □

4. Did an unsafe condition contribute to or cause this injury/accident?
   Yes □ No □ N/A □               Yes □ No □ N/A □
5. Name the unsafe condition that either contributed or caused this injury/accident.

Contributed: 

Caused: 

6. If applicable, was the employee trained/certified to use the equipment that was being operated?  
   Yes □ No □ N/A □

7. Was the correct equipment, tool, or rigging, used to perform this task?  
   Yes □ No □ N/A □

8. Was the correct piece of employee-operated machinery used for this task?  
   Yes □ No □ N/A □

9. Was a short cut taken that contributed to this injury/accident?  
   Yes □ No □ N/A □
   (If yes, circle one or more):
   a. To save time    c. An unsafe practice
   b. Lack of preplanning  d. An unsafe behavior
   e. other (describe)  

General Information/Loop Closure
1. Was employee fit for this duty?  
   Yes □ No □ N/A □

2. Did employee participate in any stretching/musculoskeletal relaxation program prior to beginning the task?  
   Yes □ No □ N/A □

3. Was employee wearing the correct PPE for the task?  
   Yes □ No □ N/A □
   If not, why? 

4. Has the employee had previous incidents/injuries with this contractor or project?  
   Yes □ No □ N/A □
   If yes, what were they? 

5. Did a previous injury contribute to this injury/accident?  
   Yes □ No □ N/A □
   If yes, describe previous injury: 

6. Did weather conditions contribute to this incident?  
   Yes □ No □ N/A □
   If yes, describe:

7. Did employee recently work overtime before this incident/injury?  
   Yes □ No □ N/A □
   If yes, # of hours per day:  # of days
8. What is employee’s daily travel time to and from project?

Root Cause Investigation Summary

From this investigation, identify the reasons that contributed to this injury/accident.

1. 
2. 
3. 
4. 
5. 
Other:

What is the Root Cause of this injury/accident?

Name the Lessons Learned:

What will be done differently to prevent accident/injury from reoccurring?

Participants in Root Cause investigation: (Please print)

<table>
<thead>
<tr>
<th>Name:</th>
<th>Title:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td>Title:</td>
</tr>
<tr>
<td>Name:</td>
<td>Title:</td>
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<tr>
<td>Name:</td>
<td>Title:</td>
</tr>
<tr>
<td>Name:</td>
<td>Title:</td>
</tr>
</tbody>
</table>

Attach applicable JHA to this investigation, sketches, reenactment photographs, etc. If JHA needs modification to identify the work, make revision and complete training before allowing employee(s) to continue task. If JHA was not developed for this work and one was required, stop task, develop JHA, and train participants before task begins again.
<table>
<thead>
<tr>
<th>Requirement</th>
<th>Rationale</th>
<th>Responsibility</th>
<th>MINIMUM Required Documents</th>
<th>Posting Requirements</th>
</tr>
</thead>
</table>
| Safety Bulletin Board    | Visual Management of On-Site Safety Performance | Site Safety Director and his/her on-site Safety Committee Members | - Posting of Weekly, Monthly Safety Bulletins  
- Project Site's Composite Safety Performance Tracking  
- Emergency Evacuation Routes Emergency Shelter Areas & Emergency Access Routes  
- Emergency Phone Numbers  
- Spill Control Response  
- Safety Organizational Chart  
- Individual Contractor Safety Performances Presented in Rank or Alphabetical Order | Prominently displayed, may require more that one Bulletin Board - at a minimum, the first bulletin board on site must be located at the employee entrance gate |
# Job Hazard Analysis - EXAMPLE WORKSHEET

**PROJECT:**

**CONTRACTOR:**

**PREPARED BY:**

<table>
<thead>
<tr>
<th>Trades Required</th>
<th>Tools/Equip:</th>
<th>Contractors Involved:</th>
</tr>
</thead>
</table>

**Miscellaneous Information:**

<table>
<thead>
<tr>
<th>Job Steps</th>
<th>Hazard</th>
<th>Hazard Control</th>
<th>Contingencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify the Scope, such as; Hanging header steel, or Confined Space entry to burn bolts, etc.</td>
<td>Identify any hazards that could be encountered.</td>
<td>Identify the hazard control method to be used.</td>
<td>Competent Person Days:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Phone:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identify by name those responsible, such as - Competent person - Qualified person - Spotter - Monitor - Rigger</td>
<td>Emergency #</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>In Plant Phone #</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Outside Phone #</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Give your:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Type of Emergency</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Name</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Location</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Phone #</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DO NOT HANG UP UNTIL TOLD TO DO SO BY THE OPERATOR</td>
</tr>
</tbody>
</table>
Job Hazard Analysis

Task or Activity:
DATE:

CONTRACTOR:

PREPARED BY:

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<tr>
<th>Trades Involved:</th>
<th>Tools/Equip Involved:</th>
<th>Contractors Involved:</th>
</tr>
</thead>
</table>

Miscellaneous Information:
This JHA is to be used as a guideline for performing your work safely. It may not be all-encompassing of your work, and there may be hazards which are not detailed in the following JHA. Stop your work if you are uncertain about a specific activity and ask questions. It is each employee’s responsibility to work safely and to follow the direction you receive from your Supervisor. If he or she asks you to do something that is not safe, you have the responsibility and the right to STOP your work until corrections have been made. The action you take may prevent you or your co-worker(s) from a serious incident of injury.

<table>
<thead>
<tr>
<th>JOB STEPS</th>
<th>HAZARDS</th>
<th>HAZARD CONTROL</th>
<th>CONTINGENCY PLAN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Competent Person</td>
</tr>
</tbody>
</table>

Days:
Nights:

Phone(s):

Emergency #

In Plant Phone #

Outside Phone #

Give your:
- Type of Emergency
- Name
- Location
- Phone #

DO NOT HANG UP UNTIL TOLD TO DO SO BY THE OPERATOR
Site Orientation Affidavit
Volkswagen
Chattanooga Tennessee

To Be Completed By Employee:
Employee Information - PRINT ALL INFORMATION EXCEPT SIGNATURE

Orientation Date: __/__/____
Employee Name: ____________________________________________
Employee Signature: _________________________________________
Craft: _______________________________________________________
Employer: __________________________________________________
Emergency Contact Name and Phone: (MANDATORY) ________________

To Be Completed By Contractor Project Manager:

Drug Test Confirmation (Complete the next section if not applicable)
The named employee is current in required drug testing.
Project Manager: _____________________________________________
Signature: __________________________________________________
Company: ___________________________________________________
Date of Drug Test: (must be within 30 days of orientation)
__/__/____
Drug Test Exemption
The named employee is exempt from drug testing.
Reason for Exemption: _________________________________________
Project Manager: _____________________________________________
Signature: __________________________________________________
Company: ___________________________________________________

Site Orientation
This affidavit certifies that the named employee has participated in the
Volkswagen site specific orientation. The information and principles outlined in
these requirements were reviewed and discussed with him/her. The named
employee has also agreed to work in a safe manner and comply with the
written procedures and policies as prescribed in these requirements and in the
OSHA 1926 Requirements for construction projects. Additionally, the named
employee has reviewed the Volkswagen Site Orientation Video and/or
Presentation, if applicable and has received Environmental Awareness
Information.

Site Orientation Administrator: ________________________________
Site Orientation Administrator Signature: _________________________
EMPLOYEE BADGE NUMBER: _________________________________
**VW Worker Audit**

**VOLKSWAGEN Chattanooga Assembly Plant**

**Stop - Look - Assess - Proceed**

<table>
<thead>
<tr>
<th>Behaviors</th>
<th>Personal Protective Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Protective Equipment Used Properly?</td>
<td>Head</td>
</tr>
<tr>
<td>Maintaining Ears on Pathways?</td>
<td>Ears</td>
</tr>
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**IF Unsafe Act(s) Observed**

**COMPLETE THE DOCUMENT**: Immediate Corrective Action AND Actions to Prevent Recurrence

**Complete the Observation Report**

**Conditions (Look at...)**

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**List DAILY Activities Taken to Encourage Continued Safe Performance**

(AlWAYS COMPLETE THIS SECTION)

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**VW Worker Audit**

**VOLKSWAGEN Chattanooga Assembly Plant**

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# Site Audit Form

## Volkswagen
Chattanooga Assembly Plant

**Percent Safe = ( %)**

Weekly Summary of Observations
Submit a form for each day worked by 10 a.m. Monday

<table>
<thead>
<tr>
<th>Company</th>
<th>Use of PPE</th>
<th>Housekeeping</th>
<th>Fire Protection</th>
<th>Signs &amp; Barricades</th>
<th>Stairways &amp; Ladders</th>
<th>Material Handling</th>
<th>Demolition</th>
<th>Mechanical Equipment</th>
<th>Aerial Lifts</th>
<th>Cranes &amp; Hosts</th>
<th>Rigging</th>
<th>Fall Protection</th>
<th>Hard and Power Tools</th>
<th>Welding &amp; Cutting</th>
<th>Electrical</th>
<th><strong>Totals</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

% Unsafe Obs. In Comparison to Safe Obs.: 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%

**COMMENTS:**

- COMMENTS:
- COMMENTS:
- COMMENTS:
- COMMENTS:
- COMMENTS:
- COMMENTS:
- COMMENTS:
- COMMENTS:
- COMMENTS:
- COMMENTS:
- COMMENTS:

**IDENTIFY CORRECTIVE ACTIONS IN COMMENTS SECTION**

**ADD ADDITIONAL SHEETS AS INDICATED**
Weekly Site Inspection Form

Company: 

Project Name: 

Project Location: 

Date of Review: 

Reviewed By: 

Project Manager: 

Project Safety Engineer: 

Project Superintendent: 

Other Key Individuals: 

1. Type of Review: 
   - Planned 
   - Random 

Safety representative present? 
   - Yes  
   - No  

Who Participated? 

2. Are there Daily meetings with the trades by Project Mgmt & Supervisors? 
   - Yes  
   - No  

Have PM, PE, Supts, GF & F signed the SafeCard? 
   - Yes  
   - No  

Are safety issues addressed on the SafeCard? 
   - Yes  
   - No  

3. Are Sub Contractors in compliance on this project? 
   - Yes  
   - No  

Comments: 

4. What were 4 of the last tool box topics? 
   - Who were they given by? 

5. What is the number of work hours per injury? 
   - What is the cost per work hour? 

6. How many accidents to date? 
   - How many doctor cases? 

Lost Time:
Weekly Site Inspection Form

7. Date of last safety audit?
Number of items remaining uncorrected:

What are the uncorrected items?

Audit Conducted by: ___________________________________________

Project Compliance: address comments below.

8. Overall compliance with Site Safety Program
   □ adequate □ needs improvement □ comments

9. SafeCard attendance by Project Management & Supervision
   □ adequate □ needs improvement □ comments

10. Subcontractor Participation in Safety Program
    □ adequate □ needs improvement □ comments

11. Stretching/Musculoskeletal Relaxation performed?
    □ adequate □ needs improvement □ comments

12. Current JHA’s in work area/change shacks?
    □ adequate □ needs improvement □ comments

13. Observations (Behavior and Condition) completed by Project Management & Supervision - provide verification
    □ adequate □ needs improvement □ comments

14. Is the project in compliance with Owner Requirements?
    □ Yes □ No

What are the deficiencies, if any?

General Comments about Safety on this project:

Positive Comments about Safety on this project:
Construction

Nearly 6.5 million people work at approximately 252,000 construction sites across the nation on any given day. The fatal injury rate for the construction industry is higher than the national average in this category for all industries.

Potential hazards for workers in construction include:

- Falls (from heights);
- Trench collapse;
- Scaffold collapse;
- Electric shock and arc flash/arc blast;
- Failure to use proper personal protective equipment; and
- Repetitive motion injuries.

OSHA

Occupational Safety and Health Administration
U.S. Department of Labor
www.osha.gov
Hazards & Solutions

For construction, the 10 OSHA standards most frequently included in the agency's citations in FY 2004 were:

1. Scaffolding
2. Fall protection (scope, application, definitions)
3. Excavations (general requirements)
4. Ladders
5. Head protection
6. Excavations (requirements for protective systems)
7. Hazard communication
8. Fall protection (training requirements)
9. Construction (general safety and health provisions)
10. Electrical (wiring methods, design and protection)
Scaffolding

Hazard: When scaffolds are not erected or used properly, fall hazards can occur. About 2.3 million construction workers frequently work on scaffolds. Protecting these workers from scaffold-related accidents would prevent an estimated 4,500 injuries and 50 fatalities each year.

Solutions:

- Scaffold must be sound, rigid and sufficient to carry its own weight plus four times the maximum intended load without settling or displacement. It must be erected on solid footing.
- Unstable objects, such as barrels, boxes, loose bricks or concrete blocks must not be used to support scaffolds or planks.
- Scaffold must not be erected, moved, dismantled or altered except under the supervision of a competent person.
- Scaffold must be equipped with guardrails, midrails and toeboards.
- Scaffold accessories such as braces, brackets, trusses, screw legs or ladders that are damaged or weakened from any cause must be immediately repaired or replaced.
- Scaffold platforms must be tightly planked with scaffold plank grade material or equivalent.
- A “competent person” must inspect the scaffolding and, at designated intervals, reinspect it.
- Rigging on suspension scaffolds must be inspected by a competent person before each shift and after any occurrence that could affect structural integrity to ensure that all connections are tight and that no
CONSTRUCTION

damage to the rigging has occurred since its last use.

- Synthetic and natural rope used in suspension scaffolding must be protected from heat-producing sources.
- Employees must be instructed about the hazards of using diagonal braces as fall protection.
- Scaffold can be accessed by using ladders and stairwells.
- Scaffolds must be at least 10 feet from electric power lines at all times.
Fall Protection

Hazard: Each year, falls consistently account for the greatest number of fatalities in the construction industry. A number of factors are often involved in falls, including unstable working surfaces, misuse or failure to use fall protection equipment and human error. Studies have shown that using guardrails, fall arrest systems, safety nets, covers and restraint systems can prevent many deaths and injuries from falls.

Solutions:
• Consider using aerial lifts or elevated platforms to provide safer elevated working surfaces;
• Erect guardrail systems with toeboards and warning lines or install control line systems to protect workers near the edges of floors and roofs;
• Cover floor holes; and/or
• Use safety net systems or personal fall arrest systems (body harnesses).
Ladders

Hazard: Ladders and stairways are another source of injuries and fatalities among construction workers. OSHA estimates that there are 24,882 injuries and as many as 36 fatalities per year due to falls on stairways and ladders used in construction. Nearly half of these injuries were serious enough to require time off the job.

Solutions:

• Use the correct ladder for the task.

• Have a competent person visually inspect a ladder before use for any defects such as:
  • Structural damage, split/bent side rails, broken or missing rungs/steps/cleats and missing or damaged safety devices;
  • Grease, dirt or other contaminants that could cause slips or falls;
  • Paint or stickers (except warning labels) that could hide possible defects.

• Make sure that ladders are long enough to safely reach the work area.

• Mark or tag ("Do Not Use") damaged or defective ladders for repair or replacement, or destroy them immediately.

• Never load ladders beyond the maximum intended load or beyond the manufacturer's rated capacity.

• Be sure the load rating can support the weight of the user, including materials and tools.

• Avoid using ladders with metallic components near electrical work and overhead power lines.
Stairways

**Hazard:** Slips, trips and falls on stairways are a major source of injuries and fatalities among construction workers.

**Solutions:**

- Stairway treads and walkways must be free of dangerous objects, debris and materials.
- Slippery conditions on stairways and walkways must be corrected immediately.
- Make sure that treads cover the entire step and landing.
- Stairways having four or more risers or rising more than 30 inches must have at least one handrail.
Trenching

**Hazard:** Trench collapses cause dozens of fatalities and hundreds of injuries each year. Trenching deaths rose in 2003.

**Solutions:**
- Never enter an unprotected trench.
- Always use a protective system for trenches 5 feet deep or greater.
- Employ a registered professional engineer to design a protective system for trenches 20 feet deep or greater.
- Protective Systems:
  - Sloping to protect workers by cutting back the trench wall at an angle inclined away from the excavation not steeper than a height/depth ratio of 1:1, according to the sloping requirements for the type of soil.

**SLOPING.** Maximum allowable slopes for excavations less than 20 ft. (6.09 m) based on soil type and angle to the horizontal are as follows:

<table>
<thead>
<tr>
<th>Soil type</th>
<th>Height/Depth ratio</th>
<th>Slope angle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stable Rock (granite or sandstone)</td>
<td>Vertical</td>
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<tr>
<td>Type A (clay)</td>
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<tr>
<td>Type B (gravel, silt)</td>
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<td>Type C (sand)</td>
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<tr>
<td>Type A (short-term)</td>
<td>1:1</td>
<td>63°</td>
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</tbody>
</table>

(For a maximum excavation depth of 12 ft.)

• Shoring to protect workers by installing supports to prevent soil movement for trenches that do not exceed 20 feet in depth.

• Shielding to protect workers by using trench boxes or other types of supports to prevent soil cave-ins.

• Always provide a way to exit a trench—such as a ladder, stairway or ramp—no more than 25 feet of lateral travel for employees in the trench.

• Keep spoils at least two feet back from the edge of a trench.

• Make sure that trenches are inspected by a competent person prior to entry and after any hazard-increasing event such as a rainstorm, vibrations or excessive surcharge loads.
Cranes

Hazard: Significant and serious injuries may occur if cranes are not inspected before use and if they are not used properly. Often these injuries occur when a worker is struck by an overhead load or caught within the crane's swing radius. Many crane fatalities occur when the boom of a crane or its load line contact an overhead power line.

Solutions:
- Check all crane controls to insure proper operation before use.
- Inspect wire rope, chains and hook for any damage.
- Know the weight of the load that the crane is to lift.
- Ensure that the load does not exceed the crane's rated capacity.
- Raise the load a few inches to verify balance and the effectiveness of the brake system.
- Check all rigging prior to use; do not wrap hoist ropes or chains around the load.
- Fully extend outriggers.
- Do not move a load over workers.
- Barricade accessible areas within the crane's swing radius.
- Watch for overhead electrical distribution and transmission lines and maintain a safe working clearance of at least 10 feet from energized electrical lines.
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<tr>
<th>Manufacturer Name</th>
<th>Product Name</th>
<th>Hazardous Chemicals Present</th>
<th>Contractor</th>
<th>MSDS Date</th>
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Hazardous Materials Affidavit of Assurance

Volkswagen
Chattanooga, Tennessee
Monthly Affidavit of Assurance

I ___________________________ of ___________________________
(Print Name) (Print Company Name)

assure Volkswagen that as of ___ / ___ / ___ all MSDS Documentation
(Insert Date)
at the Volkswagen Assembly Plant, Chattanooga, Tennessee for
my company and all of my respective subcontractors are up-to-
date and current.

________________________________________
(Contractor Project Manager)

________________________________________
(Company Information - Phone)

________________________________________
(Company Information – Address)
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<td>07664-35-3</td>
<td>HYDROGEN FLUORIDE*</td>
</tr>
<tr>
<td>07789-06-2</td>
<td>STRONTIUM CHROMATE</td>
</tr>
<tr>
<td>12001-28-4</td>
<td>ASBESTOS (CROCIDOLITE)</td>
</tr>
<tr>
<td>12001-29-5</td>
<td>ASBESTOS (CHrysolite)</td>
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<tr>
<td>12002-51-6</td>
<td>POTASSIUM CRESELYATE</td>
</tr>
<tr>
<td>12172-73-5</td>
<td>ASBESTOS (AMosite)</td>
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<tr>
<td>12656-85-8</td>
<td>MOLYBDATE RED</td>
</tr>
<tr>
<td>13768-00-8</td>
<td>ASBESTOS (ACTINOLITE)</td>
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<tr>
<td>14567-73-8</td>
<td>ASBESTOS (TREMOLITE)</td>
</tr>
<tr>
<td>17068-78-9</td>
<td>ASBESTOS (ANTHOPHYLITE)</td>
</tr>
</tbody>
</table>

This list should not be considered all-inclusive
REGULATED CHEMICALS

The substances identified below are of concern during specific manufacturing processes. Generally, those processes of concern generate fumes or dusts. This is most often associated with welding, sanding and grinding. Some stamping processes can also cause concern. If the substance is contained in a material and the material is not processed, use of the material will not be restricted.

**ALPHABETICAL LISTING**

<table>
<thead>
<tr>
<th>Substance Name</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum (Fume or Dust)</td>
<td>7429-90-5</td>
</tr>
<tr>
<td>Beryllium</td>
<td>7440-41-7</td>
</tr>
<tr>
<td>Beryllium Compounds</td>
<td>MULTIPLE</td>
</tr>
<tr>
<td>Manganese</td>
<td>7439-96-5</td>
</tr>
<tr>
<td>Manganese Compounds</td>
<td>MULTIPLE</td>
</tr>
<tr>
<td>Nickel</td>
<td>7440-02-0</td>
</tr>
<tr>
<td>Nickel Compounds</td>
<td>MULTIPLE</td>
</tr>
<tr>
<td>Selenium</td>
<td>7762-49-2</td>
</tr>
<tr>
<td>Selenium Compounds</td>
<td>MULTIPLE</td>
</tr>
<tr>
<td>Zinc (Fume or Dust)</td>
<td>7440-66-6</td>
</tr>
<tr>
<td>Zinc Compounds</td>
<td>MULTIPLE</td>
</tr>
</tbody>
</table>
0 Site Layout Plan
Sexual Harassment:

**Definition:** Sexual Harassment is unwanted or unwelcome sexual attention or sexual expression from a co-worker, supervisor, client, vendor or subcontractor, which makes the person who experiences it uncomfortable or is perceived as being offensive. Sexual harassment is serious even if it is not repeated. Behavior that can be considered sexual harassment may be verbal or physical, and may occur once or often.

There are two legal terms used to describe different types of sexual harassment: The first is referred to as hostile work environment and may be defined as a pervasive and regular harassment which unreasonably interferes with an individual’s ability to perform his or her job duties, or creates an intimidating, hostile or offensive workplace environment. This may include exposure to pornographic or nude pictures, drawings or cartoons, sexual jokes, innuendo or comments, physical touching, propositions, requests for dates, leering, teasing or graphic gestures.

The second term is quid pro quo, which literally means “this for that,” a specific demand for sexual favors in exchange for job security or job benefits. This type of sexual harassment involves a supervisory or managerial employee.

There are many myths surrounding sexual harassment:

- **Myth:** Sexual harassment only happens to women.
  **Fact:** Sexual harassment can happen to anyone, regardless of gender or sexual preference.

- **Myth:** Sexual harassment is harmless fun. People who object to it have no sense of humor.
  **Fact:** Harassment is degrading and humiliating. It can hurt performance and professional careers. No one should have to endure harassment.

- **Myth:** All the victim had to say was “no,” and the harasser would have stopped immediately.
  **Fact:** Many harassers will not stop because they think “no” really means “yes”.

- **Myth:** Women who are provocatively dressed are asking for sexual harassment.
  **Fact:** No matter how anyone dresses, they should not endure sexual harassment.

Problems of harassment whether real or perceived, may seriously interfere with the tasks employees are assigned. Employees do not work well when they feel intimidated or threatened by unwelcome sexual attention.
If you think sexual harassment can’t happen at work, you may be subscribing to two false assumptions: (1) “If it happened here, I’d know about it.” (2) “Our employees are nice people who won’t do that sort of thing.”

Victims of sexual harassment are often very reluctant to come forward, if at all. Even nice people can intimidate others due to misunderstandings or different perspectives. It’s also important to recognize that some people may be capable of behaving one way in public and another when they are alone with a potential victim.

- Harassment is not defined by the harasser, but by the perception of the recipient. If someone thinks they are being harassed, then they are, no matter how innocent it may have seemed.
- Phrases such as “You look nice today” could be considered harassment depending on how it’s said, where it’s said or how often it’s said.
- A supervisor dating a subordinate might not be sexual harassment if both consent. However, the subordinate could claim sexual harassment if the supervisor broke it off and the subordinate still wanted the relationship.
- An employee could claim hostile work environment if activities between other employees cause the employee to be uncomfortable. In other words, if an employee observes a co-worker harassing another employee over a period of time, a claim of hostile work environment may be made as the observer feels uncomfortable.

What to do if you have been sexually harassed:

- Don’t blame yourself.
- Act immediately or the situation may continue. Your harasser may view your silence as encouragement.
- Say “no” and tell the harasser to stop.
- Document each incident of harassment. Keep notes about the time, date, location and the events that led up to the incident. Consider writing a letter to the harasser identifying how the incident made you feel and what you would like to happen next. Keep a copy of the letter for your records.
- Tell someone. Your supervisor or Employment Resources will treat your complaint seriously and sensitively.

Volkswagen has no tolerance for any kind of harassment or discrimination in the workplace. We have a clearly worded sexual harassment policy, which is posted and which was a part of your employment package. Our responsibility as your employer is to:
• Communicate the policy to all employees and effectively implement the policy.

• Affirmatively raise the subject of harassment with all supervisory and non-supervisory employees, express strong disapproval and explain the consequences as outlined in the policy.

• Have a harassment complaint procedure which ensures confidentiality and provides effective remedies, including protection of victims, witnesses and alleged accused against retaliation.

• Investigate EVERY charge of harassment promptly and thoroughly.

• Take immediate and appropriate corrective action to end the harassment, address the victim's concerns and prevent the misconduct from recurring.

In conclusion, we must treat one another with respect and act reasonably. All employees are expected to behave professionally and politely without offending people.

**Sexual Harassment Policy:**

It is the policy of this Project that any type of sexual or other unlawful harassment based on an individual's sex, race, age, religion or any other legally protected characteristic **will not be tolerated under any circumstances**.

Legally sexual harassment is defined as unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature when:

- The conduct is either stated or implied as a term or condition of an individual's employment;

- Submitting to or rejecting the conduct is used as the basis for employment decisions affecting an individual; or

- The conduct has the purpose or effect of unreasonably interfering with an individual's work performance or creating an intimidating, hostile or offensive working environment.

Anyone who perceives sexual harassment should report it to his or her supervisor immediately. If this is not appropriate, contact the Project's Safety Director or Security Director. Employees can be assured reporting an incidence of perceived sexual harassment will not result in retaliation towards them by any project representative or employee. Safety/Security will investigate all claims of perceived sexual harassment for the Company.
Any supervisor who has an employee report an incidence of perceived sexual harassment must bring it to the Site Safety or Site Security Director attention immediately no matter how “harmless” the situation may seem. No supervisor is in the position to deem an incidence as “harmless” when it has been reported to him or her no matter what the circumstances.

Anyone engaging in sexual or other form of unlawful harassment will be subject to disciplinary action up to and including discharge.
Volkswagen

HOT WORK PERMIT Number ____________

Date: __________________________ Location: __________________________

Time Started: ____________________ Time Finished: ___________________

Building: ________________________

Department: ______________________ Floor: __________________________

Nature of Job: ____________________

Issued To: ________________________

Employee(s) Badge Or Contractor: __________________
Number: ____________

I verify the above locations have been examined. The precautions checked on the Required Precautions Checklist have been taken to prevent fire and permission is authorized for this work.

1. Permit will be retained by workmen during job.
2. When job is completed, permit will be returned to Building Safety Manager.
3. Hard copy stays in work area, and paper copy retained by issuing party.
4. Permit is good for one shift only.

Signed __________________________
Supervisor/Engineer

Signed __________________________
Safety Manager
REQUIRED PRECAUTIONS CHECKLIST

☐ Sprinklers, fire hoses, extinguishers are in service and operational.

REQUIREMENTS WITHIN 35 FEET OF WORK

☐ Flammable liquids, dust, lint, oil, deposits removed.
☐ Explosive atmospheres in area eliminated.
☐ Floors clean/clear of combustibles.
☐ Combustible floors wet down, covered with fire-resistive material.
☐ Remove combustible materials where possible, otherwise protect with fire-resistive tarpaulins or metal shields.
☐ All floor and wall openings covered.

WORK ON WALLS AND CEILINGS

☐ Construction is non-combustible and without combustible covering and insulation.
☐ Combustibles on the opposite side of the walls moved away.

☐ Manlift provided with portable fire extinguisher.
☐ Enclosed equipment cleaned of all combustibles.
☐ Containers purged of flammable liquids and vapors.
☐ Fire Watch (NAME)

☐ Fire minutes, including coffee or lunch breaks.
☐ Fire Watch supplied and trained in the use of extinguishers, hoses, alarms, emergency numbers.
☐ Fire Watch may be required for adjoining areas, above and below floors or obstructions.
☐ Fire Watch will wear high visibility vest.
☐ Piping valved/blanked off.
☐ Other Precautions taken

☐ Watch will be provided during and after work for 30 minute
WARNING!

HOT WORK IN PROGRESS
WATCH FOR FIRE!

IN CASE OF AN EMERGENCY

Call

At

WARNING!

HOT WORK IN PROGRESS
WATCH FOR FIRE!
APPROVED HOT WORK AREA

This area has been approved for HOT WORK Operations

Facility Location ____________

Location Numbers (Column Locator) ________________
(identify area of permit coverage)

Date ______________ through ______________

Authorization Signature _______________________

Printed Name ________________________________

This area will be reviewed on a regular basis by proper authorities, and is subject to withdrawal without advanced notification.

POST IN DESIGNATED AREA
Excavation/Trenching Permit

Project Name: ___________________________________________ Project No: ____________________________

Company: ______________________________________________ Date: ____________________________

Location and Purpose: ____________________________________________________________

Preconstruction (To be completed by Contractor prior to excavation on site)
1. Owner / Department has been notified of work location and requested utility information: Yes / NA
2. Workers have been instructed how to contact Owner / Department in emergencies: Yes / NA
3. Pertinent shut off valves and switches are located for area of work: Yes / NA
4. Onsite review by with O&G and Design Dept completed before construction starts: Yes / NA
5. Have locations of underground utilities been established? Yes / No / NA
   If Yes - By what method? ______________________________________________________________
6. Have Utility locates been requested? Yes / NA Date Required: __________________________

TN: # 811 Hamilton County: 1-800-351-1111
Public locators, Private locators, Owner Information/expertise, Drawings, Visual Inspection, Sub-exploratory
List method of line located: ___________________________________________ Contact Number: ____________________________

Utilities:
Gas ___________ Overhead: Yes / NA Underground: Yes / NA Require Shutdown: Yes / NA
Water ___________ Overhead: Yes / NA Underground: Yes / NA Require Shutdown: Yes / NA
Electric ___________ Overhead: Yes / NA Underground: Yes / NA Require Shutdown: Yes / NA
Sewers ___________ Overhead: Yes / NA Underground: Yes / NA Require Shutdown: Yes / NA
Other ___________ Overhead: Yes / NA Underground: Yes / NA Require Shutdown: Yes / NA
Other ___________ Overhead: Yes / NA Underground: Yes / NA Require Shutdown: Yes / NA
Other ___________ Overhead: Yes / NA Underground: Yes / NA Require Shutdown: Yes / NA

7. Have known or suspected utilities and objects been located by hand digging and probing? Yes / NA

   All Contractors will hand excavate 1'-0" either side of the utility until the utility has been physically located.

8. Confined Space Permit required: Yes / NA

9. Is Hazardous Atmosphere and/or Soil present: Yes / NA

10. Estimated time for trench to be open: _________ days

11. Measurements: Depth _________ ft Length _________ ft Width _________ ft

12. Soil/Water Conditions: Dry / Wet / Submerged

13. Depth to ground water: _________ ft

14. Surface Encumbrances: Yes / NA Describe: __________________________________________

15. Trench will require walkway for crossing and/or traffic control: Yes / NA

16. Expected Shoring method: None ____ Slope ___ Shield ___ Hydraulic Shores ___ Other _________

17. Is the trench near a blasting operation: Yes / NA

18. Coordination established with blasting crew: Yes / NA

Preconstruction Reviewed:

_____________________________ Signature Company Rep. _______________________________ Signature Company Oper. Eng
_____________________________ Signature Site Safety Director _______________________________ Date & Time

________________________________________
Date & Time
Excavation/Trenching Permit

Crop and Qty of Excavation:

1. Actual Conditions: Depth _____ ft, Length _____ ft, Bottom Width _____ ft, Dry, Wet, Submerged
2a. Soil Type: A, B, C or ___ over ___.
2b. Cohesive: Y, N.
2c. Testing Methods (2): ____________________________
3. Is spoil placed more than 2 ft from edges? Yes / NA
4. Is equipment kept away from edges? Yes / NA
5. Utilities are located? Yes / NA
6. Utility pole bracing required? Yes / NA
7. Underground utilities supported if required? Yes / NA
9. Traffic control (circle type): Metal plate, Cones, Barricades, Orange vests, Lane closure.
10. Is a fully charged Fire Extinguisher in the area? Yes / NA
11. Is vibration a factor? Yes / NA
12. Protection designed by (RPE): __________ Date: __________
13. Cave-In Protection Type: sloping __, benching __, shoring __, shield __, none __, Other ____________________________
   Angle of slope: 3:1 __, 1:1 __, 1:2:1 __
   Type of shoring: __________, Upright hgt: ___, Spacing: ___, Timber wale size: __x__x__
   Sheet: ___, In Material: __________, Size: ___, Ft by ___, Ft
14. Ladder placed within 25 ft of a ramp provided? Yes / NA
15. Lock-Out / Tag-Out procedures are in place? Yes / NA

Daily Inspection

To be completed by a competent person before each shift or when there is a change in conditions.

1. Have procedures been reviewed in the morning SafeStart meeting? Yes / NA
2. All Contractors will hand excavate 3'-0" either side of the utility until the utility has been physically located. Yes / NA
4. Atmospheric tests: <19.5% or >23.5% oxygen: ___, <40 ppm CO: ___, <10% LEL: ___, <10 ppm H2S: ___, Instrument used: ___, S/N: ___, Inspector: ___, Date/Time: ___,
5. Public protection measures have been implemented before leaving site, including:
   Barricades: Yes / NA, Jersey Barriers: Yes / NA, Snow Fence: Yes / NA
   Hazard Tape: Yes / NA, Traffic Cones: Yes / NA, Barrels: Yes / NA
6. All tools and equipment have been secured: Yes / NA
   Operating Engineer performing excavation (Name and Trade): ____________________________
   Trade person performing work (Name and Trade): ____________________________
   Foreman: ____________________________ Competent Person: ____________________________
## NON-PERMIT CONFINED SPACE ENTRY

**Project Number:**

**Project Name:**

**Monitor (Make / Model / Serial Number):**

**Today's Date:**

**Last Calibration Date:**

<table>
<thead>
<tr>
<th>CONTAMINANT</th>
<th>TIME</th>
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<th>SIGNATURE OF WITNESS</th>
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</thead>
<tbody>
<tr>
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### NOTE:

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ORIGINALS OR COPIES OF COMPLETED PERMITS ARE TO BE MAINTAINED AT WORKSITE.
## CONFINED SPACE ENTRY PERMIT

1. All employees involved must review the Confined Space Entry Procedure prior to entering the confined space.
2. All employees involved must review and sign the Permit prior to entering the confined space.
3. The Permit shall be posted at the entrance of the confined space.
4. The Permit is valid for one (1) shift. Subsequent shifts must initiate a new Permit.
5. No Company employee shall enter IDLH atmospheric conditions or work in excess of PEL without specific approval of Safety Director.
6. The Permit shall be removed only after, the supervisor in charge has verified all employees have exited the confined space.

### PERMIT DETAILS

<table>
<thead>
<tr>
<th>CONFINED SPACE LOCATION:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>JOB DESCRIPTION:</td>
<td></td>
</tr>
<tr>
<td>AUTHORIZED DURATION OF PERMIT:</td>
<td>DATE:</td>
</tr>
</tbody>
</table>

### HAZARDS IN CONFINED SPACE (CHECK)

<table>
<thead>
<tr>
<th>Access Problems</th>
<th>Pinched in between</th>
<th>Struck By Hazards</th>
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</thead>
<tbody>
<tr>
<td>Mechanical Hazards</td>
<td>Oxygen Deficiency</td>
<td>Skin/absorption Hazards</td>
</tr>
<tr>
<td>Chemical Hazards</td>
<td>Flammable Gases or Vapors</td>
<td>Electrical Hazards</td>
</tr>
<tr>
<td>Electrical Hazards</td>
<td>Inert Gases</td>
<td>Toxic dusts, fumes, mists or vapors</td>
</tr>
<tr>
<td>Oxygen Enrichment</td>
<td>Explosive dusts, fumes, or mists</td>
<td>Engulfment</td>
</tr>
<tr>
<td>Other</td>
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</tr>
</tbody>
</table>

### EQUIPMENT/MATERIALS REQUIRED FOR ENTRY

<table>
<thead>
<tr>
<th>Fire extinguishers:</th>
<th>Air monitor/gas meter:</th>
<th>Basic PPE:</th>
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</thead>
<tbody>
<tr>
<td>Hot work permit:</td>
<td>Protective clothing:</td>
<td>Lock out/tag out:</td>
</tr>
<tr>
<td>Post and flag area:</td>
<td>Respirator(s):</td>
<td>Rescue Equip.:</td>
</tr>
<tr>
<td>Air Horn/Telephone and Vest:</td>
<td>12V intrinsic lighting:</td>
<td>Fall protection:</td>
</tr>
<tr>
<td>Full body harness and lanyard:</td>
<td>GFCI/double insulated tools:</td>
<td>SCBA:</td>
</tr>
<tr>
<td>Ventilator:</td>
<td>Ladder/access:</td>
<td>Interior communication:</td>
</tr>
<tr>
<td>Special cleaning equipment:</td>
<td>Blanks/blind flanges:</td>
<td>Specialized hearing protection:</td>
</tr>
<tr>
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ORIGINALS OR COPIES OF COMPLETED PERMITS ARE TO BE MAINTAINED AT WORKSITE.
**ENTRY APPROVAL**

All entry criteria have been satisfied.

Entry Supervisor (Print): ____________________________  Time: ____________

Signature of Entry Supervisor: ____________________________

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**AUTHORIZED ATTENDANTS/EMERGENCY SERVICE**

<table>
<thead>
<tr>
<th>NAME (PRINT)</th>
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<tbody>
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<td>2.</td>
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<td>3.</td>
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Name of Service: ____________________________

Telephone Number: ____________________________

Alt. Method to contact: ____________________________

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**PERMIT CLOSURE**

All entrants have safely exited the permit required confined space.

Signature of Attendants: ____________________________  Time: ____________

Signature of Entry Supervisor: ____________________________  Time: ____________
ROOF ACCESS PLAN
Volkswagen General Contractors and Subcontractors at VW Assembly Plant - Tennessee

Working on roofs has been identified as a high risk activity. This procedure of roof access and safety management for the Weld Shop, Paint Shop, Assembly Shop and any/all ancillary or Administration Buildings has been established to manage this risk.

1. Access to the deck or roof is via a restricted access system. The access permit is available only through Volkswagen Site Safety Director and/or the Volkswagen Site Safety Engineers.

2. Access is limited to those personnel performing work or inspections on the deck or roof and those employees must use a sign-in/sign out sheet daily. (see attached permit) Workers who have access to the roof must be identified as having had training. A decal will be issued by the Volkswagen Site Safety Director to identify authorized personnel. Decals are available through Volkswagen Site Safety.

3. All work on the deck or roof will have a written JHA in place for work on roof.

4. No work will be performed on the deck or roof unless a controlled decking zone or controlled access zone is in place.

5. When used to control access to where leading edge work and other operations are taking place, the controlled access zone will be defined by a warning line that restricts access. The warning line shall be erected at least 10 feet from the leading edge of the roof or deck.

6. The warning line shall extend the entire length of the unprotected or leading edge and shall be parallel to those edges.

7. The warning line shall consist of ropes, chain or cable and supporting stanchions as follows:
   a. Each line shall be flagged or otherwise clearly marked at not more than six (6) feet intervals with high visibility material
   b. Each line shall be rigged and supported in such a way that the lowest point (including sag) is no less than 39 inches or no higher than 45 inches from the walking working surface.

8. Holes and other openings must be covered with 3/4 inch plywood and marked to provide warning of the hazards. The contractor creating the hole is responsible for maintaining the hole cover. Expansion joints must be covered in a similar manner.

9. All personnel working in a controlled decking zone, controlled access zone or involved in leading edge work shall be trained as to the hazards that they are exposed to.

10. All employees working at the leading edge (within 10 feet) shall be protected from fall hazards by a guardrail system or personal fall arrest systems.

11. Snow and ice removal will be performed by contractor’s labor force using snow blowers to clear pathways. Contractors are responsible for clearing their own work areas.
12. Snow & ice will be cleared prior to personnel accessing stair towers, scaffolds and roof/roof deck. Snow & ice removal will be performed following the applicable PTP.

13. There is NO SMOKING ALLOWED on the roof. This will be strictly enforced through a Class I discipline. Class I disciplines are removals from site.
Critical Lift Worksheet

Check One:  
☐ Single Crane Pick Lifting Parameters
☐ Multiple Crane Pick Lifting Parameters  (This form must be completed for each crane.)

Project: __________________ Date: __________ Prepared by: _______________________

I. CRANE DATA

1) Make and Model #: __________________

2) Unit #: __________________

3) Crane Type: 
   ☐ Crawler - mounted lattice boom
   ☐ Carrier - Mounted lattice boom
   ☐ Grove - telescope boom
   ☐ Other - __________________ Boom Type

4) Lattice Boom Type: 
   ☐ Angle Chord
   ☐ Tubular Chord
   ☐ Offset Tip
   ☐ Tapered Tip
   ☐ Hammerhead Tip

5) Boom Length: _________ ft.

6) Jib Model: __________________

7) Counterweight: __________ lbs.

II. LOAD CAPACITY

Operating by the "seat of the pants" is very dangerous and will not be tolerated. Never use signs of tipping to determine if a load is within capacity. **Either find out the load weights and use the charts, or do not lift!**

8) Exact Load Weight: ________________________________________________________

9) Size of the Load: _______________________________________________________

10) Calculate Net Capacity: 

    Net Capacity = Gross Capacity - Capacity Deductions

    Gross Capacity: __________________ lbs., ft. radius
    - __________ lbs. Rigging Weight (i.e., shackles, slings, picking beams)
    - __________ lbs. Main Block
    - __________ lbs. "Effective" Jib Weight
    - __________ lbs. Cable
    - __________ lbs. Headache Ball
    - __________ lbs. Others
    = __________________ lbs. Net Capacity

Net Capacity must be equal to or greater than exact load weight.

11) Maximum Load Radius: _________ ft.
Critical Lift Worksheet

12) Maximum Boom Angle
13) Minimum Load Radius
14) Minimum Boom Angle

III. RIGGING
15) __________ Min. # parts of hoist line = Gross Capacity. Refer to load chart or calculate according to the formula on page 1
16) Sling Construction: Dia. Inches
   __________ # Parts
   __________ Wire Core/Mechanical Splice
   __________ Fiber Core/Hand Slice
17) Number of Legs
18) Sling Angle
19) Sling Capacity
20) Means of Fastening Sling or Hoist Hook to Load
21) Capacity of Fastener, i.e.: Shackle, Picking Eye, etc.

IV. PRE-LIFT REQUIREMENTS All must be answered YES or N/A.
22) __________ Load chart utilized is for exact crane model, boom type & length
23) __________ Competent person in charge of lift: Name: __________ Title: __________
24) __________ Competent signal person identified: Name: __________ Title: __________
25) __________ Pre-lift meeting held with lift crew
26) __________ Written Crane inspection
27) __________ Swing path not over personnel
28) __________ Footing is sound
29) __________ Minimum clearances from power lines can and will be maintained
   (Under 50 KV – 10′ clearance – Over 50 KV – See OSHA Standard)
30) __________ The load radius has been measured with tape measure
31) __________ Wind speed does not exceed 30 mph. Some "sail" loads limited to 20 mph or less
32) __________ Load will not touch boom in vertical lift
33) __________ For multiple crane lift, comply with the “Multiple Crane Lifts” checklist
34) __________ If on barge, the division manager has reviewed stability and potential lift conditions
35) __________ Tag lines are long enough, tied only to the load, and in good condition - loose end controlled by designated person
36) __________ Operating locations are far enough away from shoring, excavations, and trenches to eliminate risk of collapse
37) __________ Application of hardwood mats has been carefully considered
38) __________ Outriggers or crawler tracks are fully extended and wheels are clear of ground
39) __________ Application of blocking under outrigger pads has been carefully considered
40) __________ Adequate swing clearance (min. 2 feet) between the counterweight and any obstacles
41) __________ Boom composition is correct
42) __________ No added counterweight
43) __________ Crane is level and has been checked with carpenter’s level
44) __________ Lifting lugs or fixtures are properly sized and secured to piece to be picked.
   5 to 1 Safety factor applies
45) __________ On any critical lift, a lift and hold test 1 ft. off any surface will be performed.
   Holding time – 5 to 15 minutes based on field conditions.
46) __________ Machine is rigged with adequate number of Parts of Hoist Line (#15 above)

APPROVAL SIGNATURES

Project Manager: __________ Date: __________
Equipment Manager: __________ Date: __________
Crane Operator: __________ Date: __________
Work Variance Request

To: Volkswagen Site Safety Director

From: __________________________

Date: __________________________

Contractor: _____________________

It is our belief that the current safety procedures for the following activity are inadequate or unusable. Our proposed solution is attached:

Current Activity: ____________________________________________________________
________________________________________________________________________
________________________________________________________________________

Reasons for inadequate or unusable:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Specific Activity, Location and Time Period:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

ATTACH COPY OF PROPOSED JHA

Contractor Project Manager
Alberici Constructors

BARRICADE

DO NOT REMOVE THIS TAG

SEE OTHER SIDE FOR DETAILS

---

Alberici Constructors

BARRICADE

Barricade Installation

Date: ____________________  Time: ____________________

Estimated Barricade Removal

Date: ____________________  Time: ____________________

Reason for Barricade:

Installer's Name:

Installer's Phone:
Respiratory Protective Equipment

(Mandatory) Information for Employees Using Respirators When not Required Under Standard - 1910.134 App D

Regulations (Standards - 29 CFR) - Table of Contents

- Part Number: 1910
- Part Title: Occupational Safety and Health Standards
- Subpart: I
- Subpart Title: Personal Protective Equipment
- Standard Number: 1910.134 App D
- Title: (Mandatory) Information for Employees Using Respirators When not Required Under Standard.

Appendix D to Sec. 1910.134 (Mandatory) Information for Employees Using Respirators When Not Required Under the Standard

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If your employer provides respirators for your voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

You should do the following:

1. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.

2. Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.

3. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke.

4. Keep track of your respirator so that you do not mistakenly use someone else's respirator.

[63 FR 1152, Jan. 8, 1998; 63 FR 20098, April 23, 1998]
NIOSH – Simple Solutions for Construction Workers DHHS (NIOSH)
Publication No. 2007-122

The complete publication follows this page.
Simple Solutions

Ergonomics for Construction Workers

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NIOSH Division of Applied Research and Technology

Cheryl F. Estill
NIOSH Division of Surveillance, Hazard Evaluations, and Field Studies

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health
2007
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NIOSH is a federal government research agency that works to identify the causes of work-related diseases and injuries, evaluate the hazards of new technologies and work practices, and create ways to control these hazards so that workers are protected.

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Construction is a physically demanding occupation, but a vital part of our nation and the U.S. economy. In 2006, the total annual average number of workers employed in construction rose to an all-time high of nearly 7.7 million, according to U.S. Bureau of Labor Statistics data. This large workforce handled tasks that range from carrying heavy loads to performing repetitive tasks, placing them at risk of serious injury. The physically demanding nature of this work helps to explain why injuries, such as strains, sprains, and work-related musculoskeletal disorders, are so prevalent and are the most common injury resulting in days away from work.

Although the construction industry presents many workplace hazards, there are contractors in the U.S. who are successfully implementing safety and health programs to address these issues, including work-related musculoskeletal disorders.

The safety and health of all workers is a top priority for NIOSH. This booklet is intended to aid in the prevention of common job injuries that can occur in the construction industry.

The solutions in this booklet are practical ideas to help reduce the risk of repetitive stress injury in common construction tasks. While some solutions may need the involvement of the building owner or general contractor, there are also many ideas that individual workers and supervisors can adopt.

There are sections on floor and ground-level work, overhead work, material handling, and hand-intensive work. For each type of work, “simple solutions” for various tasks are described in a series of “Tip Sheets.” The solutions consist mostly of materials or equipment that can be used to do the job in an easier way. Each Tip Sheet describes a problem, one possible solution, its benefits to the worker and employer, how much it costs, and where it can be purchased. All these solutions are readily available and are actually in use today in the U.S. construction industry.

We encourage both contractors and workers to consider the “simple solutions” in this booklet and look for ways you can adapt them to your own job and worksite.

John Howard, M.D.
Director
National Institute for Occupational Safety and Health
Centers for Disease Control and Prevention
This booklet is intended for construction workers, unions, supervisors, contractors, safety specialists, human resources managers—anyone with an interest in safe construction sites. Some of the most common injuries in construction are the result of job demands that push the human body beyond its natural limits. Workers who must often lift, stoop, kneel, twist, grip, stretch, reach overhead, or work in other awkward positions to do a job are at risk of developing a work-related musculoskeletal disorder (WMSD). These can include back problems, carpal tunnel syndrome, tendinitis, rotator cuff tears, sprains, and strains.

To aid in the prevention of these injuries, this booklet suggests many simple and inexpensive ways to make construction tasks easier, more comfortable, and better suited to the needs of the human body.

Example of a “simple solution.” This ironworker uses a tool that automatically ties rebar with the pull of a trigger. The extended handle lets him work while standing upright. No leaning, kneeling, stooping, or hand twisting are necessary.

Did You Know . . . ?

- Construction is one of the most hazardous industries in the United States.
- The number of back injuries in U.S. construction was 50% higher than the average for all other U.S. industries in 1999 (CPWR, 2002).
- Backaches and pain in the shoulders, neck, arms, and hands were the most common symptoms reported by construction workers in one study (Cook et al, 1996).
- Material handling incidents account for 32% of workers’ compensation claims in construction, and 25% of the cost of all claims. The average cost per claim is $9,240 (CNA, 2000).
- Musculoskeletal injuries can cause temporary or even permanent disability, which can affect the worker’s earnings and the contractor’s profits.

The “Tip Sheets” in this booklet show how using different tools or equipment may reduce the risk of injury. All of the items described in this booklet have been used on working construction sites. Given the nature of construction, some solutions here may not be appropriate for all worksites. Sometimes solutions discovered for one trade can be modified for other trades.

This booklet provides general information regarding the methods some construction contractors have used to reduce workers’ exposures to risk factors for work-related musculoskeletal disorders. The examples described in this booklet may not be appropriate for all types of construction work. The use of the tools and equipment described in the booklet does not ensure that a musculoskeletal disorder will not occur. The information contained in this booklet does not produce new obligations or establish any specific standards or guidelines.

Our goal has been to describe solutions that are also cost-effective. Although the cost of some of the solutions here exceeds $1,000, which may be too high for some contractors, we believe successful implementation will lead to a quick recovery of the investment in many cases.
Construction work is hard work, and construction workers feel the results. In one survey, seven out ten construction workers from 13 trades reported back pain, and nearly a third went to the doctor for it (Cook et al., 1996).

Back pain, carpal tunnel syndrome, tendinitis, rotator cuff syndrome, sprains, and strains are types of musculoskeletal disorders. Work-related musculoskeletal disorders (WMSDs) are caused by job activities and conditions, like lifting, repetitive motions, and work in confined areas. All of these are part of construction work. WMSDs can become long-term, disabling health problems that keep you from working and enjoying life. Not only do these injuries hurt your body, but they can reduce your earnings and your employer’s profit.

You have an increased risk of these injuries if you often:

- Carry heavy loads
- Work on your knees
- Twist your hands or wrists
- Stretch to work overhead
- Use certain types of tools
- Use vibrating tools or equipment.

On top of that, tight deadlines mean a fast pace. Pushing the pace increases your risk even more.

A study of workers’ compensation claims filed in Washington State between 1990–98 reported that the highest risks for developing a WMSD were “in industries characterized by manual handling and forceful repetitive exertions.” According to the study, construction work accounted for 10 of the top 25 sectors in need of interventions to prevent neck, back, and upper extremity WMSDs (Silverstein, 1998).

One insurance company reported that 29% of insured mechanical and electrical contractors’ workers’ compensation claims were due to WMSDs. A quarter of those claims resulted in temporary or permanent disability. The insurer also reported that WMSD claims for electrical contractors average around $6,600 for each WMSD, while the average claim for a mechanical contractor was around $7,300 (NIOSH 2006).

Many people in construction believe that sprains and strains are just the nature of the business. But new tools and materials are now available that can make work less risky and increase productivity. This booklet shows some of the solutions, large and small, to WMSDs.
As you read this booklet, the solutions may or may not apply to your specific jobsite or trade. You will need to review cost, quality, and site-specific information to make sure that the solution will meet your needs. Also, these ideas can be adapted. Notice the principles involved: What kinds of activities are most likely to cause injuries? How can they be minimized?

Sometimes a small change in tools, equipment, or materials can make a big difference in preventing injuries. We wish you the best as you strive to make improvements to the work you do and your worksite.

NIOSH believes that better work practices and tools can reduce the frequency and seriousness of sprains and strains among construction workers.

These suggestions can be adapted for your own jobsite.

SAFER • HEALTHIER • PEOPLE™
The goal of the science of ergonomics is to find a "best fit" between the worker and job conditions. Ergonomics tries to come up with solutions to make sure workers stay safe, comfortable, and productive. These usually involve changing tools, equipment, materials, work methods, or the workplace itself. Ergonomics is a new topic for the construction industry, but the ideas have been around for many years. For example, in 1894 the split-level scaffold was designed for masonry work in the U.S. to reduce workers' frequent bending. This new scaffold system was designed to improve workers' productivity by reducing the time spent in awkward positions. There is still a strong case for using ergonomic improvements both to reduce workers' exposure to risk factors for WMSDs and to improve their productivity.

Ergonomics looks at how:

- Physical abilities of the human body
  - and -
- Limitations of the human body
- Work tasks
- Tools, equipment, and materials
- The job environment

Work-Related Musculoskeletal Disorders

Work-related musculoskeletal disorders (WMSDs) are the leading cause of disability for people in their working years. They can be caused by frequently working in a way that puts stress on the body, such as:

- Gripping
- Working in awkward positions
- Bending
- Using vibrating equipment
- Kneeling
- Applying force
- Working overhead
- Squatting
- Lifting
- Repeating movements
- Twisting
- Over-reaching.

The best way to reduce WMSDs is to use the principles of ergonomics to redesign tools, equipment, materials, or work processes.
Simple changes can make a big difference. Using ergonomic ideas to improve tools, equipment, and jobs reduces workers’ contact with those factors that can result in injury. When ergonomic changes are introduced into the workplace or job site, they should always be accompanied by worker training on how to use the new methods and equipment, and how to work safely.

Do You Need an Ergonomics Program?

Many ergonomics experts recommend that employers and joint labor-management groups develop their own ergonomics programs to analyze risk factors at the worksite and find solutions. These programs may operate as part of the site’s health and safety program, or may be separate. An ergonomics program can be a valuable way to reduce injuries, improve worker morale, and lower workers’ compensation costs. Often, these programs can also increase productivity.

There may be a particularly urgent need for an ergonomics program at your site if:

- Injury records or workers’ compensation claims show excessive hand, arm, and shoulder problems; low back pain; or carpal tunnel syndrome.
- Workers often say that some tasks are causing aches, pains, or soreness, especially if these symptoms do not go away after a night’s rest.
- There are jobs on the site that require forceful actions, movements that are repeated over and over, heavy lifting, overhead lifting, use of vibrating equipment, or awkward positions such as raising arms, bending over, or kneeling.
- Other businesses similar to yours have high rates of work-related musculoskeletal disorders.
- Trade magazines or insurance publications in your industry frequently cover these disorders.

Effective ergonomics programs have included the following elements:

- Employer commitment of time, personnel, and resources
- Someone in charge of the program who is authorized to make decisions and institute change
- Active employee involvement in identifying problems and finding solutions
- A clearly defined administrative structure (such as a committee)
- A system to identify and analyze risk factors
- A system to research, obtain, and implement solutions such as new equipment
- Worker and management training
- Medical care for injured workers
• Maintaining good injury records

• Regular evaluation of the program's effectiveness.

Education and training programs have been developed for construction general contractors by the Associated General Contractors, the United Brotherhood of Carpenters and Joiners, the Sheet Metal Occupational Health Institute, and the Laborers' Union. Although the problems and solutions described in these organizations' materials may be specific to a sector or trade, you may find them useful when developing your own ergonomics program.

For additional information on developing an ergonomics program, see Elements of Ergonomics Programs (NIOSH Pub. No. 97-117) at www.cdc.gov/niosh/docs/97-117.
INTRODUCTION

Simple Solutions for Floor and Ground-Level Work

The Problem

On some construction jobs you need to work close to the ground or floor. For example, you may have to stoop or kneel when installing or finishing slabs, decks, or floor coverings.

Bending, stooping, kneeling, or squatting can cause pain in your lower back or knees. Over time you may develop a serious muscle or joint injury. Your risk is higher if you stoop or kneel often or for long periods of time. It is also higher if you twist your body while working in these positions.

These positions can also make it harder to do your job. When stooping or kneeling, you can’t lift, push, or pull as much weight without putting stress on your body.

Injuries & Disorders

Below are some of the injuries you may develop when you work at floor level.

Lower back. Your spine runs from the top of your neck down to your lower back. It is made up of many bones called vertebrae, one below another. Between the vertebrae are joints and discs. These give your back flexibility so it can move. The discs are flexible because they have a substance like jelly inside.

When you bend forward, your back muscles work harder and the ligaments (long fibers supporting the back muscles) flex and stretch. The discs get squeezed. As they are squeezed, they can press on different parts of the spine, including nerves. This can cause back pain. If you bend forward over and over for months or years, the discs are weakened, which may lead to disc rupture (or “herniation”).

Twisting your body while bending puts even more pressure on the discs, and more stress on the cartilage and ligaments, especially when you are exerting force to lift, push, or pull objects.
Knee. The muscles in your knee are connected to your leg by tendons. Between the tendons and bones are small sacs of fluid called bursa. They lubricate the knee so it moves easily.

Continual stress on your knee can cause the bursa to get squeezed, swollen, stiff, and inflamed (bursitis). This stress can also cause the knee tendons to become inflamed, resulting in pain (tendinitis).

Tasks that involve frequent stooping, kneeling, or squatting increase your risk of developing bursitis, tendinitis, or arthritis in the knee. The risk of arthritis increases for workers who already have had a knee injury and work in these positions.

Some Solutions

Floor-level work cannot be eliminated from construction, but it is possible to change how you do it so it is easier on your body. Solutions are available that can reduce the level of stress on your back, knee, and other parts of the body. They may also reduce how often and how long the body is subjected to this stress. Many of the solutions can also eliminate other potential safety hazards and increase productivity.

The type of task and the site conditions will determine which solutions are best for you. A few possible solutions for specific floor-level tasks are explained in Tip Sheets #1–5.

General solutions for doing floor-level work with less risk of injury include:

Change materials or work processes. One of the most effective solutions may be to use materials, building components, or work methods that are less labor-intensive, so the task takes less time and you therefore kneel and stoop for a shorter period. Because there may be cost, contract, and engineering issues involved, an individual construction worker or subcontractor usually cannot make a decision like this. Changes may require the approval of the architect, engineer, building owner, or general contractor.

However, individual workers often can change the way they do the work. Sometimes people work on the floor because it is the only large flat work area available. The floor is used as a workbench for assembling, mixing, or other tasks. This is common, for example, when assembling sheet metal ducts or building rebar cages. This increases the amount of stooping or kneeling that is necessary. Rather than stooping to the floor, try to raise the work to waist height using tables, sawhorses, or other equipment. It is possible to make your own improvised workbench out of materials you have available.
Change tools and/or equipment. For example, use tools with extension handles that let you stand up while doing a floor-level task. In a few cases, cost and site conditions may restrict the use of such tools.

Change work rules and provide training. Contractors can set site rules that require the use of benches, tables, or sawhorses to raise the work up so less kneeling and stooping are necessary. Rules can also require that materials be stored off the ground. Limits can be placed on the total time that workers do floor-level work without a break. In cases where kneeling on a hard surface cannot be avoided, knee pads or some other type of padding should be used. Also, a policy of providing ergonomics training may help workers more quickly identify potential problems and find effective solutions.

Example: Gurney converted to work table
Fastening Tools that Reduce Stooping

The Problem

When working at floor or ground level, construction workers often use screw guns and other fastening tools that require stooping, bending, kneeling, or squatting for long periods of time. Working repeatedly in these positions can result in fatigue, pain, and injury.

Your lower back and knees are the areas at greatest risk of a muscle or joint injury when you stoop, bend, kneel, or squat for prolonged periods. Your risk is increased if you have to lift, push, or pull while stooping.

One Solution

Use an auto-feed screw gun with an extension that allows you to stand upright while working. Standing while you work keeps your spine and knees in a neutral position, minimizing strain and muscle fatigue. Many stand-up tools have adjustable lengths to fit workers of different heights. Stand-up screw guns that automatically feed the screws are available. Powder-actuated fastening tools (PATs) can be used with a stand-up handle provided by the manufacturer.

How It Works

A screw gun with an extension can be used to secure subflooring, false floors, and decking; to construct concrete forms; and to do other wood-to-wood jobs. You can also
use it for drywall and some metal-to-metal work. Screws for these guns come on easy-loading, collated strips that are self-feeding. They load in seconds without requiring you to bend down, and the newer models have been improved so they do not jam like older models. There are models with fixed and telescoping extensions. Some use extensions that can be removed, allowing the screw gun to be used by itself for walls.

A **powder-actuated fastening tool** with a stand-up handle can be used to fasten metal track to concrete decks for interior steel framing, to install plywood onto concrete as a substrate for wood floors, to attach lumber to concrete and masonry, and to make steel-to-steel connections. These are a fast, reliable, efficient fastening method that can be used independent of weather conditions. They fire a .27-caliber explosive charge to drive their fasteners. The fasteners are made from hardened steel and have a knurled shaft to anchor them securely in the base material. Pre-drilling holes is not necessary. The driving depth can be adjusted for varying jobsite conditions. Hearing protection is advised when firing PATs.

**Benefits for the Worker and Employer**

Workers who spend less time in a stooped position, or kneeling, have less chance of developing lower back and knee injuries. Productivity is also improved. Studies have shown that autofeed stand-up screw guns are about twice as fast at placing screws as traditional screw guns. Both stand-up screw guns and PAT tools with stand-up handles have improved since they were first introduced and are now more dependable and easier to use. Screws are more expensive than nails and may not be cost-effective for some jobs. However, using screws may improve the quality of construction on other jobs, such as installing subfloors.

**Approximate Cost**

Stand-up screw guns are $200–400. PAT fastening tools with stand-up handles are $500–700. The PAT handles can also be purchased separately.

**For More Information**

- Products related to this solution are described at [www.cpwr.com/simple.html](http://www.cpwr.com/simple.html). Products also may be found on the internet using the following search terms:

  * **Stand-Up Screw Guns:** "screw gun extension"
  
  * **Powder-Actuated Tools with Stand-Up Handles:** (tool manufacturer) + "stand-up handle"

- Local contractor tool and equipment suppliers or rental companies may be another source of information on products.

- For general information on this solution, check [www.cpwrconstructionsolutions.org](http://www.cpwrconstructionsolutions.org) and [www.elcosh.org](http://www.elcosh.org).
TIP SHEET #2
Motorized Concrete Screeds

The Problem

When you hand screed concrete, you work bent over, and you have to use a strong grip to pull the board over the wet concrete. Your arms and shoulders exert a lot of force over and over.

Doing this work often or for a long period of time increases your chance of fatigue and pain. It puts major stresses on your back, knees, hands, arms, and shoulders, which may lead to serious muscle or joint injuries.

One Solution

Use a motorized screed (also called a vibratory screed). You can work standing upright, and operating the screed takes much less effort than hand screeding.

This type of screed eliminates both screeding in a stooped position and the need for repeated arm and shoulder movements.

How It Works

The motorized screed consists of a blade or plow that floats on the concrete, one or two gasoline motors that vibrate the blade, metal support tubing, and handles to hold when you operate it.

It works best for small to medium-sized jobs.
Benefits for the Worker and Employer

A motorized screed should reduce a worker’s chance of developing muscle and joint injuries. This equipment greatly reduces the physical effort needed for hand screeding, and eliminates the frequent and prolonged stooping. Little effort is needed to move the plow over the concrete surface.

Screeding with motorized equipment can be faster than hand screeding. Many contractors report improvements in productivity. The vibration of the blade improves the consolidation of the concrete and reduces time spent “bull floating” the surface.

There are some drawbacks. Although you can work around electrical or plumbing stubs, some hand screeding may still be necessary. Also, it can be difficult to move the screed to and from the work location. A single-engine screed weighs around 50 lbs., and can be awkward to lift and carry. Some screeds have a quick-release system to remove the plow from the frame, which makes carrying easier.

Vibration can also be a problem. It is important to protect workers from hand-arm vibration syndrome (HAVS), a nerve disorder that can become disabling. NIOSH measured vibration levels on three types of motorized screeds. Two had the gasoline engine placed at the bottom of the frame and above the plow. One screed had the engine placed on a single shaft, and the operator held the shaft below the engine. Vibration levels for the two types with the engine at the bottom were below the current recommended guidelines to prevent HAVS. The third screed, which was older and poorly maintained, gave off much higher vibration that could exceed current HAVS guidelines. Higher vibration levels are expected when the engine is connected to the frame or shaft that the operator must grip. When buying a motorized screed, ask about vibration levels and test drive the screed.

Approximate Cost

A single-engine motorized screed costs around $1,500. A twin-engine model costs around $4,000 and requires two operators.

For More Information

- Products related to this solution are described at www.cpwr.com/simple.html. Products also may be found on the internet using the following search terms: “power screed,” “vibratory screed,” or “concrete screed.”

- Local contractor tool and equipment suppliers or rental companies may be another source of information on products.

- For general information on this solution, check www.cpwrconstructionsolutions.org and www.elcosh.org.
The Problem

Ironworkers tie rebar by hand with pliers and tie wire. This work requires repeated, fast hand and arm movements while applying a lot of force. If you tie rebar at ground level, you also have to work in a stooped position, with your body bent deeply forward.

Tying rebar by hand increases your chance of developing hand-wrist disorders due to the high hand forces used to grip pliers, the rapid hand movements used to wrap and twist wire, and the high pressure on the hand and fingers when twisting and cutting wire. If you work at ground level, you also are at risk of low back injuries from frequent and prolonged stooping and bending.

One Solution

Use a rebar-tying tool. This lowers your risk of hand and wrist injury because it eliminates the frequent rapid hand motions required when using pliers. Some rebar tiers allow you to work standing up, so there is less stress on your low back due to stooping and bending.

How It Works

Both manual and battery-powered rebar-tying tools are currently available.

Battery-powered rebar tiers automatically fasten the bars together with tie wire. They can be used whenever a simple “wrap and twist” tie is needed. However, they do not provide the strength of “saddle” or “figure 8” ties.
Several companies offer power rebar tiers. With one tool design, you press the trigger and the tool feeds wire around the bars and then twists and cuts the wire. These models are not stand-up tools, but an adjustable extension handle is available.

A second tool is a stand-up power tier that uses coiled spring wire to hold the bars together. The tool automatically “screws” (or spins) flat coiled wire around the intersecting bars. This tool was designed using ergonomic principles.

Benefits for the Worker and Employer

Workers should experience fewer injuries. Studies conducted by NIOSH and the Construction Safety Association of Ontario (Canada) compared manual methods and one model of power tying tool, and showed that using the power tool may reduce the risk of injury to workers’ hands, wrists, and low back.

There have been documented increases in productivity. The NIOSH-Ontario studies found that power tying tools can tie rebar twice as fast as hand tying. Actual productivity increases will depend on the type of work and the frequency of tying. Also, contractors and rod busters who used the model of power tool involved in the studies reported they preferred it to manual tying for flat work. Before using one of these tying tools, make sure the ties are approved for the job you will be doing.

Approximate Cost

Wire feeding tiers are under $2,700 and wire costs around 2 cents per tie. Tiers using coiled spring wire are under $1,300 and wire costs around 3 cents per tie. Powered models generally require extra batteries and chargers, which may be included in the price.

For More Information

- Products related to this solution are described at www.epwr.com/simple.html. Products also may be found on the internet using the following search terms: “rebar tying system” or “rebar tier.”

- Local contractor tool and equipment suppliers or rental companies may be another source of information on products.

- For general information on this solution, check www.epwreconstructionsolutions.org and www.elcosh.org.
The Problem

Many construction tasks require frequent kneeling, squatting, or stooping because the work is close to the floor. Kneeling on a hard surface puts a lot of direct pressure on your knee, while squatting puts stress on the tendons, ligaments, and cartilage of the knee joint. Working in either position often or for long periods of time can lead to knee problems, including knee osteoarthritis.

If you work in a stooped position, there is stress on your lower back as well as your knees, possibly leading to back pain and even a serious back injury.

One Solution

Use a portable kneeling creeper with chest support. When the job requires kneeling or squatting to work at floor level, these devices will reduce the stress to your knees, ankles, and lower back.

How It Works

Kneeling creepers are available with removable seats and cushioned knee supports. They are very low and have 2 to 3 inch casters. The knee supports on one model are only ¼ inch above the floor. The cushioned knee supports reduce the pressure on your knees, just as ordinary knee pads do.
Some models are available with an adjustable cushioned chest support. It is useful when doing prolonged floor-level jobs like tile setting and concrete patching. It helps support your weight, reducing back strain and some of the pressure on your knees.

Benefits for the Worker and Employer

Kneeling creepers provide support when work must be done in awkward and stressful positions. They reduce stress on the knees and lower back, and can help prevent serious muscle and joint problems. Since work can be done with less discomfort and pain, productivity often also increases.

Kneeling creepers allow workers to move around more easily and quickly, and may also have an area where tools can be conveniently placed.

These devices can be used to assist injured workers returning to the job, since they can work with less stress to their knees and back.

Approximate Cost

Kneeling creepers without the chest support cost around $200 and the optional adjustable chest support is around $75.

For More Information

- Products related to this solution are described at www.cpwr.com/simple.html. Products also may be found on the internet using the following search terms: "kneeling creeper."

- Local contractor tool and equipment suppliers or rental companies may be another source of information on products.

- For general information on this solution, check www.cpwrconstructionsolutions.org and www.elcosh.org.
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<th>CONTRACTOR NAME</th>
<th>INDIVIDUAL MAKING OBSERVATION (PRINT NAME)</th>
<th>DESCRIPTION OF ACCUMULATED STORM WATER OR ENVIRONMENTAL SPILL</th>
<th>DATE OF RELEASE</th>
<th>TIME OF RELEASE</th>
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</table>
Notice of Use

If you are filing a "notice of intent" form (or other related forms) under EPA's stormwater program (multi-sector industrial or construction general permits) and have questions, please use the form below. You can use this form to get more information about completing the forms or to inquire about the status of your submission.

If your browser does not support forms, you can e-mail your question to us at noi@svarticorporation.com or call (866) 352-7755. EPA's electronic Notice of Intent (eNOI) System is now available. You can use the system to submit your NOI on-line. Use this form only if EPA is the permitting authority (Alaska, Idaho, Massachusetts, New Hampshire, New Mexico, Puerto Rico, and Washington DC). Most states are authorized to implement the stormwater program. If you are in an authorized state, please direct your question to the appropriate state agency. Click here for a complete list of Stormwater State Contacts.

Fields marked with * are required

* First Name: __________________________
* Last Name: __________________________

Your
Company / Organization: __________________________

* Your Email Address: __________________________
* Confirm Email Address: __________________________

Your Phone Number: __________________________
(format e.g.: 999-999-9999)

* Reason For Inquiry: __________________________

Date NOI Mailed to EPA: __________________________
(format e.g.: mm/dd/yyyy)

Authorization / Permit #: __________________________
(If Known)

* Owner / Operator (Applicant) Name: __________________________
* Project / Site Name: __________________________
* Project / Site Street Address: __________________________
EPA NOI Processing Center

* Project / State: 

* Project / Site Zip Code: 

* Your Comment or Question: (be as specific as possible)
Stormwater Inspection Report

Instructions

This sample inspection report has been developed as a helpful tool to aid you in completing your site inspections. This sample inspection report was created consistent with EPA’s Developing Your Stormwater Pollution Prevention Plan. You can find both the guide and the sample inspection report (formatted in Microsoft Word) at www.epa.gov/npdes/swpppguide.

This inspection report is provided in Microsoft Word format to allow you to easily customize it for your use and the conditions at your site. You should also customize this form to help you meet the requirements in your construction general permit related to inspections. If your permitting authority provides you with an inspection report, please use that form.

For more information on inspections, please see Developing Your Stormwater Pollution Plan Chapters 6 and 8.

Using the Inspection Report

This inspection report is designed to be customized according to the BMPs and conditions at your site. For ease of use, you should take a copy of your site plan and number all of the stormwater BMPs and areas of your site that will be inspected. A brief description of the BMP or area should then be listed in the site-specific section of the inspection report. For example, specific structural BMPs such as construction site entrances, sediment ponds, or specific areas with silt fence (e.g., silt fence along Main Street; silt fence along slope in NW corner, etc.) should be numbered and listed. You should also number specific non-structural BMPs or areas that will be inspected (such as trash areas, material storage areas, temporary sanitary waste areas, etc).

You can complete the items in the “General Information” section that will remain constant, such as the project name, NPDES tracking number, and inspector (if you only use one
inspector). Print out multiple copies of this customized inspection report to use during your inspections.

When conducting the inspection, walk the site by following your site map and numbered BMPs/areas for inspection. Also note whether the overall site issues have been addressed (customize this list according to the conditions at your site). Note any required corrective actions and the date and responsible person for the correction in the Corrective Action Log.

### Stormwater Construction Site Inspection Report

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<td>If yes, describe:</td>
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**Site-specific BMPs**

- Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.
- Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.

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Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

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<th>Maintenance Required?</th>
<th>Corrective Action Needed and Notes</th>
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<tr>
<td>2</td>
<td>Yes No</td>
<td>Yes No</td>
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<td>3</td>
<td>Yes No</td>
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<td>4</td>
<td>Yes No</td>
<td>Yes No</td>
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<td>5</td>
<td>Yes No</td>
<td>Yes No</td>
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</tr>
<tr>
<td>BMP/activity</td>
<td>Implemented?</td>
<td>Maintenance Required?</td>
<td></td>
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<tr>
<td>-----------------------------------------------------------------------------</td>
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<tr>
<td>Is the construction exit preventing sediment from being tracked into the street?</td>
<td>Yes ☐ No ☑</td>
<td>Yes ☐ No ☑</td>
<td></td>
</tr>
<tr>
<td>Is trash/litter from work areas collected and placed in covered dumpsters?</td>
<td>Yes ☐ No ☑</td>
<td>Yes ☐ No ☑</td>
<td></td>
</tr>
<tr>
<td>Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?</td>
<td>Yes ☐ No ☑</td>
<td>Yes ☐ No ☑</td>
<td></td>
</tr>
<tr>
<td>Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?</td>
<td>Yes ☐ No ☑</td>
<td>Yes ☐ No ☑</td>
<td></td>
</tr>
<tr>
<td>Are materials that are potential stormwater contaminants stored inside or under cover?</td>
<td>Yes ☐ No ☑</td>
<td>Yes ☐ No ☑</td>
<td></td>
</tr>
<tr>
<td>Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?</td>
<td>Yes ☐ No ☑</td>
<td>Yes ☐ No ☑</td>
<td></td>
</tr>
</tbody>
</table>

(Other)  ☐ Yes ☐ No ☑   ☐ Yes ☐ No ☑

**Non-Compliance**
Describe any incidents of non-compliance not described above:

**CERTIFICATION STATEMENT**
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Print name and title:

________________________________________________________

____________________

Signature: ______________________________________________

Date: __________________
Forcible Removal of Lock Procedure

There may be occasions when a person who has lockout equipment in place has left the plant. In the event the lock must be removed, the following will be required:

1. Every effort shall be made to contact this person to obtain permission to remove the lock.

2. If he or she cannot be located, the Area Supervisor shall be responsible for taking whatever action is necessary to assure that personnel will not be endangered or equipment damaged before the lock is removed. He or she will, in any case, thoroughly inspect the equipment and assure there are no workers in the danger area.

3. The Supervisor will consult a member of the Safety Department before any safety lock is forcibly removed.

4. The Supervisor must be present when the lock is removed. If a multiple locking adapter is used, cut the portion of the adapter containing the lock. The lock and adapter can then be used again.

Date: _______________ Employee’s Name __________________________

Trade: _______________ Shift: __________

Supervisor’s Name (Print): ______________________________________

Lock Location: (Cell) __________ (Column) __________ (Building) __________
Lock Number: _________ Lock ID Verified by Log? __________

1. Reason for Lock Removal:
   ________________________________________________________________
   ________________________________________________________________

2. Were Attempts Made to Notify the Above Named Employee?
   Yes _____ Was Employee Notified? __________

   No _____ How Many Attempts Were Made? _____ (minimum of 2 – one half hour apart)

3. If no attempts, why not?
   ________________________________________________________________
   ________________________________________________________________

Name (Printed) _______________________ & Signature __________________________
of Person Removing Lock

Name (Printed) _______________________ & Signature __________________________
of Supervisor Present During Lock Removal

Name (Printed) _______________________ & Signature __________________________
of Safety Department Representative Verifying Lock Removal
Forcible Removal of Lock Procedure

Name (Printed) __________________ & Signature __________________ of Owner Representative Present (optional)

Date & Time of Lock Removal: ______________________________

(Staple Lock Out Tag, If Available, To This Form & Return To On-Site Safety Department)
LOCK ASSIGNMENT LOG - RETURN LOG TO SAFETY WHEN LOCKS HAVE BEEN RETURNED TO RESPONSIBLE PARTY AT CONCLUSION OF JOB

<table>
<thead>
<tr>
<th>LOG #</th>
<th>INITIAL WHEN LOCK RECEIVED</th>
<th>DATE WHEN LOCK ISSUED</th>
<th>KEY NO.</th>
<th>PRINT EMPLOYEE NAME</th>
<th>HOME TELEPHONE NO. OR ALTERNATE CONTACT NUMBER</th>
<th>SHIFT</th>
<th>TRADE</th>
<th>INITIAL WHEN LOCK RETURNED</th>
<th>DATE OF RETURN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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</tr>
</tbody>
</table>
LOCK BOX
SYSTEMS LOCKED OUT BY THIS BOX

Lock or Locks put on by

/ 
Print Name
Signature

Company

/ 
Print Name
Signature

Verified by

/ 
Print Name
Signature

Company

Date and Time System Locked Out

/  
Initial

Date and Time System Lock Removed

/  
Initial

System

<table>
<thead>
<tr>
<th>Location Column #</th>
<th>Key #</th>
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System

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<th>Location Column #</th>
<th>Key #</th>
</tr>
</thead>
</table>

System

| Location Column # | Key # |

THIS SHEET IS TO BE TURNED INTO THE SAFETY DEPARTMENT WHEN COMPLETED
# ENERGY CONTROL PERMIT

<table>
<thead>
<tr>
<th>Project:</th>
<th>Owner:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractor to Perform Work:</td>
<td></td>
</tr>
<tr>
<td>Area(s) of Project Site:</td>
<td></td>
</tr>
<tr>
<td>Work to be Performed:</td>
<td></td>
</tr>
</tbody>
</table>

## Hazards and Precautions

### Hazards:
(i.e. electrical, pneumatic, hydraulic, gravitational, etc.)

1. a) Protective Devices to be used:
2. b) Lock Out Devices (i.e. tags, etc.):
3. c) Procedures for Lock Out (attach a copy):
4. d) Other Precautions:

## Request for Permit

I guarantee that the above noted Precautions and attached procedures will be followed and work performed will meet all legislated safety requirements to ensure the health and safety of our employees. (Name(s) of Qualified (Competent) Person(s) to Oversee Lock Out):

<table>
<thead>
<tr>
<th>Contractor Supervisor</th>
<th>Date:</th>
<th>Time:</th>
<th>Valid for:</th>
</tr>
</thead>
</table>

## Provisions of Permit

This permit will be issued based on the information and above guarantee provided by the Contractor;

<table>
<thead>
<tr>
<th>Contractor Supervisor</th>
<th>Date:</th>
<th>Time:</th>
<th>Valid for:</th>
</tr>
</thead>
</table>

## Return to Service

I guarantee that the Lock Out Area/Equipment is safe for Return to Service (i.e.: tools/equipment/foreign materials, debris have been removed/removed).

<table>
<thead>
<tr>
<th>Contractor Supervisor</th>
<th>Date:</th>
<th>Time:</th>
<th>Valid for:</th>
</tr>
</thead>
</table>

## Authorization

Based on the information and above guarantee the Job Site is ready for Return to Service.

<table>
<thead>
<tr>
<th>Contractor Supervisor</th>
<th>Date:</th>
<th>Time:</th>
<th>Valid for:</th>
</tr>
</thead>
</table>

Please ensure this certificate is available on-site.
Letter of Interpretation (Compressed Gas)

05/08/2006 - General industry and construction standards regarding "in use" or "ready to use" and "storage" of compressed gas and oxygen cylinders for welding; §1910.253(b)(2)-1910.253(b)(4) and §1926.350(a)(10). U.S.

Department of Labor
Occupational Safety & Health Administration
www.osha.gov

Standard Interpretations - 5/08/2006 - General industry and construction standards regarding "in use" or "ready to use" and "storage" of compressed gas and oxygen cylinders for welding; §1910.253(b)(2)-1910.253(b)(4) and §1926.350(a)(10).

Standard Interpretations - Table of Contents

- Standard Number: 1910.253; 1910.253(b)(2); 1910.253(b)(3);
  1910.253(b)(4); 1926.350; 1926.350(a)(10)

OSHA requirements are set by statute, standards and regulations. Our interpretation letters explain these requirements and how they apply to particular circumstances, but they cannot create additional employer obligations. This letter constitutes OSHA's interpretation of the requirements discussed. Note that our enforcement guidance may be affected by changes to OSHA rules. Also, from time to time we update our guidance in response to new information. To keep apprised of such developments, you can consult OSHA's website at http://www.osha.gov.

May 8, 2006

Mr. Kenneth J. Yotz
Senior Vice President
Environmental, Management and Training Systems, Inc.
919 St. Andrews Circle
Geneva, IL 60134-2995

Dear Mr. Yotz:

This is in response to your July 21, 2001, letter to the Occupational Safety and Health Administration (OSHA), in which you ask the Directorate of Construction to review interpretations of the requirements for oxygen and fuel gas cylinder storage for both general industry, 29 CFR 1910.253(b)(2) to 1910.253(b)(4) and construction, §1926.350(a)(10).

You believe that two interpretations previously issued to you, dated September
Letter of Interpretation (Compressed Gas)

9, 1993, and April 17, 2001, which interpret general industry requirements, are in conflict with our December 31, 1998, letter to Mr. Steven Dineen, which interprets construction requirements. The issue is when is a cylinder used in construction considered to be "in use" or "ready to use."

Please accept our sincere apologies for the inordinate and inexcusable delay in providing you with this interpretation. I am reviewing the reasons for the delay and will take the necessary action to prevent such a delay from occurring in the future.

In the Dineen letter, we addressed the cylinder storage requirements applicable to construction. We stated that the gas cylinder storage requirements in §1926.350(a)(10) apply:

when it is reasonably anticipated that gas will not be drawn from the cylinder within 24 hours (overnight hours included).

We explained the basis for this interpretation of the construction standard as follows:

We believe that it is reasonable to define "storage" based on whether it is reasonably anticipated that gas will be drawn from the cylinder in 24 hours. The purpose of the separation/fire wall standard is to prevent the spread of fire and multi-cylinder explosions in the event a single cylinder leaks and a fire begins.

Both storage options — separation and fire wall — will usually require an employer to set up a storage area some distance from the welding/cutting area.

This means that cylinders will usually have to be transported from the welding/cutting area to the storage area in order to meet the storage requirements. Also, regulators will have to be removed and the cylinders capped each time they are in storage.

The reasonable anticipation of use in 24 hours approach recognizes that welding/cutting operations usually involve gas being drawn sporadically.

A shorter time period than 24 hours would mean that gas cylinders would have to be transported back and forth from work area to storage area.

Regulators would be removed and re-installed and the cylinders capped and uncapped numerous times over the course of a day or two.

There are risks involved with moving cylinders and frequently removing and re-installing regulators and caps, with the attendant wear on tank
Letter of Interpretation (Compressed Gas)

and regulator threads.

The separation/fire wall requirement must not be interpreted in a way that will raise the risk of gas leaks and tank damage, which the standard is also supposed to prevent.

The goal of preventing the spread of fire from one tank to another is not furthered by having to move cylinders in and out of storage conditions with excessive frequency.

A 24 hour period balances the need to ensure safe storage conditions and the need to minimize the number of times cylinders have to be taken in and out of storage.

While the cylinder storage provisions in the general industry standards §1910.253(b)(2) and 1910.253(b)(4) are similar to the provisions in the construction standard, both require separate interpretation regarding this issue.

Our interpretation of the construction standard reflects typical conditions specific to construction sites. Construction site conditions are inherently changeable and unpredictable. In particular, on a construction site, there typically is frequent and unpredictable movement of personnel, heavy equipment and material. As site conditions change, there may be delays of more than a day; and during such periods the cylinders must not remain vulnerable to being struck and/or knocked over.

For these reasons, the Dineen letter only addresses hazardous characteristics particular to construction sites.

Having explained how to determine if the storage requirements apply to gas cylinders used in construction (the "24-hour" rule), there is another issue that is arguably raised by your July 21st letter. Specifically, whether failure to comply with those storage requirements (1) for single acetylene and oxygen cylinders on welding carts or secured to substantial vertical surfaces should be considered de minimis and (2) not be cited.

The Agency has conducted an extensive review of the application of the storage requirements in construction to situations where there are only two cylinders on a cylinder cart or where the cylinders are secured to a wall or other substantial vertical surface.(3) The Agency has determined that, under §1926.350(a)(10), failure to comply with the storage requirements with respect to a single acetylene and a single oxygen cylinder on a cylinder cart would be considered a de minimis violation where all of the following parameters are met:

(1) No more than a single acetylene cylinder and a single oxygen cylinder are on a cylinder cart. The cylinder cart must be specifically designed to hold/carry oxygen and acetylene cylinders in the upright
Letter of Interpretation (Compressed Gas)

position. The cylinders must be securely held to the cart (such as by straps, chains or other securing device).

(2) The cart is on a firm, level surface.

(3) The cart is not in an area where there is a reasonably foreseeable risk of being struck by vehicles, equipment, or materials (such as in a pathway for vehicles on a construction site).

(4) Both cylinders either have valves closed with protection caps on or are connected to a properly functioning regulator.

Similarly, failure to comply with the storage requirements with respect to a single acetylene and a single oxygen cylinder that are firmly attached to a substantial vertical surface (such as a wall) would be considered a de minimis violation of §1926.350(a)(10) where all of the following parameters are met:

(1) The only cylinders in the area for which the storage requirements apply but are not met are a single acetylene cylinder and a single oxygen cylinder.

(2) Both cylinders are firmly attached (such as by chains or other secure means) in an upright position to a substantial vertical surface (such as a wall, steel column, exposed wall studs).

(3) The cylinders are not in an area where there is a reasonably foreseeable risk of their being struck by vehicles, equipment, or materials (such as in a pathway for vehicles on a construction site).

(4) Both cylinders either have valves closed with protection caps on or are connected to a properly functioning regulator.

If these parameters are not met, the employer must apply the 24-hour rule to determine if the storage requirements apply. If these parameters are met, OSHA will consider the violation to be de minimis, regardless of the period of time in which the cylinders are on the cylinder cart or attached to the vertical surface.

We recognize that, with this result, there remains a technical disparity between the manner in which OSHA interprets the cylinder storage provisions of the respective general industry and construction standards. This disparity results from independent interpretations that recognize certain distinct occupational conditions and factors in the respective industries. However, in practice, there will be no disparity in the manner in which OSHA administers and enforces the cylinder storage provisions at general industry worksites and construction worksites.
Letter of Interpretation (Compressed Gas)

If a general industry employer meets all the conditions above, OSHA will consider the cylinders to be "in use" or "ready to use" and not subject to the general industry cylinder storage provisions.

If a construction employer meets all the conditions listed above, OSHA will consider the violation of §1926.350(a)(10) to be a de minimis violation of the OSH Act. In both cases, OSHA will not issue a citation or propose a penalty, and the employer will be under no legal obligation to change the manner in which it was using the cylinders at its worksite.

If you need additional information, please contact us at: U.S. Department of Labor, OSHA, Directorate of Construction, Office of Construction Standards and Guidance, fax # 202-693-1689. You can also contact us by mail at the above office, Room N3468, 200 Constitution Avenue, N.W., Washington, D.C. 20210 although there will be a delay in our receiving correspondence by mail.

Sincerely,

Edwin G. Foulke, Jr.

1 Note that some companies are using welding carts with separation barriers in an attempt to comply with the construction storage requirements without having to remove the cylinders from the cart. We addressed this scenario in a May 23, 2001, interpretation letter to Mr. John Stallbaumer and January 23, 2004, letter to Mr. Frank Salvucci Jr., in which we stated:

[A]s long as the barrier is at least 5 feet high, meets the [½]-hour fire resistance rating and is designed to prevent the spread of the fire from one cylinder to another, employers using the product would meet the requirements of §1926.350(a)(10).

2 Under OSHA's de minimis policy, de minimis violations are those which have no direct or immediate relationship to safety or health. Consequently, no citation is issued.

3 The Agency also considered current industry consensus gas cylinder standards.

[Corrected June 9, 2006]
Letter of Interpretation (Compressed Gas)

Occupational Safety & Health Administration
200 Constitution Avenue, NW
Washington, DC 20210
Portable Ladder Safety

Each year, about 50 construction workers are killed by falls from ladders. More than half of the deaths occur to people working from ladders. Twice as many falls occur stepping down compared to going up ladders. The main cause of falls from straight and extension ladders is sliding of the ladder base. For self-supported ladders or stepladders, the main cause is tipping sideways. A lot of workers carrying ladders hurt their backs, too.

Protect Yourself

- Choose the right equipment. Use ladders mainly for climbing to or from other levels. If you can – instead of using ladders to work from – use scaffolds or scissor lifts; they are safer to work from.
- Choose the right ladder length.
- A sticker on a commercial ladder tells you its maximum weight capacity. Use only type I, IA, or IAA ladders, which can support 250, 300, and 375 pounds, respectively. OSHA says job-made portable ladders must be tested for strength; a regular ladder must be able to hold at least 4 times its maximum weight capacity.
- Ladder rungs, cleats, and steps must be parallel, level, and evenly spaced (10 to 14 inches for most ladders). The rungs and steps of metal ladders must be grooved or roughened to minimize slipping. Side rails must be at least 11.5 inches apart.
- Do not tie ladders together.
- If you use two or more ladders to reach one spot, they must have a platform or landing between them.
- Ladder parts must be smooth to prevent punctures or cuts or snagging of clothing.
- Wood ladders must not be painted with a coating that can hide defects.
- Employees must be trained in ladder use. A competent person must train employees in site-specific ladder safety.*

Setting up a Ladder

- Use 2 people to carry and set up a ladder, if possible.
- Keep all types of ladders (and tools) at least 10 feet away from live overhead power lines and other overhead obstructions. Aluminum and even wet or dirty wood or fiberglass ladders can conduct electricity.
- Set a ladder on firm, level ground. Use ladder levelers on uneven ground. Secure the ladder – tie it
down, use slip-resistant feet, or have someone hold it in place. (A ladder on a slippery
surface must be
tied in place or held.)
• Keep the area around the top and bottom of a ladder clear. In passageways, doorways,
or where traffic
or other activities can occur, secure the ladder or block off the area.
• Do not set a ladder on a scaffold, box, or other object.
• Stepladders: All four legs must be on solid, level ground. The spreaders must be
locked fully open.
Never climb on the cross-bracing. Never lean a stepladder against a wall.
• Straight and extension ladders: The ladder base should be 1 foot from the building (or
top support,
such as an eave) for every 4 feet of ladder length up to the resting position. Counting
rungs will give you
a good estimate of the ladder length; rungs are about 1 foot apart.

(Please turn the page.)

* OSHA says a competent person is...capable of identifying existing and predictable hazards...and has
authorization to take
prompt measures to eliminate them. More information on ladder safety is in the OSHA Construction
Standards in the Code
of Federal Regulations, CFR 1926.1050-1060 (Subpart X).
• After you set up an extension ladder, lock the top section in place. Extension ladder sections must overlap – by at least 3 feet for ladders up to 32 feet, by 4 feet for ladders 32 feet to 48 feet, and by 5 feet for ladders 48 feet to 60 feet.
• Both rails must rest evenly on the resting spot, unless the ladder has a single-support attachment.
• When a ladder is used to get on or off a roof, secure the ladder by tying. The side rails should be at least 3 feet above the roof to be safe. Job-made ladders should let you get on or off a ladder by stepping between the rails. If you have to step around a ladder because of rungs, there should be a grab rail attached to the building to help you. (OSHA requires the grab rail and tie-off if a ladder doesn’t extend at least 3 feet above the roof.) If there is a high parapet wall, use a stairway or some other way to get on or off the parapet.

Using a Ladder
• Always check a ladder before you use it; recheck it if it has been unattended.
• Always face a ladder when using it.
• Wear shoes with slip-resistant soles.
• Always have a 3-point contact (such as, one hand and two feet).
• Keep your body centered between the side rails of the ladder – so you don’t tip over the ladder.
• Never work from the top or top step of a stepladder, or from any of the top 3 steps of a straight or extension ladder.
• If you must work from an extension ladder, consider using a fall protection system attached to a secure anchor point on the building, especially if pushing, pulling, or prying. (The fall protection should be designed by a qualified person.*) And keep both feet on the same rung.
• Do not hold objects in your hand when moving up or down or stepping on/off a ladder to an upper level. Attach objects to your tool belt or pull them up on a line after you get to your work spot.
• Do not use a ladder when it is windy.
• Never move a ladder while someone is on it.
• Lower the top section of an extension ladder before you move it.

Inspecting a Ladder
OSHA says a ladder must be inspected regularly for visible defects by a competent person and after any incident that could affect its safe use. Check your ladder for damage before each use. If a ladder is damaged, label it, Do not use, and take it away until it is fixed. Destroy it if it can’t be fixed.

Here is a checklist for inspecting ladders:
• Make sure the feet work and are not broken – and slip-resistant pads on the feet are secure.
• Inspect ladder parts for cracks, bends, splits, or corrosion.
• Check all rung and step connections.
• Make sure rung locks and spreader braces are working.
• On extension ladders, make sure the rope and pulley work and the rope is not frayed.
• All bolts and rivets should be secure.
• All rung locks and other movable parts should be oiled or greased.
• Make sure the steps, rungs and other ladder parts are free of oil, grease, and other materials.

For more information, call your local union, the Center to Protect Workers’ Rights (CPWR)
(301-578-8500 or www.cpwr.com), the National Institute for Occupational Safety and Health
(1-800-35-NIOSH or www.cdc.gov/niosh), or OSHA (1-800-321-OSHA or www.osha.gov). Or
go to www.elcosh.org

**OSHA says a qualified person...by extensive knowledge, training, and experience can...solve...problems related to the subject matter...**
© 2004. The Center to Protect Workers’ Rights. All rights reserved. CPWR is a research, development, and training arm of the Building and Construction Trades Dept., AFL-CIO. CPWR, Suite 1000, 8484 Georgia Ave., Silver Spring, MD 20910. (Edward C. Sullivan is president of the Building and Construction Trades Dept. and of CPWR and Joseph Maloney is secretary-treasurer.) Production of this card was supported by grant CCU17202 from the National Institute for Occupational Safety and Health and grants U45-ES00764 and U45-ES00853 from the National Institute of Environmental Health Sciences. The contents are solely the responsibility of the authors and do not necessarily represent the official views of NIOSH or NIEHS. 12/004
Red Scaffold Tag

DANGER
DO NOT USE
THIS SCAFFOLD
unless it has been
erected, taken down or
has been found defective.
DO NOT ALTER

DATE:
COMPETENT PERSON
SIGNATURE:
COMMENTS:

Green Scaffold Tag

OK
This scaffold has
been erected to meet
all applicable
standards for all craft work.
DO NOT ALTER

DATE:
COMPETENT PERSON
SIGNATURE:
COMMENTS:
CAUTION
This scaffold does NOT MEET Federal/State OSHA Specifications.
Employees or anyone entering this scaffold must wear and use an approved safety harness.
DO NOT ALTER
DATE: ___________________________
COMPETENT PERSON: ____________________________
SIGNATURE: ____________________________
COMMENTS: ____________________________
<table>
<thead>
<tr>
<th>Site Inspection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Correct personal protective equipment in place (PPE)</td>
</tr>
<tr>
<td>2. Wearable and safety manual available</td>
</tr>
<tr>
<td>3. Fall protection (i.e., free of trip and trip hazards)</td>
</tr>
<tr>
<td>4. OSHA and safety signs clearly visible</td>
</tr>
<tr>
<td>5. General site (i.e., waste bins and showers)</td>
</tr>
<tr>
<td>6. Warning and control devices on plungers (present and legible)</td>
</tr>
<tr>
<td>7. Outriggers, stabilizers, extendable arms, and other relevant components</td>
</tr>
<tr>
<td>8. Equipment: (check list and check lists)</td>
</tr>
<tr>
<td>9. Structural members (check list and check lists)</td>
</tr>
<tr>
<td>10. Outriggers, stabilizers, extendable arms, and other relevant components</td>
</tr>
<tr>
<td>11. Warning and control devices on plungers (present and legible)</td>
</tr>
<tr>
<td>12. Gear system, safety lines, and chains</td>
</tr>
<tr>
<td>13. Warning and control devices on plungers (present and legible)</td>
</tr>
<tr>
<td>14. Outriggers, stabilizers, extendable arms, and other relevant components</td>
</tr>
<tr>
<td>15. Correct personal protective equipment in place (PPE)</td>
</tr>
</tbody>
</table>

**Equipment Inspection**

A checkmark (✓) in a box indicates satisfactory - write in any unsatisfactory findings in comment section below. Do not operate if unit or site conditions are not acceptable.

<table>
<thead>
<tr>
<th>Sun</th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
<th>Sat</th>
</tr>
</thead>
</table>

**Equipment Type:**

**Model:**

**Serial/ID:**

**Operator:**

**Maintenance:**

Operators must be trained to inspect and operate the unit in accordance with local/state/national requirements.

The location of hazards that could affect the equipment's safe operation and use.

Before equipment operation on each work, the aerial work platform and area of planned use will be given a visual inspection by the operator. Any equipment defects and

**Aerial Work Platform Daily Inspection Log**
<table>
<thead>
<tr>
<th>Date</th>
<th>Initials</th>
<th>Name of Inspecting Operator (Print)</th>
<th>Additional Comments:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Surface capable of supporting the equipment in all operating conditions</td>
</tr>
</tbody>
</table>
SAFETY PROCEDURES FOR GOLF CARTS/CRASH CARTS, ETC.

Project Issued Licenses are Required to Operate a Golf/Gator on Project Grounds!

1. All golf carts/gators must have whip flags, flashing lights horns and audible alarms that operate in the forward and reverse directions.

2. Be aware of your surroundings. AVOID SUDDEN STOPS - Anticipate stops so you do not have to "jam on the brakes". Sudden stops may cause loss of control or a vehicle behind you may not see you stopping.

3. The operator shall give the right-of-way to an ambulance, fire truck, or other emergency vehicles as well as fork trucks, maintenance vehicles, production vehicles and all other plant or site personnel.

4. The operator shall not pass another vehicle at intersections, blind spots, or at other dangerous locations.

5. The operator shall not ride beneath the elevated portion of any powered industrial truck, whether loaded or unloaded.

6. The operator will perform safety checks by completing a daily checklist before cart is used to ensure that brakes, steering, horn, audible warning device, etc. are in proper working condition. Carts needing repair shall not be used and reported immediately.

7. The operator shall slow down and stop before proceeding at all cross aisles, pedestrian crosswalks and other locations where the rider's vision is obstructed. Operator MUST stop before proceeding through any overhead doorway entering or exiting plant. Obey all traffic signs and signals.

8. The operator shall report all accidents involving injury of an employee or damage to property to his/her supervisor or other designated person.

9. RIDE AT A SAFE SPEED - Aisle conditions determine the safe speed, but the maximum speed in the plant is 5 MPH, (6 seconds/standard 45 foot bay) Avoid riding through wet or oily areas. Speed outside the plant is 15 MPH.

10. The operator shall not drive his/her cart through any production line, whether moving or not; or through any workstation.

11. NO PASSENGERS ALLOWED OVER THE DESIGNATED CAPACITY OR ON FLATBED OF CART. NO STAND-UP RIDING! REMAIN SEATED AT ALL TIMES WHILE VEHICLE IS IN MOTION.

12. Parts and material shall not be carried on carts that are not designed for this purpose. Anything you carry must be secured. Do not haul ladders or fuel bottles unless the cart is specifically designed to do so.

13. When parking carts, take into consideration what you may be blocking - aisles, driveways, access to material storage, water coolers, fire equipment, etc. DO NOT LEAVE THE KEY IN THE IGNITION.

14. USE YOUR HORN - DON'T ABUSE IT when approaching intersecting aisles, blind corners, doorways, and pedestrians walking away from you. Sounding your horn does not give you the right-of-way. Use several short beeps instead of a long, loud blast.

15. Keep arms and legs within the perimeter of cart. Do not transport more people than there are seats for.

REMEMBER - You are operating a vehicle in aisles that are used by other vehicles and pedestrians. Be cautious, courteous and considerate.
16. The use of mobile communication devices and/or headphones is strictly prohibited while operating any moving vehicle on plant grounds. You must move over and stop to use a radio or cell phone whether driving or walking.

<table>
<thead>
<tr>
<th>Employee (Please Print)</th>
<th>Site ID Number</th>
<th>Employee Signature / Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Name</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Valid state driver's license verified by: ______________________________
Expiration date: ________________
State: _______
Restrictions: ____________________________

FAILURE TO FOLLOW THE ABOVE RULES MAY RESULT IN DISCIPLINARY ACTION WITH REMOVAL OF CART PRIVILEGES, INCLUDING RIDING ON A CART, AND ADDITIONAL ACTION UP TO AND INCLUDING TERMINATION!
WRITTEN SAFETY VIOLATION NOTIFICATION

Date: _____________________

Name: ____________________  Company: ____________________________

Address: ____________________  _______________________________

City, State, Zip: ____________________  ___________________________

Craft: __________________________  _____________________________

Employee Site ID: __________________________  _________________________

You were observed in the violation of ____________________________

at the ____________________  Project Site ___________________________

On, ___________  Date ___________  Time ___________

☐ Class A Violation  ☐ Class B Violation  ☐ Class C Violation

☐ Violation not likely to cause life-threatening or serious injury

☐ This notice is a written notice only.

☐ This notice is to inform you of ☐ three, ☐ six consecutive scheduled workdays (Contractor Employee) suspension without pay. (Employee removed from Company Project Site, see bottom line.)

Beginning on ___________  Ending on ___________

☐ This notice is to terminate your employment (Contractor employee removed from site) for a minimum period of one calendar year for repeat safety violations of the Project Safety Program.

This notice is to __________________________  to inform said company of the above referenced violation and request immediate action in regard to discipline as outlined in the Project Safety Protection Policy Program.

If you have any questions, please contact the Site Safety Director or your Safety Manager.

Sincerely,

Name

Project Manager

Copy: Labor Relations
Union Affiliation ______________________
Safety Department